

# CHF Readmission Initiative

- Mary Fischer MSN, CCRN, PCCN, CHFN
  - Cardiology Clinical Nurse Specialist
    - St. Vincent Hospital
    - Indianapolis, Indiana

# St. Vincent 86<sup>th</sup> Street Campus



# *Heart Failure Program History*

- Planning began July 2005
- Multidisciplinary membership
- Admission/Discharge criteria were agreed upon
- Admit & Discharge Orders
- Heart Failure rounds formalized
- Staff Education regarding heart failure protocols
- Disease Specific Certification May 2009 and 2011



Grand Opening December 8, 2005

# Daily Heart Failure Rounds

## DAILY

- Primary RN
- Unit Pharmacist
- Care Coordinator (Case Manager) RN
- Cardiac Rehab RN
- Cardiology Social Worker
- Cardiology Clinical Nurse Specialist
- LPN or patient care tech.

## Weekly

- Palliative care/Hospice representative
- Home Health Care Telehealth RN
- Resident Chaplain

# Overview of Activity

## *Patient Demographics*

- 67 % male
- Age range: 18-104 yrs
- Mean patient age: 70.8
- African American: 23.4%
- Critical Care transfer: 10.3%
- 4 or more comorbidities: 17.7%

# Multidisciplinary Heart Failure Unit Care Increases Adherence to Performance Measures

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St. Vincent Hospital and The Care Group, LLC, Indianapolis, IN

## Introduction

Joint Commission on Accreditation of Healthcare Organization (JCAHO) has performance measures with regard to the care of heart failure patients. The performance measures elements include: angiotensin-converting enzyme inhibitor (ACEI) or angiotensin receptor blocker (ARB) for left ventricular systolic dysfunction or contraindications at discharge, beta blocker (BB) for left ventricular systolic dysfunction or contraindication at discharge, discharge instructions, evaluation of left ventricular systolic function and smoking cessation counseling at discharge.

It is expected that the application of these performance measures will result in improved outcomes for heart failure patients.

We sought to determine whether adherence to performance measures in a multidisciplinary heart failure inpatient unit, with a focus on comprehensive care, was superior to adherence to performance measures for heart failure patients in other units.

## Methods

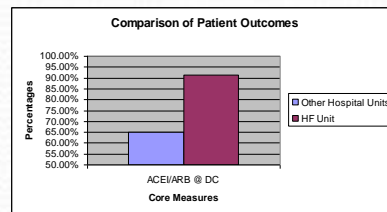
We reviewed data on patients discharged between December 1, 2005 and December 31, 2006 from St. Vincent Hospital with the principle discharge diagnosis of heart failure (DRG 127). We examined the JCAHO performance measures and an all or none composite measure.

## Results

During the study period, 706 patients were treated for heart failure; 475 patients in the heart failure unit and 231 patients in other hospital units. Physician preference and bed availability influenced unit of care.

Mean age was 71.5 years and many had co-morbid conditions; including diabetes, hypertension, coronary artery disease, renal disease, pneumonia, chronic pulmonary disease and abnormal heart rhythm. Age and co-morbid conditions were similar in the two groups. Patients with abnormal heart rhythm were more likely cared for in the heart failure unit compared to other units (68.8% vs. 56.7%). Patients with pulmonary disease were more often cared for elsewhere compared to the heart failure unit (49.8% vs. 32.8%).

With the single exception of smoking cessation counseling, adherence to performance measures was significantly higher for all measures compared to other units. ( $p < 0.05$ )

