EARLY SEPSIS RECOGNITION UTILIZING SEPSIS SCREENING TOOLS IN PEDIATRICS

Authors: Dr.Rasha Ashour, Dr.Sohair Elsiddig , Mrs.Mini Ramesh, Dr.Amira Mostafa, Dr.Ahmed Al-Hammadi

مؤسسة حمد الطبية
Hamad Medical Corporation
HEALTH • EDUCATION • RESEARCH صحة • تعليم • بحوث

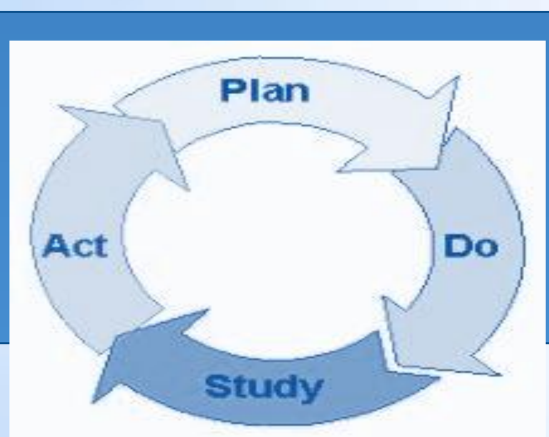
Team:
Team Leader: Dr. Rasha Ashour , Consultant General Pediatric
Team Coach : Dr. Amira Mostafa , Consultant General Pediatric
Members: Dr. Sohair Elsiddig , Clinical Fellow General Pediatric , Mrs. Mini Ramesh , Quality Improvement Reviewer , Dr. Ahmed Yagoub , Pediatric Resident , Dr. Sondos Altaraqji Pediatric Resident .
Sponsor: Dr. Ahmad Al- Hammadi, Head of General Pediatric, Dr. Mohammad Janahi, Chairman of Pediatric Department

Problem: currently no standardized method is used in pediatric wards at Hamad General Hospital HGH for early detection of sepsis among admitted pediatric patients with vital signs instability .

Aim :

1. To achieve 30% compliance with the novel newly introduced pediatric sepsis screening tools as a standardized method for early sepsis detection among patients in the pediatric medical ward with vital signs instability at Hamad General Hospital by May 30,2016 .
2. To decrease the time between criteria met for sepsis and starting of the sepsis bundle.

Methods: A baseline process map for patients with new onset vital signs instability was studied and all possible causes were obtained. A survey was conducted to look for the most likely cause for the delay in recognition and initiation of septic bundle.. A data collection tool was designed to record the various steps in the process for the pre-and post-intervention phases. Using a series of PDSA cycles, interventions were introduced to the process.



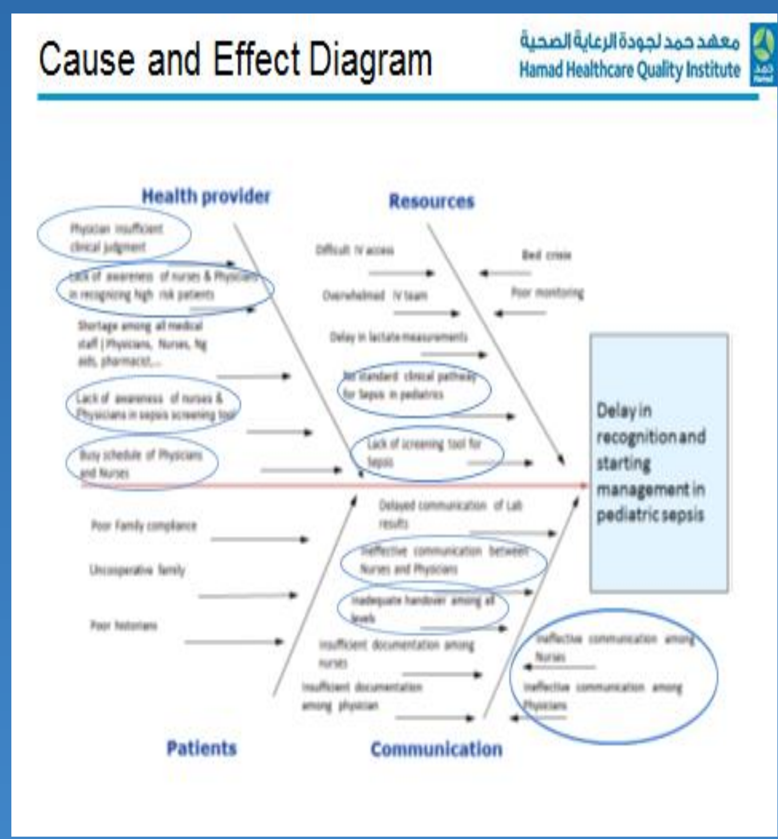
Interventions:

