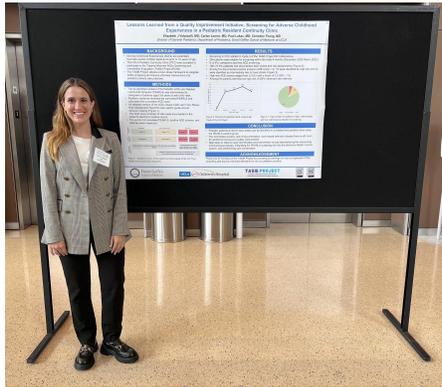


*The AAP California Chapter 2 sent out a call for abstracts on scholarly projects by trainees in the Southern California counties of Kern, Los Angeles, Riverside, San Bernardino, San Luis Obispo, Santa Barbara and Ventura. The accepted abstracts were showcased at the 2023 Advances in Pediatrics Symposium. We would like to recognize each finalist and their abstract in our chapter newsletter. Thank you to everyone who participated in this year's research awards.*



### **Lessons Learned from a Quality Improvement Initiative: Screening for Adverse Childhood Experiences in a Pediatric Resident Continuity Clinic**

**Elizabeth J. Volpicelli, MD;** Christine Thang, MD  
 Division of Pediatrics, University of California Los Angeles  
 David Geffen School of Medicine, Los Angeles, California,  
 USA

**Background:** Adverse Childhood Experiences (ACEs) are potentially traumatic events that children experience prior to eighteen years of age. Given the recognized impacts of childhood adversity across the lifespan, the Office of the California Surgeon General and the California Department of Health Care Services founded ACEs Aware, a statewide initiative calling on primary care providers to screen children and adults for ACEs and to treat the impacts of toxic stress with trauma-informed care [1]. There is a critical need and demand for learning how to effectively integrate ACEs screening and trauma-informed care into the pediatric primary care practice. The purpose of this report is to describe the lessons learned following a quality improvement project aimed to implement the ACEs Aware screening algorithm into a resident-led primary care pediatric clinic.

**Methods:** The UCLA Pediatric Resident Continuity Clinic was selected as the pilot setting for this project. Pediatric caregivers were administered the de-identified version of the Pediatric ACEs and Related Life Events Screener (PEARLS) if their child met the following criteria: aged 3–8 years, presented for a well-child check, and spoke English or Spanish. After conducting the standard well-child check, pediatric residents reviewed the completed PEARLS and calculated a cumulative ACE score based on the reported total number of ACEs categories experienced. An adapted version of the ACEs Aware ACEs and Toxic Stress Risk Assessment Algorithm was used to guide clinical decision-making [2]. For a score of 0 (“low risk”), residents provided anticipatory guidance. For a score of 1-3 with no symptomatology (“intermediate risk”), residents provided anticipatory guidance and education. For a score of 1-3 with symptomatology or a score of 4+ (“high risk”), residents provided anticipatory guidance, education, appropriate referrals, and a follow up visit (See Figure 1). De-identified ACE scores and plans were documented in the clinic note within the patient’s electronic medical record (EMR). The percent of completed PEARLS, positive ACEs screens, and referrals were calculated.

**Results:** Following the first two months of this project, 108 pediatric patients were eligible for screening with 73 (68%) responses successfully completed and documented. There was only 1 documented caregiver refusal. Of those successfully screened, 9.6% (n=7) were identified as high risk, 6.8% (n=5) were identified as intermediate risk, and 83.6% (n=61) were identified as low risk. Of the high-risk patients, 71% (n=5) were referred to the clinic’s social worker and child psychologist.

**Conclusion:** This quality improvement project demonstrates that high-risk pediatric patients can be successfully identified in a resident-led, pediatric clinic using a standardized ACEs screening tool. However, the incomplete screens, lack of documentation, and missed referrals indicate there is still room for learning and improvement. A standardized onboarding process and streamlined care coordination protocol are recommended to improve early identification and intervention. Additionally, buy-in strategies including lectures on the prevalence and impact of ACEs, trainings on how to conduct screenings and address results with families, and small group feedback sessions are strongly advised to motivate clinic staff and providers to prioritize screening for ACEs.