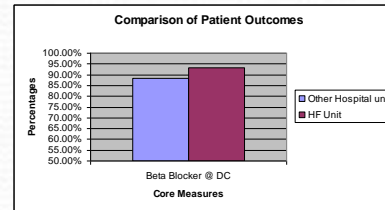


ACEI

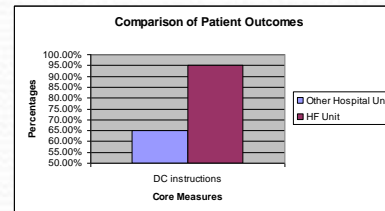


The Best Outcomes in Cardiology

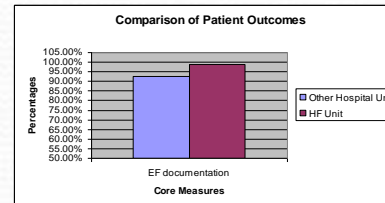
## Results



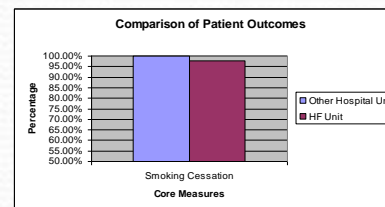
Beta blocker at discharge  
(88.4% vs. 93.4%)



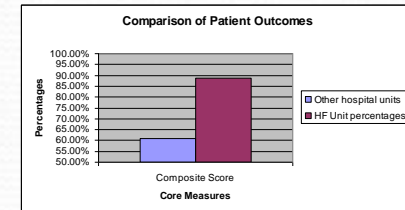
Discharge instructions  
(65.1% vs. 95.2%)



Evaluation of left ventricular systolic  
function (92.4% vs. 98.6%)



## Results



The composite measure was significantly higher for the HFU (61.0% vs. 88.6%) ( $p < 0.05$ ).

## Discussion

Adherence to performance measures was significantly better for patients discharged from a unit with a focus on specialized heart failure care. Performance measures are being publicly reported by insurers and governmental agencies and will be used as criteria in pay-for-performance projects.

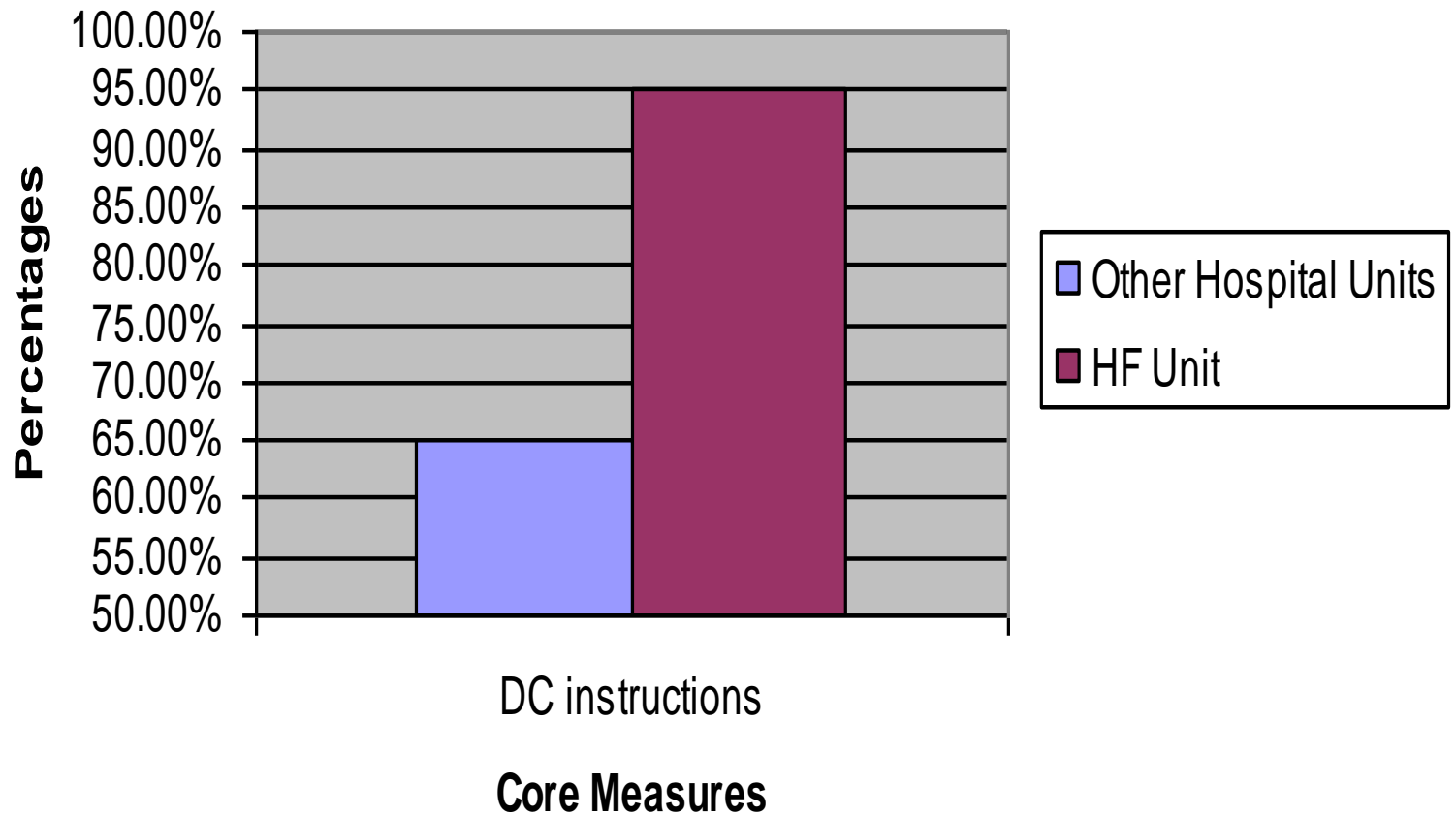
In light of this, wider adoption of multidisciplinary heart failure unit care may improve adherence to performance measures and translate into an improvement in quality and outcomes.

