# VA Heart Failure Network CHF QUERI

11/4/2009

Paul Heidenreich MD, MS

#### Outline

- Announcements
- Acute Decompensated Heart Failure: ED Pathway
- CHF QUERI Quality Improvement Goals for 2010
- Facility Survey Data

### VA Quality Improvement Guide

- Based on Input from the VA Heart Failure Network
- Already have extensive library of patient education materials
- Looking to collect the following:
  - Inpatient forms, protocols
  - Outpatient forms, protocols
  - Other?

#### **Criteria for CHF QUERI Goals**

 Must improve outcome (survival or quality adjusted survival)

- Absolute benefit\*gap in care
- Must have value (reasonable cost per gain in benefit).
- Must Meet Stakeholder goals
   Existing VA HF Performance Measures
   Readmissions

#### **Rank Order of Goals**

- Reduce Readmission Rates
- Increase Life-prolonging Treatments
  - Beta-blockers (3 recommended)
  - Aldosterone antagonists
  - Hydralazine/Nitrates in African Americans
  - Devices
  - ACE Inhibitors

 Recognition of asymptomatic LV dysfunction or unrecognized symptomatic HF.

#### **HF Network Input**

- Current goals sent to all members
  Received 87 responses with 85
  - commenting on the goal order:
    - 80 agreed with reducing readmissions as #1
    - 3 favored increased use of life-prolonging therapy as #1
    - Other recommendations for top goal
      - Prevention of HF and detection of unrecognized heart failure
      - Treatment of advanced heart failure.

### **CHF QUERI Plans for 2010**

- Interventions to Reduce Readmission Rates
  - Identification of interventions
  - Implementation
- Continued focus on beta-blockers
  - Have patients on one of three recommended betablockers

#### New areas

- Atrial fibrillation
- Appropriateness/overuse (echo, medication use)

### Facility Survey for Heart Failure Care: 2008

#### Facility Survey Background

Increasing focus on heart failure
Rehospitalization
Outcome varies
Facilities function independently
Unclear variation in resources devoted to heart failure care

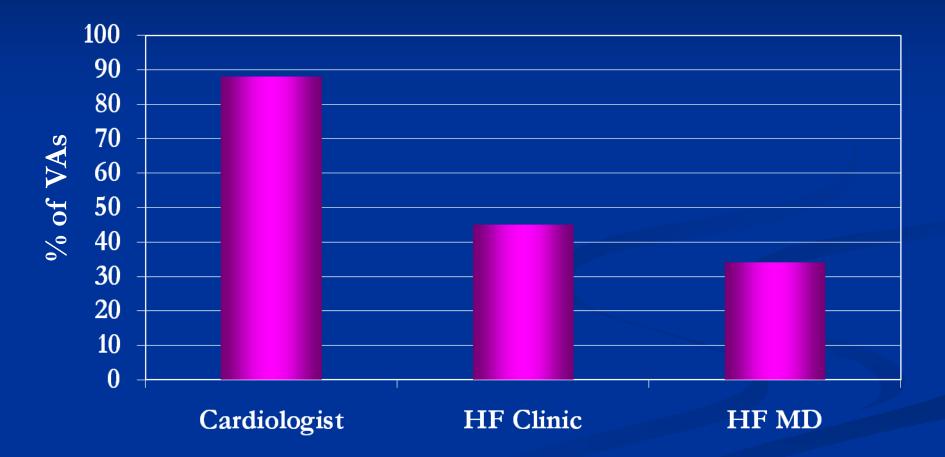
#### Facility Survey Goals

- Determine structure/resource use for heart failure care at each VA facility
- Determine any association with survival and hospitalization.
- Disseminate findings, encourage implementation of programs found to be highly effective

