Heart Failure Disease Management in the North Florida/South Georgia VHS

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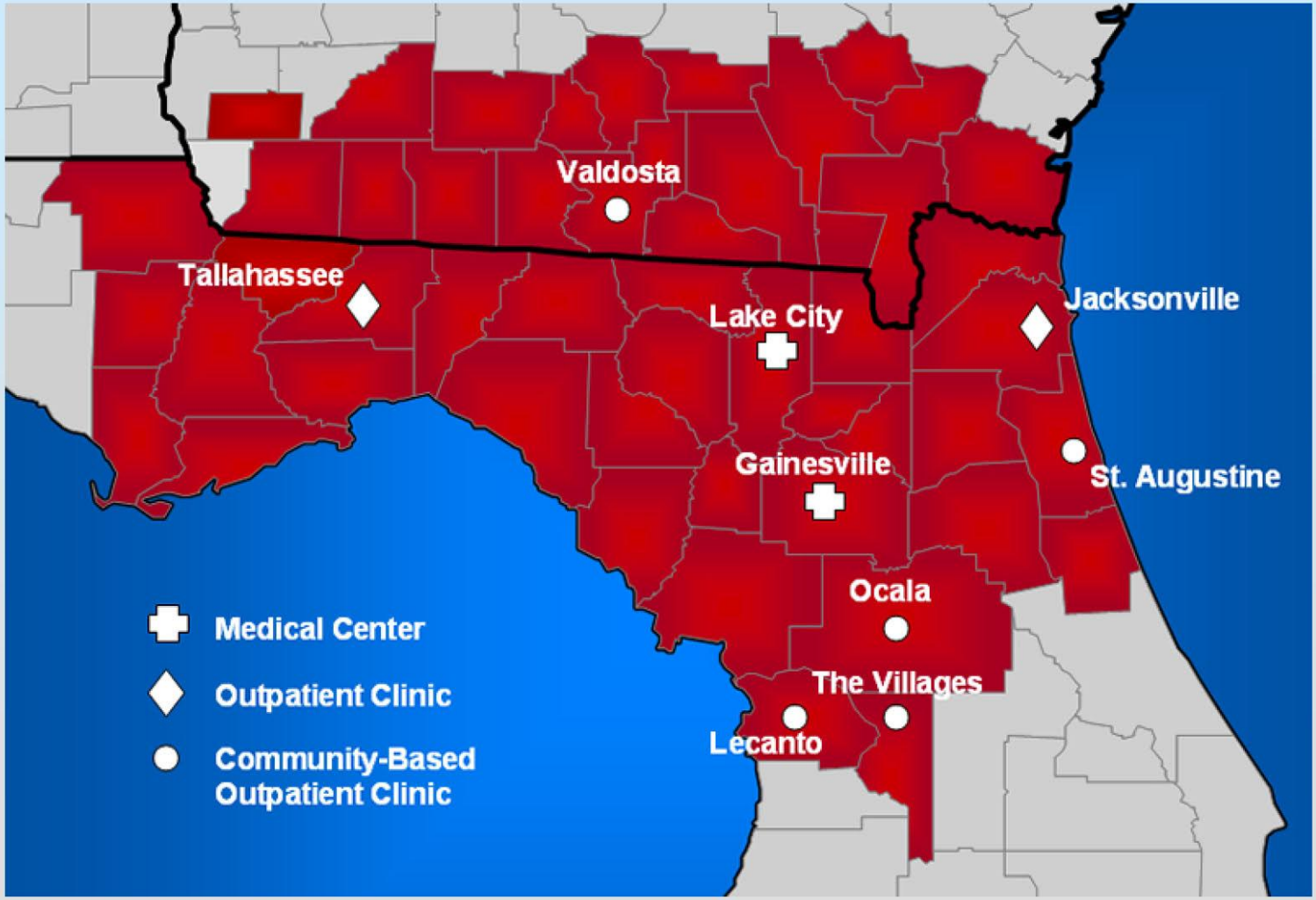
North Florida/South Georgia VHS

- 2 inpatient hospitals
- 2 nursing homes
- 3 large multispecialty outpatient clinics, 1 more under construction
- 6 smaller CBOCs, 3 more under construction
- 250,000 sq ft addition to the Gainesville hospital now underway
- Over 125,000 unique patients, most in VISN 8
- 12,229 inpatient admissions annually
- 1.3 million outpatient visits annually
- Total budget $603 million in 2006

