



# Health Care Access and Quality Among Children Exposed to Adversity: Implications for Universal Screening of Adverse Childhood Experiences

Maria Schweer-Collins<sup>1</sup> · Paul Lanier<sup>2</sup>

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## Abstract

**Objectives** Given recent advances toward universal screening for Adverse Childhood Experiences (ACEs), our objective was to investigate whether children with higher ACEs experience poorer quality of provider care and greater challenges accessing needed mental health treatment.

**Methods** This study uses a nationally representative sample of US children aged 0–17 years drawn from the National Survey on Children’s Health for 2016–2019. Caregivers and parents completed surveys between June 2016 and February 2020 ( $N = 131,774$ ). Logistic regression models adjusting for identified covariates were used to test associations between a child’s number of ACEs, their quality of provider care, and their access to mental health treatment. All analyses used appropriate survey weighting commands.

**Results** High ACEs (4 or more) were associated with lower quality of provider care, including effective care coordination [OR 0.45, 95% CI (0.38, 0.52)], family-centered care [OR 0.49, 95% CI (0.41, 0.58)], shared decision making [OR 0.50, 95% CI (0.39, 0.85)], and referrals for care [OR 0.58, 95% CI (0.43, 0.80)]; children with high ACEs were also less likely to have a medical home [OR 0.66, 95% CI (0.57, 0.76)]. High ACEs were also significantly associated with greater difficulty accessing mental health treatment [OR 0.55, 95% CI (0.43, 0.70)]. Similar results were found for children in the moderate ACE (2–3) and low ACE (1) groups.

**Conclusions for Practice** Findings indicate that greater ACEs were associated with poorer quality medical care and greater difficulty accessing needed mental health treatment. Because findings indicate that children with high ACEs may be the least likely to receive quality care or necessary mental health treatment to address this adversity, universal screening for ACEs should be considered with caution.

**Keywords** Adverse childhood experiences · Screening · Child maltreatment · Mental health service access

## Significance

*What is already known on this subject?* Mental health care disparities are often more pronounced among the most vulnerable populations. It is unknown whether children with greater adverse childhood experiences likewise experience greater challenges accessing mental health treatment and receive poorer quality of care.

*What does this study add?* Results based on nationally representative data indicate that children exposed to high adverse childhood experiences have reduced odds of receiving quality provider care and having no difficulty accessing needed mental health treatment to address adversity.

According to recent data, 62% of US adults report that they experienced at least one adverse childhood event (ACE; Merrick et al., 2018). Further, nearly 1 in 4 US adults report that they experienced three or more ACEs, a striking statistic given that the seminal epidemiological ACE study conducted by Kaiser Permanent and the Centers for Disease Control showed that this level of childhood adversity has a strong graded relationship with risk factors underlying many leading causes of death for US adults (Felitti et al., 1998; Hughes et al., 2017; Merrick et al., 2018). Numerous studies have corroborated these findings, finding similar

✉ Maria Schweer-Collins  
mschweer@uoregon.edu

<sup>1</sup> Prevention Science Institute, University of Oregon, Eugene, OR, USA

<sup>2</sup> School of Social Work, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

prevalence rates and connections between greater cumulative adversity and poorer physical and mental health outcomes and greater risk-taking behaviors (Gilbert et al., 2015; Hughest et al., 2017). In studies drawing data from the National Survey of Children's Health (NSCH), ACEs have been associated with greater internalizing and externalizing problems, poorer emotion regulation (Suh & Luthar, 2020), and greater physical health problems in children (e.g., asthma, Ross et al., 2021; arthritis, Rubinstein et al., 2020). Ample evidence underlines the far-reaching negative effects of early adversity.

