“The Kids Aren’t Alright: Adverse Childhood Experiences and Opportunities to Forge a Healthier Future” Webinar Transcript

Elizabeth Lukanen: Welcome everybody. We will get started in just a minute.

Elizabeth Lukanen: Hello, and welcome. We will get started in just one moment.

Elizabeth Lukanen: Welcome, everyone. Thanks for joining us at this SHADAC Webinar. Our webinar today will focus on Adverse Childhood Experiences, their policies and health implications. My name is Elizabeth Lukanen. I'm the Director of the State Health Access Data Assistance Center or SHADAC as we're more commonly known. And I'm going to be moderating the webinar today.

Elizabeth Lukanen: For those of you who may not know us, SHADAC is a health policy research center located within the University of Minnesota School of Public Health, based here in beautiful Minneapolis. One of our main goals is to assist analysts, researchers, and policymakers in the use of a variety of data sources, including Federal and State surveys, to inform and evaluate their policy decision making.

Elizabeth Lukanen: We also specialize in translating complex research findings into actionable information which is our aim today.

Elizabeth Lukanen: Before we start, I want to thank the Robert Wood Johnson Foundation for funding SHADAC’s work, and for making this webinar possible. We are always very grateful for their support.

Elizabeth Lukanen: A couple of logistics: Everyone in the audience has been muted. But you can use the chat feature to send us a message. If you're experiencing any issues, we'll do our best to help out. You can also submit questions anytime throughout the presentation through the Q&A button at the bottom of your screen. That's how we're going to be fielding questions, and we'll answer as many as we can after Colin has concluded his presentation. Just a reminder that this webinar is only 45 min. So, get those questions in early!

Elizabeth Lukanen: Finally, this webinar is being recorded, and we will notify you via email when it's posted on the SHADAC website. With that will come a transcript and presentation slides. So, stay tuned for that.

Elizabeth Lukanen: Now I want to introduce our featured speaker, Colin Planalp. Colin is the Associate Director of Emerging Health Policy Issues here at SHADAC. In this role, he helps policymakers to measure, address, and study pressing health issues, including the opioid crisis, cannabis policy, and the topic of today's webinar, adverse childhood experiences. You can find his full bio on our website.

Elizabeth Lukanen: As this webinar is just under an hour, we're going to jump into the presentation right away. Colin will begin with some background on adverse childhood experiences, also called ACEs, including how they're linked to health. Then he'll dive into estimates of ACE prevalence among various states and subpopulations, closing with implications of ACEs for health policy and the longer-term health of children and adults.

At the end of the webinar, we're really hoping to address questions that have been submitted through the Q&A button at the bottom of the screen.

Elizabeth Lukanen: And if we don't get to your questions, Colin has included some contact information on his last slide; you can always reach out via email. With that I will turn it over to Colin.

Colin Planalp: Thank you very much for the introduction, Elizabeth, and thanks everyone for joining. Today. I'm going to jump right into my presentation.

Colin Planalp: So, we'll start with just a little bit of level setting. First, what do we mean by adverse childhood experiences? There's no single consensus definition of ACEs. But here's a working definition that I use in my work. ACEs are stressful or potentially traumatic events that occurred during a person's childhood (so generally before the age of 18) that may have negative short or especially long-term effects on physical or mental health, and those can also have trickle down effects on people's well-being, such as topics of socioeconomic position.

Colin Planalp: Similar to how there's no single consensus definition of ACEs, there's no single list of what experiences constitute ACEs. However, this slide shows several that appear in the most commonly noted forms of ACEs: abuse, including physical or sexual, neglect, including neglect of physical and emotional needs, and a composite category often called a household dysfunction. However, I find the term dysfunction to be frustratingly vague, so I prefer to think of these as family instability and volatility. Examples include domestic violence, substance use, mental illness in the household, and separation from parents through incarceration, divorce, or death.

Colin Planalp: This graphic shows a handful of the health and social conditions that research has found to be associated with ACEs exposure, including mental health and substance use disorders, cancer, diabetes, heart disease, lower income and lower educational attainment into adulthood.

Colin Planalp: I'll also point out where the graphic denotes lasting impacts.

Colin Planalp: Well, ACEs can have short term health consequences. Surely what makes them a particular concern is their potential for long-term health harms that persist well into adulthood. An important point to keep in mind about ACEs is that not all stress causes longstanding harm.

