Conclusions This CHF disease management program allowed a significant reduction in hospitalization costs due to fewer admissions for worsening of HF as well as of total admissions.

Background: Previous studies have documented low use of evidence-based therapies for coronary artery disease (CAD) and heart failure (HF) at hospital discharge. Few studies have evaluated the extent of use of these therapies after discharge. We evaluated long-term use of evidence-based therapies in CAD and HF.

Methods: Patients who were referred to Duke Medical Center for a cardiac procedure and had CAD or HF were identified in the Duke Databank for Cardiovascular Disease. Follow-up surveys of these patients in their communities collect patient-reported medication use annually. From 1995 to 2000, we determined annual prevalence of use of aspirin, beta-blockers, and lipid lowering therapy (LLT) in patients with CAD, and use of beta-blockers and ACE inhibitors (ACEIs) in patients with HF. Use of ACEIs in patients with CAD but without HF was also determined. In addition to determine annual prevalence for each drug, we assessed consistency of use from 1995 to 2000 in individual patients.

Results: Reported use of evidence-based therapies for CAD and HF increased from 1995 to 2000. Of 2187 CAD patients in the year 2000, 81%, 46%, and 55%, reported use of aspirin, BB, and LLT, respectively. Only 27% reported taking all three drugs and 31% reported taking aspirin plus BB. Of the 15037 HF patients in 2000, 40%, 44%, and 44% reported use of ACEI and BB, respectively. 23% took all drugs. Over the years 1995-2000, 27038 CAD patients, consistent use was lower: 57%, 30%, and 26%, for aspirin, BB, and LLT, respectively. Nine percent consistently took all three drugs, and 22% consistently took aspirin plus BB. Of the 19432 CAD patients without HF, 12% reported consistent ACEI use. Of the 7293 HF patients, only 6% reported consistent use of ACEI and BB, and 8% reported taking both drugs.

Conclusion: Efforts to improve the use of evidence-based therapies at hospital discharge are needed, but attention also needs to focus on improving long-term adherence.

Background: The impact of chronic heart failure (CHF) disease management programs on hospital costs and outcomes is unclear. The CHF program at Duke Medical Center, a Jagged Heart (JH) program, has been developed prior to broad use of beta blockade (BB). We hypothesized that HFSS would retain its ability to risk stratify HT need in BB patients. Methods: We collected clinical data on 500 consecutive patients referred for HT from 1994 to 2002, including BB and the 7 components of the HFSS: LVEF, peak VO2, mean arterial BP, resting heart rate, QRS interval, serum sodium, and CAD. Kaplan-Meier survival analysis with log rank testing and multivariable Cox regression analysis were performed with the events defined as death or UNOS 1 HT. Results: Kaplan-Meier analysis of the patient population (age 51±1, male 73%, CAD 53%, ejection fraction 24±9%, peak VO2 15.8±5.1 m/min/kg, HFSS 0.6±0.1 [low risk], 0.8±0.12 [moderate risk], 0.9±0.16 [high risk]) revealed effective discrimination by HFSS both for BB and no BB patients (both p<0.0001). Two-year event free survival was 96%±1% for BB and 87%±3% for BB and no BB patients in the low-risk HFSS strata. Cox proportional hazards modeling showed that both BB (RR 0.46, p=0.0001) and the HFSS (p<0.0001) at the two year follow-up were independently associated with event-free survival. Conclusion: HFSS provides effective risk stratification with or without BB. Consideration of BB therapy with HFSS strata improves outcome prediction in patients evaluated for HT.