Policies and practices addressing early adversity's effects on development and subsequent physical and mental health have proliferated in the decades following the original ACE study (Felitti et al., 1998). Currently, 26 US states and the District of Columbia have implemented legislation addressing ACE and trauma education, identification, and prevention (Prewitt, 2019). Recently, debate around the ethicality and feasibility of requiring universal screening for ACEs has emerged. For instance, in 2019 California became the first state to mandate universal ACE screening for Medi-Cal pediatric and adult populations, allocating over 40 million dollars for the purpose (Department of Health Care Services—State of California—Health & Human Services Agency, 2019). Proponents of universal ACE screening emphasize that accurate and early screening is vital to preventing ACE's negative developmental sequelae. At the same time, critics question the validity of the ACEs measure as a screening tool (McLennan et al., 2020) and voice concerns about the risk of potential harm caused by asking persons to disclose their traumatic experiences without having trauma-informed care infrastructures and policies already in place (Finkelhor, 2018; McLennan et al., 2020; Racine et al., 2020).

Numerous researchers and practitioners have stressed the importance of providing high-quality evidence-based mental health services as the primary treatment for persons who have experienced high levels of childhood adversity and resultant mental health problems (Finkelhor, 2018; Oral et al., 2016). Unfortunately, adequate mental health services are often unavailable as part of routine care for pediatric populations in particular (Garland et al., 2013; Roll et al., 2013; So et al., 2019). For example, findings from a 2019 national prevalence study of children's mental health in the US show that nearly 50% of children aged 6–17 who are diagnosed with a mental health condition do not receive treatment (these estimates would potentially be higher were children aged 0–5 included; Whitney & Peterson, 2019). Furthermore, results from a recent study using data from the National Survey of Children's Exposure to Violence showed that a large proportion of children and youth (<50%) who had either experienced high ACEs or who had clinically elevated mental health symptoms did not receive any behavioral health services (Finkelhor et al., 2021). As evinced by

these startlingly high numbers, understanding the structural barriers to quality health care access, particularly behavioral and mental health care services (e.g., structural racism, lack of workforce and workforce resources and training to meet the mental and behavioral health needs of youth; inadequate funding for behavioral health services), for those most in need of services is a critical next step toward decreasing the health disparities and negative sequelae stemming from ACEs. Notably, mental health care disparities are often more pronounced among the most vulnerable populations, including those residing in rural areas, racial and ethnic minority populations, and those with greater social disadvantages (Alegria et al., 2010; Howell & McFeeters, 2008; Lu, 2017). Our investigation therefore assesses whether universal ACE screening policies could also serve to identify an even greater number of children who need additional services but face disproportionate challenges in accessing and receiving them.

Using a nationally representative sample of children, our study evaluates whether and to what extent disparities in access to mental health services affect children on the continuum of ACE exposure. Beyond providing estimates of these children's access to appropriate mental health treatment, we also assess whether these disparities characterize the quality of these children's and their families' experiences engaging with pediatric health systems and providers. Together, these estimates may identify potential systems-level improvements in health care access and quality to be made prior to implementing universal ACE screening protocols.

## Methods

### Data Source and Study Population

Data for this study were collected through the NSCH administered in its revised format beginning in 2016 (Ghandour et al., 2018). Funded and directed by the Maternal and Child Health Bureau, the NSCH is one of the only nationally representative pediatric samples that surveys children's physical and mental health, health care access and quality, and contextual factors at multiple levels (i.e., family, school, neighborhood). Households were randomly selected and invited to complete the NSCH survey by mail or online in English or Spanish.

The current study used data drawn from topical data files from the 2016 ( $N = 50,212$ ), 2017 ( $N = 21,599$ ), 2018 ( $N = 30,530$ ), and 2019 ( $N = 29,433$ ) survey years. To account for sampling bias and ensure nationally representative estimates, we weighted all analyses to account for potential differences in survey nonresponse and differences in the population of children residing in household

units in each survey year. Further information on NSCH sampling protocols and methodology is available online (U.S. Census Bureau, 2018a, 2018b, 2019, 2020).