Colin Planalp: This illustration shows a continuum from positive stress to tolerable stress to toxic stress. Stress can become toxic and become more likely to have ACEs type harm if it is severe or intense, if it's prolonged or frequent, and especially if it isn't accompanied by protective factors, such as supportive family relationships.

Colin Planalp: This concept of stress is critical to how we believe ACEs cause harm. Toxic stress can be harmful in itself, having a weathering kind of effect on the body, and it can also serve as a trigger creating a cascade effect, especially in children whose brains and bodies are still developing.

Colin Planalp: This graphic illustrates a more behavioral focus model of how ACEs cause harm with factors lower on the pyramid feeding upward. There are a couple of important ideas built into this model. You can see the ACEs are found near the middle here highlighted in orange. It shows the ACEs have antecedents such as historical trauma that affects families and communities, and social conditions like poverty. These can make exposure to ACEs more likely for individuals.

Colin Planalp: It also shows that ACEs have personal repercussions, such as disrupted neurodevelopment and maladaptive cognitive patterns which can result in behavioral problems that in turn can harm people's health.

Colin Planalp: There's also a biological focus model of how ACEs cause health harms. We know from numerous scientific studies that exposure to trauma or severe and prolonged stress can affect neurodevelopment in children - how kids’ developing brains grow and function. Though it's not just the brain: there's evidence indicating the ACEs can contribute to a dysregulated stress response, which can affect the cardiovascular system, the immune system, and various other systems of the human body.

Colin Planalp: We also know that severe stress can have epigenetic impacts - impacting how cells and peoples’ bodies read and use our DNA with potentially negative consequences for our health. Epigenetic changes can also be passed on to offspring.

Colin Planalp: Studies have found that higher prevalence of certain physical and mental health conditions is associated with people whose parents were exposed to extreme stress.

Colin Planalp: Alright. So, with that brief background, I want to move on to SHADAC’s work with ACEs. One of the biggest challenges to quantifying the prevalence of ACEs pertains to definitions. As I noted, earlier definitions vary. Studies typically include these most commonly referenced types seen here on the left.

Colin Planalp: This list was drawn from the very 1st study of ACEs in the 1990s. But there are other potential ACEs that are sometimes included in definitions. However, studies often exclude other experiences that could arguably be considered ACEs, including certain economic hardships, like food insecurity and housing instability, that may still cause severe or prolonged stress in kids. For our study, we analyzed data from the National Survey of Children's Health. It's a long-running Federal study in which parents and guardians answer questions on behalf of their children. We were especially interested in understanding ACEs from a health equity perspective. And we wanted to examine data at the state level.

Colin Planalp: So, we used a strategy of combining several years of survey data to produce more reliable and precise estimates of the prevalence of ACEs for demographic subgroups in each state.

Colin Planalp: Thinking back to that last slide on definitions, we ended up using a somewhat idiosyncratic definition of ACEs for this project. Because this survey didn't ask questions about abuse and neglect, we're missing those components that are often included in ACEs definitions and ACEs research.

Colin Planalp: However, because the survey did ask about issues such as difficulty covering basic necessities, including food and housing and exposure to racism, our estimates include some experiences that are less commonly included in ACEs research.

Colin Planalp: Here, we see state-level estimates of the prevalence of children exposed to one or more ACEs. What's striking to me on this slide is that ACEs are quite common, touching nearly half of kids at the U.S. level. Most states have rates of ACEs exposure that are not significantly different from the U.S. rate of 46.3%. Those states are shown here in gray. However, there are a dozen states with rates significantly higher than the U.S. shown in dark teal in this chart, and 10 states with rates significantly lower than the U.S. shown in this chart in light teal.

Colin Planalp: This slide presents those same data, but in a map. The orange states are states with ACEs prevalence that's significantly higher than the U.S. rate, the dark teal are states with ACEs prevalence that's significantly lower than the U.S. rate, and the light teal states have ACEs rates that are not significantly different from the U.S. rate of 46.3%.

Colin Planalp: I'll pause for a moment so you can look at the variation across the map.

