

Title: External Validation of the HEART Score for identification of Patients at Risk of Adverse Outcomes from Acute Coronary Syndrome

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Project Description:

Evaluation of patients presenting to the emergency department (ED) with chest pain often requires inpatient admission or observation in order to rule out acute coronary syndrome (ACS). Recently, attention has turned to using the HEART score (*Crit Pathw Cardiol.* 2011 September ; 10(3): 128-133) to risk stratify patients with chest pain. By potentially identifying patients as being very low risk for near-term adverse outcomes, HEART score-based protocols may eliminate the need to keep selected patients hospitalized or observed in the ED awaiting stress testing which could potentially be avoided or deferred to the outpatient setting. This investigation will explore the safety of a strategy of HEART score utilization and potential early discharge, with the old paradigm of inpatient observation. The following data points will be analyzed: chest pain history, ECG, age, risk factors for ACS, troponin levels, 30 and 60 day cardiac events documented in Epic, provocative or imaging testing completed, and discharge diagnoses. The investigators will determine if the HEART score based protocol, potentially used in conjunction with a high sensitivity troponin assay, performs better than historical practices in ruling out ACS in patients with chest pain. Eventual goals of this project include improving care, reducing exposure to ionizing radiation, and increasing patient satisfaction through shorter emergency department evaluations and reduced hospital admission rates. The student will have the opportunity to participate in abstract preparation and presentation at the Florida College of Emergency Physicians annual meeting in August, as well as eventual manuscript preparation.