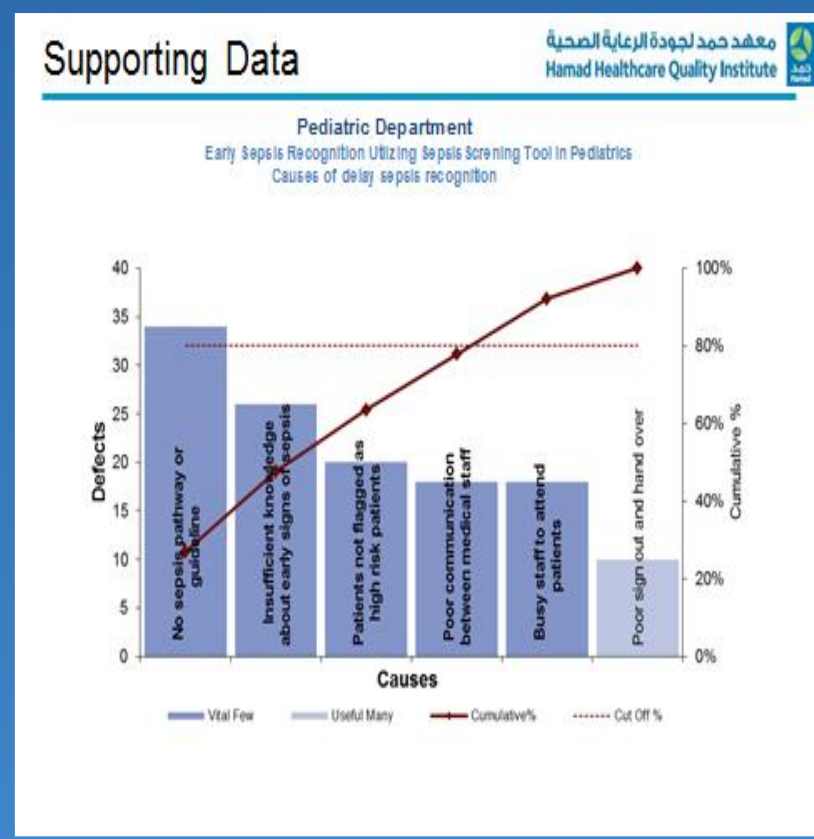
PDSA1- Implementation of Sepsis tool
- Designed the tool
- Education about the tool

