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ADDRESSING ADVERSE CHILDHOOD EXPERIENCES (ACES) AN OVERLOOKED SOCIAL DETERMINANT OF HEALTH

As the nation emerges from the COVID-19 pandemic, states face budget challenges and struggle to meet increased demand for health, behavioral health, and human services. Under the Biden administration, the Centers for Medicare & Medicaid Services (CMS) has encouraged states to leverage Medicaid to address social determinants of health (SDOH). For example, CMS Administrator Chiquita Brooks-LaSure wrote in Health Affairs, "Our approach includes partnering with states to ensure the health care system considers and supports the whole of a person's needs: physical health, behavioral health, oral health, long-term service and supports, and healthrelated social needs. We must address longstanding gaps in areas such as behavioral health, as well as explore how Medicaid can contribute to addressing health-related social needs (e.g., nutrition and homelessness or housing instability)."1

In conjunction with Third Horizon Strategies (THS), the Health Equity Project has released a series of briefs to support policymakers, regulators, providers, and other key stakeholders evaluate investments to bolster health equity and address SDOH. Minimizing SDOH helps achieve health equity by ensuring everyone has a fair and just opportunity to be as healthy as possible. In this final issue brief of the series, researchers explore the impacts of trauma and adverse childhood experiences (ACEs) on health outcomes and ways states and health care delivery systems can support those whose health is negatively impacted by traumatic events.

The Centers for Disease Control and Prevention (CDC) defines ACEs² as potentially traumatic events that occur in childhood (0-17 years), including but not limited to:

- Experiencing violence, abuse, or neglect
- Witnessing violence in the home or community
- Having a family member attempt or die by suicide

ACEs fall into three categories: abuse (physical, emotional, or sexual), neglect (physical or emotional), and household dysfunction, which is caused by aspects of the child's environment that threaten their sense of safety and stability, such as growing up in a household with:

- Substance use disorders (SUD)
- Mental health conditions
- Instability due to parental separation or divorce

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- Family members in jail or prison
- Domestic violence





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INTRODUCTION

ACEs pose a grave and costly public health threat. According to the CDC, about 61 percent of adults have experienced at least one ACE before age 18.3 ACEs can induce toxic stress (i.e., extended or prolonged stress), compromising children's brain development, immune systems, and emotional response systems. Dr. Bessel van der Kolk is a worldrenowned psychiatrist and trauma expert who has helped pioneer research on post-traumatic stress since the 1970s. In his book The Body Keeps the Score,⁴ he details how trauma reshapes the body and brain and explores innovative treatments that activate the brain's neuroplasticity. The stress hormones of people who experience trauma take much longer to return to baseline than usual, and the stress response is often disproportionate to the stressful stimuli. For example, people who have experienced trauma may react strongly-or dissociate entirely in some cases—when faced with even mild stress. Essentially, the emotional brain trumps the rational brain. Even in cases where the mind learns to ignore the constant messages from the emotional brain, the brain does not stop secreting stress hormones and firing its electrical circuits. The physical effects on the organs may go unnoticed until the body demands attention by manifesting stress as somatic symptoms with no apparent biological basis, a ubiquitous phenomenon among children and adults with trauma. Constantly elevated stress levels lead to insidious side effects, such as memory and attention problems, irritability, sleep disorders, and long-term health issues.

ACEs take away a child's primal assurance of love and safety, particularly from their parents or caregivers, impeding their ability to tell whether people and situations are safe or dangerous. Individuals who experience trauma often struggle to trust or attach healthily to future supportive figures. Children cannot get in sync with people around them and develop empathy, impulse control, and self-motivation without an apparent safe haven. People must assess how others feel and adjust accordingly to function effectively in relationships and social settings, a complex work environment, or a household with children. However, faulty emotional response systems in individuals with ACEs can lead to blowups or shutdowns in response to harmless remarks or facial expressions. Dr. van der Kolk describes it as "continuing to organize your life as if the trauma were still going on—unchanged and immutable—as every new encounter is contaminated by the past".⁵

ACEs' adverse social and emotional effects can extend into adulthood, compromising education and job opportunities and increasing the risk of health conditions such as depression or heart disease. They can also lead to difficulty in making or maintaining relationships and trouble managing finances.

