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), a number of hospitals, including UF Health, have created Emergency Department Chest Pain Evaluation Centers. Currently, low risk patients undergo serial biomarker assessments and EKGs, followed by stress testing or cardiac CT angiography. This investigation will explore the safety of this of this current standard versus the HEART score (Crit Pathw Cardiol. 2011 September; 10(3): 128–133), which has been proposed as a means of identifying patients at elevated risk of adverse cardiac events. The investigators are concluding a retrospective chart review of patients evaluated in the Chest Pain Unit of the UF Health Emergency Department, and plan to begin a prospective arm of the study. The following data points will be analyzed: chest pain history, ECG, age, risk factors for ACS, troponin level, 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 generated by this review can be used to identify patients who have increased risk of adverse cardiac events and to then examine if this score performs better than the current CPEC protocol in ruling out ACS in patients with chest pain. Inter-observer reliability will also be assessed. Eventual goals of this project include improving care, reducing exposure to ionizing radiation, and increasing patient satisfaction through shorter emergency department evaluations.