Abstract 11

Primary Author: Joseph Sabato, MD

Hospital Affiliation: UF Health Jacksonville (SHANDS), Jacksonville, FL

Title: Field Activated STEMI Immediate Feedback Program

Background:
The Field activation by Emergency Medical Services has a crucial impact on patients and hospitals. Timely and accurate field diagnosis leads to shorter times for hospital intervention and possibly better outcomes. Accuracy is crucial not only in making the field diagnosis but also has a tremendous impact on hospital resources and cost. STEMI's that are missed in the field can delay patient care and can have a negative effect on patient outcomes. High cancellation rates of field STEMI's and high rates of negative cardiac catheterizations cost significant dollars and lead to wasted resources as well as the potential to negatively affect other patients whose care may be delayed. The Gold Standard is felt to be an 80% true positive rate in field activation of STEMI's and a subsequent 20 % or less false positive rate.

Methods:
UFHealth Jacksonville maintains a database of all STEMI patients both EMS and Emergency Department activated. Close monitoring of the data is done for feedback and quality improvement. Working with Jacksonville Fire Rescue Department a multipronged approach was taken to achieve high accuracy for field activation. Education, protocol adjustment, immediate oversight in the field and immediate feedback in the emergency department were employed to help improve and maintain accuracy.

Results:
There were 71 Field Activations in 2013, 69 had enough data to analyze. There were 10 cancellations for an overall accuracy of 84%. After enhancements were made including protocol updates, immediate field oversight and immediate feedback, accuracy increased to over 90 % and has remained stable. 50% of the eligible field activations received immediate feedback in the emergency department.

Conclusion:
STEMI accuracy can be enhanced through innovative approaches including immediate field oversight and immediate emergency department feedback as well as protocol adjustment. Close monitoring allows for adjustment to help improve patient care. Further evaluation should explore the relative contribution of each innovation and the use of similar approaches for other diagnoses.