

# Code Heart: Improving Care Delivery for Acute Coronary Syndrome Patients in a Critical Access Hospital

Samantha S. Williams, BSHAM, RRT, AE-C, LSSGB - West Feliciana Hospital – St. Francisville, LA



NO DISCLOSURES

## PROBLEM STATEMENT

Rural and Critical Access Hospitals (CAHs) must create & implement processes to overcome challenges associated with fewer resources & smaller pools of employees to efficiently & appropriately identify & treat patients suffering from Acute Coronary Syndrome (ACS). This project will demonstrate how rural & CAHs can successfully meet ECG, Troponin & door-in-door-out (DIDO) goals by streamlining processes, practicing early activation & maximizing the use of human resources.

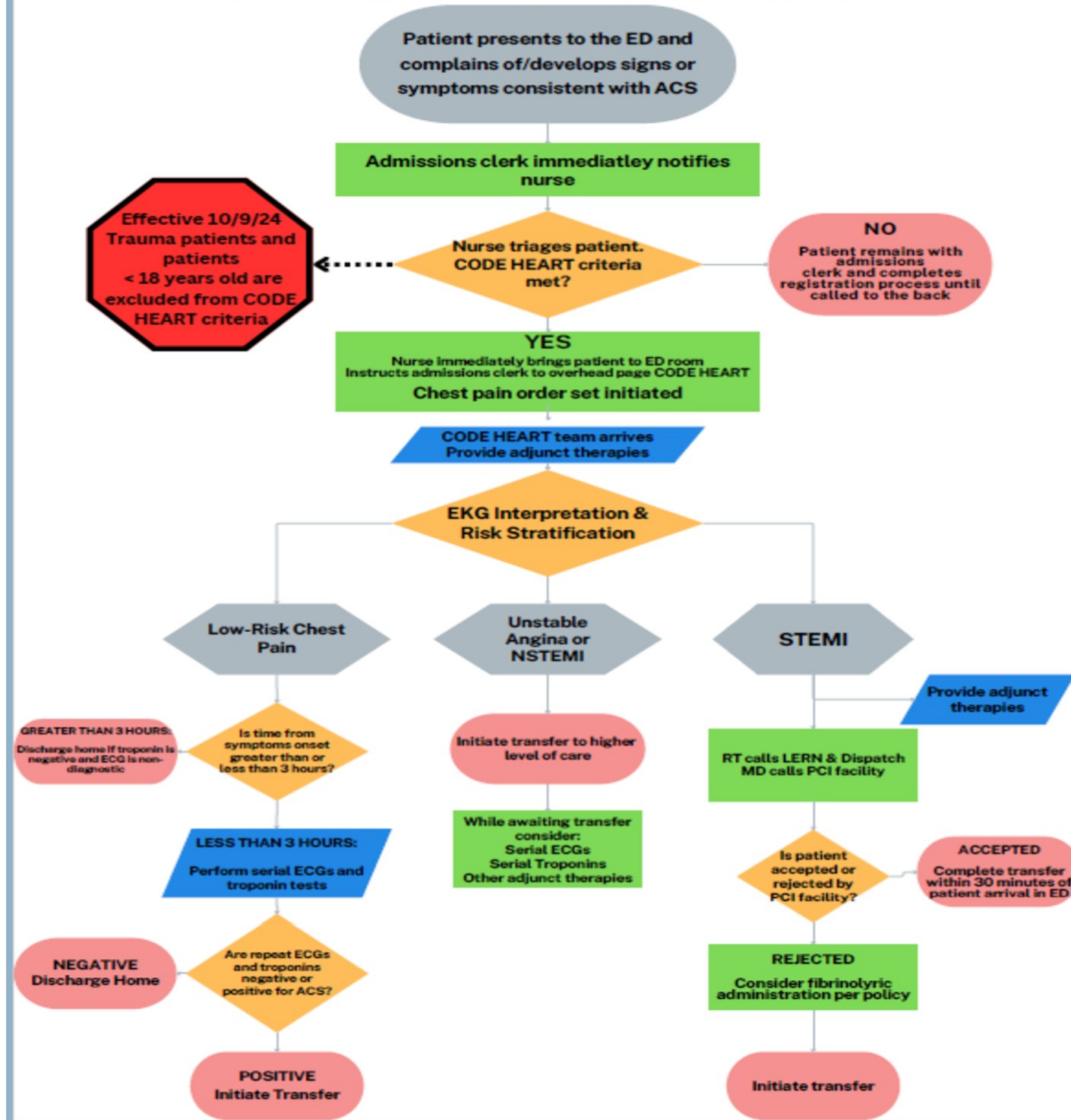
## METHODOLOGY

- Gather baseline/historical data from manual chart abstraction.
- Assemble interdisciplinary team & conduct process mapping session to outline steps currently taken when potential ACS patients present to the Emergency Department (ED).
- Brainstorm ideas that allow the required team members to be alerted to patient arrival and available for care delivery in an expedited manner.
- Modify current process to reflect desired process.
  - Create ACS rapid identification procedure.
  - Implement nurse-driven protocol termed the "Code Heart" alert.
  - Align physician order set with American College of Cardiology (ACC) recommendations.
- Evaluate current & new/proposed process for bottlenecks & inefficiencies.
- Re-delegate general duty tasks to other, available team members to lessen the workload of those in roles that must complete specific & specialized tasks.
- Monitor data & continue to modify the process as necessary when improvement opportunities arise.

## REFERENCES

- 1 - DeAnda, R. (2018) Stop the Bottleneck: Improving Patient Throughput in the Emergency Department. *Journal of Emergency Nursing*, 44(6), 582-588. <https://doi.org/10.1016/j.jen.2018.05.002>
- 2 - Gioppatto, S., et al. (2024). The Clinical and Economic Impact of Delayed Reperfusion Therapy: Real-World Evidence. *Arquivos Brasileiros de Cardiologia*, 121(5), doi: 10.36660/abc.20230650.