## Variables

### Adverse Childhood Experiences

NSCH captures children's ACEs through a 9-item caregiver report ACE questionnaire that differs slightly from the original ACE study questionnaire (Felitti et al., 1998). Parents or guardians report whether children have ever: resided in a low-income environment; experienced parental divorce/separation, death, or incarceration; witnessed violence in the home or neighborhood; been exposed to mental illness; been exposed to substance use problems; or experienced racism. Responses to 8 questions were recorded as a dichotomous *yes* or *no*; responses regarding experiences of economic deprivation were rated on a 4-point scale (from 1 = *very often* to 4 = *never*). The original 10-item ACE questionnaire includes questions about experiences of child emotional, physical, and sexual abuse, and, unlike the NSCH, does not index experiences of parental death, poverty, or racism (Felitti et al., 1998). Our study examined categories of no (0), low (1), moderate (2–3), and high (4–9) ACE exposure based on prior empirical evidence of a strong graded relationship between ACE experiences and negative long-term physical and mental health outcomes (Felitti et al., 1998; Hughes et al., 2017; Merrick et al., 2018).

### Quality of Provider Experience

To assess the quality of families' experiences with providers, we drew data from questions in four domains of the NSCH survey describing the child's and family's experiences with health care providers. We selected indicators using the Bayview Child Health Center-Center for Youth Wellness (BCHC-CYW) model of care specifically developed to address and treat the effects of ACEs in pediatric populations (Center for Youth Wellness, 2017). According to BCHC-CYW, key components of quality and appropriate care for ACE experiences include coordination of care and referral to appropriate treatment for ACEs. Parents and guardians reported on provider experiences by responding to questions related to family-centered care (5 items), effective care coordination (5 items), shared decision making (3 items), and referrals for care (1 item). Table 1 provides a full list of the NSCH items we used.

### Difficulty Receiving Needed Mental Health Treatment

BCHC-CYW's model of care claims that service delivery and accessibility are key components for assessing the quality of mental health treatment for youths with 4 or more ACEs or for youths with 1–3 ACEs who also have co-occurring mental or behavioral health issues (Center for Youth Wellness, 2017). Accordingly, we measured youths' levels of difficulty in obtaining needed mental health services. Parents or guardians with children who had received mental health services in the past 12 months responded to the following item: "How difficult was it to get the mental health treatment or counseling that this child needed?" We dichotomized this variable to 1 (*no difficulty*) and 0 (*somewhat or very difficult or it was not possible to obtain care*).

### Covariates

Following the Andersen Behavioral Model of Health Service Use (Andersen, 1995), we controlled for several individual and contextual factors with demonstrated influence on health care service utilization, and which thus could be potential confounders when evaluating the relationship between ACEs and the perceived quality of provider relations and mental health treatment access (Andersen, 2008; Babitsch et al., 2012). Among predisposing individual factors, we controlled for child age, child race, parental educational attainment, number of children in the home, and household poverty level. We determined household poverty levels using thresholds set by the US Census Bureau, and missing data were multiply imputed using sequential regression imputation methods (US Census Bureau, 2016, 2017, 2018a, 2018b). We also controlled for enabling factors that might promote greater service utilization (i.e., insurance type; gap in insurance within the past 12 months), as well as covariates considered to be need factors (i.e., a heart condition, a genetic condition, or another special health care need).

### Statistical Analyses

We conducted descriptive statistical analyses for the exposure variable (number of ACEs), covariates, and dependent variables. We then developed logistic regression models adjusting for identified covariates for each dependent variable. All analyses were conducted using SAS 9.4 software and appropriate survey weighting commands.

