

National Advisory Committee on Rural Health and Human Services' Policy Brief on Exploring the Rural Context for Adverse Childhood Experiences (ACEs) – 10/29/18

Kristine Sande:

Good afternoon, everyone. I'm Kristine Sande. I'm the program director of the Rural Health Information Hub. I'd like to welcome you to today's webinar. We are excited for this webinar. We're partnering with the National Advisory Committee on Rural Health and Human Services. They recently released a policy brief on exploring the rural context for Adverse Childhood Experiences or ACEs. We're happy to have this webinar today on ACEs.

I'm going to quickly run through a few housekeeping items before we begin. We do hope to have time for your questions at the end of today's webinar. If you do have questions for our presenters, please submit those at the end of the webinar using the Q&A section that will appear in the lower right-hand corner of the screen following the presentations.

We've provided a PDF copy of the presentations on the RHHub website. Those are accessible through the URL on the screen. We also will send the link to that via the chat function. For technical issues during the webinar, please call WebEx support at 866-229-3239. Our first speaker today will be Steve Hirsch from the Federal Office of Rural Health Policy. He also serves as the administrative coordinator of the National Advisory Committee on Rural Health and Human Services.

At this time, I'll turn it over to Steve.

Steve Hirsch:

Thanks, Kristine. I'm sitting in for Paul Moore who's the executive secretary and would have liked to be here, but he's having problems with his computer. I'm going to take over for him. I'd like to take this opportunity to welcome our audience to today's webinar on exploring the rural context for Adverse Childhood Experiences otherwise known as ACEs.

In this webinar, we're going to provide an overview of the committee, cover what ACEs are, and why the committee chose to address this topic and review the committee's recommendations for this issue. In addition, we'll also hear from two speakers who will provide a local and a federal perspective on the role that Health and Human Services play in mitigating and preventing ACEs.

The committee, I'd like to give you a brief background on the committee. As a federally chartered independent citizens panel, the committee is tasked with advising the Secretary of the Department of Health and Human Services on issues related to how the department and its programs can better serve rural communities.

The committee is currently chaired by former Mississippi Governor Ronnie Musgrove and is comprised of 20 members. The experience and expertise that the committee members bring covers a wide variety of rural issues and fields such as public health, medicine, nursing, human services, hospital administration, childcare and other areas.

The committee was formed in the late 1980s after a large number of rural hospitals closed. Since then, the committee meets twice a year to examine pertinent issues that affect the health and well-being of rural Americans and to also hear directly from rural stakeholders in health care and human services. Following those meetings, the committee produces policy briefs to

the HHS secretary with recommendations on policy or regulatory matters under the Secretary's purview.

The last three topics that the committee looked at and provided recommendations for were suicide in rural America, modernizing rural health clinic provisions, and the social determinants of health. Those policy briefs along with others can be found on the committee's website provided at the link on this slide.

At its April 2018 meeting in a near Saratoga Springs, New York, the committee looked at the rural landscape of what are referred to as Adverse Childhood Experiences or ACEs. ACEs refers to any form of chronic stress or trauma such as abuse, neglect, and/or household dysfunction that when experienced during childhood and adolescence can have both short and long-term impacts on an individual's development, health and overall well-being.

Over the years, the committee's work has focused on understanding how conditions and outcomes such as serving at-risk children in rural areas, childhood poverty, intimate partner violence, and suicide can be more effectively addressed through HHS programs and policies. In its reports and policy briefs to the HHS secretary, the committee has consistently acknowledged that the persistent health challenges experience has persistently acknowledged the persistent health challenges experienced by rural communities.

Some of these barriers include inadequate access to primary and behavioral healthcare, workforce shortages, rural hospital closures, and other social determinants of health such as transportation, food insecurity, housing instability, and diminished economic opportunities. With an already limited rural infrastructure, these determinants contribute to chronic disease disparities which in turn affects rural life expectancy and mortality.

The committee chose to focus on ACEs is one of its two topics for the April 2018 meeting as ACEs are another layer of examination and a set of conditions that may worsen rural health disparities and outcomes. The committee also chose the topic as it draws a focal point of attention to the committee's previous work where ACEs have been referenced in some of the topics the committee has looked at.

On that note, I'd like to now introduce three speakers to the rest of this webinar. First, we'll hear from a former committee member Dr. Don Warne, currently at the University of North Dakota School of Medicine Health Science. Dr. Warne is the director of the Indians into medicine program, is the associate dean for diversity, equity, and inclusion and is professor in the Department of Family and Community Medicine.

He comes from a long line of traditional Lakota healers. Previously, Dr. Warne served as a primary care in integrative medicine physician with the Gila River Health Care Corporation in Sacaton, Arizona, if I pronounced that correctly. He also worked for three years as a staff clinician with National Institutes of Health in Phoenix. During his time in Arizona, Dr. Warne conducted diabetes research and developed diabetes education and prevention programs in partnership with tribes.

He received a Master of Public Health from Harvard, a doctorate of Medicine degree from Stanford University School of Medicine and completed his residency training at the Good Samaritan Regional Medical Center in Phoenix. In this webinar, he will briefly expand on the research behind ACEs, further draw the connections between ACEs and morality and highlight the committee's recommendations on this topic.

Dr. Warne will be followed by Siri Young. Siri is the mental health and special services manager for Schoharie County head start, early head start which is also referred to as Schoharie County Child Development Council. In this position, Siri uses her knowledge and experience to implement trauma-informed practices.

