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Implementation of Pediatric Appendicitis Screening Tool in Children's ED

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BACKGROUND

- Multiple patients present to the Children's Emergency Department daily with a chief complaint of abdominal pain.
- At this time, there is no specific screening tool for appendicitis.
- Patients sit in the ED for hours prior to being seen by a provider, thus possibly worsening their condition.

PICO

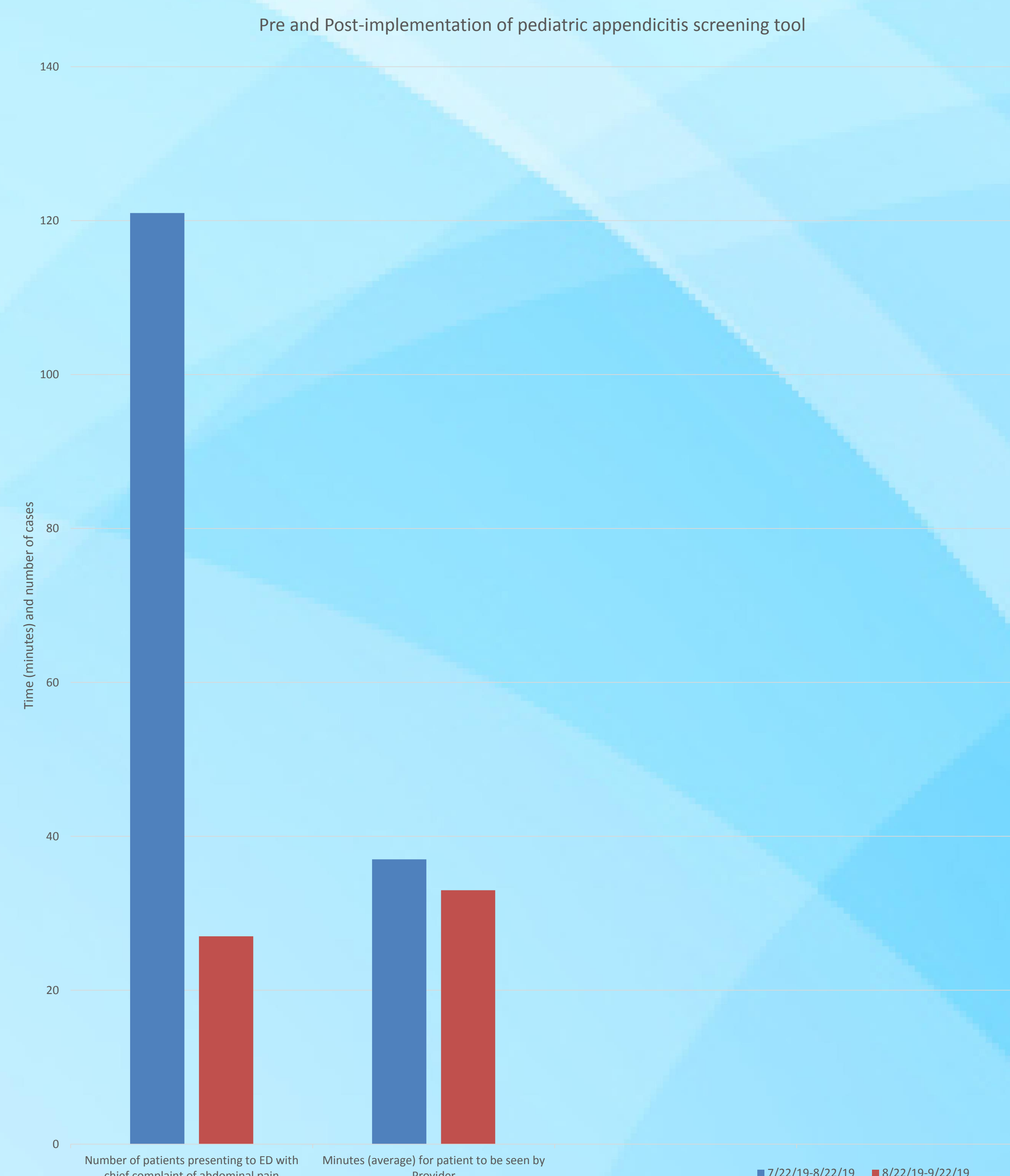
- P - Pediatric triage RN
- I - Appendicitis screening tool
- C - No appendicitis screening tool
- O - Time from triage to initial provider contact

EVIDENCE

- Pediatric appendicitis score (PAS):
 - 0-2 low risk; 3-5 moderate risk; 6-8 high risk
 - Nausea/Emesis: 1
 - Anorexia: 1
 - Migration of pain to RLQ: 1
 - Low-grade fever (> 38.0 degrees C): 1
 - RLQ tenderness upon palpation: 2
 - Cough/percussion tenderness at RLQ: 2
- PAS developed to improve decision-making process in patients with suspected appendicitis. A PAS score greater than or equal to 5 was found to be the best cutoff point compatible with acute appendicitis, with a sensitivity of 95%, specificity of 84%, and accuracy of 89%. PAS scores between 1 and 3 could be discharged without further imaging examination

OUTCOMES

- As demonstrated below, the number of cases per time period can be identified by the red bars. Furthermore, the time recorded can be identified as the blue bars. Overall, the amount of time from triage to patient-provider contact was decreased by approximately 4 minutes when implementing an appendicitis screening tool.



IMPLEMENTATION

- Education to all ChER staff in person with background to the screening tool as well as how to score each patient with abdominal pain. Emails were sent out periodically throughout the month to encourage staff to utilize the pathway.
- Appendicitis screening tool printout placed in the ChER triage room as well as at the nurses and physician sitting areas.

NEXT STEPS

- More data should be gathered to explore the effectiveness of this screening tool.
- Potentially include the appendicitis screening tool in the formal triage of the Children's Emergency Department.

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