Additionally, ACEs are associated with other SDOHs. For example, children living in under-resourced neighborhoods or experiencing housing instability or food insecurity are more likely to have ACEs. Some children are further exposed to toxic stress due to systemic racism. Untreated trauma leads to devastating economic and social costs to families, communities, and society, totaling hundreds of billions of dollars each year. The CDC estimates that lowering the prevalence of ACEs in North America by just 10 percent could lead to annual savings of \$56 billion.⁶

LITERATURE REVIEW FINDINGS

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The relationship between ACEs and poor health outcomes is well-researched and documented. ACEs are significantly associated with poor health outcomes, such as increased substance use, depression, and chronic conditions such as heart disease. Interventions to address ACEs include





Post Traumatic Stress Disorder (PTSD)-focused counseling, brief therapy (e.g., two sessions focused on trauma and health behaviors), psychotherapies such as Family Mode Deactivation Therapy (FMDT), or Eye Movement Desensitization and Processing (EMDR), and motivation-based interventions. Analysts reviewed studies that include evidence of trauma and ACEs as health challenges and their correlation with health system utilization. All evidence listed is available publicly; the analysts did not have any studies that require a subscription.

Analysts assigned each piece of evidence a score (1-3) based on three components:

- 1. **Time** alludes to how recent the research and support data were published. Analysts attempted to reach the programming agency for more relevant evaluation findings if a study looked promising or a program was re-occurring, but that data was outdated.
- 2. **Strength** refers to the type of publication. For instance, analysts assigned a peerreviewed journal a higher strength score than a sponsored white paper.
- 3. **Outcome** is based on the specificity and economic nature of reported outcomes.

Analysts scored each element and then calculated a composite score: high (2.33–3.00), medium (1.67– 2.32), or low (1.00–1.66). Analysts reviewed 32 studies; 20 explored evidence for the impact of ACEs on health outcomes and interventions to improve them, and 12 were explicitly focused on community or domestic violence. Of these studies, analysts scored 24 studies high, seven studies medium, and one study low.

KEY FINDINGS

Numerous studies and systemic reviews establish that childhood trauma can lead to poorer health outcomes, higher prevalence of chronic health conditions, health risk behaviors, and socioeconomic complications later in life. Research also shows that adults with ACEs utilize health care services more often than those without. However, there are significant gaps in the evidence on interventions for ACEs. Most approaches focus on mitigating physiological or psychological symptoms rather than the negative impacts of ACEs on relationships or life circumstances and the social pathways that may mediate these effects. Addressing physiological and psychological symptoms is fundamental to treatment. However, many studies demonstrate linkages between ACEs and other SDOHs, suggesting the need for multifaceted solutions that provide clinical treatment in conjunction with the resources or pathways for individuals to improve their social conditions.

Some adult health problems are attributable

to ACEs. One study⁷ calculated the potential reduction in the number of observed cases for a range of population health outcomes and found that 23.9 percent of heavy drinking, 27 percent of chronic obstructive pulmonary disease (COPD), and 44.1 percent of depression cases among the population could have been potentially avoided in the absence of ACEs. The same study also found that nearly one in six (15.6 percent) adults reported having four or more ACEs.