Siri is also a founding member of the Schoharie ACEs team, a grassroots initiative that strives to raise community awareness about ACEs. As part of the team, Siri offers training to a number of school districts and agencies and organizes conferences and community events. Her expertise on the effects of trauma spans her entire career beginning with her time working with women and children affected by domestic violence and has continued to her current position. She will provide a local perspective on ACEs and discuss more about the ACEs team as a promising strategy and model that other rural communities can replicate.

Our third speaker will be Dr. Aaron Lopata. Dr. Lopata joined the health resources and Services Administration as the Maternal and Child Health Bureau's chief medical officer in November 2014. Dr. Lopata came to MCHB from the Office of Management and Budget where he worked for 10 years overseeing HRSA HIV/AIDS Bureau. MCHB in the Federal Office of Rural Health. In his role as chief medical officer, Dr. Lopata has worked to highlight the critical role that HRSA's and MCHB's programs play in promoting the health and well-being of women and children.

Specifically, Dr. Lopata has worked to promote MCHB's Home Visiting and Healthy Start programs along with interventions that utilize community-based two generation approaches to ensure that at-risk children mothers and families have access to the critical services they need to thrive. Dr. Lopata continues practicing medicine part-time with Capital Area Pediatrics in Vienna, Virginia. With that, I'll turn it over to Dr. Warne.

Donald Warne:

Thank you so much, Steve, for introducing us and giving more background on the committee. I really appreciate the introduction and your commitment to this important effort. To everyone on the webinar, this is Don Warne. I welcome you and thank you for tuning in today. I'm honored to present this information on behalf of the committee and specifically our recommendations with you.

My term actually has expired on the national advisory committee as of April 2018. This past meeting was my last meeting but very pleased with the work that we have done to date. Before we go over the recommendations, I'd like to pick up where Steve left off and expand where the ACE study came from, some of the outcomes from ACE studies, the connectivity to ACEs and rural populations and then finally our recommendations from a policy perspective.

In terms of looking at ACE categories, leading up to the publication of the original ACE study back in 1998, the co-principal investigators were Dr. Vincent Felitti from Kaiser Permanente in California and Dr. Robert Ander from the CDC, Centers for Disease Control and Prevention.

They actually evaluated over 17,000 Kaiser health plan enrollees and analyzed survey results that included different types of Adverse Childhood Experiences and health-related behaviors as a result of those connections to Adverse Childhood Experiences.

The ACE categories included abuse which listed here include physical abuse, emotional abuse, and sexual abuse as well as neglect both physical neglect and emotional neglect and then five categories of household dysfunction including mental illness in the home, incarcerated relative, mother treated violently or domestic violence in the home, substance abuse in the home, and parental divorce or separation.

In looking at this, what Felitti and colleagues found was that Adverse Childhood Experiences were quite common in the sample they studied which was mostly Caucasian and college-educated, about two-thirds of the participants reported at least one category of ACEs and about one in eight or about 12-1/2% reported high ACE scores of four or more. This is relatively common even in a relatively well-educated and higher income population.

What did the ACE study findings show? What was fascinating is that they did observe what's known as a dose-response relationship. What they found is that the number of ACEs reported by the individual correlated with worse adult health outcomes. That's to say that the more ACEs an individual reported, the likelihood of engaging in negative health behaviors increased as well as increased risk for several causes of morbidity and mortality.

You can see towards the bottom of the list things like depression, alcoholism, substance abuse, suicide attempts were significantly increased if an individual had four or more Adverse Childhood Experiences. The ACE score can range from 0 to 10 based on the number of ACEs. Here, you can see significant associations with mental health considerations. In addition, they found significant associations with chronic disease as well, so 1.6 times greater to experience diabetes, 1.9 times greater to have cancer, 2.2 times greater to have heart disease, 2.4 times greater for stroke, 3.9 times greater for COPD.

In addition, there's higher risk or higher percentages of risk factors including severe obesity and smoking. Even sexually transmitted diseases are two and a half times greater for those who have four or more ACEs compared to those who had zero ACEs. We can see significant correlations to poor health outcomes based on an individual's ACE score.

From their findings, the researchers developed the following conceptual framework which is the ACE pyramid. What it suggests is that early exposure to chronic stress has negative implications for the onset of chronic disease and even premature mortality. In the 20 years or so that have passed since the original ACE study was first published, researchers reaffirmed its findings across a number of populations.

Researchers have also begun to understand the critical role that toxic stress plays in affecting the foundations for health development. It very briefly toxic stress refers to the severe and prolonged activation of the stress response system. That includes things like stress hormones such as epinephrine and cortisol that can be elevated leading to what's commonly known as the fight-or-flight response.

We can see that high levels of stress have a negative impact on health outcomes. That can be referred to toxic stress. When toxic stress is experienced repeatedly, it can lead to kind of a wear and tear on the brain and the body leading to early onset of disease. For those who are interested in learning more about the impact of toxic stress at the bottom of this slide, there are links to a couple of TED-Ed videos that I think are very good in demonstrating the correlations between toxic stress and the impact on brain development.

What are the issues related to ACEs in rural America? The answer that question remains largely unknown surveillance of ACEs nationally particularly accounting for geographic variation does remain limited but we do know the following from these three studies. Today, there have been three studies that have looked at the prevalence of ACEs based on rural or urban variation among adults 18 and over. These first two listed are taken from data from the CDC's behavioral risk factor surveillance system or the BRFSS survey.

In this survey, it is asking adults their recall regarding Adverse Childhood Experiences. As you can see in both of these studies, more than half the rural adult respondents reported that they

had at least one ACE, so an ACE score one, and more than one in eight of the respondents experienced at least four or more ACEs.