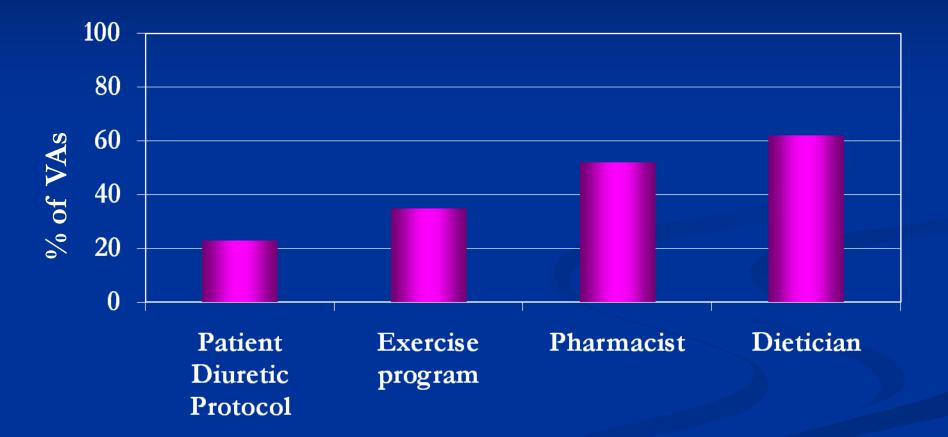
#### Facility Survey Responses

144 facilities responded
93 reported data on fulltime cardiologists (mean 3.3)

