

Acute Stress Disorder and Post-Traumatic Stress Disorder Screening in Pediatric Trauma Patients

Samantha Irizarry BSN-RN; Marian Malone DNP, APRN, CPNP-AC/PC; Megan Waddell MSN CPEN

BACKGROUND

- Two-thirds of U.S. children and adolescents report experiencing one or more potentially traumatic events by age seventeen, and 4.7% of U.S. adolescents meet the lifetime criteria for PTSD.
- 13.4% of the North Carolina pediatric population ages 0-17 have undergone two or more traumatic adverse childhood experiences, compared to 14% of the U.S. population.
- One of the most common inappropriate diagnoses and treatments is attention-deficit/hyperactivity disorder (ADHD) in this population.
- Early identification reduces the by-products of underdiagnosis of ASD and PTSD, such as mental illness, developmental delays, poor academic performance, and challenges with social interactions.

LOCAL PROBLEM

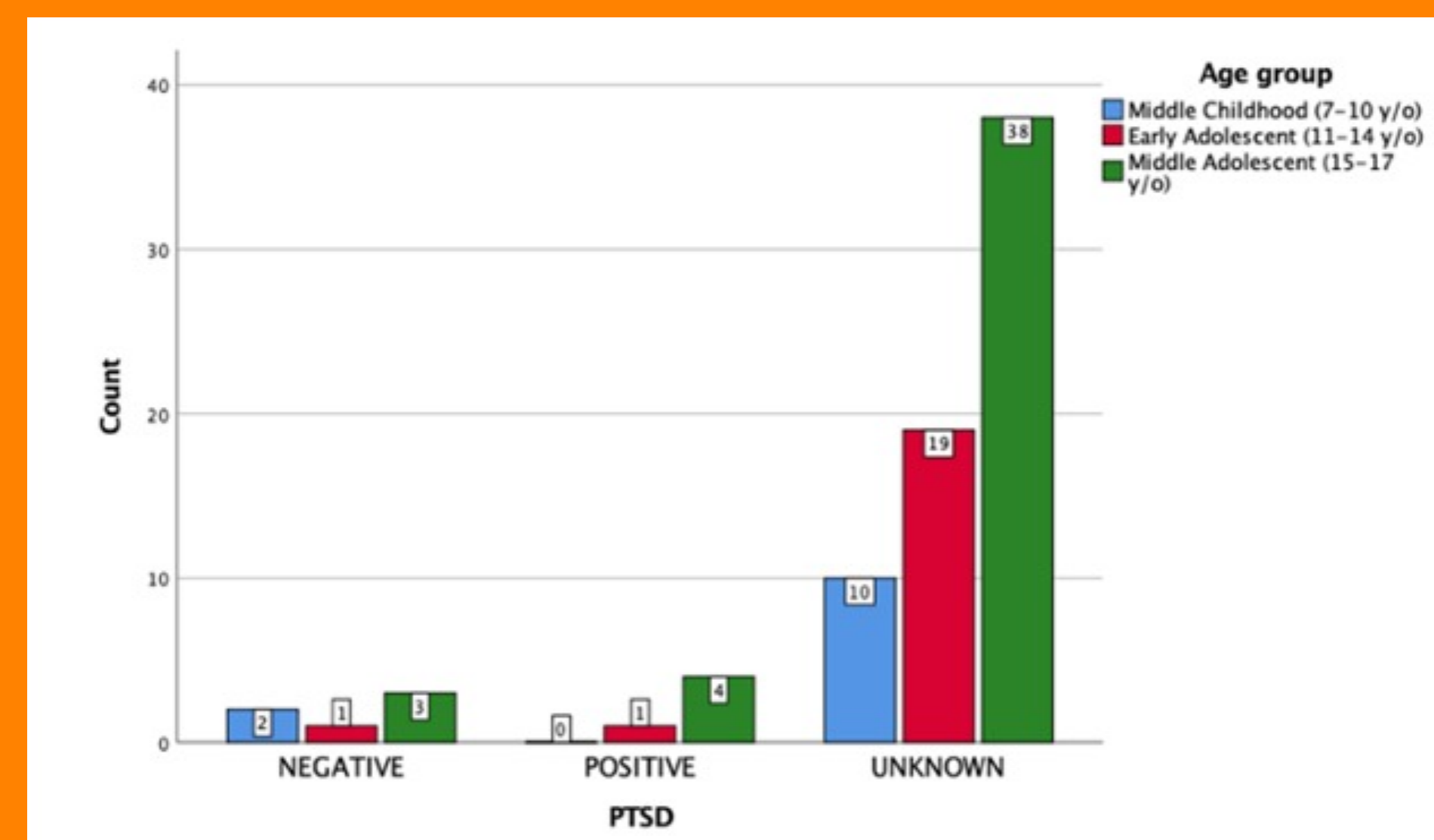
- The site for this Evidence-Based Practice Improvement project is a level-one pediatric trauma hospital in Charlotte, North Carolina, seeing more than 130,000 patients annually.
- Prior to project implementation, there was an absence of ASD and PTSD screening and referral protocol for pediatric trauma patients.
- The aims of the project were:
 - Implement ASD and PTSD screening at the project site for pediatric trauma patients
 - Increase the number of pediatric trauma patients with referrals ordered

METHODS

- The Evidence-Based Practice Improvement (EBPI) and Plan-Do-Study-Act (PDSA) models were the frameworks used for this project.
- Literature search, critical appraisal, and synthesis outcomes revealed strong, consistent evidence for each screening tool utilized: Child Stress Disorder Checklist (CSDC-SF), Acute Stress Checklist (ASC 3/6-SF), and Child and Adolescent Trauma Screening (CATS).
- Outcome measures were compared to the pilot study performed pre/post-intervention implementation.