Adults with at least one type of ACE utilize health care services more often than adults without

an ACE. One study⁸ assessed the effects of ACEs on adult health care utilization in an underserved, low-income population. The researchers analyzed data from nearly 40,000 Black and white participants who answered a yes-or-no questionnaire regarding exposure to ACEs. Some questions asked directly about specific traumatic events that constitute ACEs (e.g., the experience of sexual assault, physical abuse, substance misuse within the household, etc.). Others asked whether the participant felt loved, supported, important, or close to their family or whether a parent or other adult in the household often insulted, humiliated, or incited fear in them as a child. The study found that nearly 60 percent had at least one ACE, and 18 percent reported four or more. Black participants were more likely to have any ACE but less likely to have four or more ACEs than white participants. Compared to adults with no ACEs, participants with four or more ACEs were

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nearly 36 percent more likely to have visited the Emergency Room (ER) more than 10 times in the past year, 40 percent more likely to seek care in an ER or hospital instead of a private doctor's office, and 30 percent more likely to have more than two chronic diseases. The youngest participant surveyed was 43 years old, and the average age of participants was 54 years old. These results speak to the detrimental effects of ACEs on health care utilization, costs, and individual health for decades after the events have passed.

Hundreds of billions of dollars in annual costs are attributable to ACEs. A meta-analysis⁹ of 23 studies found that the total estimated annual costs attributable to ACEs are nearly \$750 billion in North America, with more than 75 percent of these costs arising from individuals with two or more ACEs.

The association of certain ACEs with health risks can be attributed to socioeconomic conditions. A study¹⁰ used the Behavioral Risk Factor Surveillance

System (BRFSS) survey to determine the direct effects of ACEs on three adult socioeconomic factors-education level, marital status, and income level-and estimate the associations of the number and types of ACEs with certain health risks. The researchers then assessed whether adult socioeconomic conditions mediate those associations. Researchers found that 15 to 20 percent of the association between the number of ACEs and adult health risks was attributable to socioeconomic conditions. However, some ACEs are more directly attributed to socioeconomic conditions than others. The health risks associated with three ACEs-exposure to domestic violence, parental divorce, and residing with a person who was incarcerated-were nearly entirely

explained by socioeconomic conditions. Further, socioeconomic attainment can mediate the total effect of ACEs by 8 percent for one ACE, 11 percent for two to three ACEs, and 12 percent for four or more ACEs. These findings emphasize the importance of addressing all SDOHs, as they are often intertwined.

Innovative psychotherapies can have better outcomes than traditional treatment

modalities. One study found that Family Mode Deactivation Therapy (FMDT)¹¹ led to significantly better outcomes than conventional cognitivebehavioral therapy (CBT) among adolescents with a history of abuse who exhibited deviant behavior and complex comorbid issues. FMDT was developed using a unique process called Validation-Clarification-Redirection (VCR), which uncovers and validates the distorted core beliefs in the family unit that form as a coping response to ACEs and impede cognitive functioning and emotional regulation. FMDT combines VCR with elements of other cognitive and behavioral therapies, including Dialectical Behavior Therapy (DBT), Acceptance and Commitment Therapy (ACT), and mindfulness. FMDT is a traumasensitive treatment modality that engages the entire family to bring awareness to and address unconscious patterns of cognition and related aberrant behavior. The premise of this treatment is to validate dysfunctional cognitions as reasonable products of past experiences without judgment or shame. Table 1 compares the stark differences in outcomes between the CBT and FMDT groups post-treatment. Internalizing behaviors refer to somatic, withdrawn, anxious, or depressive behaviors, and externalizing behaviors refer to aggressive or delinquent behaviors.

Table 1: Reduction in Behaviors Between Pre- and Post-Treatment

	Internalizing Behaviors	Externalizing Behaviors	Outward Anger	Inward Anger	Incidence of Physical Aggression
CBT	-5%	-4%	-3%	-6%	-33%
FMDT	-34%	-35%	-41%	-35%	-91%





Social support can have a buffering effect on individuals exposed to physical and emotional abuse. A longitudinal study¹² assessed whether self-reported social support decreased mortality risk associated with self-reported exposure to physical or emotional abuse over two decades. The study found that a one standard deviation increase in social support was associated with a 26 percent, 19 percent, and 20 percent reduction in mortality risk among individuals who experienced severe physical abuse, moderate physical abuse, and emotional abuse, respectively, in childhood.