Assess Risk Score	<b>Low Risk</b>	<b>Intermediate Risk</b>	<b>High Risk</b>	
	Score of 0	Score of 1-3	Score of 1-3	Score of 4+
Assess Symptoms	No Symptoms	No Symptoms	With Symptoms	With / Without Symptoms
	Provide anticipatory guidance on ACEs and toxic stress.	Provide anticipatory guidance and education on toxic stress, protective factors, and resilience.	Provide education on toxic stress and trauma-informed care.	
Determine Appropriate Follow-up Plan	Jointly formulate treatment plan. Refer to support services, as appropriate.		Provide referral to clinic’s social worker and child psychologist.	
			Schedule follow up appointment to monitor symptoms.	

**Figure 1.** An Adapted Version of the California ACEs Aware ACEs and Toxic Stress Risk Assessment Algorithm

**References**

1. Bhushan D, Kotz K, McCall J, Wirtz S, Gilgoff R, Dube SR, Powers C, Olson-Morgan J, Galeste M, Patterson K, Harris L, Mills A, Bethell C, Burke Harris N, Office of the California Surgeon General. Roadmap for Resilience: The California Surgeon General’s Report on Adverse Childhood Experiences, Toxic Stress, and Health. Office of the California Surgeon General, 2020. DOI: 10.48019/PEAM8812.

2. ACEs Aware. Clinical Algorithms Workflows and ACEs Associated Health Conditions. [www.acesaware.org/wp-content/uploads/2019/12/ACEs-Clinical-Algorithms-Workflows-and-ACEs-Associated-Health-Conditions.pdf](http://www.acesaware.org/wp-content/uploads/2019/12/ACEs-Clinical-Algorithms-Workflows-and-ACEs-Associated-Health-Conditions.pdf). Published 2019.



Elizabeth Volpicelli, MD is a pediatric resident at the UCLA Pediatric Residency Program.  
Email: [evolpicelli@mednet.ucla.edu](mailto:evolpicelli@mednet.ucla.edu)

Dr. Elizabeth Volpicelli was born and raised in Los Angeles, CA. She graduated magna cum laude from the University of Southern California with a Bachelor of Arts degree in Psychology with Departmental honors and minor in Public Health. While applying the concepts she learned in the classroom to her work in the laboratory, Dr. Volpicelli investigated how demographic characteristics and cultural norms impact the social, emotional, and academic adjustment of adolescents. As her curiosity drove her further into exploring how genes and the environment influence human behavior, she soon found herself sitting on a cold, steel metal chair in Central Juvenile Hall, facilitating one-on-one mentoring sessions with the incarcerated in the detention center. By offering a listening ear, her mentees confided in her sensitive personal information including past experiences with abuse and neglect. Ready and determined to discover new strategies to prevent childhood adversity, she matriculated at the Lewis Katz School of Medicine. Beyond learning about the pathophysiology and management of medical conditions, she gained firsthand experience of how the social determinants of health directly impact children's health. Eager to reduce health disparities, she implemented community-based initiatives aimed to meet basic needs. In helping to provide food, clothing, security, and mentorship, she witnessed the immense potential that children have when given the proper tools and encouragement. Her experiences solidified her decision to pursue a career in pediatrics, a field which she feels is an essential to creating hope and healthier futures for all children.

Dr. Volpicelli is active in multiple professional societies. She serves as the Resident Assistant District Representative for District 9 of the American Academy of Pediatrics Section on Pediatric Trainees. She has over 10 years of research experience and has published 7 peer-reviewed publications and 2 book chapters. She was awarded the Junior Investigator Clinical Research Award at the American Cleft Palate-Craniofacial Association's 74th Annual Meeting in 2017 and co-chaired the Junior Investigator Session at the American Cleft Palate-Craniofacial Association's Annual Meeting the following year. Dr. Volpicelli is also extremely passionate about advocacy and philanthropy. She was awarded the Dollies Making A Difference Grant (\$2,000) in 2018 to transform the Salvation Army's Bright Space into a clean, safe, and stimulating playroom for children living in the Red Shield Family Residence Center in Philadelphia, PA. She was awarded an AAP Community Access To Child Health (CATCH) Grant to identify high school students at risk for developing toxic stress and to implement new resiliency strategies to mitigate the short- and long-term negative effects of trauma.