**Table 1** Key variables and associated national survey of children's health indicators

Variable	Indicators
Personal doctor or nurse	Do you have one or more persons you think of as this child's personal doctor or nurse?*
Referrals for care	How difficult was it to get referrals (to see any doctors or receive any services)?*
Family centered care*	DURING THE PAST 12 MONTHS, how often did this child's doctors or other health care providers: Spend enough time with this child? Listen carefully to you (as child's parents)? Show sensitivity to your (child's) family's values and customs? Provide specific information specific you (parent) needed concerning this child? Help make you (parents) feel like partners in this child's care?
Shared decision making	DURING THE PAST 12 MONTHS, how often did this child's doctors or other health care providers: Discuss with you (parent) the range of options to consider for his or her health care or treatment? Make it easy for you (parent) to raise concerns or disagree with recommendations for the child's health care? Work with you (parent) to decide together which health care and treatment choices would be best for this child?
Effective care coordination*	DURING THE PAST 12 MONTHS, did anyone help you arrange or coordinate this child's care among the different doctors or services that this child uses? DURING THE PAST 12 MONTHS, have you felt that you could have used extra help arranging or coordinating this child's care among the different health care providers or services? DURING THE PAST 12 MONTHS, how satisfied were you with the communication among this child's doctors and other health care providers? DURING THE PAST 12 MONTHS, did this child's health care provider communicate with the child's school, child care provider, or special education program? During this time, how satisfied are you with the health care provider's communication with the school, child care provider, or special education program?
Difficulty receiving needed mental health treatment	How difficult was it to get the mental health treatment or counseling that this child needed?
Additional medical home criteria	Is there a place you or another caregiver USUALLY take this child when he or she is sick or you need advice about his or her health?*

\*Indicates that an item was included in the composite medical home criteria variable. Indicator wording drawn from 2018 survey

## Results

The majority of children were in the group with no ACEs (0 ACE; 60.5%), followed by the low ACE group (1 ACE; 21.5%), 13% were in the moderate ACE group (2–3 ACEs), and 5% were in the high ACE group (4 or more ACEs). Table 2 presents the results of the bivariate descriptive analysis comparing ACE category across the covariates. Older children, children of parents without no higher than a high school education, children in families below the federal poverty line, publicly insured children, children with gaps in insurance coverage, and children who were Black or in the Multiracial group were all overrepresented in the low, moderate, and high ACE groups relative to children with no ACEs. Children with genetic conditions, heart conditions, and special health care needs were also more likely to experience a greater number of ACEs.

Table 3 presents the results of our logistic regression analyses. After adjusting for covariates, we found no difference in the likelihood of having a personal doctor or nurse between children in the high, moderate, low, and no ACE groups. However, for all other indicators of care quality, high

ACEs were associated with a lower quality of care, with the indicator for effective care coordination showing the largest effect [OR 0.48, 95% CI (0.35, 0.42)]. High ACEs were also associated with greater difficulty obtaining needed mental health treatment [OR 0.55, 95% CI (0.43, 0.70)]. Similarly, children in the moderate ACEs group had significantly lower quality of care in medical home, personal doctor or nurse, family-centered care, shared decision making, and care coordination categories and had greater difficulty obtaining mental health treatment. Children in the low ACE group also had significantly lower quality of care as indexed by the medical home, personal doctor or nurse, family-centered care, shared decision making, and effective care coordination; however, children in the low ACE group did not have greater difficulty accessing mental health treatment.

## Discussion

Using a nationally representative sample of US children, we found that children who experience four or more ACEs have significantly reduced odds of receiving high quality