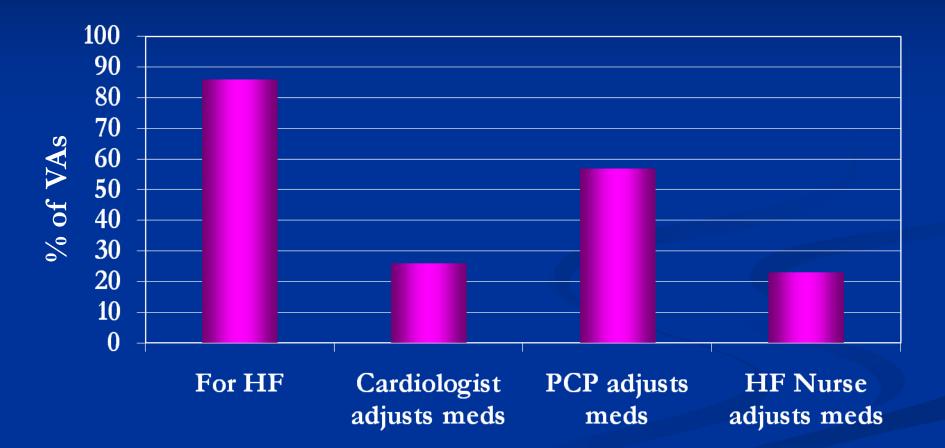
#### **Physician Resources**



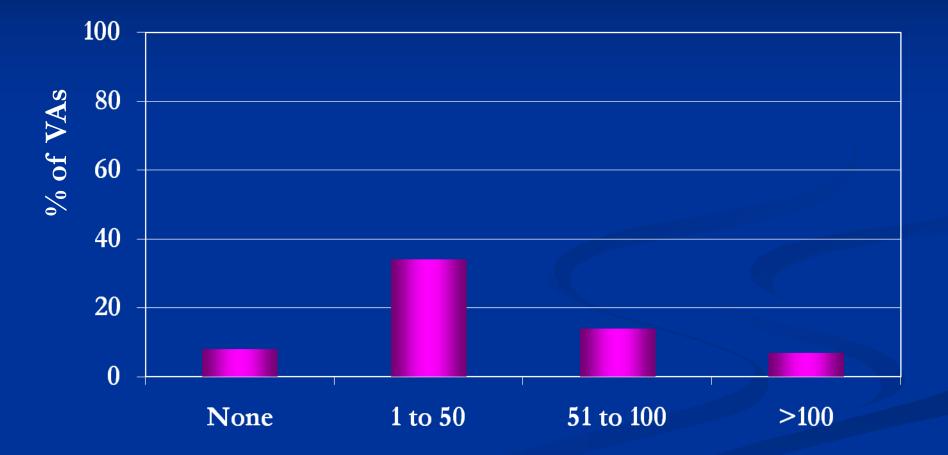
### **HF Program Characteristics**



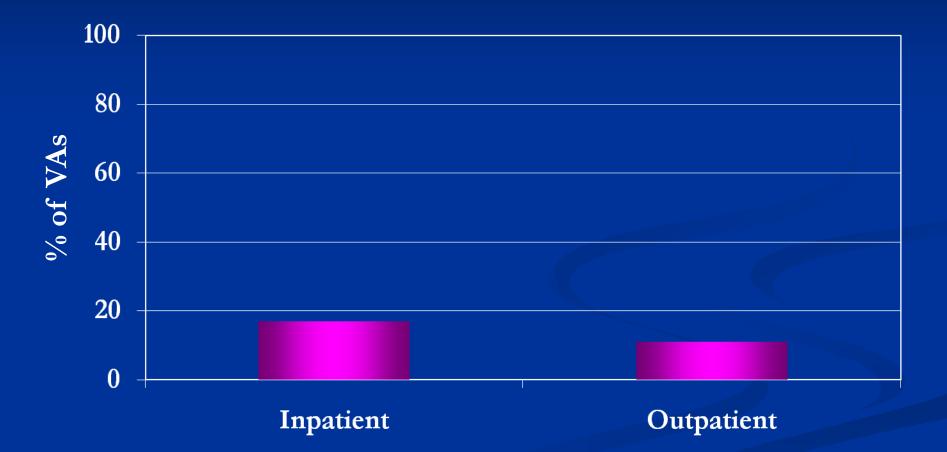
### Home Monitoring



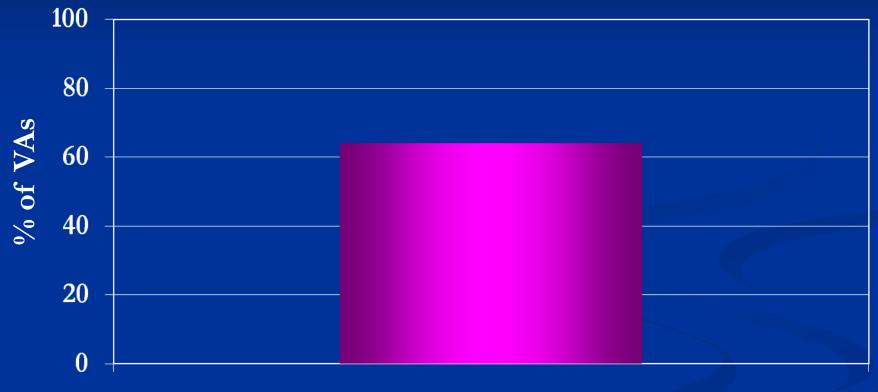
#### Home Monitoring Enrollment



#### **Standardized Orders**

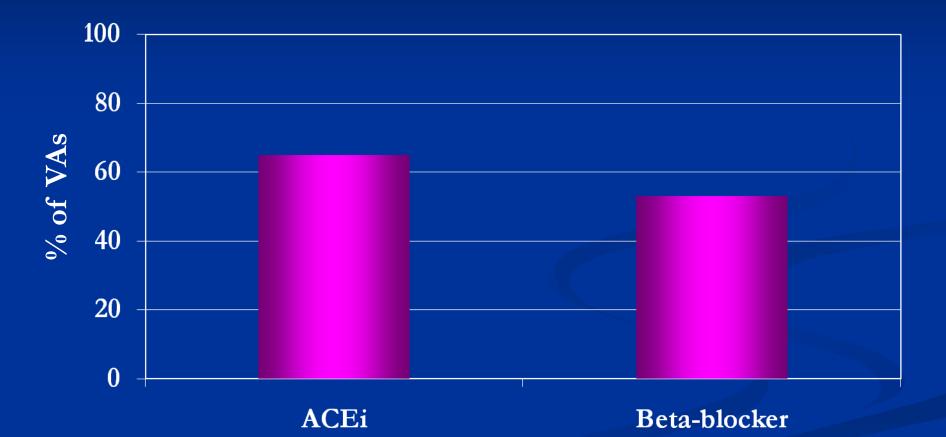


#### Feedback Quality Measures

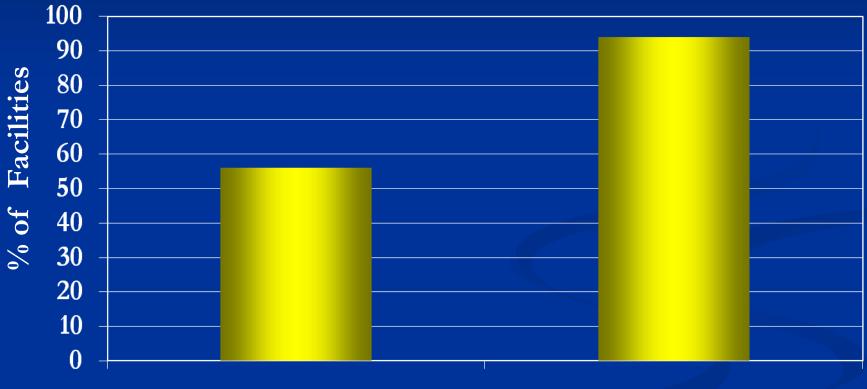


Any

#### **Clinical Reminders**



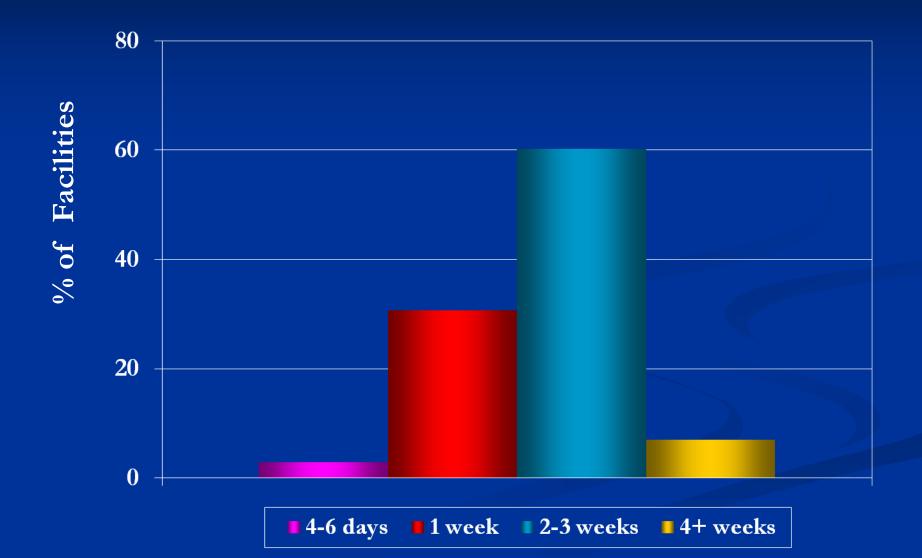
## Follow Up



**Telephone Call** 

**Clinic Visit** 

### Follow-up Time for Clinic Visit



### Follow-up Time for Telephone Call



<b>Patient Characteristics:</b>				
<b>Cardiologist Available</b>				