Colin Planalp: This table highlights the states with the 5 highest rates of ACEs, with Arkansas at the highest at 55.9% or more than half of children in the state. And the states with the 5 lowest rates of ACEs [are shown], with Minnesota at the lowest at 38.1%, but still more than one in three kids in the state.

Colin Planalp: One interesting pattern is that states with the highest prevalence of ACEs also tend to have high rates of child poverty while those with the lowest prevalence of ACEs tend to have low rates of child poverty. That suggests to me an opportunity for policy intervention to reduce the prevalence of ACEs by addressing issues related to child poverty and that relationship between economics and ACEs seems to hold when looking at demographic subgroups at the U.S. level.

Colin Planalp: This slide shows prevalence of ACEs by family income measured by percent of Federal poverty guidelines.

Colin Planalp: We see that children from families with lower incomes have higher rates of ACEs exposure than children from families with higher incomes. In fact, the prevalence of ACEs is more than twice as high among children from the lowest income families versus those from the highest income families in this chart. Although, even among higher income families, ACEs still affect more than one in four children.

Colin Planalp: Examining the data by race and ethnicity, we see that American Indian and Alaska Native children, Black children, Hispanic children, and children of multiple races had ACEs prevalence that was significantly higher than the population overall.

Colin Planalp: Asian children and White children had rates that were significantly lower than the population overall, and the rate for Native Hawaiian and Pacific Islander children was not significantly different from the overall population.

Colin Planalp: On this slide, like the last slide, we see some pretty wide variation. While more than half of American Indian kids, Black kids, Hispanic kids, and kids of multiple races had ACEs exposure, one in four Asian kids had ACEs exposure.

Colin Planalp: By age, we see that older kids had a higher prevalence of ACEs. In fact, a majority of kids aged 12 to 17 had exposure to at least one ACE. This also suggests that the risk of exposure to ACEs increases over time. That's concerning because research indicates a dose response to ACEs so that the more adverse childhood experience exposures that a person has, the more likely they are to suffer negative health effects in adulthood.

Colin Planalp: And finally, we see that ACEs are significantly more common among kids who don't have health insurance and kids with public health insurance coverage like Medicaid and CHIP. Kids with private health insurance, such as insurance through their parents’ employers, had a significantly lower prevalence of ACEs. This suggests to me another potential policy opportunity, and one that some States are pursuing.

Colin Planalp: In California, for instance, the State Medicaid program (called Medi-Cal) reimburses health care providers for conducting ACEs screenings of both children and adults enrolled in the program.

Colin Planalp: I recently had a conversation with the former California Surgeon General who spearheaded that effort, Dr. Nadine Burke Harris, and she described to me the importance of that approach for informing clinical interventions for people affected by ACEs.

Colin Planalp: My presentation isn't over yet, but I want to take a moment to point folks to SHADAC’s brief on this topic. It provides more context on the topic and on these data than I have time for in today's webinar.

Colin Planalp: And, just as importantly, or perhaps more importantly, along with that brief, you can also access detailed data tables, including estimates by demographic subgroups for all 50 States and the District of Columbia. And you can also access another slightly different version of those data on SHADAC’s State Health Compare website.

Colin Planalp: So, those are the data on prevalence of ACEs exposure that I wanted to present today. But I also want to talk a bit more on the public health and policy implications of adverse childhood experiences.

Colin Planalp: A quarter century of research has linked ACEs to numerous health and health-related issues with the corollary being that reducing exposure to ACEs may improve people's health and well-being.

Colin Planalp: This graphic from the CDC highlights how reducing the prevalence of ACEs could also help to reduce health risk behaviors, such as smoking, heavy drinking; socioeconomic challenges that harm people's health, such as unemployment and uninsurance; and the prevalence of numerous diseases and causes of death in the United States, including cancer, heart disease, and mental illnesses, including depression.

Colin Planalp: In addition to improving the health and well-being of Americans broadly, addressing ACEs could also prove to be an effective strategy for health equity. If ACEs harm children's health in the short, and especially the long term (and we have pretty strong evidence today that they do), and if exposure to ACEs is disproportionately more common among marginalized and oppressed communities (as the data I presented today seem to indicate), couldn't mitigating ACEs be an early intervention strategy to enhance health equity over time as well as health overall for the U.S. population?

Colin Planalp: Fortunately, the CDC has developed a resource guide to serve as a starting point.