These findings do follow a similar pattern to other multi-state BRFSS analyses and also very consistent with the original ACE study published about 20 years ago. There does appear to be a similarity between rural and urban populations in terms of overall ACE prevalence. However, there may be emerging disparity. As I'd mentioned, the BRFSS reports are adults that are surveyed based on their recall. When we look at a recent study of rural children that used the 2011, 2012 national survey on children's health, they found that nearly 30% of children living in small rural areas experienced two or more ACEs compared to 21.3% of urban children.

In this study, it looks like the disparities might be a little bit worse and does that reflect changes in the patterns of ACEs and communities or something with the way we're collecting data based on looking at children directly in real-time or based on adult recall, other ACEs in the BRFSS study. These are important research questions that need to be pursued moving forward.

Although research on the prevalence and severity of ACEs is limited, it is possible that rural children and adults would be at an elevated risk of experiencing more toxic stress based on the social determinants of health that we see in many of our rural populations. Thus, they could have higher ACE scores than their urban counterparts. Over the years, the committee has noted in its reports and policy briefs to the Secretary of Health and Human Services that the rural population is diminished when multiple often co-occurring factors limit one's ability to thrive.

The co-occurrence of these factors such as poverty, other socio-economic factors and disease can take a toll on the health of rural populations. In terms of rural poverty, we've known for many years, unfortunately, that rural populations tend to live in a greater degree of poverty than other populations.

According to the US Department of Agriculture's Economic Research Service in 2016, the poverty rate among rural Americans was higher than that of those living in urban centers or specifically if we look at who faces higher rates of poverty, children under five have a poverty rate that is higher than all other age groups and particularly rural children face higher rates of poverty than other demographics unfortunately.

In terms of rural disparities focusing on mortality, we can look at our own committee's policy brief in 2015 looking at the differences between rural and urban mortality rates. It appears that the disparity life expectancy is worsening over time. You can see on the right side of this slide for large metro counties, life expectancy in years is about 79.1 years and in rural non-metro, 76.7 years for the rural populations.

We do see disparities potentially in Adverse Childhood Experiences that could be correlating with the disparities in mortality. We see these examples here, COPD and suicide attempts. When we think about chronic obstructive pulmonary disease and suicide, these both are also correlated with higher ACE scores. The interesting thing about both of these topics and why we mentioned them that they've both been discussed in previous committee meetings.

In September 2017, the committee met near Boise, Idaho and discuss the impact of suicide among rural populations. Earlier this year, the committee convened near Charlotte, North Carolina. At that meeting, we did examine a number of issues including the delivery and quality of COPD care and treatment that's available to rural populations.

Unfortunately, the rural mortality rates are worse than urban and appear to be getting worse over time.

In terms of looking at rural health and Adverse Childhood Experiences when taken together in combination with existing healthcare barriers such as difficulty accessing care, healthcare workforce shortages, hospital closures, rural health is diminished. When additional determinants are accounted for such as ACEs, we can see worsening outcomes for the rural population.

Additional research has shown that the experience of growing up poor disrupts vital brain regions and results in difficulties with emotional regulation, working memory, inhibitory control, and learning. Furthermore, poverty and low-income levels contribute to a greater likelihood of other health burdens that are related to low-income, poverty, and less access.

Data from the CDC show that chronic disease differences are more pronounced in rural and impoverished communities when compared to more affluent and more highly populated areas of the country.

In terms of policy recommendations, the committee was able to visit the community of Cobleskill in upstate New York. We were graciously hosted by Siri Young who you will hear from shortly. During our time in Cobleskill, we took a tour of the Schoharie County Head Start. We also heard from early childhood experts and advocates in the region including Head Start educators, home visiting specialists, school-based providers and array of cross-systems professionals from local law enforcement to community social and Human Services staff.

Before we hear from Siri, I would like to go over the committee's recommendations in terms of our approach to policy. The first recommendation touches on the need to develop and implement a national strategy for ACEs. The committee recognizes that federal human service programs, funding streams, and research initiatives have the potential to move more fully toward integrating existing efforts into robust initiatives that can actively address the health and social consequences resulting from Adverse Childhood Experiences.

As a step in that direction, the committee believes that an ACE prevention strategy with a focus on rural, tribal and other at-risk populations should be established and implemented. Within the Department of Health and Human Services. There a number of federal programs and resources some of which Aaron Lopata will go over in this webinar in just a little bit.

However, the reach and coordination of these programs can sometimes be restricted as a result of statutory parameters that inadvertently create silos within our systems of care. Therefore, to overcome this and similar to other HHS strategies, the committee recommends that the Secretary develop and implement a comprehensive prevention strategy that identifies priority outreach and awareness, programming research and policy areas that address toxic stress trauma and its associated health consequences for Adverse Childhood Experiences in rural, tribal, and other at-risk populations with the understanding that each community is different. We have to have specific strategies for at-risk populations.

In the second recommendation, as seen on this slide, we focus on economic costs and impacts to society from ACEs and toxic stress. Economist and Nobel laureate, James Heckman, has consistently articulated the idea that the best way to increase economic productivity and to promote equity is to invest in early childhood wellness. In alignment with that notion, the committee recognizes that an understanding of economic costs resulting from ACEs and benefits gained from current federal prevention efforts are needed.

The committee also acknowledges that certain drivers that result in toxic stress and ACEs such as poverty have great impact on economic costs for society. For example, researchers estimate that in 2015, total childhood poverty cost over \$1 trillion in the United States.

From a cost-benefit standpoint, researchers concluded that "investing in programs that reduce childhood poverty is both smart and effective economic policy." Similarly, prevention of ACEs and their negative outcomes on health and well-being has implications for diminished economic productivity.