## Chest Pain Center ACS Flowchart

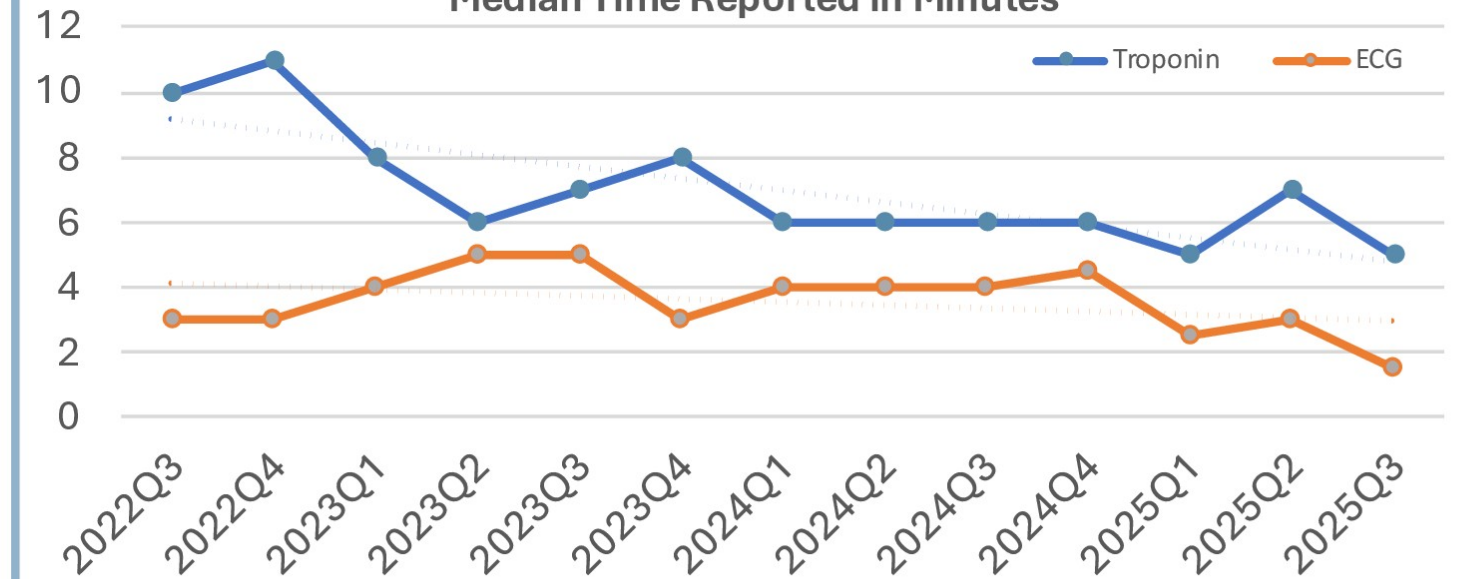


## CONCLUSIONS

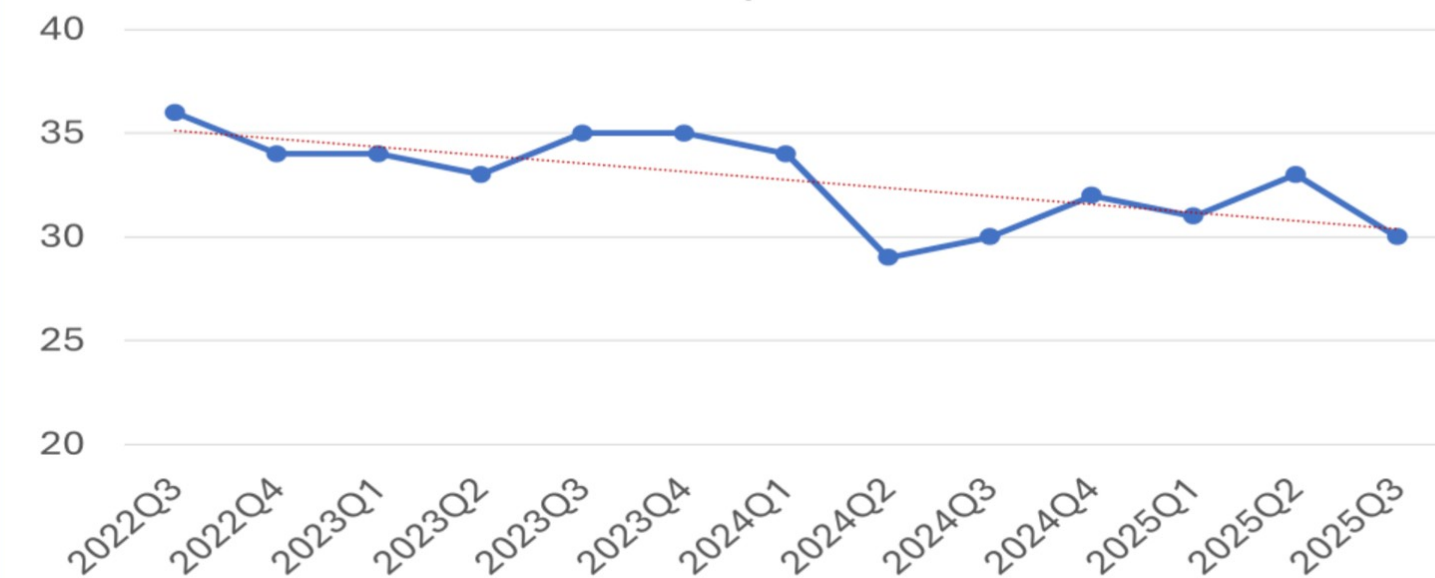
- Early identification coupled with designated roles & responsibilities for all team members increases the likelihood of meeting ECG, Troponin & DIDO goals.
- Nurse initiated, evidence-based protocols allow patients to receive the appropriate care at the appropriate time due to:
  - The removal of testing & treatment variation that can occur between providers
  - Mitigation of delays caused by lack of provider availability.

## RESULTS

Patient Arrival to Troponin & ECG Acquisition  
Median Time Reported in Minutes



Patient Arrival to Troponin Result  
Median Time Reported in Minutes



## VALUE PROPOSITION

- Rapid intervention improves patient outcome & mortality rates leading to lower direct & indirect healthcare costs.
- By decreasing ED throughput times organizations can benefit from:
  - Lowered risk of medical errors
  - Lower healthcare costs
  - Improved patient satisfaction
  - Relief from ED overcrowding & boarding