I recommend folks check it out through the link below, but I'm also going to highlight a few key points and takeaways from that resource for action.

Colin Planalp: Ultimately, the idea comes down to a multi-layered strategy for addressing adverse childhood experiences. First, we endeavor to make ACEs less common through primary prevention - that could be through policies that support strong, economically secure families, addressing that relationship that I discussed earlier between family income and child poverty and ACEs exposure.

Colin Planalp: Second, we prevent tolerable stress from becoming toxic stress through secondary prevention strategies. We can do that by ensuring communities and families have support and resources so that they can moderate the potential harm of ACEs when those experiences can't be prevented.

Colin Planalp: Third, we not only treat the harms caused by ACEs (the heart disease, the diabetes, the mental health and substance use disorders), but also intervene in the mechanisms by which ACEs cause harm, such as the dysregulated stress response that I mentioned earlier. Health care systems can screen children and adults for ACEs exposure (like they're starting to do in California) and associated illness and then deploy appropriate treatments. This is a tertiary prevention strategy.

Colin Planalp: It's also important to note that because of the intergenerational cycles of ACEs, tertiary prevention for one generation can serve as primary prevention for subsequent generations so that we can interrupt the recapitulating pattern of aces running from one generation to another.

Colin Planalp: That's it for my prepared slides. But I'm very excited today for your questions, and to discuss this topic more.

Elizabeth Lukanen: Thank you, Colin, so much.

Elizabeth Lukanen: Please feel free to continue to add questions to the Q&A button at the bottom, but we will dive in.

Elizabeth Lukanen: And it looks like we have some that are about policy and impact, and some that are about data. Maybe I'll start with the data.

Elizabeth Lukanen: Can you talk a little bit about the data source that you used? And, specifically, talk about why you pooled so many years of data (2016 to 2019) to produce the estimates that you presented.

Colin Planalp: Yeah. So that's an important question. Like I mentioned earlier, we used data from the National Survey of Children's Health. This is a federal survey that's conducted annually, I believe, and it includes State identifiers that allowed us to produce estimates down to the state level; that was important for talking about the state-level variation that I discussed earlier in my slide deck.

Colin Planalp: The reason that we combined multiple years of data is we thought it was important, for health equity purposes, for understanding disparities in the prevalence of ACEs exposure across different demographic subgroups, to understand what that looked like, both for those demographic subgroups at the U.S. level, but also at the state level. By pooling together multiple years of survey data from the NSCH, we were able to increase the sample size in a way that allowed us to produce estimates for relatively small demographic subpopulations, so that we have to do less suppression of estimates because they're unreliable or imprecise.

Colin Planalp: We still had to do some suppression at the state level, but what that allowed us to do was really minimize it so that we could best understand variation among demographic subgroups at the state level and make that make those data available to people from states throughout the U.S.

Elizabeth Lukanen: And, just quickly, because this is sort of a side question is, is the National Survey of Children's Health pretty easy to get and use?

Colin Planalp: Yes. So, we have some data from the National Survey of Children's Health on our State Health Compare website. For instance, that ACEs measure on our State Health Compare website. There are other organizations that do some analysis of NSCH data and make that available for people who don't have a really technical quantitative background. But there are also microdata files that the federal government makes available for researchers to do that analysis yourself. And there are also places like SHADAC and an organization called CAMI that can provide technical assistance and have resources on the web discussing how to use and how to interpret data from the NSCH.

Elizabeth Lukanen: Thank you. Now, we have a couple of questions on almost sort of the inverse of ACEs. Can you talk at all about that, and is there data to do research on the positive extent of protective effects of positive childhood experiences that could counter ACEs.

Colin Planalp: Yeah, that's another really good question. I only touched on that briefly in my slides when I referenced the flip side of ACEs and the importance of having supportive family relationships. There are other kinds of positive childhood experiences, as researchers often call them, that can help insulate people from the harm of ACEs, and that gets back to the secondary prevention strategy that I discussed earlier.