Therefore, the committee believes that the rural implications of this issue deserves a more specific focus and recommends that an analysis of economic costs resulting from ACEs and the benefits gained from prevention efforts are needed.

Our third recommendation focuses on strengthening existing data to better understand rural ACEs among child and adolescents. As I referenced earlier, the CDC's BRFSS survey is one of the most common ways that ACE prevalence is analyzed. Of course, BRFSS again is surveying adults and gathering recall data based on their own Adverse Childhood Experiences.

Another common method is using the National Children ... I'm sorry, the National Survey On Children's Health or the NSCH. The NSCH is administered by HRSA's maternal and child health bureau and collects state-level data on a range of items related to the health and the well-being of children aged 0 to 17 years in the United States.

The committee recognizes that while obtaining statewide data is important, this level of collection lacks rural specificity. Therefore, to help researchers and others analyze rural-urban differences in the prevalence of ACEs, the committee recommends that in addition to having a state variable within the public use file, a predefined composite variable for rural-urban status should be developed to improve our access to appropriate data.

The fourth and final recommendation from the committee touches on supporting funding for rural telehealth and supporting school-based health centers. According to a policy brief by the CDC using telehealth integrating primary care and behavioral health and administering services through a school-based health center or essential policy options to help increase access to mental care services for children in rural areas.

By combining these policy options into a more comprehensive approach, the committee believes that access to and delivery of integrated services through an on-site school health center with further support from the use of telehealth is an optimal promising practice for rural populations. Of course, the school-based health centers and rural communities are ideally positioned to offer prevention and intervention services for ACE-related outcomes.

During our site visit in Cobleskill, the committee heard from two representatives from Basset Healthcare, SBHC program, the school-based health center, a HRSA telehealth network grant program Bassett's SBHC program is increasing access to care using telehealth connecting patients to pediatric specialty services including psychiatry and linking them to non-medical services and registered dieticians.

According to the CDC's policy brief, school-based health centers have been shown to yield financial benefits with annual savings ranging from 15,000 to 912,000 at that savings to Medicaid has an example. However, the cost of starting and maintaining a school-based health center is challenging. While funding for SBHCs comes from a variety of public and private mechanisms since the SBHC model is a promising practice for rural communities, the committee recommends that the secretary seek additional funding and other resources of support for telehealth supported SBHCs in rural areas as a way of increasing access to integrated care.

In conclusion, those are the recommendations coming from the committee. If you'd like to further read about them or about any of the material that I've presented here, I encourage you

to read the committee's policy brief. You can access the brief on the committee's web page. We've provided a link on this PowerPoint file and also a link at the end of the webinar should you like to read further. With that, I will now pass it on to Siri Young who will provide a local perspective on ACEs. Siri.

Siri Young:

All right. Thank you, Dr. Warne. I'm Siri Young. As has been previously mentioned, I work at the head start program in Schoharie County. I'm a member of the Schoharie County ACEs Team. To start with, I wanted to give you a little bit of information about the county. We are located in rural upstate New York. Our population is a little over 31,000 people.

We're in 622 square miles, and our demographics, we are 95.7% Caucasian, 97% English-speaking. The per capita income is just around 28-1/2 thousand dollars per year. The Schoharie County ACEs Team was formed in 2015 out of a need for trauma-informed services for children and families in the county.

One of the things that we wanted to do when we got started was we wanted to really have some data around ACEs. When we first started meeting as a team, we felt as though ACEs was a factor for many of the children and families that we were working with as providers, but we really wanted to have some data around that.

We did the ACEs questionnaire with caregivers at the head start where I work. The structure of Head Start, we do have classroom teachers. We also have advocates and home-based educators. Those are staff who work directly with families. I trained the advocates and the home-based educators on ACEs on the questionnaire and how to do the questionnaire with families.

We decided to have it be done on a voluntary basis, so nobody had to do it. It was completely voluntary and families could do it anonymously. They could do it there with their advocate or their home-based educator or they can send it in anonymously in an envelope that we provided that went through the mail and came to me.

We had parents and caregivers fill it out on behalf of 46 children, and the results were as you can see on this graph, 35% of the children had a zero on ACEs questionnaire. 41% of the children had one, two, or three yeses on the ACEs questionnaire, 20% of the children had four, five, or six and 4% of the children had seven or more yeses on the ACE questionnaire.

One of the things that I point out with this is that the original ACEs study was done with adults who were looking back at their first 18 years of childhood. When we did the questionnaire with our families, they were responding for their children who were at most 5 years old.

We also asked the adults if they wanted to do it for themselves as well looking back on their childhood. We had 49 adults fill it out. The results were 33% of them had a zero. 42% of them said yes to one, two, or three items on the ACE questionnaire. 22% said yes to four, five, or six items. 10% of the adults who participated scored seven or more on the ACEs questionnaire.

This gave us a really good perspective about working with caregivers who themselves had their own childhood trauma and looking at how that impacts them as a parent and looking at their resilience of the family. Taking this all together, we definitely saw a need for services and trauma-informed approaches in the county.

The ACEs team is comprised of service providers in the community who are vested in promoting community awareness and capacity in order to help children and caregivers build resilience in response to Adverse Childhood Experiences. We decided that we really wanted to focus on two

main points that was to build awareness in the community and to build the capacity of the providers who are in the community. Those are our two main goals for the ACEs team.

As you can see from the slide, our membership has grown quite a bit. We have really varied agencies participating in our ACEs team at this point. We have representation from such agencies as the Department of Health with the early intervention program and the visiting nurses, the police department. We have several school districts.