Primary Service Area



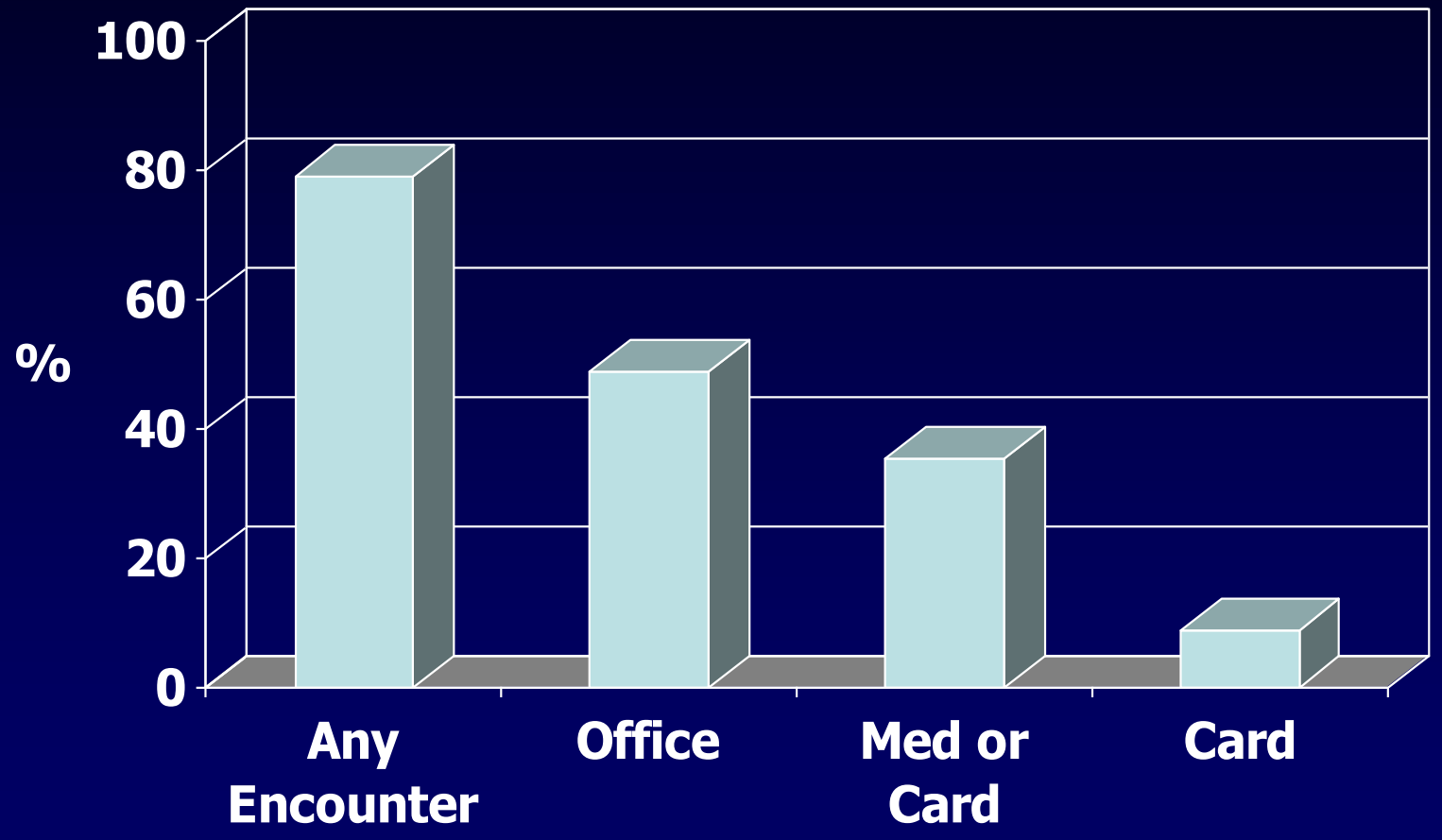
Volusia and Lake Counties (Daytona Beach and Leesburg clinics) reassigned to the Orlando Primary Service Area as of 12-9-07