Cardiologist Available				
	YES	NO		
Age	69.4	71.7*		
LOS	6.43	6.32		
Comorbid Score	2.13	2.22*		



Patient Characteristics				
Cardiology Clinic				
	Cardiology Clinic			
	YES	NO		
Age	68.8	70.7*		
LOS	6.31	6.61*		
Comorbid Score	2.02	2.22*		



<b>Patient Characteristics:</b>				
Heart Failure Cardiologist				
Heart Failure Cardiologist				
	YES	NO		
Age	68.7	70.2*		
LOS	6.56	6.31*		
Comorbid Score	2.06	2.21*		



<b>Patient Characteristics:</b>				
Home Telehealth				
Home Telehealth Use				
	YES	NO		
Age	69.6	68.7*		
LOS	6.45	6.44		
Comorbid Score	2.13	2.13		



14 day Follow Up After HF Hospitalization

Patients N=118,280

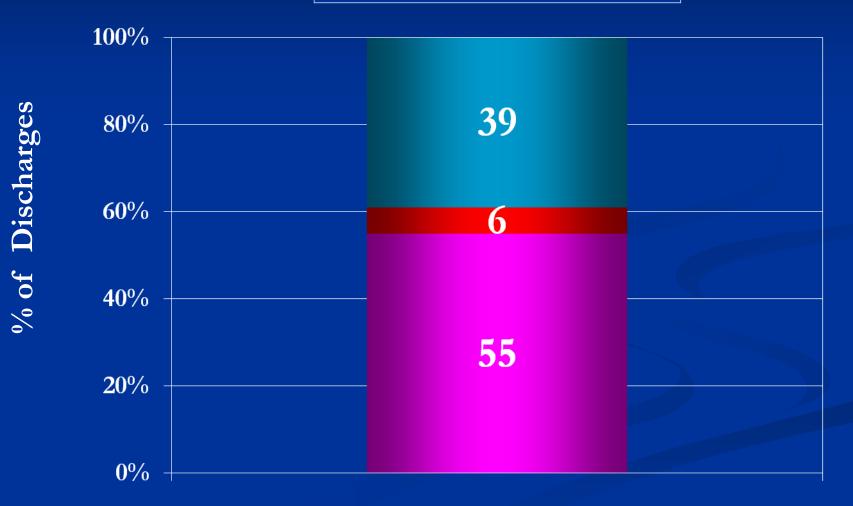
Primary Discharge diagnosis for heart failure
 2000-2006

