# Utilizing the Adverse Childhood Experiences (ACEs) Screening Tool in a Pediatric Primary Care Clinic

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## Introduction

- ACEs are traumatic events that occur during childhood, such as child abuse, child neglect and household challenges
- The pediatric primary care provider can identify those children at risk, particularly in socioeconomically disadvantaged populations
- The American Academy of Pediatrics (AAP) recommends screening for ACEs during WCC visits
- Evidence shows that education and training in ACE screening and interventions in primary care would increase provider knowledge and competence

# Purpose

- Increase pediatric provider's awareness on ACEs through education and evaluation
- Increase the utilization of the ACEs screening tool in a pediatric primary care clinic
- As a result, screening for ACEs was expected to increase amongst providers, patients and families

# Methods

## Design

- Quality Improvement (QI) Project, utilizing an Educational Intervention
- Pre-post test to determine if there was a difference in the provider's awareness and knowledge of ACEs.
- Target sample included all 59 primary care providers in an pediatric primary care clinic
- None of the providers were excluded
- Single clinical site and there was no control group.

Table 1. Distribution of Demographic Characteristics of Primary Care Providers				
Characteristics	N = 59 n (%)			
Mean age in years ± (SD) Gender, n (%)	30.8 <u>+</u> 6.5			
Female	45 (76.3)			
Male	14 (23.7)			
Race, n (%)				
White	44 (74.6)			
African American	5 (8.5)			
Asian	9 (15.3)			
Other	1 (1.7)			
Type of Provider, n (%)				
Intern	17 (28.8)			
Assistant Resident	17 (28.8)			
Senior Assistant	23 (39.0)			
Resident				
Nurse Practitioner	2 (3.4)			

#### Provider's knowledge on ACEs and screening

- Paper-based content validity survey with a 5 point Likert scale: (strongly disagree to strongly agree)
- Survey asked about provider's: (1) familiarity (2) role (3) comfort level (4) barriers (5) resources in screening for
- Distributed prior to the educational intervention and 12 weeks post implementation of project

#### **Educational Intervention**

- All primary care providers received a Powerpoint presentation on ACEs and screening
- Posters placed in patient exam rooms and provider's work areas
- The education included:
- background of the original study
- the definition
- why this patient population was at risk
- what they were at risk for
- importance of screening
- steps to overcome barriers
- patient-centered communication

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## **Utilization of the Screening Tool**

- The Center for Youth Wellness (CYW) ACEs
   Screening Tool was distributed during Well Child
   Care visits
- Screening tools collected as a way of obtaining data
- Electronic medical records reviewed weekly to examine which patients completed the tool (numerator), number of well-child care visits (denominator), by which providers

Variable	Pre-Test Scores (n=59)	Post-Test Scores (n=52)	Difference in Scores	p-value
	M (SD)	M (SD)	М	
Knowledgeable of ACEs & screening	3.52 (1.038)	4.33 (.513)	81	.00
Role of PCP in screening for ACEs	4.19 (.687)	4.35 (.556)	15	.13
Provider's Comfort Level in Screening for ACEs	3.06 (.916)	3.75 (.682)	69	.00
Provider's Perception of Having Sufficient Time to Screen	2.38 (.796)	2.75 (.837)	37	.02
Provider's Awareness of Resources for Positive Screenings	2.50 (.960)	3.63 (.864)	1.14	.00
Provider's Total Pre-Post Test Scores of Knowledge of Screening for ACEs	15.71 (2.585)	18.92 (2.222)	-3.21	.00

## Results

- 59 providers participated
- Provider's total knowledge score increased by 21%, paired t-test statistically significant
- Paired t-test in provider's knowledge, comfort level in screening, sufficient time to screen and awareness of resources statistically significant, pvalue < .05</li>
- No statistical significance in provider's role in screening for ACEs
- 480 screening tools collected over 12 weeks
- 93% (n=55) of providers utilized the screening tool
- 16-47% of patients completed the screening tool weekly with
  - 1537 Well Child Care visits

## Conclusions

- Pre-post survey showed that providers continued to feel that they did not have sufficient time to screen
- Evidence shows that continuing education curriculums should include ACEs to increase provider's awareness of ACEs
- Ongoing training to providers on patient centered communication skills and building resiliency in patients and families.