**Table 2** Bivariate associations between adverse childhood experiences and descriptive characteristics

	# Total ACEs				P Value
	0	1	2–3	4+	
	M(SE) / %				
Child age (years)	7.78 (0.04)	9.15 (0.07)	10.32 (0.08)	11.18 (0.11)	<0.0001
Child race					<0.0001
White alone	70.8	64.1	60.1	59.9	
Black or African American alone	10.1	17.0	21.1	20.3	
American Indian/Alaska native	1.0	1.4	1.3	1.6	
Asian	6.4	3.5	2.0	0.8	
Native Hawaiian/Other Pacific Islander	0.6	0.9	1.0	0.6	
Some other race alone	4.0	5.6	4.6	4.3	
Two or more races	7.1	7.5	9.9	12.5	
Child sex (Female)	48.9	48.8	49.1	49.8	0.912
Child born in USA (Yes)	95.9	95.7	96.1	97.4	0.072
Parent highest education					<0.0001
< HS	8.2	11.0	9.1	11.8	
HS	14.3	23.0	28.4	30.4	
> HS	77.5	66	62.5	57.8	
Poverty level					<0.0001
0–99% FPL	13.9	24.2	31.9	36.0	
100%–199% FPL	17.7	25.7	27.2	31.8	
200%–399% FPL	28.1	28.4	26.2	22.2	
400% FPL or above	40.3	21.7	14.7	10.0	
Total kids in the home					<0.0001
1	23.3	27.8	31.7	26.7	
2	41.4	37.2	34.4	30.8	
3	23.7	22.1	20.5	22.8	
4+	11.6	12.9	13.4	19.7	
Survey year					<0.0001
2016	23.4	26.7	28.3	27.4	
2017	24.4	26.6	25.6	23.4	
2018	26.2	23.9	22.2	25.3	
2019	26.0	22.8	23.9	23.9	
Insurance type					<0.0001
Public only	21.3	36.6	47.8	61.3	
Private only	69.4	49.8	38.3	23.1	
Private and public	2.9	6.2	6.9	8.0	
Insurance type unspecified	0.3	0.5	0.4	0.3	
Not insured	6.0	6.8	6.6	7.3	
Insurance gap					<0.0001
Insured all 12 months	92.7	90.6	89.7	87.2	
Insured during the past 12 months but with gaps in coverage	2.7	4.3	5.2	7.5	
No coverage past 12 months	4.6	5.1	5.1	5.3	
Heart condition (Yes)	1.8	2.4	3.0	3.7	<0.0001
Genetic condition (Yes)	2.4	3.5	5.1	8.9	<0.0001
Child special healthcare need (Yes)	13.2	20.4	29.4	43.8	<0.0001

care from medical providers and having no issues accessing mental health services. Specifically, compared to children in the no ACEs group, children with high ACEs were 55%

less likely to experience effective care coordination, 42% less likely to experience no problems with referrals, and 45% less likely to have no issues accessing needed mental

**Table 3** Adjusted associations between adverse childhood experiences and care quality indicators and mental health treatment access

Indicator	# Total ACEs									
	0		1			2–3			4+	
	%	Adj. OR	%	95% CI	Adj. OR	%	95% CI	Adj. OR	%	95% CI
Medical home	46.6		37.1			34.0			29.2	
	1 [Reference]	0.78	0.72	0.84	0.76	0.69	0.83	0.66	0.57	0.76
Personal doctor or nurse	75.1		69.7			68.0			69.8	
	1 [Reference]	0.88	0.81	0.95	0.81	0.74	0.89	0.87	0.76	1.00
Referrals for care (not a problem)	84.3		78.6			75.2			65.2	
	1 [Reference]	0.89	0.70	1.14	0.83	0.64	1.07	0.58	0.44	0.80
Family-centered care (Received)	89.9		84.3			81.0			75.4	
	1 [Reference]	0.73	0.65	0.82	0.61	0.54	0.70	0.49	0.39	0.60
Shared decision making	89.9		83.0			81.9			76.1	
	1 [Reference]	0.65	0.53	0.79	0.67	0.53	0.85	0.50	0.39	0.66
Effective care coordination	76.5		68.8			64.6			53.4	
	1 [Reference]	0.71	0.64	0.78	0.63	0.56	0.71	0.45	0.38	0.52
Difficulty receiving needed mental health treatment (no difficulty)	61.1		60.7			54.0			46.2	
	1 [Reference]	0.97	0.80	1.18	0.76	0.62	0.92	0.55	0.43	0.70

health treatment. Caregivers of children with high ACEs also reported perceptions of lower-quality medical home services, as measured by multiple quality indicators derived from the patient-centered medical home model (Patient-Centered Primary Care Collaborative, 2017; Rosenthal, 2008). Similarly, relative to the ACE group, children with moderate ACEs were more likely to report experiences of lower-quality family-centered care and poorer coordination of care, and more likely to encounter challenges when seeking mental health services. Even after adjusting for many predisposing, need-based, and enabling variables potentially associated with quality of care and access to treatment (Andersen, 1995, 2008; Babitsch et al., 2012), we found significant associations between children's quality of care and access to mental health services and their ACE group.