Discharged to community

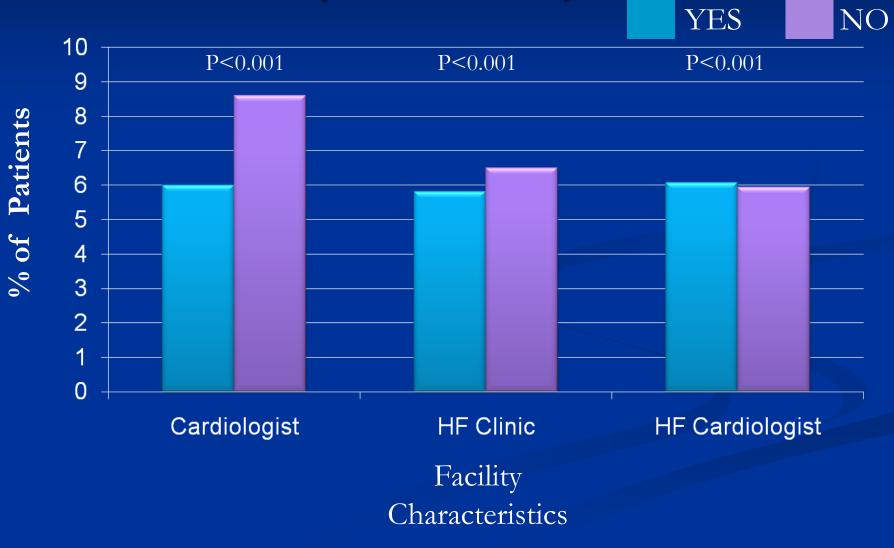
Survived 14 days post discharge without an admissions