Heart Failure Within the VA

- Leading discharge diagnosis
- 20% readmission rate within 14 days
- Average of 1.42 hospital stays and 14 inpatient days/year
- > 20 outpatient visits/year
- Approximately $2.5 billion in cost/year
- > 60% mortality at 5 years

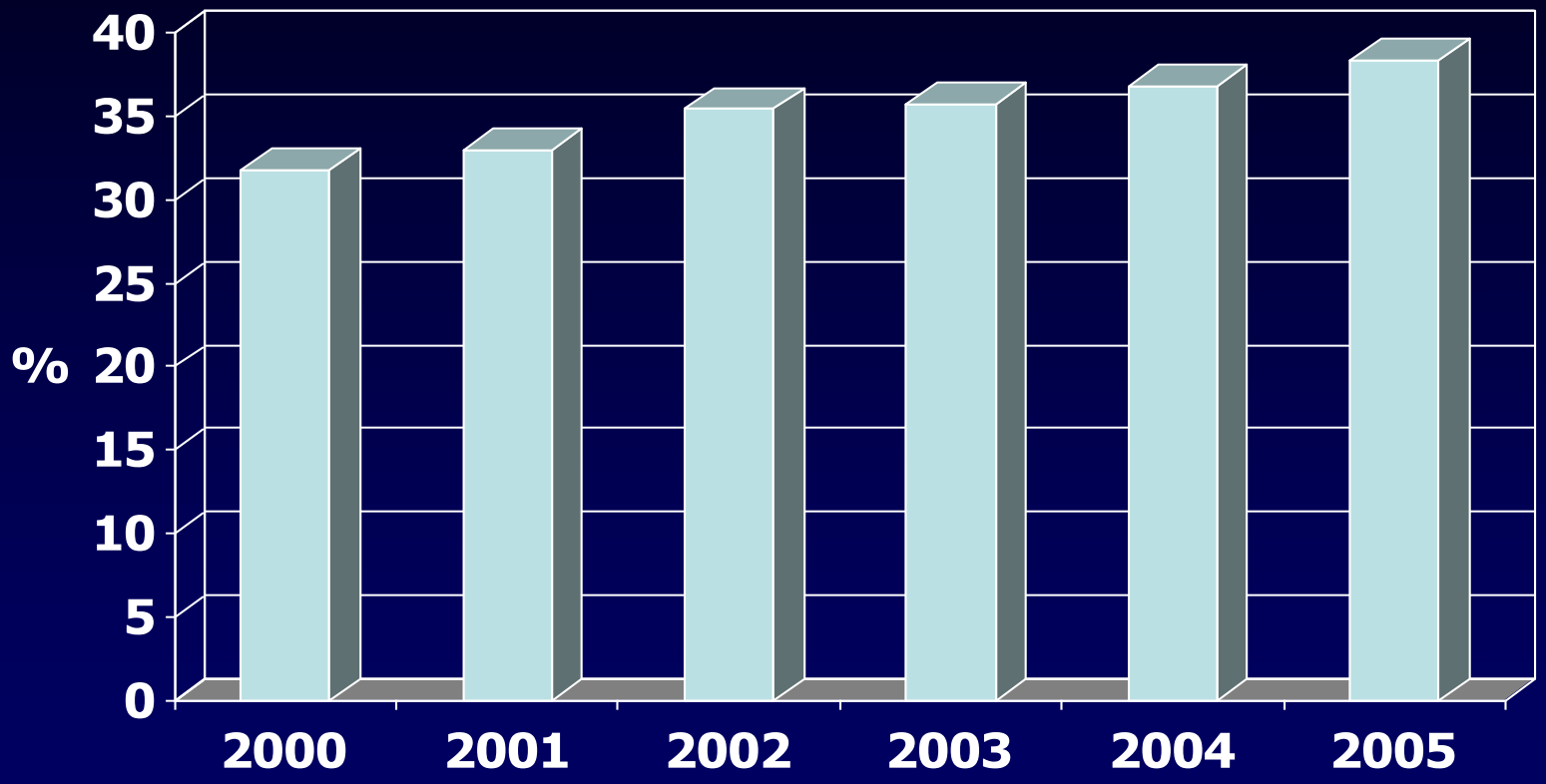
1. VA QUERI CHF fact sheet, 2003
2. Med Care 1997;35:768
3. Am J Med Qual 1999;14:45
4. Med Care 2000;38:I-26

