

## Abstract 7

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**Title:** Improving Clinical Outcomes: Reducing Door to Electrocardiogram Read Times in the Emergency Department

### Background:

Care of patients experiencing acute coronary syndrome should be in alignment with current American College of Cardiology/American Heart Association guidelines. The guidelines recommend reading Electrocardiograms (EKG) should occur within ten minutes of arrival to the Emergency Department (ED). The literature is robust in describing the impact of frontline nurses in driving quality outcomes of care. The purpose of this process improvement project was to improve the door to EKG read times by engaging frontline staff to use process improvement tools to reduce the response times.

### Methods:

A multi-disciplinary workgroup including front line staff was developed. The group utilized the SWOT Analysis (strength/weakness/opportunities/threat) tool to evaluate and analyze gaps in the process. The current state was analyzed by flow mapping out the process to reveal areas of opportunities. A new standardized process was developed and staff was educated. A surveillance tool was developed.

### Results:

The door to EKG read times by physician resulted in an average decrease of 10.35 minutes to 6.6 minutes. The average door to balloon time decreased from an average of 77.65 minutes with a standard deviation on 59.2 and 96.1 minutes to an average of 73.6 minutes with a standard deviation of 66.9 and 80.4 minutes.

### Conclusion:

(1) Engaging frontline staff to utilize defined best practice tools and processes to drive outcomes of care, can impact quality care and reduce process variation; (2) By creating standard work, the impact can result in decreasing the time to definitive treatment thus reducing the risk of mortality.