



**ADDRESSING ADVERSE
CHILDHOOD EXPERIENCES
(ACES) THROUGH
TRAUMA-INFORMED
HEALTH SYSTEMS:
PRACTITIONER AND PRACTICE
LEVEL STRATEGIES**

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INTRODUCTION

Across the country, children experiencing events such as parental substance misuse or violence within their home or community are left with lifelong negative consequences. These events, termed *adverse childhood experiences (ACEs)*, remain a largely unaddressed public health problem that not only disrupt the lives of children and families, but potentially costs billions in preventable health expenditures.¹ Unaddressed ACEs have implications for both the mind and body over the life course and are linked to the development of numerous adult chronic diseases.² Policy makers and advocates face significant challenges in addressing and preventing the long-term impact of ACEs, which will require reform in multiple sectors including health care, education, and social service delivery.

The momentum to address ACEs and childhood trauma is rapidly growing and there is an emerging movement to create systems of service delivery that are trauma informed. *Trauma-informed care* is defined by Substance Abuse and Mental Health Service Administration as “a program, organization, or system that realizes the widespread impact of trauma and understands potential paths to recovery, recognizes the signs and symptoms of trauma, and responds by fully integrating knowledge about trauma into policies, procedures and practices, and seeks to actively resist re-traumatization.”³ Comprehensive trauma-informed care is a new journey for many pediatric health systems and medical practices. On the other hand, there are many successful initiatives and policies currently operating at multiple levels to support children facing adversity.

For example, behavioral health integration and incorporation of ACEs screening in pediatric settings are not mutually exclusive nor an exhaustive list of how medical providers can address childhood trauma. However, they do offer a lens into how the pediatric community is adjusting their practice in response to growing research in brain science and evidence-based methods of increasing resilience for young children and families.

This brief aims to 1) equip advocates with an overview of ACEs science and help advocates understand the challenges of effectively addressing ACEs, 2) elucidate strategies currently operating in pediatric settings to address ACEs, and 3) suggest opportunities for advocates to collaborate with practitioners in addressing ACEs.



ACES 101:

Why do they matter?

A growing body of evidence is making it increasingly clear that unaddressed ACEs can have a life-long impact on a person's health. When children with ample supports experience a traumatic event, their body and mind are typically able to recover from that event. Children are resilient, but their natural inclination to heal is hindered without responsive and supportive relationships with parents, guardians or mentors.⁴ Factors hindering a guardian's ability to provide responsive caregiving can include depression, substance use disorders, intimate partner violence, or the chronic stress of living in poverty.⁵ Chronic stressors in the absence of responsive caregiving create what is termed "toxic stress," in which dysregulation of biological stress systems has a detrimental effect on numerous developmental processes and organ systems.⁶ Developing brains are highly susceptible to chemical influence.⁷ Research suggests that higher levels of stress hormones result in overdevelopment of brain structures associated with fear and anxiety.⁸ Simultaneously, brain structures controlling executive functioning, learning, and memory are stunted.⁹ In this manner, toxic stress in childhood can become embedded in the body, affecting the child for the duration of the life course.

How ACEs Influence Health



Source: Centers for Disease Control and Prevention

Further research is bringing to light disparities in the distribution of adverse experiences among different racial and ethnic groups. An analysis of the most recent census tract demonstrates that poor neighborhoods have a disproportionately higher number of young children of color compared to wealthier neighborhoods.¹⁰ Initial research examining ACEs prevalence in pediatric populations of color demonstrates a higher burden of adversity compared to their white counterparts. In one study, over 67 percent of study participants from a low income, urban community reported one or more ACE.¹¹ This estimate was made using the original ACEs survey; original ACE measures do not take into account neighborhood, community, and other social influences into their definition of trauma. Nor do they incorporate the personal, institutional, and structural racism that disproportionately impacts communities and individuals of color. Given the more narrow definition of trauma in the original ACEs survey and the more recent understanding of the traumatic impacts of racism, further research is necessary to capture disparities in adversity for children of color.