VA Data - 14 day Outpatient Encounters Following HF Discharge (1999-2005)



CHF QUERI 2007

VA Data - Trends in 14 Day HF Follow up: Medicine or Cardiology



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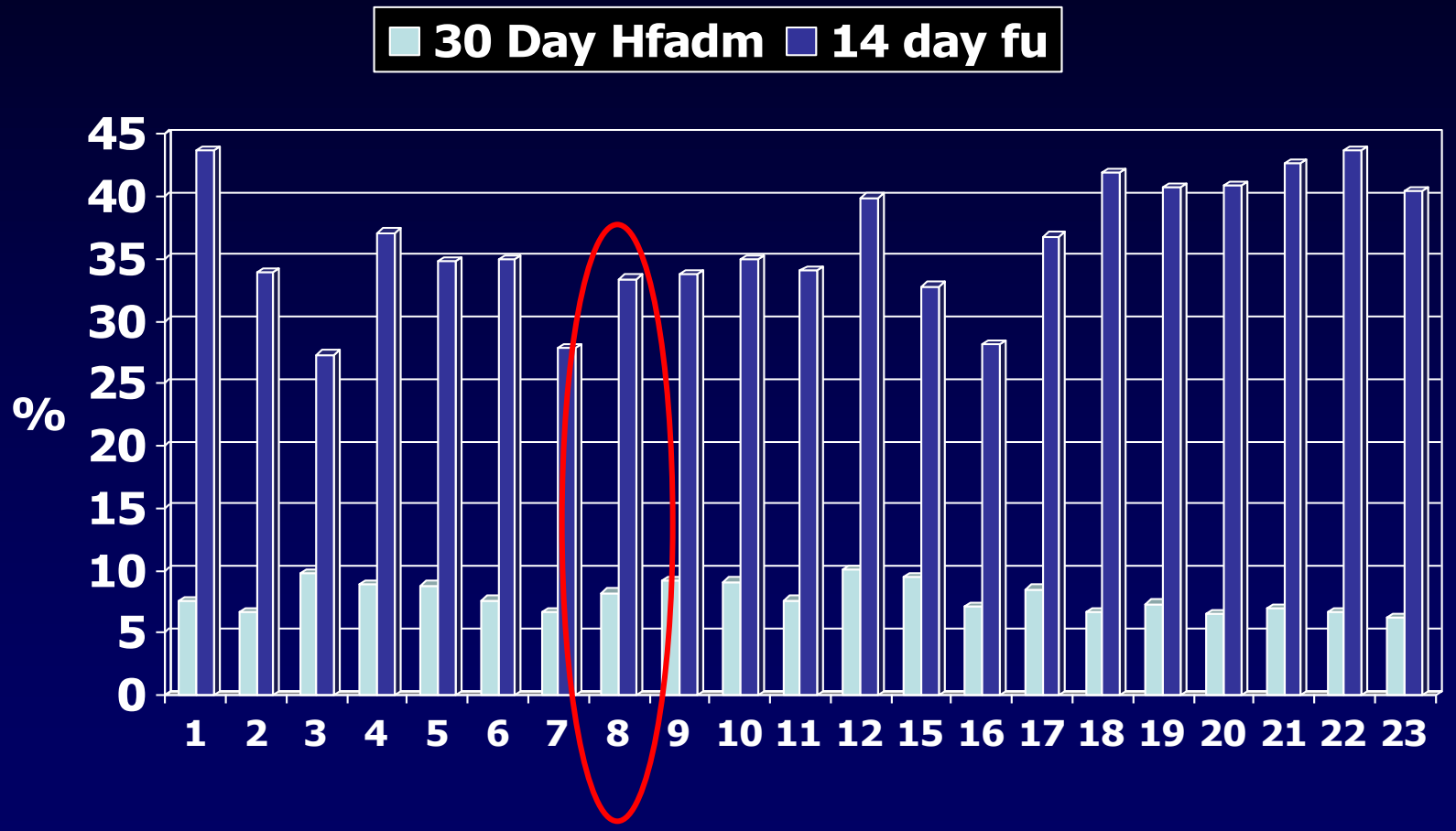
VISN Level: 14 Day Visits and 30 Day HF Readmission



