Heart Failure Transitional Care Service Slashes 30-Day Readmission and Mortality Rates: A Single Center Experience (HF-TCS Study)

Lochan Bellamkonda¹, Mohammad Ehsan¹, Mansoor Ahmad¹, Jay N. Patel, MD¹,², Deidra Lewandowski, CNP², Chetan Bhardwaj¹,², MD, Kenneth Berkovitz, MD², Barry Clemson, MD¹,²

¹Department of Internal Medicine, University of Illinois College of Medicine at Peoria, IL
²Department of Cardiology, OSF St. Francis Medical Center, Peoria, IL

Background
• Transitional care services (TCS) improve clinical outcomes in HF
• Best practices have yet to be defined.
• 1-year data from an intensive TCS program

Methods
HF-TCS Team: 3 HF-Trained Nurse Practitioners
• Utilize Epic EHR to develop a system list of inpatients with HF
• Review chart to confirm 1° HF diagnosis
• Official consultation to identify gaps in care
• Advise the primary team
• Offer follow-up with HF-TCS program

HF-TCS Program: intensive Transitional Care Program
• 2-day phone call
• 5-day office visit
• Additional follow-up as needed (30 days – 90 days)
• Dedicated 24/7 call line staffed by HF-TCS team

Quasi-experimental study design (n=410)
• Intervention group: accepted HF-TCS program
• Comparison group: declined HF-TCS program
• 1-year data: September 2016 – 2017

Conclusions
• Intensive TCS programs can dramatically reduce 30-day readmissions and mortality for patients admitted with HF
• Our data contributes to growing body of evidence needed to define best practices
• Future research:
  • Long term clinical outcomes
  • Patient-centered outcomes
  • Cost-effectiveness analysis

Results
Intervention Group: 261 (63.7%)
Control Group: 125 (36.3%)
Completed 2-day phone call (93%)
Average Office Visit Time: 4.9 Days

HF-TCS clinical outcomes:
• 66% reduction in composite endpoint: mortality + HF readmission
• 74% reduction in all-cause mortality
• 56% reduction in HF readmissions
• 37% reduction in all-cause readmissions

HF-TCS cost:
• Intervention group during HF-TCS: $2.3 million
• Intervention group after HF-TCS: $1.1 million
• Comparison group: $1.0 million

HF-TCS contribution margin
• Annualized reduction in AC readmission cases: 38
• Annualized potential gain in CM: $168,944

Special Acknowledgment to the OSF HF-TCS Team

Outpatient Visits September 2016-2017

Clinical Outcomes September 2016-2017

Average Cost Per Patient
October 2016 – June 2017
Intervention Group during program: $8,130
Intervention Group after discharge from program: $4,055
Comparison Group: $9,146

Average Contribution Margin Per Case
October 2016 – June 2017
FY17 Average Inpatient DCM per case (Heart Failure only): $4,700
FY17 Average Inpatient DCM per case (All causes): $9,146

The reduction of all-cause readmissions for the Intervention group allows the annualized opportunity of 38 new case admissions, at a higher average Contribution Margin per case.