Despite the gravity of ACEs, there is hope for children undergoing high degrees of adversity. Thanks to the science of *resilience*, we know that experiencing ACEs in childhood is by no means a guarantee of negative health outcomes. The mind and the body are capable of healing from the damaging effects of trauma. Enhancing protective factors, such as a supportive relationship with a nurturing caregiver or mentor, can mitigate the effects of ACEs.¹² Because of the potential for intergenerational transmission of ACEs and toxic stress, it is imperative that we include parents and families in our efforts to address

trauma in children. *To learn more about multigenerational approaches to addressing trauma, visit our prior [issue brief](#).*

How are pediatricians and health systems addressing ACEs?

Given their longitudinal relationship with patients and families, pediatricians and medical providers are uniquely positioned to provide support and intervention for children experiencing ACEs. Currently, there are several approaches that providers and practices across the country are taking to address ACEs in their clinics. This brief outlines two approaches to address trauma and build resilience in the pediatric primary care setting: 1) integrating ACEs screening into workflow and 2) restructuring practices to fully integrate behavioral health services for children.

ACEs Screening

After understanding the long-term negative impacts of ACEs, it is easy to wonder why identifying and addressing childhood adversity in the medical setting is not yet a widespread practice. However, given the relative novelty of ACEs research, the pediatric community is still reaching a consensus on how to effectively address the long-term impacts of early life adversity. As recently as 2012, the American Academy of Pediatrics released a policy statement emphasizing the responsibility of pediatricians to drive innovation in addressing the lifelong effects of toxic stress.¹³ Current areas of debate involve the appropriate age of screening and whether to screen parents or children.¹⁴ Some practitioners also feel that it may be unethical to screen when evidence-based interventions have not been identified for different types of trauma.¹⁵ Other points of contention surround the ACEs measure itself; as previously discussed, the original ACEs measures do not take into account experiences such as community violence, racism and bullying.¹⁶ New measures were recently created that aim to incorporate these varied experiences.¹⁷ Efforts to incorporate ACEs screening in the pediatric setting are still in their infancy, with clinicians and researchers still working to identify high quality, evidence-based approaches to ACEs screening and connect patients to appropriate resources.

Despite the diverse perspectives around ACEs screening, leaders in the pediatric community are supportive of innovation in the clinical setting. In 2014, the American Academy of Pediatrics (AAP) released a toolkit on trauma informed practices in the pediatric setting, with an emphasis on screening for ACEs.¹⁸ The guide emphasizes five equally important steps to building a trauma informed and ACE responsive practice:

- *Assessing readiness to change*
- *Educating staff and patients on the importance of addressing trauma and ACEs*
- *Deciding who to assess and when*
- *Deciding how to screen (ie. surveys, in person interviews)*
- *Identifying community resources and appropriate interventions for patients and families*

It is important to note the last step requires practices to create a plan for how they will support children and families with high ACEs scores. Building appropriate infrastructure is essential to addressing concerns raised through screens and avoiding unnecessary re-traumatization of families.

With this framework, pediatric clinics are more equipped to take a preventive approach to curbing

the negative impact of ACEs and build resilience in young patients and families. Practices across the country are currently working to identify ACEs in both patients and families and provide appropriate services. ***Below we highlight how different practices approached these five steps. We collected this information through both direct conversations with practitioners and a review of the literature.***