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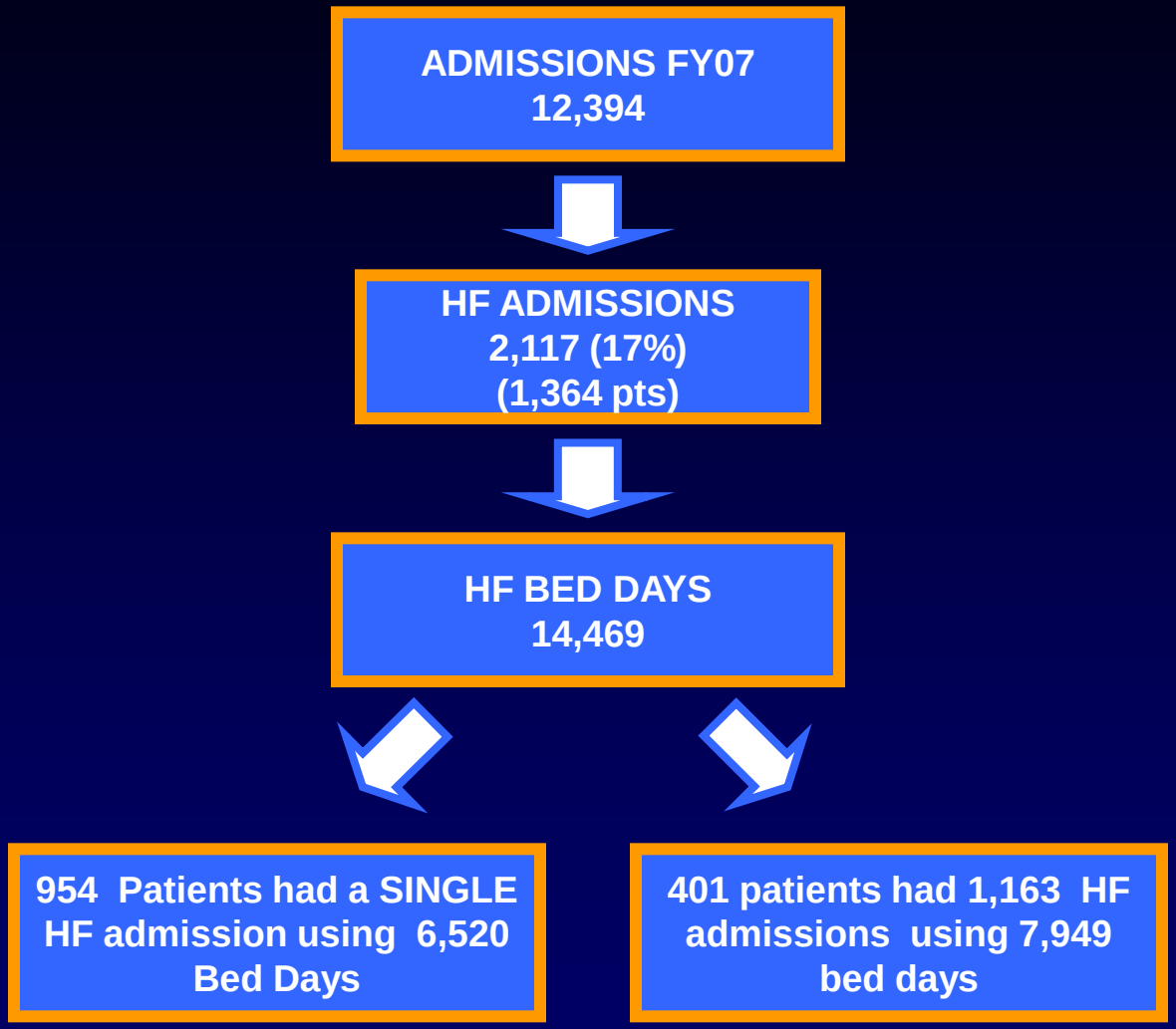
Why is Heart Failure Important to Our VA?