## Acknowledgement

The authors would like to acknowledge the hard work and dedication of all of the members of the multidisciplinary team in the excellent care of the heart failure patients.



## Comparison of Patient Outcomes



# Strategy Employed to Seek Out CHF Patients

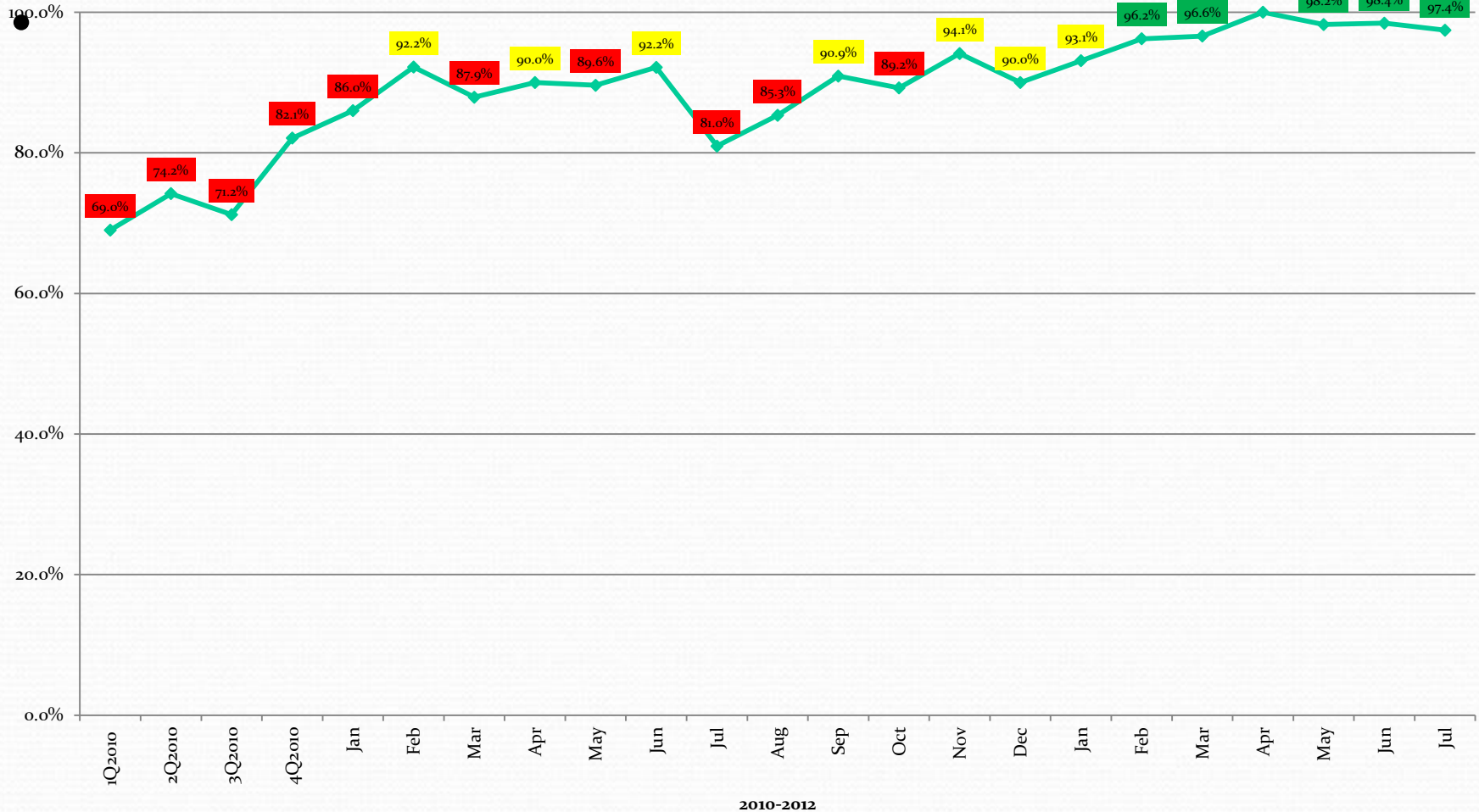
- Elevated BNP List automated daily and sent to members of the Multidisciplinary Heart Failure Team
- Case Managers throughout house call Cardiac Rehab RN
  - Teaches patient about CHF survival skills
  - Flags Core Measure Quality note and/or calls physician for missing documentation
  - Distributes Minnesota Living With Heart Failure Questionnaire to patient
  - Calls Clinical Nurse Specialist for need for further follow up

