

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

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In an effort to reduce the need for formal hospital admission for selected relatively low risk patients being evaluated for acute coronary syndrome (ACS), many hospitals, including UF Health, created Emergency Department (ED) Chest Pain Evaluation Centers (CPECs). In these centers, low risk patients undergo serial biomarker assessments and EKGs, followed by stress testing or cardiac CT angiography. More 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 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 CPEC utilization. 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 performs better than the CPEC protocol 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.