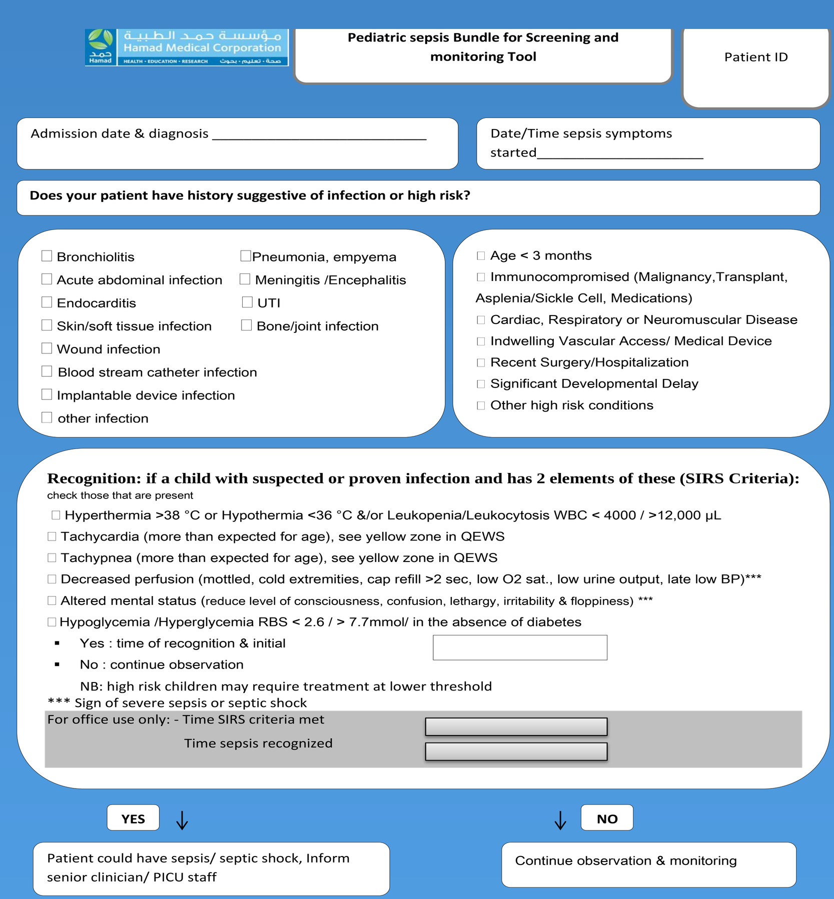
PDSA 2- Easy accessible tool
- Designated place for tool
- Reeducation & reminders

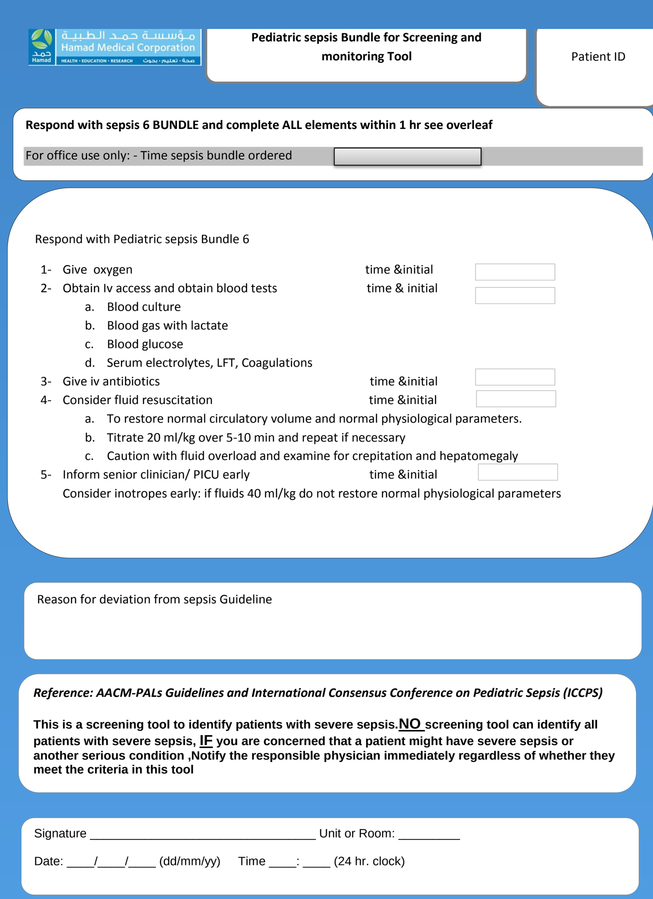
Results:
After education and implementation of pediatric sepsis screening tool, the total time gap between meeting criteria for sepsis till starting pediatric sepsis bundle is significantly reduced by 28.2% (from average of 353 min pre intervention to 182 post intervention.

