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 Well Child Care (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

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N = 59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age in years (SD)</td>
<td>30.8 ± 6.3</td>
</tr>
<tr>
<td>Gender, n (%)</td>
<td>Male: 45 (76.3)</td>
</tr>
<tr>
<td>Race, n (%)</td>
<td>White: 64 (44.6)</td>
</tr>
<tr>
<td>Type of Provider, n (%)</td>
<td>Intern: 17 (28.8)</td>
</tr>
</tbody>
</table>

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

Table 2: Comparison of the Provider’s Knowledge Pre and Post an Educational Intervention of Screening for ACEs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-Test Score</th>
<th>Post-Test Score</th>
<th>Difference in Scores</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledgeable of ACEs &amp; screening</td>
<td>4.13 (1.04)</td>
<td>6.23 (1.1)</td>
<td>2.1</td>
<td>.00</td>
</tr>
<tr>
<td>Role of PCC in screening for ACEs</td>
<td>4.10 (0.68)</td>
<td>6.45 (1.56)</td>
<td>2.35</td>
<td>.01</td>
</tr>
<tr>
<td>Provider’s Comfort Level in Screening for ACEs</td>
<td>4.06 (1.81)</td>
<td>3.77 (0.82)</td>
<td>-0.29</td>
<td>.80</td>
</tr>
<tr>
<td>Provider’s Perceived Time to Screen</td>
<td>3.78 (0.90)</td>
<td>2.75 (0.87)</td>
<td>-1.03</td>
<td>.33</td>
</tr>
<tr>
<td>Provider’s Assessment of Resources for Positive Screenings</td>
<td>4.60 (1.39)</td>
<td>4.21 (1.30)</td>
<td>-0.39</td>
<td>.14</td>
</tr>
<tr>
<td>Provider’s Total Pre-Post Scores of Knowledge of ACEs</td>
<td>15.71 (2.93)</td>
<td>18.92 (2.22)</td>
<td>3.21</td>
<td>.00</td>
</tr>
</tbody>
</table>

Results

- 59 providers participated.
- Provider’s total knowledge score increased by 21%, paired t-test statistically significant.
- Pair ed t-test in provider’s knowledge, comfort level in screening, sufficient time to screen and awareness of resources statistically significant, p-value < .05.
- No statistical significance in provider’s role in screening for ACEs.

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.

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.

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 ACEs.

- Distributed prior to the educational intervention and 12 weeks post implementation of project.

- Electronic medical records reviewed weekly to examine which patients completed the tool (numerator), number of well-child care visits (denominator), by which providers.

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

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