In Cobleskill in the county, we have a State University of New York College at SUNY Cobleskill. They also participate in our ACEs team specifically through the early childhood program. We have many human service agencies and individual providers on our team as well.

Some of the accomplishments that we have in our three years since we have been formed as we just this fall at our third annual trauma and resilience conference. That drew an audience of 250 people. We have also created trauma bags. These bags are available to any provider who would like to use them and carry them with them. They have community resources in them.

They also have information for caregivers on very specific strategies that they can use with children to help build resilience and children who have experienced trauma. We, also all of us on the team, see ourselves as information ambassadors. When we're working directly with families or older children, we provide education around ACEs and ways to build resilience. When we're in the community whether we're at meetings, we talk about ACEs with other service providers and agencies as well.

What we're looking at a lot is trauma using trauma-informed approaches. Just to give some definitions, trauma is an event or a series of events or set of circumstances that's experienced by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on individuals functioning mental, physical, emotional or spiritual well-being.

Using a trauma-informed approach, it means that a program, organization, or system that realizes the widespread impact of trauma and understands potential paths for recovery recognizes the signs and symptoms of trauma and clients, families, staff and others involved in the system and responds by fully integrating that knowledge about trauma into policies and procedures and seeks to actively resist retraumatization.

For myself in my own ambassador role, just to give an example, I am very fortunate to have the full support of my administration as well as my fellow managers in understanding how trauma can impact all levels of working with children and families. All the direct service staff who I work with also, their buy-in was pretty immediate around using trauma-informed approaches.

They recognized how the perspective would enhance their work with children and families. We concentrate very hard on having a trauma-informed staff or using trauma-informed perspective with children, families and each other.

One of our program goals is to continue to increase the level of trauma-informed staff and trauma-informed approaches that we use. At least twice a year, we provide trainings regarding trauma and what kind of strategies can be used. We do use the ACE questionnaire and other education materials.

Since 2015, when we did the questionnaire with our families, we haven't done it across the board since then. We are looking at doing another round, but since then, our family advocates and home-based educators have the questionnaire with them when they're working with families so that if I'm the subject of childhood trauma comes up, they can use the questionnaire.

They use it in a way to sort of jumpstart having some talk about education around the effects of trauma and also to talk about resilience.

One of the major messages that is used with that if a caregiver does it based on the child who they are raising and, for instance, the child may have a score of four, we really talk with them about, okay, let's talk about ways to build resilience and ways that you can use your resources so that when your child turns 18 and your score is still four. We focus an awful lot on resilience building. We talk about strategies within our program and with our families about ways to build a child's resilience as well as the whole family's resilience specific ways of coping skills and ways to use relationships to do that.

I want to say that even though I'm the one who's talking to you today, it really has been such a huge community effort with the ACEs team and here at the head start program in Schoharie County and every member of our team is really doing amazing work in their own agencies and in the community at large.

I provide my information here if there's anybody after this webinar who would like to contact me, I'm more than happy to share more details about the things that we do here at head start or how we organize as a team in the county. With that, I will pass it over to Aaron Lopata.

Aaron Lopata:

Thank you so much, Siri. I want to just first start by just like quickly introducing myself. My name is Aaron Lopata. I'm the chief medical officer for the Maternal Child Health Bureau at HRSA. I would also like to say that we do work very closely with our colleagues in HRSA's office of rural health policy. I just want to say thank you to them for asking us to participate and talk with all of you today.

Just to give a brief overview of where MCHB and HRSA are within the bigger picture, agencies inside of HHS. Then, all the all the agencies I will say that HRSA is one of the programs ... agencies that are maybe lesser-known. Everybody knows CDC and NIH at FDA as example. I say HRSA is about the same size of CDC, but we are mostly a service. We provide services for lower income, underserved, at-risk populations.

As a result, everybody knows who we are, but we do a lot of great important work especially in this area to prevent ACEs which I'll get into discuss further.

Again, just to give an idea of my bureau or our bureau of maternal child health bureau, our mission is to improve the health of all mothers, children and families. Just to give you the idea of our size, we are at FY 2018 appropriation 1.292 billion. Our big grant programs is our title five MCH block grant which provides a block grants to all 59 states and territories and then to improve the health and access of low-income at-risk women and children to ensure that they all have all women children have access to healthcare.

Then, of course the maternal infant-early childhood home visiting program which I'll talk about more our Healthy Start program which is another community-based program focusing on, there's a lot of home visiting and focuses on reducing infant mortality and maternal mortality. Then, I included one small program. This is more of a demonstration but real impact that our bureau work very closely with our HRSA's office of rural health policy to implement as a technical assistance program to work with rural communities to reduce some of the disparities that Steve had talked about in his presentation regarding the health of young children and their parents and in the disparities that exist in terms of some increased prevalence of ACEs compared to urban communities.

Then, just briefly again, our mission is to improve the health of America's mothers, children and families. Again, we envision America where all children and families are healthy and thriving where every child and family have a fair shot at reaching their potential. I just wanted to point out that we MCHB well understand that in order to realize this vision where all children and families are healthy and thriving and have a fair shot at reaching their full potential, it's critical that MCHB be able to partner effectively with other federal agencies state and local governments and public and nonprofit organizations working on the ground with an at-risk communities.

Our ability at the federal level to positively impact the lives of families particularly underserved families and prevent ACEs, that job cannot be done by any one individual, agency or bureau. It has to be done in partnership with multiple federal agencies as well, of course, state government, state health offices and local governments and local nongovernmental organizations.

Having said that, we move into the next slide. Some of this has been covered already in the previous series and Steve's presentations, but just the stress that ACEs are preventable through primary prevention and through secondary prevention in terms of strengthening resilience among families and children, and it's critical that we be able to help children thrive by helping to ensure that they have safe, stable, nurturing relationships and environments.