#### **Clinic visit with 14 days**

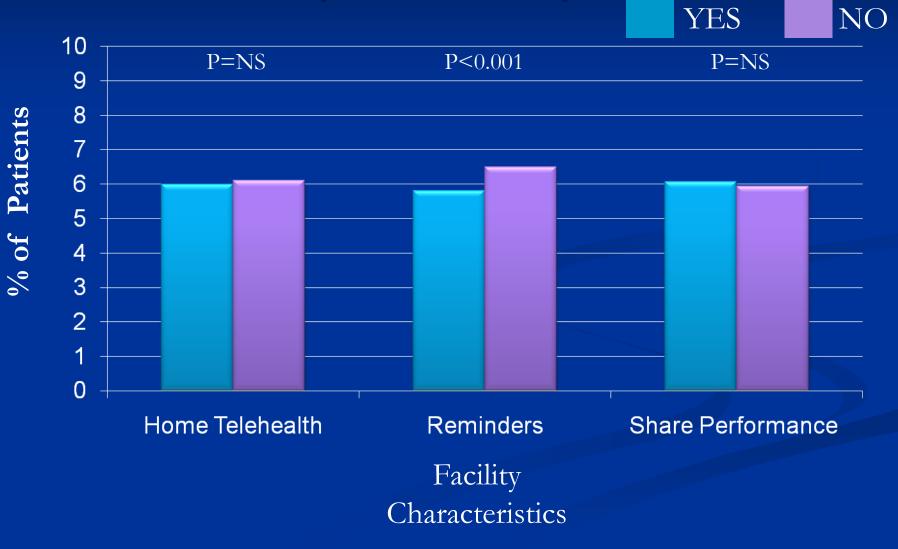
■ No ■ Cardiology ■ Other



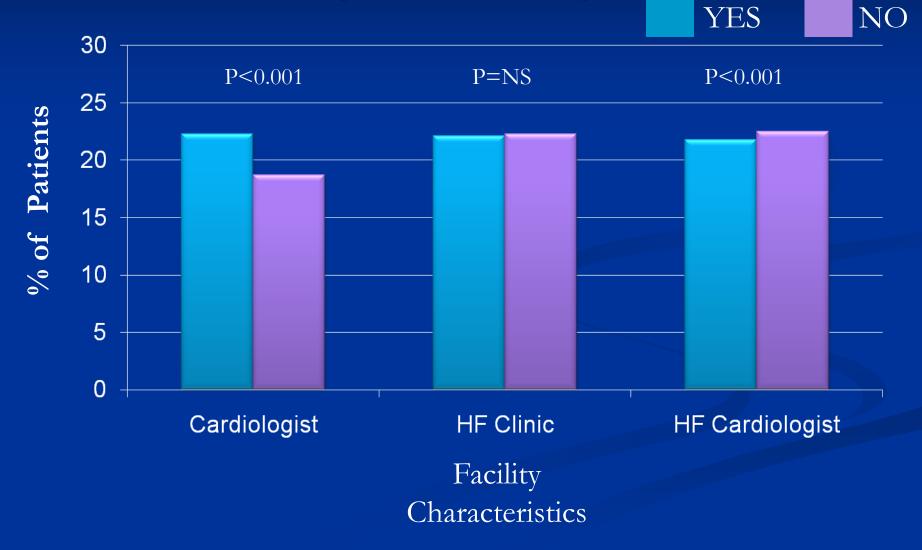
## 30 Days Mortality (All Cause)



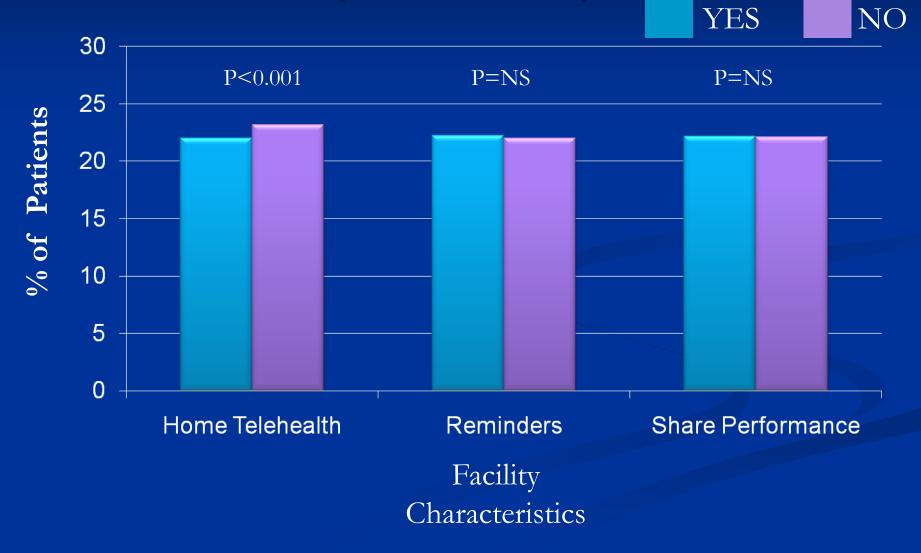
## 30 Days Mortality (All Cause)



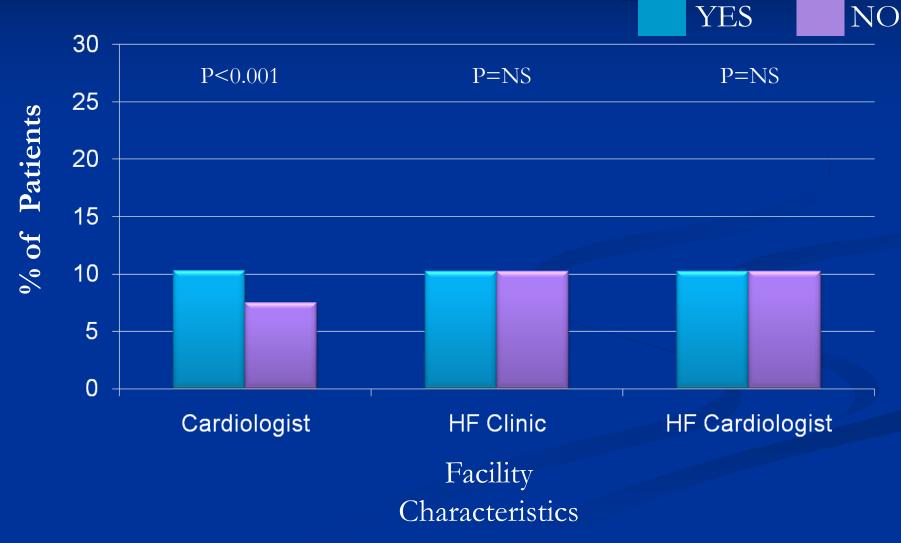
## Readmitted within 30 Days (All Cause)