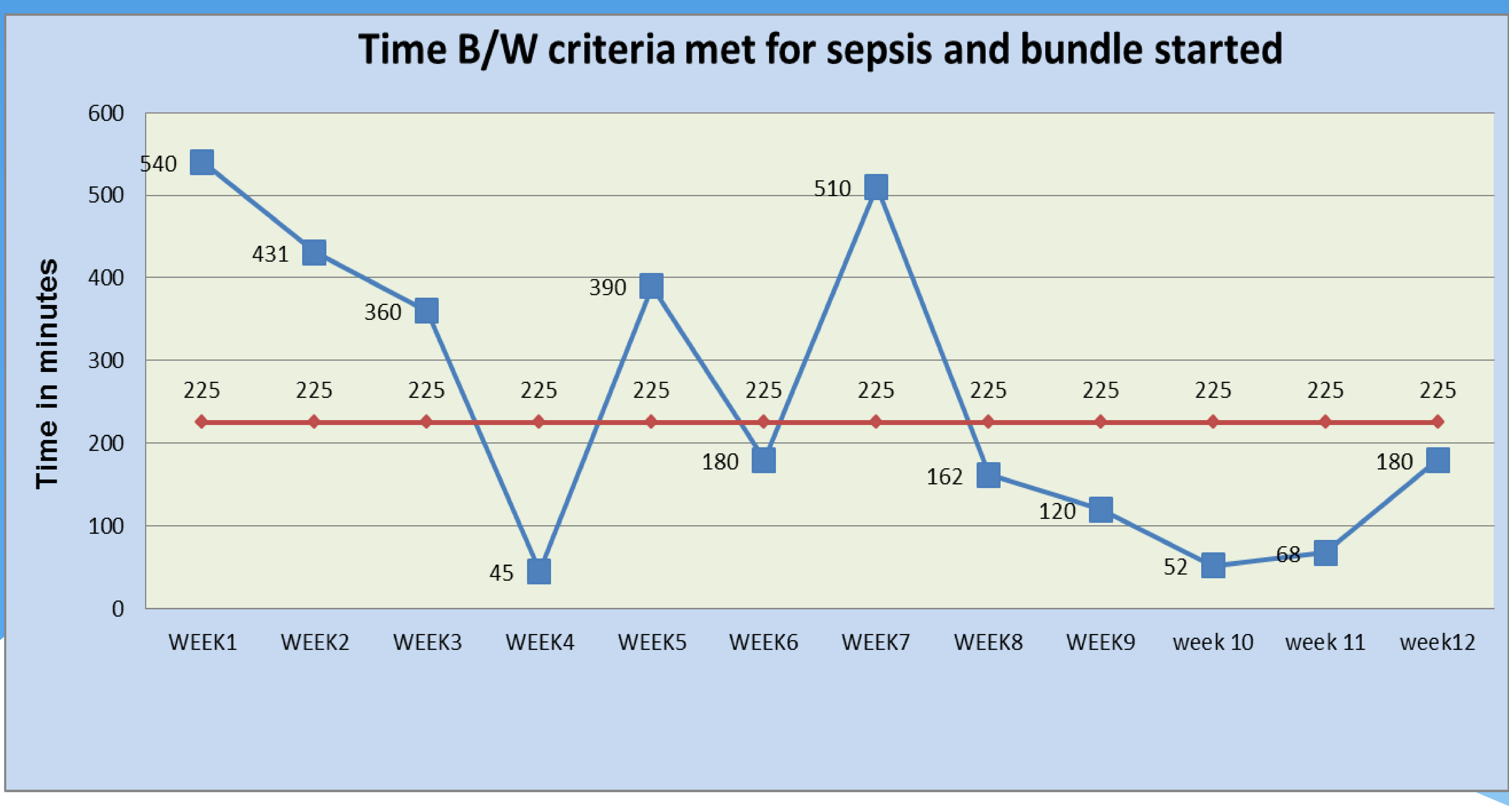
The compliance in using pediatric sepsis screening tool has been increased from 0 % to 68.8 % average (exceeded the target 30 %) .