This slide is, I think, it's important to take a look at this list of. By the way, this is a big list but it's not everything. It's not inclusive. All the things that family needs to thrive, but that's a pretty good list. To give an idea of what family is required to thrive and also give an idea of ... or to remind that it requires work from not just one agency or not even one health agency but from federal agencies across ... for agencies across the federal government.

Again, families need to thrive as job opportunities, fair wages, scheduling paid leave. Transportation is a huge need, again, particularly in rural areas, quality and affordable housing and then affordable healthy food supply. Then, we found to get to access the affordable healthcare which again is mainly within HHS's purview but again we need to work with partners that can provide and help support these other components.

The quality of child care, public schools, opportunities for higher education civic engagement inclusion and availability of networks and social support and family support. You see all these different things. It requires partnership across the federal government and, of course, with partnerships with states and local governments.

I just wanted to discuss briefly the MCHB programs or what we contribute to this partnership and to this coordinated effort. With the way we look at is we think it's critical to create a comprehensive two-generation approach the family needs by integrating and coordinating maternal and child health services. This includes social ... I'm sorry, health and medical services, social educational services and other services like I said about housing and transportation.

Again, just to name of few. The programs we have at MCHB that help work towards this goal is again the maternal-infant or a child home visiting program, our Healthy Start program. We also have our early childhood comprehensive systems program. Then, again real impact. The big one we want to talk ... I want to run or discuss is our maternal and early childhood home visiting program which is easier to say MIECHV.

The goals of this program is to provide voluntary evidence evidence-based home visiting services with the goal to improve prenatal, maternal, and newborn health, child's health and development including the prevention of child injuries and maltreatment to improve pairing

skills, to improve school readiness and child academic achievement to improve family economic self-sufficiency and referrals for our provision of other community resources and supports.

I'm going to the next slide. Then, just to give you an idea that in order to use our resources or help states use their resources wisely, our home visiting program really focuses on the most at-risk communities. Again, families in at-risk communities and low-income families our priority, pregnant women under the age of 21, families with a history of child abuse or neglect, families with a history of substance abuse, families that have users of tobacco in the home, families with children with low student achievement, families with children with developmental delays or disabilities, and families with individuals who are serving or have served in the armed forces including those with multiple deployments.

These have all found to be risk factors for families in terms of their risk for ACEs and for other social determinants of health. How does home visiting prevent ACEs? Well, one is that all the home visitors do screening and provide support services. They screen for depression. They screen for domestic violence. They screen for child abuse and neglect. If they find that there is evidence of this or if a mother or family is at risk for this, they will connect them to services.

The home visitors also build relationships and help parents and children build resilience, and as I just said, to connect family to community systems of services and support. Another program that MCHB funds is the Healthy Start program. Again, this is a program that was started in 1991 and has grown from 15 demonstration projects and 15 communities to 100 Healthy Start projects in 37 states and in Washington DC.

A big part of what they do, what Healthy Start does is collaborate again closely with local state, regional, and national partners. Again, these partnerships are critical to the success of Healthy Start or their ability to work with families and improve or create systems of services two generation services within their communities.

I also should say that the Healthy Start program targets communities. The way they identified 100 communities is that the entire communities with infant mortality rates that are at least one and one-half times the US national average. Healthy Start actually focuses very much on reducing infant mortality.

Then, these are the again the goals, reduce differences and access to and use of health services, improve the quality of local health care system, empower women and their families and create consumer and community participation and healthcare decisions. While the objective of the Healthy Start really one of the main objectives is to reduce infant mortality, you can see that the program believes and through our history of looking at evidence-based approaches and best practices that we have to do these four things in order to achieve the ... and all these four things are about involved system changes to achieve and realize our goal of reducing infant mortality.

Then, another one program we support is early childhood comprehensive systems. This uses a collaborative innovation and improvement network approach to work to enhance early childhood systems building and to demonstrate improved outcomes and population-based children's developmental, health, and family well-being indicators. Then, these are state grants. These grants develop, help states develop collective impact expertise. They help states implement, sustained efforts across the state and the county and at the county and community levels.

I also want to again point out or discuss briefly Rural IMPACT. This was a program that we, MCHB, worked closely with our partners, our colleagues and the office of rural health. The objectives was to provide technical assistance to 10 rural and travel communities to help them

innovate two generation strategies. The goal was to increase parents ... The overall outcomes goal was to increase parent's employment and education and the well-being of their children and families.

This was a collaboration not only between MCHB and our HRSA's office of rural health but also between a MCHB, HRSA and CHB office of rural health and administration for children and families. That was within HRSA, of course, and the US Department of Agriculture, education, labor, and the Corporation for National Community Service. Again, just to highlight that in order to create these and help communities develop and implement these comprehensive two-gen systems of services to support families, it requires a partnership beyond HRSA and beyond HHS.

Then, this is just to kind of again highlight again that any partnership that that involves an effort to build these comprehensive services or systems of services at community level will require not just MCHB programs or programs from our office of rural health policy but also from ACF, the Administration for Children and Family and Head Start and Early Head Start also our critical programs when it comes to early childhood education and support. Of course, the WIC program is also critical and title 10 family planning.

As Siri talked about supporting in all cases, in all environments trauma-informed systems of care which again is really critical to be able to provide the support to family's children or parents who've experienced trauma. Anywhere they go within the system of a healthcare system, it's really critical that they are receiving care from people that understand trauma-informed systems of care and provide guidance and supports that is consistent with from informed care. That is also very critical.