- High cost to the system
- High inpatient bed occupancy
- High medical bed occupancy rates have led to high fee basis costs for inpatients not able to transfer from civilian hospitals
- HF care is part of multiple quality measures (IHI 5 Million Lives Campaign, JCAHO, EPRP)
- A length of stay/bed utilization committee tasked cardiology to reduce HF readmissions

Local Data, North Florida/South Georgia VHS



Local HF Data, NF/SG VHS

- Average length of stay 6.8 days
- Significant number (37%) of all HF admissions are for 3 days or less:
  - 201 admissions had 1 day LOS
  - 268 admissions had 2 day LOS
  - 317 admissions had 3 day LOS
- Also, of the HF pts with multiple admissions for FY07, many of the admissions had short LOS:
  - 100 admissions had 1 day LOS
  - 149 admissions had 2 day LOS
  - 166 admissions had 3 day LOS

  *Short LOS admissions might be preventable in many cases with a HF disease management team

Heart Failure Team Goals

- Offer HF disease management to every inpatient with HF
- Screen and automatically generate consults to the HF Team daily (M-F), without need for primary service to generate a consult
- Offer early HF clinic f/u within 2-7 days of discharge
- Target HF admissions with short (≤ 3 day) LOS
- Free up 2800 bed days for the system
- Eliminate the ER as a point of entry for HF admits
- Reduce HF readmissions by 25%
- Satisfy all relevant HF quality measures

Heart Failure Team Members

- 1.0 Heart Failure cardiologist
- 2.0 ARNPs
- 1.0 GS-7 Program Support Assistant
- 1 general cardiology fellow
- 1 medical resident (elective rotation)
- 1 PharmD
- Access to Social Worker, Dietician if needed

How Will the Team Work?

- A computer program will pull the medical service admission list daily (pilot project was successful)
- Potential HF patients will be reviewed by the HF ARNP and if HF is confirmed or likely, then the HF Team will see the patient as a consult
- The team will give advice on inpatient management but also will focus on discharge planning and arrangement of early outpatient clinic f/u
- Patients will receive a scale and a BP cuff prior to D/C
- High risk patients will be seen within 48 hours in HF clinic, lower risk patients within 5-7 days

Identify potential inpatient HF admissions daily (M-F)
from medical admissions pull list

Confirm likely HF admissions from brief CPRS chart review
Submit an electronic consult

- Complete inpatient consult
- Optimize HF therapy
- Discharge planning/HF education
- Explain HF Team concept
- Provide scale and BP cuff

Enroll in the HF Team

Return to HF outpatient clinic
within 2-7 days
6 months of HF clinic for stable pts
Long term HF clinic for complex pts

HF Care Coordination and Home
Telehealth management for
appropriate patients

How Will the Team Work?

- A plan for care will be made with the HF cardiologist at the time of the inpatient consult and first outpatient clinic visit
- Mildly volume overloaded pts may be treated with IV loop diuretics in clinic
- End stage pts may be considered for palliative care referral, hospice, home inotropes
- If pts need admission, avoid ER care when possible
- Appropriate pts will be referred to a separate HF disease management program using a Care Coordination/Home Telehealth strategy

How Will the Team Work?

- Standardized note templates will be used for inpatient consults, outpatient visits, and for discharge planning
- All pts will be entered into a HF Registry
- Pts that accept HF Team outpatient f/u will complete HF QOL questionnaires at baseline, 3 and 6 months
- Event rates (death, HF and non-HF hospitalization) will be tracked over time
- Stable pts who meet team goals may be discharged from the team after 6 months
- Pts will be screened for HF research trials if appropriate

Unique Aspects of this HF Team

- Focus on inpatients as the referral base into HF disease management
- Standardized screening of all admissions
- All inpatients are offered entry into the program
- Early post-discharge clinic f/u
- A Care Coordination/Home Telehealth component is available for appropriate patients
- Data tracking over time for adverse events
- Entry of all patients into a HF Registry
- Measurement of HF QOL data will be included

Barriers to Implementation

- Travel costs may have an impact on pt willingness to come for frequent clinic visits
- Clinic space is limited at our facility
- For inpatients, we will need to communicate well with the primary admission teams since we will not be the primary service
- Screening the inpatient admission pull list may be time consuming
- Data collection may be time consuming for the HF Team program support assistant

Heart Failure Team Timeline