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## **CARDIAC FUNCTION AND HEART FAILURE**

## INCREASING HEART FAILURE HOSPITAL ADMISSIONS WITH DECREASING NEW HEART FAILURE PATIENTS IN NEW JERSEY, 1996-2005

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Session Title: Epidemiology, Medication and Advanced Directives

Abstract Category: Myocardial Function/Heart Failure--Clinical Pharmacological Treatment

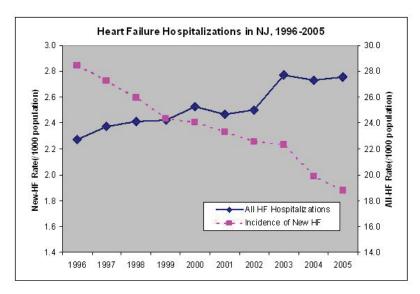
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Authors: <u>Yingzi Deng</u>, William J. Kostis, Abel E. Moreyra, John Pantazopoulos, Nora M. Cosgrove, Alan C. Wilson, John B. Kostis, for the MIDAS group, University of Medicine and Dentistry, New Jersey, New Brunswick, NJ

**Background:** Heart failure (HF) is a common cause of hospitalizations in the U.S.

**Methods:** We examined trends of HF (ICD9 428) incidence, HF admissions and factors associated with 30-day and 1-year case fatality using MIDAS, a statewide database.

**Results:** From 1996 to 2005, there were a total of 1,146,110 admissions with a diagnosis of HF at any of the nine diagnosis fields (All-HF), 106,923 (9.3%) of these were first-time HF hospitalizations for each patient (New-HF). Age-adjusted hospitalization rates for All-HF increased significantly while the incidence of New-HF decreased markedly over the 10-year period. Age (mean 74) and sex distribution (54% women) of New-HF did not change. The rates of co-morbidities increased: hypertension 59.8% to 81.3%, history of myocardial infarction 10.9% to 13.4%, diabetes 32.8% to 38.3% and atrial fibrillation 32.0% to 35.4%, while case fatality decreased (5.8% to 4.5% in-hospital, 23.6% to 21.9% at 1-year). Multivariate Cox models adjusting for demographics, co-morbidities and invasive procedures revealed lower 30-day (HR 0.980 95% CI: 0.970-0.990[/year]) and 1-year (HR: 0.989 95% CI: 0.983-0.994) case fatality in recent years.



**Conclusion:** The divergent trends of increasing All-HF hospitalizations and decreasing New-HF incidence are due in part to decreased mortality and to higher rates of co-morbidities.