Pediatric trauma patients at risk for ASD and PTSD *were more likely to be identified and receive referral orders* after the implementation of a standardized ASD and PTSD screening tool.

Screening Tools	Screen Results		
	Positive	Negative	Unknown
Child Stress Disorder Checklist (CSDC)	11	8	0
Acute Stress Checklist (ASC -3/ACS-6)	8	39	0
Child Adolescent Trauma Screen (CATS)	5	6	46
Acute Stress Disorder - High Risk	11	46	0
Post-Traumatic Stress Disorder - High Risk	5	6	46

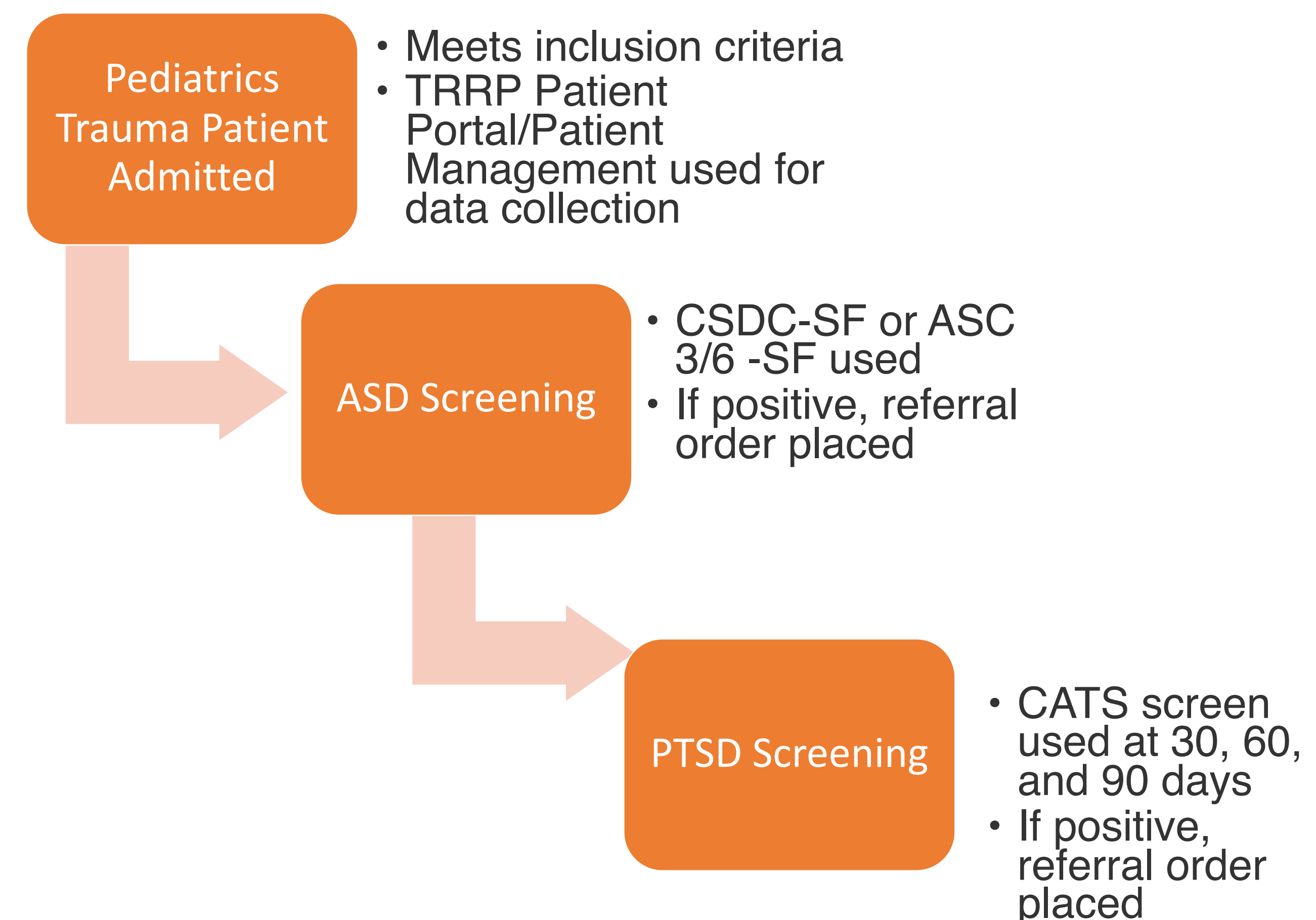


	Number of referrals ordered	Trauma Type			
		MVC	GSW	MVC & GSW	OTHER
MALE	21	8	7	0	6
FEMALE	8	7	0	0	1
TOTAL	29	15	7	0	7



INTERVENTIONS

- All pediatric patients ages 7-17 years old who were admitted for unintentional traumatic injuries for a minimum of 24 hours were screened for ASD and PTSD using three screening tools.



RESULTS

- The project data analysis and pilot study statistical analysis were compared via Chi-Square and Pearson R analysis; however, without the original data set, the comparison left a margin for error.
- Moreover, the data collected expanded demographics, trauma types, and referrals placed.
- Data was used to determine the permanent selection of screening tools used for ASD and PTSD screening.

CONCLUSIONS

- The use of standardized screening tools increased the number of referrals placed for pediatric trauma patients at risk for ASD and PTSD.
- The implementation of ASD and PTSD screening tools was integrated into the standard practice at the project site.
- The screening tools were incorporated into the site's electronic health records.