Even brief interventions can improve the quality of life for individuals with ACEs in underserved

communities. One pilot study¹³ evaluated the feasibility of a two-session motivation-based intervention among low-income, Black primary care patients with ACEs. Of the participants, 65 percent reported four or more ACEs, 58 percent screened positive for PTSD, and nearly twothirds had at least one health risk behavior. The participants showed improvements in stress, alcohol use, risky sex, and nutrition habits postintervention. Stress reduction continued through the two-month follow-up, though unhealthy behaviors rebounded.

Community-based programs can improve psychosocial and health outcomes in adults

with ACEs. Adults enrolled in both faithbased and secular versions of a 12-week ACE Overcomers program showed significant improvements in all facets of emotion regulation skills, psychological resilience, mental wellbeing, and physical symptoms and illness, as well as specific facets of quality of life. The program held group sessions providing education and skills training on emotion regulation, self-awareness, resilience, and social functioning.¹⁴

Interventions for youth at high risk for maltreatment can reduce health care costs.

The Safe Environment for Every Kid (SEEK) model targets high-risk youth to identify and help address psychosocial problems that are risk factors for child maltreatment. A recent study¹⁵ found that SEEK has the potential to reduce health care costs. While implementing SEEK across 18 primary care sites would have cost about \$265,892 over two and a half years (\$3.59 per child per year), those same sites would have saved \$2,151,878 in health care costs for the 29,610 children involved, based on a conservative estimate that each child maltreatment case costs about \$2,779.



QUANTITATIVE RESEARCH METHODOLOGY

Researchers referenced a model of household stress with physical and behavioral health conditions and inpatient admit days, as well as demographic data (e.g., single-parent households, health care insurance coverage, household income), to assess the extent to which toxic stress and ACEs correlate with poorer health and social conditions.





The researchers leveraged the Household Stress Score from Algorex Health; a household-level social risk score developed to proxy the social determinant domains identified in the ACEs survey. Specifically, the model works by trying to identify, using proxy values, whether households have the following adversities:

- sexual abuse by an adult
- emotional abuse
- physical abuse
- domestic violence
- incarcerated household member
- SUD
- mental illness
- divorce

The model has a scoring range of 0-300, with a higher score indicating a higher risk for household stress.

- very low = 0-60
- low = 61-120
- medium = 121-180
- high = 181-240
- very high = 241-300

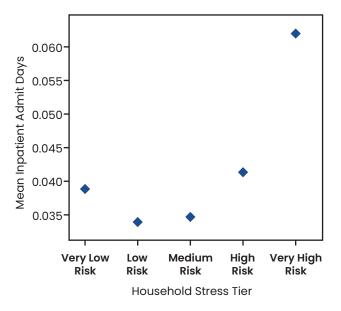
DATA FINDINGS

Household stress increases the risk of behavioral and physical health conditions. Researchers

found that household stress was associated with an increased prevalence of mental health issues, as well as diabetes, high blood pressure, obesity, and asthma ($R^2 = 0.7$ for all variables).

High levels of household stress are correlated with higher mean inpatient days. Households at increased risk for toxic stress or ACEs utilize costly inpatient services for extended periods. Data from Algorex Health demonstrates the correlation between household stress and mean inpatient admit days, with significantly higher inpatient admit days in households at very high risk for ACEs. Mean inpatient admit days for very high-risk households are nearly double those of low-risk households (See Figure 1). High utilization among households at risk is even more costly to the system considering households at increased risk for toxic stress or ACEs are also more likely to be uninsured. The data found that around 4 percent of high or very highrisk households are uninsured, compared to about 1 percent of very low-risk households.

Figure 1: Mean Inpatient Admit Days by Household Stress Tier



Lower-income households are at greater risk

for ACEs. Households with an income of less than \$50,000 are at high or very high risk for household stress, whereas households earning at least \$70,000 a year are at low risk for household stress. The data also found a positive correlation between the mean percent of families with a single parent and household stress.