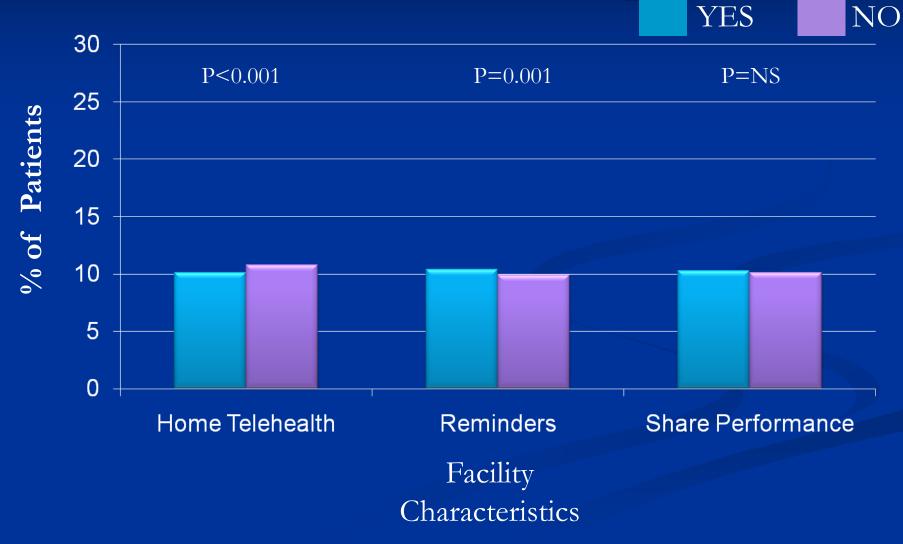
## Readmitted within 30 Days (All Cause)



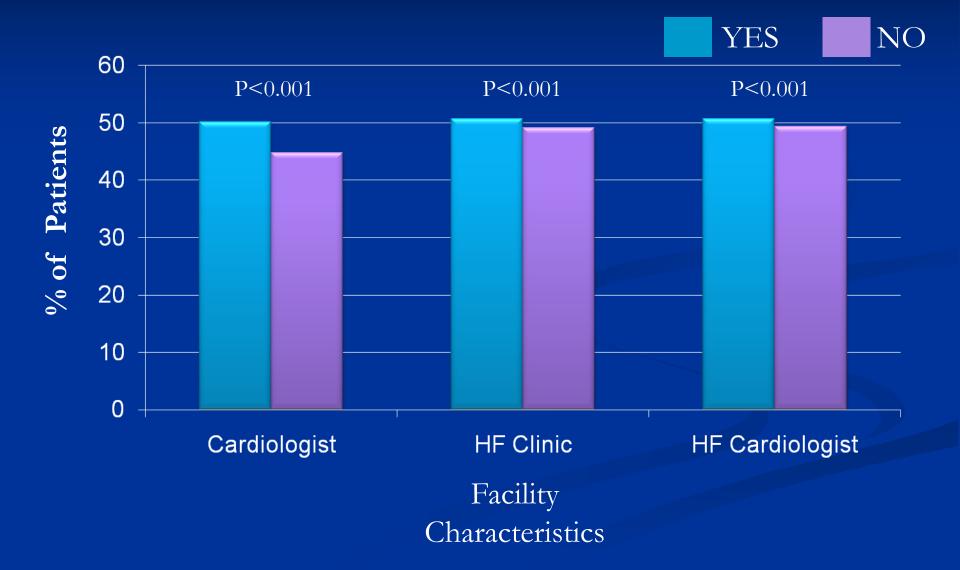
# Readmitted within 30 Days (Heart Failure Principal Dx)