# Data Analysis-Navion

- Founded in 1986-Jointly owned and operated by St. Vincent Health, SVMG, & CorVasc
- Former method of coding provided us retrospective data, which prevented improvements
  - Lean Process evaluated current state vs. desired for state
  - Navion staff increased
  - Boots on the ground on the units helping identify missing documentation
  - Concurrent coding began
  - Assists with calls to physicians and engaging the Case Managers and Bedside RN with process

# Results-Improved Discharge Instruction Data

Discharge Instructions



# New Priority to Reducing Readmission of CHF Patients in Healthcare Policy

- High rates of CHF readmissions have gained scrutiny due to cost and quality concerns
  - Close to 1 in 5 Medicare patients discharged from the hospital is readmitted within 30 days at a cost of over \$15 billion every year
- While some hospital readmissions are planned, others are avoidable and can be the result of uncoordinated, poor quality care
- Wide variation in readmission rates by hospital and geographic region suggest that the rates can be reduced
  - Application of evidence-based guidelines and enhanced coordination may reduce preventable readmissions

Policymakers and payers are targeting readmissions to reduce health expenditures and improve quality of care and patient outcomes

# Thirty Day Readmission Data

## Condition At Discharge

## 30-Day Rehospital. Data

- AMI 19.8%
- Heart Failure 24.8%
- Pneumonia 18.4%

# Strategies Employed to Address CHF Readmission Rates at St. V.

- Joined the Indianapolis Patient Safety Coalition of Indiana for Reduction of Avoidable CHF Readmission
  - Hospitals from around the city collaborated with the American College of Cardiology and developed implementable tactics to improve preventable heart failure readmissions.
  - Evidence based practice for transitions of care were explored
  - Best practice from each hospital were shared

# New Strategies for in Patient Education

- All hands on deck



# CHF Resource RN Program



# New Case Management Model

- Case Load decreased
  - Identify causes of readmission with interview
  - Provide 7 day follow up appointment
  - Arrange for visit to outpatient CHF clinic
  - Arrange for Home Care/Telehealth
  - Identify patients for potential to be enrolled in Beacon Study



# St. Vincent Foundation Grants



Scales for Life

## Magnets for Success

### HEART FAILURE ZONES

Which Heart Failure Zone are you today?  
**GREEN, YELLOW OR RED?**



165<sup>th</sup> & North Meridian • 85<sup>th</sup> Street

#### EVERYDAY ZONE

##### EVERY DAY:

- Weigh yourself first thing in the morning and write it down.
- Take your medicine as instructed.
- Check for swelling in your feet, ankles, legs and abdomen.
- Eat low-salt food - 2 gram sodium diet.
- Balance activity and rest periods.