STRATEGIES STATES CAN USE TO ADDRESS LONELINESS AND SOCIAL ISOLATION

As described in the issue brief series <u>introduction</u>, researchers developed a framework that enables funding, implementation, and operationalization for such activities. States and other key stakeholders can utilize the activities in this framework to develop thoughtful and innovative approaches that address social gaps demonstrably linked to health outcomes.

Exhibit 1 illustrates the guiding framework for these issue briefs. The framework outlines a pathway of six activities and three foundational levers that govern how these activities are funded, implemented, and operated. The structural approach to this model encourages states to problem-solve by examining the multifaceted options at their disposal.

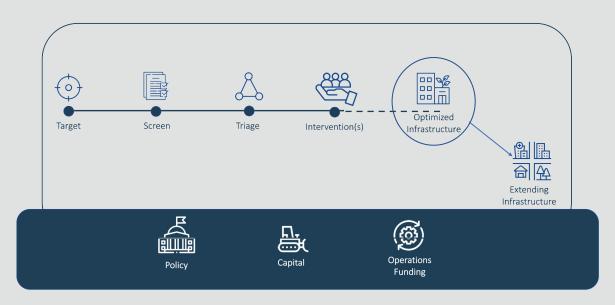


Exhibit 1: SDOH Strategy Framework

The following section provides specific considerations for addressing ACEs based on this framework.

Target

Individuals living in distressed neighborhoods or with multiple chronic conditions should be viewed as potential targets for ACE screening and treatment. Individuals with serious mental illness (SMI) are also at risk for ACEs, particularly those with borderline personality disorder (BPD), for which 30 to 90 percent of cases are associated with childhood abuse and neglect.¹⁶ Additionally, youth who present aberrant or antisocial behavior are warranting attention now more than ever due to their cost to society. Health systems should also pay attention to individuals experiencing unexplained mental and physical health symptoms, as trauma can manifest as illnesses without apparent cause. As a form of primary prevention, states and health systems should also encourage screening pregnant women with psychosocial risks to limit the transmission of vulnerability and trauma from mother to child via maternal behavior.





Screen

States are increasingly requiring SDOH screening of Medicaid members, whether they are conducted by Managed Care Organizations (MCOs), intermediary care coordination entities, or directly by health care providers. States should ensure that questions assessing toxic stress and ACEs are included in these screenings.

The literature shows that screening and identifying ACEs are vital in connecting patients with needed services and support, such as behavioral health counseling. Providers can use various tools, including the Pediatric ACEs and Related Life Events Screener (PEARLS),¹⁷ the original ACE Questionnaire developed by the CDC and Kaiser,¹⁸ Whole Child Assessment,¹⁹ or homegrown screening tools.

The Philadelphia ACE Task Force (PATF)²⁰ is a community-based collaborative focused on developing local strategies to address ACEs and promote resiliency and recovery. One of its first initiatives was to develop an expanded ACE survey, which included additional questions about toxic stress and adversity – such as experiencing racism or discrimination, living in unsafe neighborhoods, experiencing bullying, and being in foster care – as well as the original ACE Questionnaire terms. A study²¹ conducted on the expanded survey found that 73 percent of participants had at least one conventional ACE, and more than 63 percent had at least one expanded ACE. The nearly 14 percent of participants who experienced only expanded ACEs would have gone undetected if only conventional ACEs were assessed, suggesting the need for broader and more inclusive screening initiatives.

Triage and Care Coordination

States must follow up on any SDOH and ACE screening with a systematized approach to triage and care coordination that connects Medicaid members with behavioral health services and needed community resources. States can accomplish this by establishing Primary Care Case Management programs (PCCM), requiring MCOs to carry out these functions, and/or paying the intermediary organizations designated to engage with these community members.