Colin Planalp: So, the idea there is that if people are insulated enough by these protective factors, these positive childhood experiences, these relationships, then that can prevent what might be tolerable stress from becoming toxic stress. So, it interrupts that pathway. There are researchers who have looked in depth at positive childhood experiences what some of those positive childhood experiences are; they can moderate the harm of tolerable stress and prevent that from becoming toxic stress. I don't have a list of those right in front of me right now. But I think that's an important kind of next step for policymakers who are thinking about how to mitigate the harm of ACEs is thinking about ways that policy can be used as a secondary prevention strategy, not only primary prevention, which would prevent ACEs in the 1st place, but secondary prevention to prevent tolerable stress from becoming toxic stress.

Elizabeth Lukanen: Great. And that leads into a series of questions that are very policy focused. I'll sort of try to summarize them into one with two parts. How can communities and policymakers use findings like this to support kids and to enact policy? And then, specifically, you had an example in California. Are there other states or other communities that you know that have implemented direct policy interventions aimed at ACEs, and do you know of any evaluations of those interventions?

Colin Planalp: Yeah, so that's a good question. I think certainly these data can be useful for identifying where ACEs are particularly a risk - in what states ACEs are particularly a risk as well as demographic subpopulations. Looking at differences in ACEs exposure across children with different kinds of health insurance coverage, or health coverage status. I think that that example of the notably higher prevalence of ACEs exposure among children without health insurance and with public health coverage, such as Medicaid and CHIP, can help policymakers to think about what levers they have available to address ACEs and use that as a pathway to enhance health.

Colin Planalp: I will go back to that California example that you mentioned. I think that's a really great example of a state where policymakers looked at these data on the prevalence of ACEs, they saw those disparities, and they realized that they had a policy lever to help intervene in those pathways. They were able to establish a system for Medi-Cal in California to reimburse health providers for screening, and, as we all know, reimbursement is critical to helping influence what gets done; health care is a busy environment, and it's hard to prioritize things that aren't reimbursed.

Colin Planalp: And then, health care providers can use what they learn from those screenings to ensure that people get appropriate treatment. Not only treatment for cardiovascular disease or mental health issues that may precipitate their visit to the health care system, but also start thinking about some of those antecedents to what caused those issues thinking about dysregulated stress response or perhaps referring people to mental health treatment to help address maladaptive cognitive pathways that cause people harm and distress.

Colin Planalp: In in terms of other examples, I'm sure there are other examples in the U.S. The main example that I'm aware of is California. I think that California clearly has one of the most advanced approaches to addressing ACEs; it is quite broad, and how it uses the state Medi-Cal program to do that. And I know that there have been evaluation efforts in California to look at what the impacts of that have been. And I think it's going to be important for other States to do similar work when they take on efforts to address ACEs so that we can build a body of evidence to determine what works for addressing ACEs. Is this having the expected payoff and improving people's health and people's lives that we expect and want it to have?

Elizabeth Lukanen: Yeah, absolutely. And if we can look here at SHADAC to see if any evaluation documentations online, and if not, if it is forthcoming, we can try to lift that up when it comes out.

Elizabeth Lukanen: Shifting gears a little bit. We have a couple questions about sort of definitions, one very specific and one broad. First, would separation due to foster care be a factor in this? That's the specific one. And then I'll just give you the broad: can you talk about how the National Survey of Children’s Health asks about ACEs, and how that might compare to other sources that measure the concept?

Colin Planalp: Yeah. So, this gets into one of my great frustrations with ACEs research. Different people have different perspectives - it's my perspective that ACEs definitions often have been too focused on that very initial study from the 1990s that identified ACEs as an issue; many studies have failed to really broaden beyond those initial definitions.

Colin Planalp: I think that from my perspective separation from parents due to foster care could certainly be an adverse childhood experience. One of the broad concerns with divorce or parental incarceration or parental death is that separation from that parent, that interruption in a critical familial relationship. So, from my perspective, it doesn't necessarily matter precisely what the trigger for that was, and I think that broadly goes at my perspective, and how we should think a little bit more broadly about how to define ACEs. I think we should be looking at ACEs and ask what fits into this pathway? We know that, for instance, part of the reason we decided to include food insecurity and housing instability in our definition is because of research showing that that stress associated with those experiences as well as the research showing long term potential harm associated with things such as food insecurity. So we shouldn't, in my view, narrow ourselves to that very tight definition.