1. ***Assessing readiness to change:*** the pediatric clinic is busy and often times hectic, with patient visits averaging approximately 16 minutes.¹⁹ For this reason, many providers are understandably hesitant to add another screening component to their visits.²⁰ Furthermore, some providers worry about the length of time needed to adequately discuss and address a serious topic such as ACEs.²¹ At the **The Children's Clinic**, a private practice in **Oregon**, **Dr. RJ Gillespie** addressed this concern by conducting a pilot screening project in collaboration with several colleagues. After beginning to incorporate a screening tool into their own practices, they were able to demonstrate both the feasibility and efficacy of such a protocol.²² Dr. Gillespie's efforts also illustrate the importance of having a ***practice champion***, or someone who is willing to lead a practice in changing its protocols. Once the screening protocol was adopted by the entire practice, pediatricians endorsed improvement in subjective relationships with families as well as minimal addition of time spent discussing scores with parents.²³ This initial work suggests that screening can be successfully incorporated into a busy pediatric setting and is well-received by parents and caregivers.
2. ***Educating staff and patients on the importance of addressing trauma and ACEs:*** Before an institution can begin to take steps to address ACEs through screening or other measures, all staff in a healthcare setting must understand the benefits and importance of addressing trauma. At **Children's National Health System** in **Washington DC**, **Dr. Binny Chokshi** is leading the way in creating a trauma-informed workforce. After identifying the need to address ACEs and trauma as a strategic priority for the center, Dr. Chokshi and her colleagues wanted to drive momentum towards positive change. Currently, Dr. Chokshi is working to create training modules on topics related to trauma that can be easily disseminated and presented to all staff members. Topics include the relationship between Attention Deficit and Hyperactivity Disorder (ADHD) and ACEs, obesity and resilience building, and responses to both high and low ACE screening scores. In addition to creating education modules, she frequently discusses these topics with medical trainees and residents to educate the next generation of practitioners.
3. ***Deciding who to assess and when:*** Once a practice decides to begin screening, a myriad of other decisions must be made. Some practices opt to adopt a universal screening protocol, assessing all patients and families at certain age intervals.²⁴ Others choose to focus on screening high-risk patients in an effort to devote time and resources to those most likely to need additional services.²⁵ Another decision surrounds whether to screen children themselves or take an intergenerational approach by screening parents. **The Children's Clinic** chose to focus on screening parents for ACEs at the pediatric four-month well child visit. Gillespie feels that screening parents of young children for ACEs visit takes a preventive approach by building healthy and responsive parenting practices. In addition to screening for ACEs, Gillespie and other providers in his practice also screen for resilience, adding a strength based component to dialogue with families. Taking a different approach, **Dr. Paul Espinas, Dr. Deborah Frank**, and other colleagues at **Kaiser Permanente Hayward** screen children at the three-year well-child visit.²⁶ Similar to Dr. Gillespie and his colleagues, the three-year visit was chosen due to a lower number of other visit components such as immunizations or screenings. Pediatricians at Kaiser also include discussions on building resilience and connecting children and families to appropriate resources. Parents reacted positively to initial screening efforts and expressed appreciation for the opportunity to discuss these issues with their child's provider.²⁷
4. ***Deciding how to screen:*** Screening can take place in the form of an in-person interview during the clinic visit or a survey completed before the provider enters the room. Preliminary studies, as well as anecdotal evidence from provider interviews, seem to suggest that parents are more willing to disclose sensitive information about ACEs or personal experiences when given the chance to fill

out forms on their own.²⁸ This approach appeared to fit in best with clinic flow and maximize time to discuss survey results.

5. ***Identifying community resources and appropriate interventions for patients and families:***

This is the most important step to creating a successful screening program in a medical setting. Without connecting families to appropriate intervention and resources, many argue that simply screening for ACEs is ineffective and even unethical.²⁹ To identify resources in the Portland community, Dr. Gillespie at the Children’s Clinic held focus groups with parents, who identified parenting classes and support groups as the highest needs. At Kaiser Permanente Hayward, a pediatric social worker reaches out to children who screened positive for one or more ACEs. Parents were also provided with an informational “ACEs Safety Card” created by *Futures Without Violence*, a non-profit that provides resources and interventions to families undergoing trauma. Other clinics work to address the social determinants of health through their interventions, an approach that is also gaining momentum in the medical field.³⁰ At Boston Medical Center’s **GROW Clinic**, **Dr. Megan Sandel** focuses on needs such as housing and food insecurity to influence the non-clinical factors that contribute to childhood adversity and poor development. Dr. Sandel describes her work as addressing what she terms “*bandwidth scarcity*” among many parents. She explains that stressors such as lack of stable housing or healthy food often create feelings of hopelessness and guilt. By addressing these issues, she strives to expand the “bandwidth”, or emotional and physical capacity of parents to provide for their children. “To me,” she says, “that is trauma-informed care.”