Interventions

The interventions identified through the literature review primarily rely on psychological interventions and community-based education campaigns. The research found that psychosocial and behavioral outcomes have a higher odds ratio than medical outcomes for individuals exposed to multiple ACEs.²² Thus, systems should begin to move away from the standard focus on medical outcomes and instead focus on how to alleviate problems that interfere with an individual's ability to be a functioning member of their community. Treatment needs to address not only the effects of specific traumatic events but also the loss of self-regulation and dissociation that persons who experienced ACEs exhibit due to not having consistent care, affection, and security. The basis of any treatment for ACEs is to address trauma. Therefore, it is critical to implement trauma-informed care (TIC) and training for health care professionals.

Healthy relationships are one of the most important determinants for child resilience and recovery from trauma, so evidence-based interventions that strengthen familial relationships, caregiver bonding, and positive social interactions are critical to addressing ACEs. Protective factors, such as children's social-emotional competence, supportive social connections, and knowledge of parenting and child development, can help mitigate risk and promote healthy development. The emerging Health





Outcomes from Positive Experiences (HOPE) framework²³ includes protective and promotive factors that decrease the effects of ACEs and allow children to develop resilience and recovery skills. HOPE is a conceptual framework that encourages a holistic approach to child health care and focuses on actively promoting positive childhood experiences to create a strong foundation for children's learning, behaviors, and mental and physical health. The philosophy guiding the framework is that individual, relational, community, and societal factors can impact child health, and child health is inextricably linked to parent health and wellbeing. HOPE identifies four areas of positive childhood experiences: nurturing and supportive relationships, safe and stable environments, social engagement and a sense of connectedness, and social and emotional competencies. Clinicians can help facilitate these positive experiences by addressing parents' mental health needs; encouraging parents to engage with their children, such as by reading to them; linking families with available support for basic needs, as well as educational programs on healthy development; encouraging participation in community-based or faith-based extra-curricular experiences; and providing referrals for TIC.

A study²⁴ on California adults with ACEs (61 percent of the population) found that ACEs were associated with \$10.5 billion in excess personal health care spending and \$102 billion in losses due to premature death and loss of productivity. To help address the negative impact of ACEs on health care outcomes and costs in the state, California launched a statewide initiative called ACEs Aware²⁵ in 2019 to assist Medi-Cal providers with screening for and treating ACEs by providing clinical training protocols, and payment for screening patients for ACEs. The initiative uses a three-step approach: 1) identifying a patient's exposure to adversity through screening, 2) determining any clinical manifestation of toxic stress, and 3) understanding potential protective factors in a patient's life. To become certified and qualify for Medi-Cal payment, providers are required to complete a free ACEs Aware Core Training. Between December 4, 2019 and September 30, 2021, 20,550 providers in California completed the training, more than half of which were completed between April 2020 and July 2020. More than one-third (34 percent) of participants had never screened patients for ACEs before taking the training. After the training, two-thirds (67 percent) reported that they plan to implement changes in their practice, and 41 percent even plan to apply a clinical algorithm on ACEs to guide patient care. Between January 2020 and March 2021, Medi-Cal providers conducted more than 640,000 ACE screenings, 518,060 of which were unique beneficiaries. Of the unique beneficiaries screened, 80 percent were under age 18 and 33 percent were under age five. It was found that the percentage of beneficiaries with a high-risk ACE score increased with age, emphasizing the importance of early intervention.²⁶

The Center for Health Care Strategies (CHCS) released a report²⁷ with insights from California providers and clinics to inform other organizations seeking to adopt an effective ACE screening approach. The report suggests the following steps:

- 1. Select the right screening tool for your patient population and clinical practice
- 2. Build staff and organizational capacity (e.g., educate staff on ACEs, establish a clinic-wide understanding of TIC)
- 3. Promote cultural humility
- 4. Support staff wellness, which includes respecting staff who are not comfortable presenting the ACE screener to families for various reasons, including personal trauma
- 5. Develop trust with patients and families
- 6. Determine how data will be tracked
- 7. Establish a referral network and process





The California Surgeon General's Network of Care Subcommittee also released a Trauma-Informed Network of Care Roadmap²⁸ to provide care teams, community-based organizations (CBOs), and social service agencies with a framework for improving collaboration and coordination to prevent and address the impact of ACEs and toxic stress on health. The roadmap emphasizes the importance of working with cross-sector partners to establish care networks and provide preventive, evidence-based buffering resources or stress-mitigating supports.