According to the US Prevention Services Task Force, a key factor in determining when to initiate risk screening protocols is whether the feasibility of treatment delivery for the risk in question differs across subgroups (e.g., children with high ACEs) of the population who will be screened (U.S. Preventive Services Task Force, 2017). Our analysis offers empirical evidence that higher ACEs are associated with lower-quality care and greater difficulty accessing treatment. Therefore, universal ACE screening may not ultimately assist those who stand to benefit most from its large-scale implementation because screening alone cannot address the systemic disparities affecting this population's ability to access quality care. Further, we know of no evidence to suggest that simply screening for ACEs would yield

benefits for other aspects of health care quality absent other systemic changes.

Interestingly, for all ACE groups, parents reported comparable access to consistent primary care medical staff (e.g., personal doctors and nurses) and comparable access to insurance coverage, whether private or Medicaid. These results suggest that children across ACE groups have similar access to certain providers and insurance coverage, and in principle could be connected to a medical home and receive effective treatment. In practice, however, our findings show that children with moderate and high ACEs are more likely to experience lower-quality care and more difficulties in accessing needed mental health services relative to children with no ACEs. Along with others, we hypothesize that one reason for this gap between service need and service utilization is that extant delivery systems may lack structures to efficiently coordinate referrals to mental health treatment and other specialty services (Bringewatt & Gershoff, 2010). Our findings indicate that this potential lack may affect children with high or moderate ACEs more than children with no ACEs. Providing appropriate treatment referrals and coordinating care in light of those referrals are explicit components of the patient-centered medical home model (Patient-Centered Primary Care Collaborative, 2017; Rosenthal, 2008), and these components are employed by some of the most effective pediatric medical homes as rated by the Medical Home Index (McAllister et al., 2013). Yet our findings suggest that children with greater ACEs are less likely to have access to a medical home that meets these criteria. Only screening



for ACEs, therefore, likely cannot improve the wellbeing of children with ACEs, given that the resources available to support children and the systems in place to connect children and families to those resources are least likely to be provided to those children with a greater number of ACEs.

In the national discussion on universal ACE screening, its advocates rightly emphasize that screening should employ a trauma-informed approach to patient care, and which requires providing support and training to clinicians and professionals who may administer the screening (Dube, 2018; Finkelhor, 2018). Our findings uniquely add to this discussion by also highlighting that the provider care currently received by children with high-adversity histories is less likely to be family-centered. Standards of family-centered care include incorporating the family's cultural values, addressing the whole child and family (including physical, mental, and social needs), and encouraging parents and caregivers to be partners in decision-making (Patient-Centered Primary Care Collaborative, 2017). Drawing on empirical studies of integrated health care, we advise researchers and clinicians to embrace models of pediatric care with demonstrated success in enhancing family-centered care and improving psychosocial outcomes for children and adolescents. Findings from a meta-analysis of randomized clinical trials comparing integrated medical-behavioral care to regular primary care showed that integrated care resulted in superior mental health outcomes for adolescents (Asarnow et al., 2015). Studies of collaborative care models (i.e., a form of integrated care in which physicians, behavioral health professionals, and families work together on patient-centered goals) showed that these models yielded the strongest positive benefits for adolescent mental health (Asarnow et al., 2015). Another exemplar is the Safe Environment for Every Kid (SEEK) model for pediatric primary care (Dubowitz et al., 2009), which involves a standardized brief psychosocial risk screening and coordinated care that informs any referrals to treatment. SEEK has been successfully implemented in primary care settings and multiple rigorous randomized clinical trials have confirmed its efficacy in reducing child abuse, child neglect, and risk factors associated with child maltreatment (Dubowitz et al., 2009; 2012). These models demonstrate that incorporating a family's context and voice into pediatric care can improve outcomes for children and families and reduce their risk of future adverse experiences.