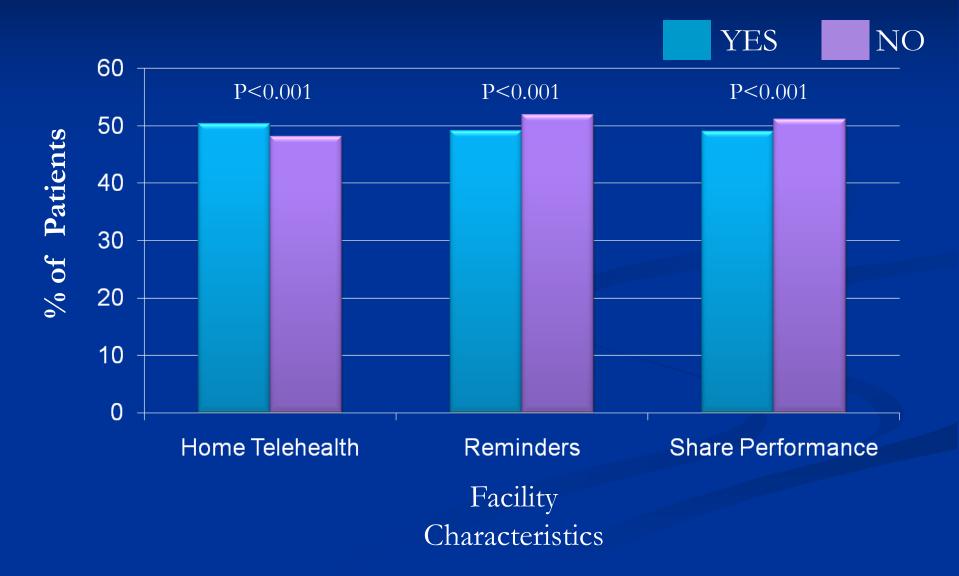
# Readmitted within 30 Days (Heart Failure Principal Dx)



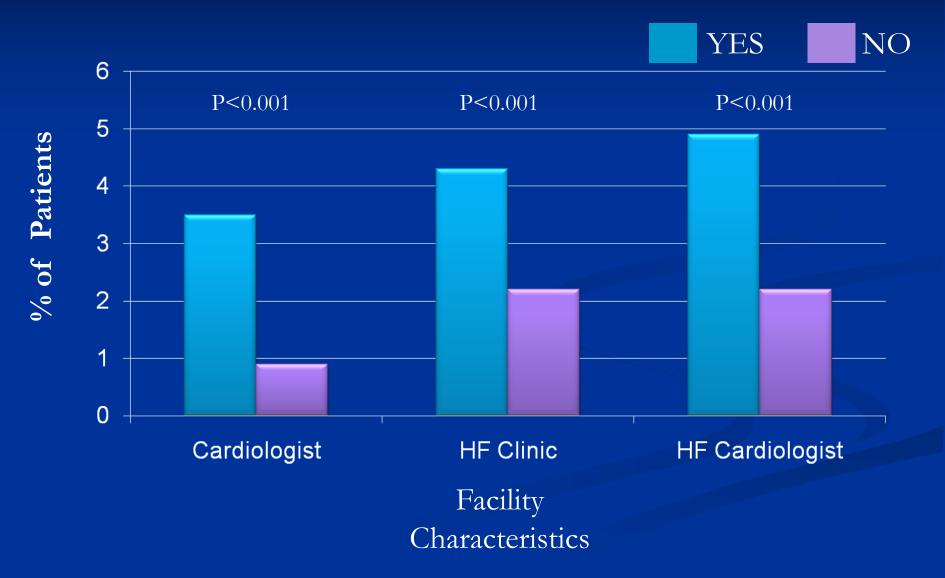
#### Office Visit within 14 Days



#### Office Visit within 14 Days



#### **Right Heart Catheterization**



#### **Survey Conclusions**

#### Facility Survey

Better outcomes associated with available resources, however bias cannot be excluded
 Home Telehealth
 Heart failure specialists