We work very closely with SAMSA, the Substance Abuse and Mental Health Services Administration. Again, that involves the partnerships across the federal government as well. Hopefully, this helps to provide a little bit of overview of what this effort looks like from the federal perspective.

With that, I wanted to throw it back to Steve. Steve, are you there?

Steve Hirsch:

Yeah. I'm here. Thanks so much, Aaron. I'd like to thank our other two speakers as well, Dr. Don Warne and Siri Young. Before we move into the Q&A session, let me remind everyone, you can visit the committee website at the address given here on the screen and find the ACE's policy brief there along with the recommendations. Now, I'll turn it over to Kristine. We will see if there are any questions.

Kristine Sande:

Thanks, Steve. At this time, you should all see the Q&A box on the lower right-hand corner of your screen. That's where you can enter any questions you might have for our speakers today. I do realize that we are running up against the end of the hour, but for those of you who can stay on, I think we can run the Q&A session a little past the hour if we have questions for our folks.

The first question says, "I work for a behavioral health provider in New York. Given the lack of medical access in vast areas of rural upstate New York, we are in the early stages of identifying an appropriate model program for mobile behavioral health." Let's see. I don't see any actual question there. We'll go on to the next. Can Siri share more about trauma bags or share contents with us in follow-up? Siri, do you have things that you want to share about the trauma bags?

Siri Young:

Sure. I have one right in front of me. We have some brochures for some of our local agencies that can be a support to children and families such as our mobile crisis team and our, let's see, rehabilitation support services. We also have a magnet that was created that talks about who to

call for help so that families can put it on their refrigerators or somewhere else where it's accessible that talks about where some things that could be related to trauma, that might be difficult for people and what kinds of symptoms they might have that they would need to call somebody. Then, it has the numbers of the local places where they can call.

Then, we also, through our program out of Binghamton, called Early Childhood Direction Center and the Parent Technical Assistance Center on their website, they have cards that you can print out better for children. It's a really wonderful visual that has pictures and it has words. There are cards of different things that children can do when they're upset. Of course, there are things that anybody can do. These actually are cards that we use within our classrooms and our preschool and some of our toddler classrooms in our program.

They just have their ... It's just a nice visual for families to be able to use so that when kids are really upset, it gives them some coping strategies of things that they can do to calm down. There's a bunch of them, so families can really pick ones that fit with their family culture and with the things that they might have readily available. Those are a couple of things. We have stress balls that we frequently get donated that when you put in there and those kinds of things.

Kristine Sande: Thank you so much. Next question is what are the pros and cons of screening for ACEs in primary care in rural areas where behavioral health services are limited? Anyone want to weigh in on that?

Aaron Lopata: This is Aaron Lopata. I think that the pros are clearly ... I mean you don't know ... You first need to have information there to take action, of course. If you're going to support families and help them address adverse childhood events, you first need to determine if there are any or how many there are. I think this is a challenge. I think that the cons are among primary care center is just a limited amount of time that providers have with patients to go over ACEs unless they make a specific appointment for it.

But this is also why I think we need innovation within primary care clinics and also then that also means underlines the necessity for medical homes which are more team-based approach. There could be a team member whether it's the nurse and nurses also have so much to do as well, but another person, a staff member that can sit down with the family before or after a visit ideally before to go through a list of questions of asking them social determinants of health and ACEs to get an idea of what their problem is.

Then, that clinic needs to have connections to services outside and in their community. They have to be aware of again what their behavioral health services are available. If there are some, they can make a referral to them. If they're not, then that information that they need to share again with their local government or community leaders to say this is a problem.

We can't address the problem of insufficient behavioral health services unless we're aware of it. There needs to be a system involved where there can be feedback at the local level, state level, or federal level is say this is an area where we need more behavioral health services, but until that happens, they at least have to have a medical home where the primary care provider or their team can, one, identify social determinants of health and/or ACEs and then provide a referral to services in that community or outside of community. I hope that helps a little bit.

Kristine Sande: All right. The next question is I was wondering what theoretical models you use to treat trauma such as TCBT or positive parenting. Does anyone wanted to take that question?

Siri Young: This is Siri. I can just say we don't treat trauma from a therapeutic point of view in the head start program. We are looking at building resilience. That's the basis of where we come from.

Kristine Sande: All right. Here's a question for Siri. How did you engage the non-health-related partners specifically law enforcement to recognize ACEs and how to handle those cases differently?

Siri Young: Yes. The police chief for Cobleskill got involved in our team because we were doing a showing of the documentary Paper Tigers in our community. One of ACEs team members invited Chief Falkowski to sit on the panel that we were having afterwards. He was more than happy to do that. The police department does a lot of community outreach. He came and he watched the movie. He sat on the panel.

From having watched the movie Paper Tigers, that was where the buy-in came from. He watched the documentary. Then, he reflected with his team. They really looked at the things about having police involvement in a home or in a family and how that can be a component of a traumatic event for a child.

Kristine Sande: Thank you. Let's see. This question says my question is regarding the future options of telehealth that Dr. Warne mentioned. Would telehealth include speaking to with trained trauma-informed staff that could guide them in resiliency building and strengthening and parenting skills? Dr. Warne, do you want to take a stab at that?

Donald Warne: Sure. Just kind of related to some of the other questions previously, there's, as we know, in many of our communities just a lack of services. If we live in a rural particularly impoverished setting, we typically don't have access to pediatric psychiatry, for example, or quite often, people are trained in counseling for the pediatric population. Certainly, when we're looking at interventions for those children who are suffering in real time from Adverse Childhood Experiences, I think telemedicine, telehealth, telepsychiatry offers an opportunity to at least level the playing field to some degree for that level of service.