We acknowledge that the ACEs framework has been and continues to be a powerful public health advocacy tool that has increased knowledge about the prevalence of ACEs and conveyed the urgent need to address the detrimental long-term consequences of childhood adversity. Our findings add to this discussion by highlighting significant links between ACEs, quality of provider care, and access to appropriate treatment for ACEs. To improve the current and future

wellbeing of children with ACEs, systems for identifying these children along with other social determinants of health must be complemented by efforts to enhance these children's ability to access the quality care and support they require.

Our findings should be interpreted in light of our study's limitations. Foremost, this study uses cross-sectional data, meaning that we were unable to determine whether high ACE exposure results in lower-quality care and greater difficulties in accessing mental health services, or vice versa. Moreover, because our quality of care indicators were dichotomous, we are not able to evaluate in detail the different quality levels of provider care received by children and families in the sample, though our study variables do capture salient indicators of provider care quality according to the Patient-Centered Medical Home model (Patient-Centered Primary Care Collaborative, 2020; Rosenthal, 2008). The recall time frame for parent report on child ACEs varied according to child age, however, all main analytic models had child age and other theoretically and empirically relevant variables included as covariates (see Table 2). All measures in this study, including child ACEs, access to mental health services, and quality of care indicators, were collected through parent self-report. Thus, our study is limited due to mono-method measurement and potential social desirability or retrospective reporting biases germane to self-report measurement. Future studies might incorporate both parent and child perceptions of ACEs and quality of care as well as administrative records documenting access or attempts to access services.

Despite these limitations, our findings warrant further consideration. Policymakers and care providers must consider whether many persons who will be screened for high levels of ACEs will in fact receive quality provider care, appropriate referrals, and access to needed mental health treatment from US medical delivery systems as they are currently arranged. For example, there is a well-documented workforce shortage in youth-serving providers, particularly in the area of evidence-based treatment delivered by mental and behavioral health providers (Cummings et al., 2013; Health Resources & Services Administration, 2021). Families and children residing in rural and low-resource areas also have limited or no access to mental health providers (e.g., Child Psychiatrists, McBain et al., 2019). Along with others, we maintain that these systems' and individual providers' capacities to provide these services must be evaluated and modified prior to increasing the number of persons screened with any given screening method (Finkelhor, 2018). We also reiterate the significant concerns voiced by others about the use of the ACEs questionnaire as a universal clinical screening tool (Anda et al., 2020). To date, there is limited psychometric evidence supporting the use of ACEs (Finkelhor, 2018; McLennan et al., 2020), a lack of clinical guidance for thresholds of when to treat and intervention

to treat ACEs (Barnes et al., 2020; Finkelhor, 2018), and a noticeable absence of cost–benefit analyses of using ACEs for referral to targeted treatment (Finkelhor, 2018). Additionally, others have warned of the potential for greater patient harm when patients disclose trauma in contexts and within care systems that may not be equipped to support such disclosures (McLennan et al., 2020; Racine et al., 2020). A recent review of more general screening procedures for all social determinants of health in pediatric settings identifies similar concerns (Sokol et al., 2019). The current study adds to this list of potential issues with universal screening systems by suggesting that the children and adolescents who may most benefit from targeted treatment to address ACEs may in fact be the least likely to receive quality care or necessary mental health treatment. However, this does not mean that the social determinants of health, such as ACEs, do not remain important to understand and address.

## Conclusions

The goal of implementing universal ACEs screening to identify and support children and families with experiences of early adversity cannot be met without acknowledging the association between higher ACEs, lower-quality care, and greater challenges accessing mental health treatment. Until these disparities in care quality and access are addressed, we do not recommend implementing large-scale universal ACE screening. In the meantime, we should direct our efforts toward supporting the numerous high-quality evidence-based interventions with a demonstrated ability to reduce the negative psychological and physiological effects of early adversity (Kirlic et al., 2020). Future research should explore methods for redesigning current service delivery systems to ensure that these interventions and treatments reach and benefit the most vulnerable children and families.

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## Declarations

**Conflict of interest** The authors declare that they have no conflict of interest.

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