#### GREEN ZONE

##### ALL CLEAR - THIS ZONE IS YOUR GOAL.

Your symptoms are under control. You have:

- No shortness of breath.
- No weight gain more than 2 pounds.
- No swelling of your feet, ankles, legs or abdomen.
- No chest pain.

#### YELLOW ZONE

##### CAUTION: THIS ZONE IS A WARNING - TAKE ACTION.

Call your doctor's office if you have:

- A weight gain of more than 2-3 pounds in one day or a weight gain of 5 pounds or more in one week.
- More shortness of breath with your usual activities.
- More swelling of your feet, ankles, legs or abdomen.
- No energy. Feel more tired.
- A sudden decrease in urination.
- Dizziness.
- Uneasiness; you know something is not right.
- Increased shortness of breath when lying down or you need to sleep sitting up in a chair.

#### RED ZONE

##### EMERGENCY!

Go to the emergency room or call 911 if you:

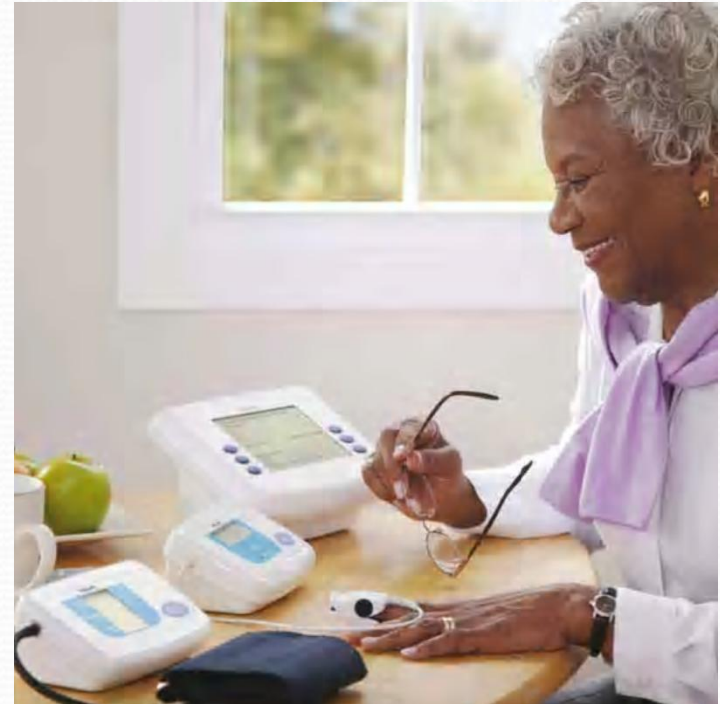
- Are struggling to breathe. Unrelieved shortness of breath while sitting still.
- Are having chest pain.
- Are having confusion or can't think clearly.

### Tele-health

- Daily monitoring of weight, Oximetry, BP, Pulse, 1 Lead EKG
- Reinforce CHF survival skills

### Requirements

- Physician order
- Able to read and understand instructions, or have caregiver who can
- Able to stand on scales
- Home suitable for equipment .