Emerging best practices from the ACEs screening approach include a range of elements that include but are not limited to:

- **Practice Champion.** Presence of a practice champion, usually a clinic provider, to lead screening implementation efforts and address provider concerns.
- **Multidisciplinary Approach.** A multidisciplinary approach is crucial to provide high quality care to children and families. In other words, different types of providers are available to support children beyond pediatricians such as social workers, community health workers, psychologists and psychiatrists. In most practices, social workers and other professionals are instrumental in identifying and directing patients to the most appropriate resources.
- **Information Sharing.** Information sharing allows practices to learn from one another. According to Dr. Chokshi from the Children’s National Medical Center, one impetus for change at the institution was a visit from Dr. Nadine Burke Harris, a pioneer of ACEs screening at the Center for Youth Wellness in San Francisco, CA. Similarly, online resources such as the ACEs Connection facilitate the exchange of best practices between different settings and clinicians.
- **Strength-Based Approach.** As highlighted by Dr. Renee Boynton Jarrett of Vital Villages, screening of any kind must be strength-based so that it amplifies a patient’s resilience in light of their traumatic experiences³¹. Screening for ACEs has the potential to strengthen relationships between families and providers. Framing screening in terms of a patient’s strengths in addition to identifying their challenges is core to building trust and long-term engagement in addressing trauma.
- **Reliable Referral Network.** Integral to ACEs screening is to have a reliable referral network at the ready to serve patients needing services and supports. More harm than good can result from an acknowledgement of trauma but no available resources, supports and follow-up for patients.

Integrated Behavioral/Mental Health and Primary Care Services

While practitioners expand the scope of what they are asking patients and families by screening for ACEs, many institutions are addressing childhood adversity and trauma by restructuring practice models altogether. Research suggests that integrating behavioral and mental health services in the primary care setting can be an effective method of intervention for children and families experiencing trauma.³² The concept of integrating these two fields first arose from adult medicine through the Collaborative Care Model.³³ A key element of the Collaborative Care Model is the presence of a mental health specialist who works directly with primary care providers to care for the patient.³⁴ Benefits of this approach include reduction of stigma around needing mental health services as well as increasing access by limiting need for referrals and additional clinic visits.³⁵ This model is increasingly being adapted to the pediatric setting with promising results. A recent meta-analysis indicated that compared to usual primary care, integrated behavioral health care models resulted in better outcomes for children and adolescent patients.³⁶ When implemented effectively, an integrated model has four components:

- team-based
- population-focused
- measurement-guided, and
- evidence-based.³⁷

The following two case studies serve as exemplar models of integrated care delivery.

Healthy Steps

Healthy Steps is an evidence-based program currently implemented in more than 120 pediatric clinics in 15 states.³⁸ The program integrates a behavioral specialist with training in mental health services into the pediatric primary care clinic.³⁹ The Healthy Steps specialist sees families at each primary care visit, screening for behavioral and developmental concerns and connecting families with appropriate resources. The model is funded through a mixture of private and public sources, including Medicaid, CHIP, and private payer reimbursements.⁴⁰

At the **Children’s National Medical Center in Washington DC**, **Justine Wu** leads the implementation of Healthy Steps in two pediatric clinics. Healthy Steps at Children’s National is one component of the **Early Childhood Innovation Network**, an interdisciplinary collaborative of professionals that works to drive advances in trauma-informed service delivery in the DC area. According to Wu, two changes were made to the traditional Healthy Steps model to successfully adapt the program to the DC population. To better serve both parents and children, program coordinators recruited clinical psychologists to serve as Healthy Steps specialists. In addition, the clinic hired a family services associate from the community to act as a care coordinator and case manager. These changes increased the capacity to deliver mental health services to both parents and children, as well as help families navigate an often complex medical system. Evaluation studies of Healthy Steps programs show improved parental-child attachment as well as improved social-emotional screening scores for children of mothers who have undergone trauma.⁴¹

Codman Square Health Center

Codman Square Health Center (CSHC) is a federally qualified community health center in Dorchester, MA that offers a full range of primary care and specialty services for adults and children.