Of course related to a previous question, the other challenge that is not just that direct psychiatry or psychology type of services that sort of wraparound social services that are needed which raises another challenge in a rural population. I just look at telepsychiatry, telemedicine in general as a way to try to level out equitable access to those types of services, but we still need services on the ground. We still need home visitation and opportunities to expand some of the evidence-based and promising practices that are already being funded like MIECHV, other home visitation and parenting skills. Perhaps, we could look at home visitation through home-based telehealth opportunities. They have not seen a lot of that going on around this area, but certainly direct access to perhaps web-based social services and home outreach is another possibility within this arena just has not yet been developed to the degree that we need to reduce the inequity.

Kristine Sande: All right. We have a couple of questions pertaining to middle school students whether you think it would be worthwhile to screen all students across the Middle School. Then, what resources might be available to help those students who are in middle school that have ACE exposure?

Donald Warne: This is Dr. Warne, I guess I could take an initial stab at that. There are some very promising home-based programs that are not necessarily purely focused on Adverse Childhood Experiences, but there's such connectivity across things like suicide prevention, opioid prevention just wellness promotion, and, of course, reduction of ACEs and mitigating the impact of ACEs.

There are some very good and promising school-based programs that I'm familiar with here in North Dakota and other states. We have sources of strength which does engage entire school-based populations around peer supports. I think that when we're screening, we have to be

cognizant to the fact this is difficult data to collect because the original study and most of the follow-up studies have been interviewing adults based on their recall of their own childhood.

When we're trying to assess ACE scores within the current pediatric population, it's very challenging because quite often, children can't express the terms that we would need. We depend on the caregivers or the parents. In some cases, it's the parents and caregivers who are the perpetrators of the Adverse Childhood Experiences.

You have to be cognizant that this is an incredibly complex arena, but there are some promising practices for school-based and pediatric clinic based screening but ideally those have to be connected with warm handoffs to social services. It can't just be collecting the data. We need to make sure that we increase access to the support services needed to mitigate the impact of adversity and toxic stress.

Kristine Sande: Thank you. Another question probably for Dr. Lopata. We are a very rural community and receive many homeless families in need of housing, food, transportation, and employment. How might we incorporate a Healthy Start program or Rural IMPACT program?

Aaron Lopata: Yeah. That's a very good question. Well, I think Rural IMPACT a little bit ... Rural IMPACT is a little bit more of a demonstration. We initially had 10 programs. Now, we just gave a grant to West Virginia. They have identified three rural communities within their state. They're going to be doing the same type of work to promote development of two generation systems to work with at-risk families in those communities.

I will say Healthy Start is, of course, I work as a actual funded program was like about a hundred million. I think it's just a matter of applying for when looking at Healthy Start and see you next time. They will be posting a request for new applications, but I think until the time I would also work with your state title V grants, our state title V offices. Again, this is an ongoing challenge to kind of determine what are the assets you have federal programs in their communities and whether state and local programs and determining like what are the needs.

I think what we really need though is ... going back to the recommendation like the first recommendation on the need for I think Dr. Warne's presentation talking about the needs for that committee recommends the secretary develop and implement a comprehensive prevention strategy.

Again, if we have a comprehensive strategy, then there's a strategy that should include way for communities to provide feedback and what their needs are both in terms of services and for their needs in terms of building capacity to implement these two-gen systems because, otherwise, from the federal perspective, we need to know where to put the resources, what resources are required.

It is also from our ... We don't always our resources are finite as well. We also need some help from Congress in terms of getting additional resources, but I'm guessing that the response wasn't that reassuring or helpful, but definitely keep an eye on Healthy Start's website and see when they're requesting applications. Hopefully, we'll be able to work with our partners to find a mechanism through which we can help provide rural communities like yours receive those resources that they require.

Donald Warne: Hey, it's Dr. Warne. Can I just add a little bit to that?

Kristine Sande: Sure.

Donald Warne: Just thinking in terms of our recommendations, of course, it's to the secretary at the federal level, but there's opportunities I think at each state level as well and part of the comprehensive strategy also has to look at sustainable models for developing these programs. Right now with grant funding, if you receive the grant that's wonderful, but what happens when the grant ends or what happens if you're just not one of the communities that received a grant?

Part of the comprehensive strategy and sustainability includes making these types of services billable under Medicaid, but that's a state-by-state decision. I would think that people would look at their local advocacy organizations to try to determine how we can have sustainable and billable services to address ACEs.

Aaron Lopata: Yeah. I would agree with Dr. Warne 100%. Any services that we can manage to get billable to Medicaid would be extremely helpful because a lot of the problems in terms of providing the resources is, of course, paying for them and grants are not a really ideal way of doing it. It's much more sustainable if it's through one of the public ideally even private as well, but insurance payers.

Kristine Sande: Thank you, really interesting discussion there. I think, at this time, we will wrap up. Unfortunately, we didn't get a chance to get to all of the questions. We will try to get the questions that have been asked that we didn't get to the speakers so that they can reply privately to you if you asked a question that we didn't get to.

On behalf of RHlhub, I just like to thank our speakers for the great information they share today as well as to our participants for being with us. A survey will automatically open at the end of the webinar. We encourage you to complete that survey to help us constantly improve our webinars and to give us ideas of what topics you would like to hear in the future.

The slides used in today's webinar are currently available at the link listed on the slide. In addition, a recording and the transcript of the webinar will be sent to you by email in the near future that will allow you to listen again if you'd want or to share the presentation with your colleagues. Thanks so much and have a great day.