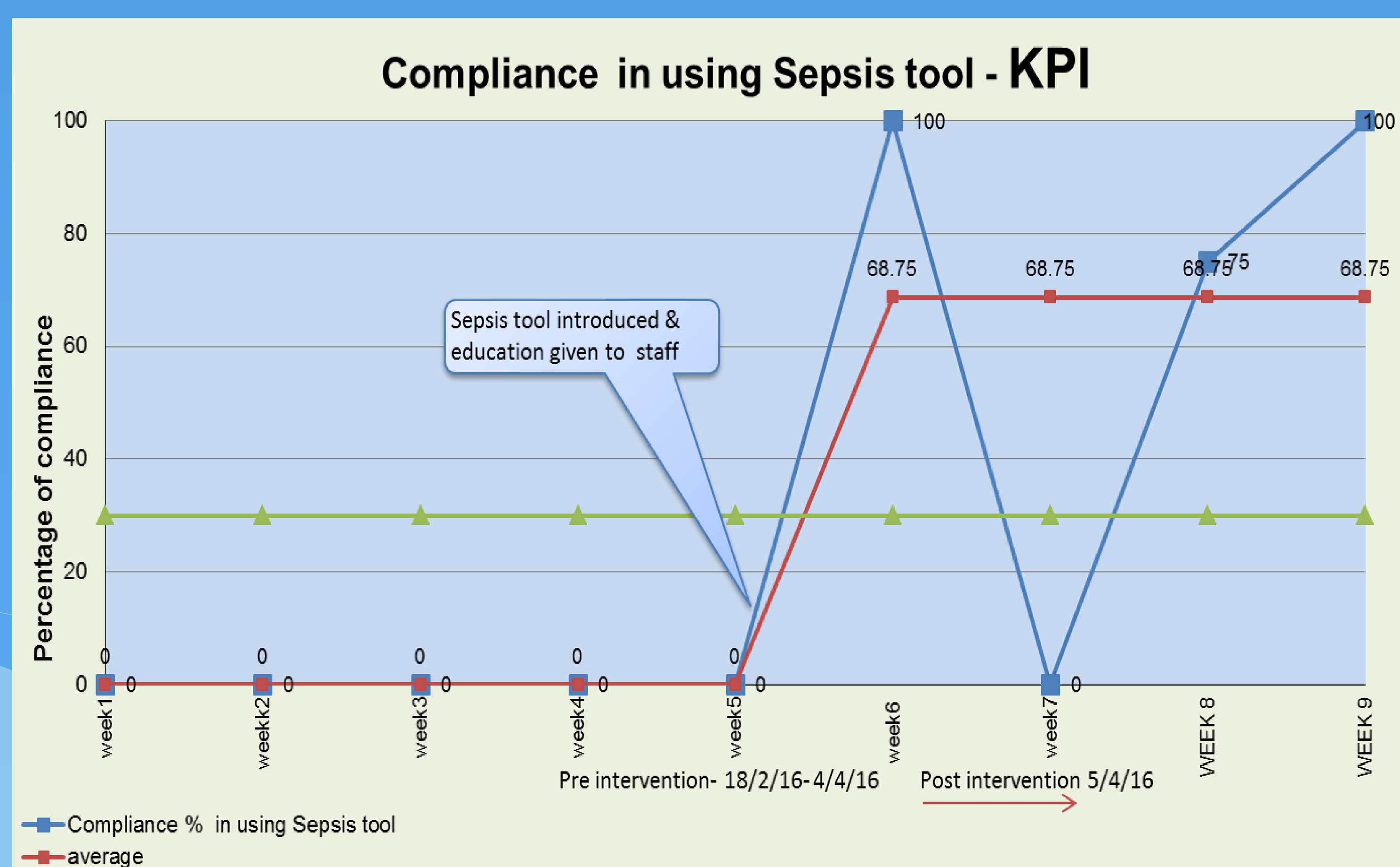












Conclusion:
- No standardized protocol for early sepsis recognition in pediatrics was the most contributing factor to the delay in sepsis recognition and initiation of management in the medical pediatric unit at HGH.
- After education and implementation of pediatric sepsis screening tool, the total time gap between meeting criteria for sepsis till starting pediatric sepsis bundle is significantly reduced .
- Further work is needed to reduce the time further between meeting criteria for sepsis till starting pediatric sepsis bundle and measure compliance with elements of the bundle.