Dr. Genevieve Daftary serves as a leader in improving pediatric care for children facing adversity who come to Codman. When asked about the most pressing health issues facing her patients, trauma is at the top of Dr. Daftary's list. While the primary literature focuses on the "big T's" of trauma, such as physical or sexual abuse, her patients also struggle with the day-to-day trauma of living in poverty. Similar to Dr. Sandel, Dr. Daftary sees social determinants of health such as housing and food insecurity as a source of constant stress for children and families.

CSHC is working to address these issues through the **TEAM-UP** initiative, or **Transforming and Expanding Access to Mental Health in Urban Pediatrics**. The program incorporates dyads of mental health professionals and family health workers into the primary care clinic. Similar to the Healthy Steps model, family health workers are instrumental in ensuring the program's success. Family health workers are community members who serve as patient navigators in the health system. The teams are available to see patients immediately should a mental health issue arise, and work in direct collaboration with pediatricians. Since beginning the program, Dr. Daftary notes an increase in children seen for mental health issues due to the immediate availability of providers and elimination of separate clinical appointments. Importantly, the TEAM-UP approach requires a shift in how providers work alongside one another, share information, and leverage one another's skillsets. Team members all participate in an extended training to shift their practice styles and norms. The TEAM-UP model requires all provider types to shift away from single provider interactions to group assessment and decision-making.

Implementing any type of practice change—whether a workflow change or full practice transformation—is no easy feat and requires dedicated commitment from all clinic staff. After interviewing a number of providers in diverse settings, we identify several areas essential for success:

- **Patient Driven.** All patients should have a voice in their care. Successful approaches to addressing trauma includes authentically incorporating and responding to family voices. Engaging families in stakeholder conversations and evaluation are important ways to ensure the best health outcomes.
- **Patient Navigators.** Patient navigators who are members of the local community, are instrumental in ensuring the success of integration efforts. Payment systems often overlook these navigators but they are core to the success of integrated models of care.
- **Intentional Collaboration.** Cultivating the processes needed for successful integration of services requires increased collaboration and information sharing among all team members. It will also likely require challenging the traditional hierarchical structure among physicians, other provider types and support staff.
- **Ongoing Training.** Behavioral health integration applies a new approach to caring for children and families. Team members will need ongoing support and training as they adjust, evaluate and refine their workflow to ensure a seamless experience for patients.

CONCLUSION

How Can Advocates Support Provider Practice Changes to Address Trauma?

Ultimately, changing practice environments to address the long-term impacts of childhood trauma will require policy changes at the local, state, and federal levels. Health advocates can play a key role in driving policy priorities that can support practice shifts that support children and families who have experienced trauma. Four policy priorities can assist practitioners in moving toward trauma-informed care delivery:

- 1) **Align Payment and Delivery of Care.** Ensure that evidenced-based treatments for trauma are reimbursed and incentives are incorporated to ensure that providers address patients' trauma.
- 2) **Collect and Disaggregate Data.** Invest in monitoring of ACEs through robust disaggregated data collection.
- 3) **Develop Evidenced-Based Practices.** Develop and disseminate evidenced-based screening practices.
- 4) **Ensure Workforce Development.** Prioritize workforce development by ensuring adequate resources exist to train providers and their staff in trauma-informed approaches and protect staff from burnout and secondary traumatic stress.

