**A STUDY TO IDENTIFY THE PREDICTORS OF RE-ADMISSIONS IN PATIENTS WITH CONGESTIVE HEART FAILURE IN MINORITY POPULATION IN AN INNER CITY HOSPITAL**

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**Objectives:** This study sought to identify the risk factors associated with readmissions in patients with congestive heart failure (CHF) in an inner city hospital.

**Background:** Reducing CHF readmission rates is a national priority and is of paramount importance to relieve the burden on the health care system. Prior studies have identified certain risk factors attributing to all-cause readmissions within this population. Less has been studied about risk factors associated with heart failure specific readmissions and the impact of cocaine abuse.

**Methods:** This is a single center retrospective observational study. The authors used the data from Bronx Care Health System to identify patients above 18 years with CHF as a primary diagnosis using ICD-10 codes between Jan 2017 to Dec 2017. The risk factors were analyzed using multiple logistic regression modeling.

**Results:** A total of 483 patients with CHF were included (190 [39.7%] African American; 181 [37.9%] Hispanic; and 107 [22.4%] others). Out of 483, 111 (23%) patients had heart failure specific readmission within one year. All comparisons are between those patients who were readmitted versus those that were not readmitted respectively. Male gender (64.9% vs 50.5%, p=0.011); Diabetes Mellitus (71.2% vs 60.2%, p=0.048); Coronary Artery Disease (74.8% vs 57.2%, p=0.001); Atrial Fibrillation (44.1% vs 31.9%, p=0.02); high LACE index (13.1±2.4 vs 12.0±2.75, p=<0.001); ejection fraction <30 %(44.1% vs 32%,p=0.025); Cocaine use (24.3% vs 12%, p=0.002) and High B-type natriuretic peptide > 500 at discharge (96.4% vs 89.5%, p =0.041) were associated with increased risk of readmission. There was no significant interaction between pulmonary hypertension, race or age related to readmission. (p > 0.05).

**Conclusions:** This study uniquely focusses on CHF specific readmissions as compared to all-cause readmission within one year in minority population in an inner city hospital. It validates LACE index as a predictor of readmission in patients with CHF. It identifies cocaine use as a unique risk factor in our population for readmission in CHF patients which should be explored in further studies.