**BACKGROUND**

- Mid-2015 a baseline assessment regarding the status of the door to balloon process in treatment of the STEMI patient initiated with D2B XXX. The goal was to establish a chest pain logistics and care process that would positively impact outcomes.
- October 2016, the Chest Committee was organized and implemented specific patient flow logistics and response to patients with chest pain. Data was entered into the NCDR Registry and reported monthly for plan updates and to address barriers. Implemented plan to become Chest Pain Certified by summer 2017.
- July 2017, attained Chest Pain Certification through The Joint Commission meeting indicator requirements and door to balloon averaging approximately 47 minutes.

**PLANNED CHANGES**

- **Targeted changes:**
  - Program manager in place to guide changes and facilitate the Chest Pain Committee
  - PCI registry initiated via NCDR with 100 percent chest pain auditing
  - Opportunities for improvement guided by NCDR Performance Data
  - Pre-hospital team reads EKGs and sends copy to the ED physician from the field
  - EMR orders developed for chest pain and MI developed with educational effort for all that use them
  - Decision to pursue Chest Pain Accreditation via The Joint Commission
  - Standardized annual education for physicians and clinicians that care for chest pain patients
  - Standardized paging system on phones and pagers to reach all STEMI Team with one call
  - Wall of fame with indicators posted for all STEMI team to support continuous improvement
  - Communication email to all STEMI team within 24 hours after each case to report D2B and any opportunities
  - All disciplines standardized response to Hall Bed 9 in ED when chest pain patient presents.
  - Brief touch and go ED. Hall Bed 9 to validate airway, life threatening arrhythmias, or hypotension, then straight to CIV.
  - Code box/STEMI box with standardized contents to prevent leaving the bedside while caring for the patient
  - Floor scale weight equipment installed in ED for weighing patient on arrival/stretcher
  - Bed assignment facilitated by house supervisor and bed brought to cath lab by ICU nurse
  - EKG not repeated from field unless problematic
  - Each patient has a HgbA1C assessed as well as Lipid Profile for guidance in treatment
  - Standardizing 2B3A drugs and placing each into color coded bags so that the clinician has ease of use
  - Selection of high intensity statin for all patients that meet the criteria
  - Using just Troponin I for initial cardiac enzyme assessment and deleting other types of testing to eliminate confusion
  - Standardizing 2B3A drugs and placing each into color coded bags so that the clinician has ease of use
  - Labeling collected lab specimens as STEMI to insure rapid results
  - Serial EKGs timed every 3 minutes if continued chest pain or every 3 hours if not pain
  - Floor scale weight equipment installed in ED for weighing patient on arrival/stretcher
  - Bed assignment facilitated by house supervisor and bed brought to cath lab by ICU nurse
  - EKG not repeated from field unless problematic
  - Each patient has a HgbA1C assessed as well as Lipid Profile for guidance in treatment
  - Lab drawn on first stick in cath lab

**RESULTS**

- **That ever moving BAR!!**
  - Chest Pain Certification achieved July 2017
  - Median door to balloon time 2017 = 47 minutes
  - Pre-hospital providers send initial EKG to ED physician
  - Code STEMI called from field presentation
  - Eliminated repeat EKG and lab draws in the ED
  - Touch and go station in ED where seconds count to ensure patient safety
  - All STEMI EKGs complete and to physician in less than 5 minutes
  - 100% compliance with high intensity statin prescribed at discharge
  - Outpatient Cardiac Rehabilitation added to discharge orders

**CONCLUSIONS**

- NCDR Performance Data guided the program to areas with opportunity for improvement.
- Any process that repeats or overlaps should be investigated for elimination to reduce wasted time/steps.
- Engagement of the entire team is mandatory for optimal improvement.
- Patient focused effort is required to achieve best outcomes.
- Evidence based practice requires continually being aware of study outcomes and being open to change. Never be satisfied with reaching the standard – exceed expectations to achieve optimal results.

**REFERENCES**


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**Cardiovascular Excellence: Raising the Bar**

Rachel Tidwell, RN, DNP, Ben Schuler, RN, BSN, Darlene Collier, RN