

Quality improvement Project to Achieve and sustain Door-to-Balloon time to Less than 90 minutes for ST Segment Elevation Myocardial Infarction by Implementing Door-to-Electrocardiogram in Emergency Department”

King Fahad Military Medical Complex Hospital in Dhahran

Description \ Background

The AHA/ ACC guidelines recommend rapid door to ECG time for patients with chest pain. Reducing ECG to-door time is vital & to early identification of Myocardial Infarction. Organization focus to ensure patient safety by reducing the duration for initial ECG for the patients with the Chest pain in Emergency Department, & ensuring quality

AIM:

To reduce Door to EKG time for patients with chest pain in the Emergency Department

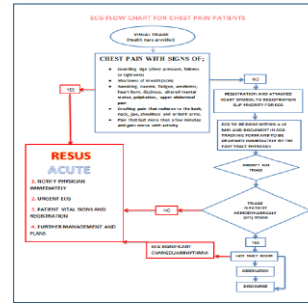
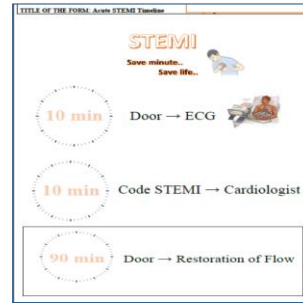
Method:

Retrospective method of data collection using the All data were retrospectively collected by Quality improvement link and taken from our computerized tracking system in preplanned analysis.

FOCUS PDCA Methodology was used in the project.

SUMMARY OF RESULTS:

In the study period, 1,571 patients with chest pain received EKGs. Before intervention, compliance with a door-to-EKG time of 10 minutes or less was found to be 29.4%. Post intervention, compliance improved to 97.50% & sustained well without any failure of the process.



Measure:

Numerator : sum of duration (in minutes) for patient's arrival With chest pain to EKG (Door to EKG)
Denominator : Total number of patients with chest pain complaints

Knowledge gained:

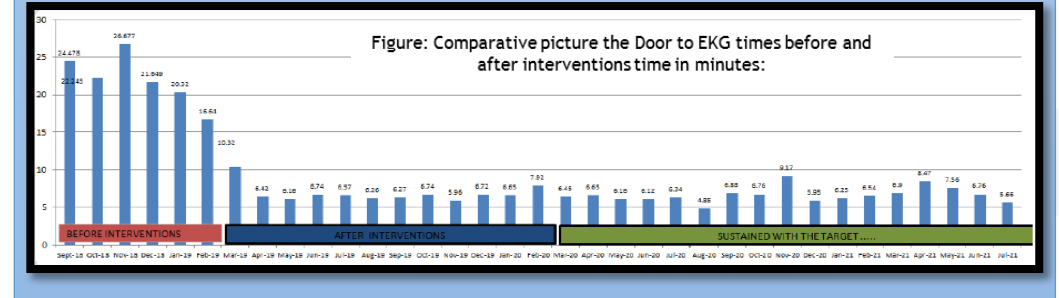
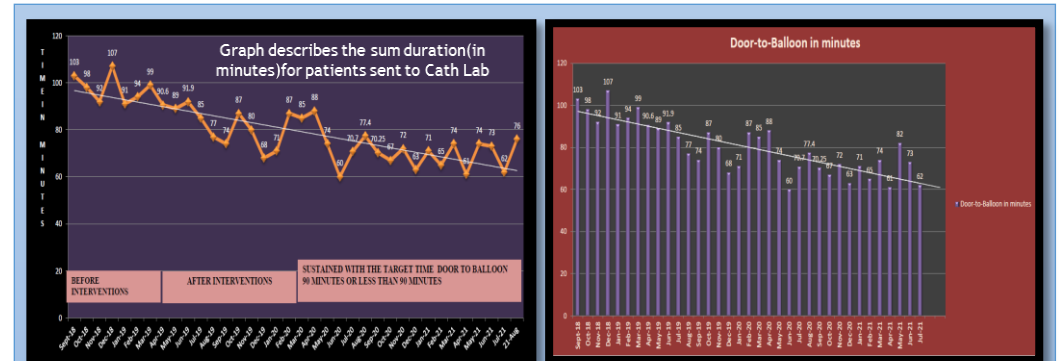
Educational interventions of this project regarding best-practices enhance staff knowledge simultaneously with patient experience; empower healthcare worker's clinical judgment & critical thinking.

Sustainability plan:

To reinforce the permanency of the change we implemented

Interventions:

- A Multidisciplinary QI team has been formulated for this Policy and process
- Provision of standard guidelines.
- Standard flow chart for EKG project.
- EKG specialized Room



Value and Innovation

Cost saving:

Since the role of the Visual triage nurse and triage nurses has already been in practiced within the daily duties roles, there will not be any additional costs involved with the realignment.

Risk reduction:

Managing STEMI patients by early recognition at ER is key to improving quality of life, it affects patient's physiological & psychological well being such as their ability to function result in complications such as cardiac, cardiac arrest, which negatively affects healing process.