In order to make practice changes feasible for providers to implement, we need to ensure that we are paying for the right care at the right time, maximizing both quality, equity and health improvement. Two ways advocates can support advancing a trauma-informed approach are by securing covered benefits that address trauma and by embedding trauma-informed approaches into payment and delivery system reform. For example, advocates can work to include evidence-based treatments for childhood trauma such as Parent Child Interaction Therapy or Trauma-Informed Cognitive Behavioral Therapy (CBT) in state level Medicaid plans. Additionally, states can legislatively mandate that Early Periodic Screening, Diagnosis and Treatment (EPSDT) include ACEs screenings and referral to treatment. California passed [legislation](#) to explicitly mandate a trauma screen every 5 years as part of their EPSDT approach. Similarly, advocates can work for ACEs and social determinants of health screening reimbursement in Medicaid Managed Care contracts or other transformation efforts such as Accountable Care Organizations or Primary Care Medical Home (PCMH) models. For example, North Carolina included a [universal social determinant of health screen](#) in its 1115 waiver, while New York included [childhood trauma](#) as chronic condition, making persons experiencing trauma eligible for a Health Home. Finally, payment approaches should include the payment of services that facilitate integration of mental health and primary care. These include warm handoffs between providers and payment for essential ancillary staff such as patient navigators.

Second, strengthening data collection efforts is an important part of monitoring prevalence of ACEs and driving a response. Further, the development of evidence-based screening practices requires more research to identify and establish the best methods for addressing childhood trauma. Health advocates can assist in building the data narrative around ACEs that can spur investment in the development of evidenced-based practices to address trauma. For example, currently 32 states opt to use the [ACEs module](#) in their Behavioral Risk Factor Surveillance System (BRFSS) survey. Advocates can work with states to participate in ACEs data collection and amplify the results for public health and health care stakeholders. Community-level advocates can also promote use of ACEs data as part of their community

CONCLUSION

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health needs assessment and community benefit planning. Investment in local approaches can pave the way for broader shifts in practice and raise awareness among community members and health providers. As current data shows, ACEs disproportionately affects communities of color; disaggregated data is a vital tool to targeting interventions to the populations that need them most. While broad data collection can support innovation and action and amplify the disproportionate burden of trauma, building a compendium of evidenced-based practices means that providers have tools to respond with confidence.

Pediatric practices that are currently implementing ACEs screening and integration of behavioral health should continue to identify and share best practices with one another. Advocating for a national clearinghouse of evidenced-base practices for providers and practices such as [California's Evidence-Based Clearinghouse for Child Welfare](#) is one effective approach to supporting uniform and effective screening and referral. The efforts of the [National Pediatric Practice Community on Adverse Childhood Experiences](#) is also a helpful starting point for providers and a resource for policymakers in advancing integration of trauma-informed approaches into health care programs and systems.

Finally, workforce development is a foundational piece of the ACEs movement. Policies, programs and systems must support and adequately resource the training of clinicians and their staff to be equipped with the knowledge and skills to address ACEs. This training transforms the patient-provider relationship but can also lead to changes in the workplace such as the physical set up of a practice or the interaction between frontline staff and families. Health advocates can play a role in advocating for resources and directives at the federal and state levels to support the development and retention of a trauma-informed workforce. At the state level, this may include advocating for mandates regarding training or dedicated funds as part of any health transformation work to support ongoing training related to trauma. For example, the [San Francisco Department of Public Health](#) trained over 9,000 public health employees in trauma practices, developing internal champions to drive culture change. Moving upstream, advocates can work with medical school and residency curriculums to include training on ACEs science and trauma informed care. Given the high prevalence of burnout already present in the medical profession, we must also have adequate supports to avoid the negative impacts of secondary trauma on providers. The Center for Health Care Strategies (CHCS) has written extensively on building a [trauma-informed workplace](#), highlighting best practices regarding self-care and wellness activities. Our policies and programs must support these efforts through adequate funding and organizational support.

Unaddressed ACEs have implications for both the mind and body over the life course. This nationwide public health crisis demands a swift response. Health advocates can do their part by learning more about trauma-informed care and related policies, programs and delivery of care in health care practices that support a child's optimal health.⁴² As providers work to address trauma in their own practices, advocates can support their work by addressing policy barriers and inadequate resources to drive changes needed to respond to childhood trauma.

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