The PATF has also identified trauma-informed professional training as an area of critical importance and created a workgroup to identify ways to address it. Their first step was to develop and implement trauma-informed curricula for health professionals, but the workgroup is now developing curricula for the medical, social service, community health, and child- and family-serving sectors.

Building Strong Brains Tennessee (BSBTN)²⁹ is another state initiative aiming to prevent and mitigate the impacts of ACEs, guided by three principles: 1) investments in childhood can lead to long-term improvements in the cognitive and social development of children that ultimately build healthy and productive future generations, 2) all Tennessee children should have the resources needed to thrive, 3) the future prosperity of Tennessee is contingent on building strong brain architecture in early childhood, making it imperative to address ACEs. BSBTN focuses on creating culture change through a top-down transformation in the prevention, mitigation, and treatment of ACEs at four levels: philosophy and approach, policies and funding, programs and services, and professional practice. The National Governors Association Center for Best Practices has partnered with the Duke-Margolis Center for Health Policy and a former leader to create a five-state collaborative with Delaware, Maryland, Pennsylvania, Virginia, and Wyoming to develop and implement sustainable state-level strategies.³⁰ The collaborative uses Alaska, California, New Jersey, and Tennessee as models for trauma-informed policies and initiatives to address ACEs.

Optimized Infrastructure

States can prevent and mitigate ACEs by improving data collection and reporting of ACEs. This may require cross-agency collaboration to ensure public health data (e.g., BRFFS) and clinic-level and MCO-level ACE screening data are considered. Optimizing state data infrastructure can help paint a complete picture of the extent of risk and the impacts of ACEs.

Extending Infrastructure

States can leverage payment reform strategies to promote <u>trauma-informed screening</u>, treatment, and referral services. Creating financial incentives and regulatory structures that encourage integrated care, prevention and early intervention, and cross-sector collaboration could increase the state's infrastructure to identify and address ACEs.





Policy

State Medicaid programs can follow California's example to incentivize ACE screening by "turning on" Healthcare Common Procedure Coding System (HCPCS) billing codes G9919 and G9920 and enabling screening via telehealth. States can enact bills and statutes to promote <u>trauma-informed practices</u> beyond screening for ACEs, including training staff and providers and creating safe and supportive environments. They can also implement trauma-informed care within social service systems, such as child welfare, juvenile/criminal justice, education, and early childhood. Policymakers could support the implementation and evaluation of trauma-informed models and research regarding the relationship between trauma across the lifespan and adverse social and health outcomes.

While mental health and SUD treatment are mandatory covered services in state Medicaid programs, states can explore various waiver opportunities to enhance these services through non-medical interventions such as peer support and evidence-based treatment models such as Assertive Community Treatment. States can also promote primary care and behavioral health integration to ensure seamless services are available to people who have experienced ACEs.

Conclusion

The COVID-19 pandemic increased the risk for ACEs, as evidenced by the rise in mental health problems, SUDs, and intimate partner violence. Children also spend more time in dysfunctional households, increasing their risk of exposure to adversity and toxic stress. It is also essential to address other SDOH, such as poverty and racism, which are proven risk factors for toxic stress. There must be a sustained effort to address the long-term outcomes associated with childhood adversity and raise awareness of the power of early intervention. The ideal solution is to limit exposure to ACEs so that every child can feel safe and lead a productive life.

So, what should states do?

Key actions that states can take include:

- Facilitate and incentivize screening of ACEs
- Enhance and optimize ACEs data collection and analysis infrastructure
- Encourage cross-system partnerships to better address the social, emotional, and physical health impacts of ACEs
- Promote TIC in health and human services
- Invest in upstream prevention to reduce early adversity, identify those at risk sooner, and connect atrisk children and families with needed services

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