Colin Planalp: The second question about how the National Survey on Children's Health defines ACEs, and this gets at another one of the challenges of sort of surveillance work or broad research on ACEs using secondary data. So, one of the concerns and challenges with measuring the prevalence of ACEs is these can be very sensitive questions and the responses that you get may differ based on who you are asking. For instance, the CDC sponsored Behavioral Risk Factor Surveillance System over the years has included an optional module that asks about ACEs. Some states in some years have used that. And the way BRFSS asks about ACEs is it asks adults about what their experiences were with ACEs looking back in time at their childhood. So you can ask questions that are different of an adult through a survey in different ways. And you may get different levels of comfort with people responding to that survey through the BRFSS. For instance, when you're asking adults about their prior experiences versus a survey like the National Survey of Children's Health where you're asking parents or guardians about the experiences of their children.

Colin Planalp: So that is one of the critical challenges there. It remains a challenge even in examples like California's screening procedures. How do you ask those questions in a health care environment? How do you ask those questions of adults about their experiences in their childhood? How do you ask those questions of parents, for instance, of young children? How do you ask those questions, and what questions do you ask them? For instance, adolescents may be able to respond for themselves. It's a real challenge. But I think it's a challenge we need to grapple with.

Elizabeth Lukanen: Absolutely. And a question just came in that is sort of related, but less about defining the ACE and more about studying it differentially: Have you looked at or do you know of research that looks at individual ACEs? So, for example, does parental separation have a different impact than exposure to violence?

Colin Planalp: I have seen studies that focus on particular ACEs. That's not something that I have really focused on a whole lot in my work. I think that there are a couple of important reasons that influence how I've thought about that. One is any one of these forms of ACEs isn't necessarily especially common, especially when you're talking about ACEs like abuse, neglect. It can be more common for some of these economic ACEs. But when you're working with population level data collected from a survey, you may not get the level of precision and reliability that you want, especially for demographic subgroups, for particular ACEs, when you're looking for particular states.

Colin Planalp: When you're looking at this single ACE or that single ACE, another thing to keep in mind is there are lots of people who have exposure to multiple ACEs, and that is something that research has been very clear on - that dose response. People who have exposure to 3, 4 or more ACEs during their childhoods have a much higher risk for some of those associated negative health consequences than people who have exposure to only one adverse childhood experience. Here, we focused on that “one or more”, in part, because we're trying to make sure that we could produce reliable estimates at the state level for demographic subgroups. So, the more that you constrain that, if you want to look at 2 or more, 3 or more, 4 or more, that number gets smaller and smaller. It’s still important and it still can have real policy significance, but that's why we haven't focused on particular ACEs in our research here.

Elizabeth Lukanen: I'll give you 2 final questions, one that's broad and one that's specific. But I think they tie together. We have a question about whether you've seen any differences in ACEs reporting by age or generation, and the questioner notes that certain generations could see a situation as traumatic, while another could see it as normal. And that leads into my final question for you, which is anything you're thinking about in terms of future research?

Colin Planalp: Yeah. So that's a really good question. I think that there are a couple of reasons that people of different generations may report different prevalence of ACEs. One is that the prevalence of some of these experiences may have varied over time, and you're thinking especially about some of these economic-moderated ACEs (as I view them) that could vary over relatively short periods of time, like when you're talking about economic downturns and recessions. People who grew up in the 1950s, 1960s may have very different experiences than kids who came of age during the great recession.

Colin Planalp: Certainly, people might have different perspectives in what they consider to be an adverse experience. And I think that's why these surveys typically ask relatively specific questions. But I also think we kind of have to take people at their word. To some extent, people know what was deeply stressful, what was severe and prolonged stress for them. They know what abuse was, what neglect was in their experience. I haven't looked at research in my work at whether and how that's varied over generations, but I would certainly expect some variation there.

Colin Planalp: In terms of future research. One of the things that we're really interested in doing is looking at ACEs and especially whether the prevalence of ACEs changed in recent years. We’ve come out, in the past few years, of a major event and world in U.S history with the pandemic. That had the potential to affect children in really profound ways. And I think it will be important to research that and understand as we're looking for ways to improve public health, and leverage the policy opportunities that we have at our at our at our fingertips.

Elizabeth Lukanen: Thank you so much, Colin, and thanks everyone for joining us today. We will follow up with a recording and transcript of this our contact information is available. And Colin has provided his email address if you have any further questions. Thank you so much, and we hope to see you next time!