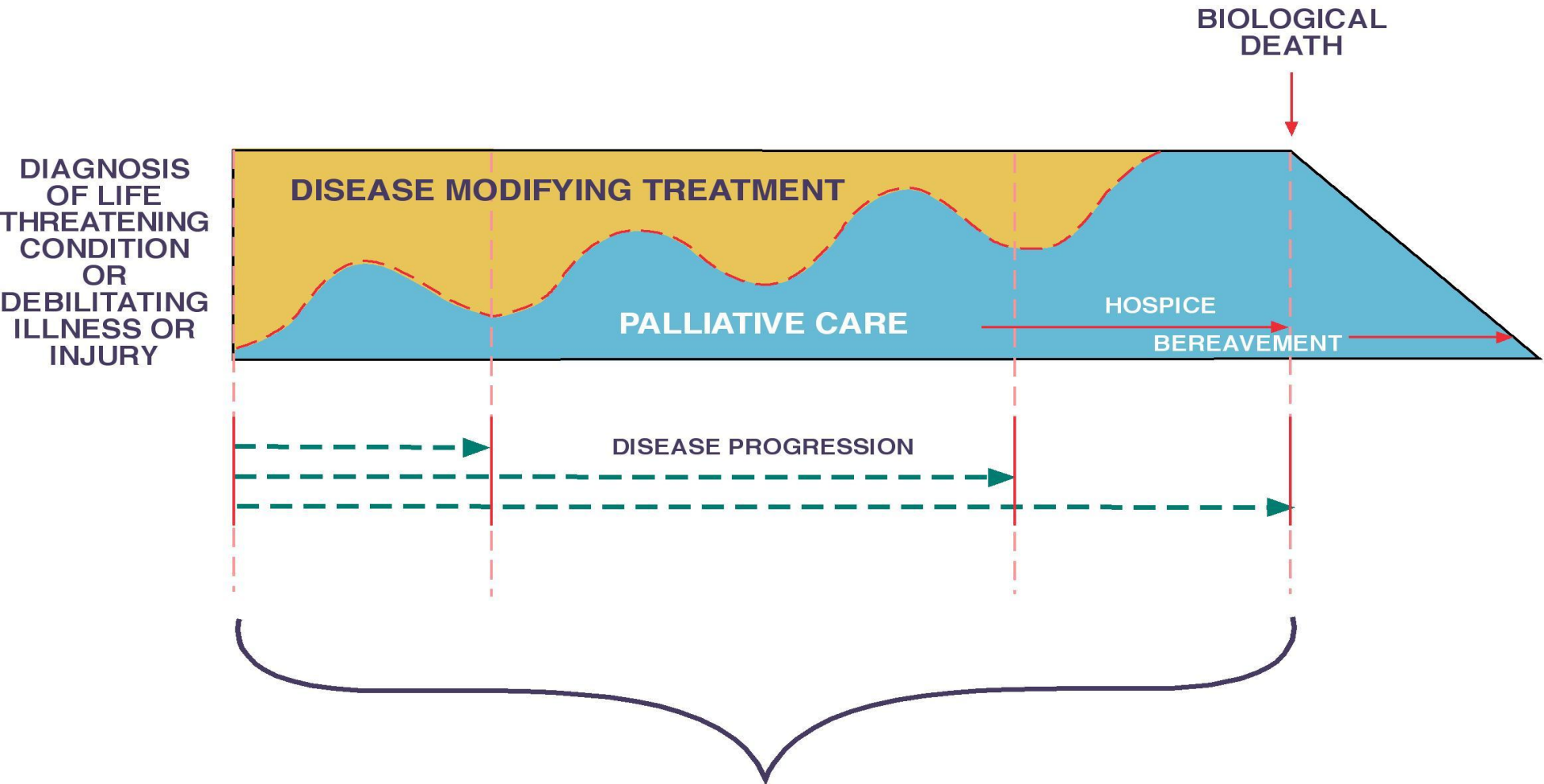
Take care of yourself every day Daily in-home monitoring program

# Inpatient CHF Support Group

## “The Out-The-Door Gang”



## ASCENSION HEALTH PALLIATIVE CARE MODEL



CONDITION APPROPRIATE FOR PALLIATIVE CARE MAY

# Post Discharge Phone Call



- Conducted within 24-48 hours
- Appointment confirmed
- Reviewed medication list with patient from discharge instructions
- Asked patient what their weight was today
- Reviewed signs and sx of CHF exacerbation

# Background-SNF initiative

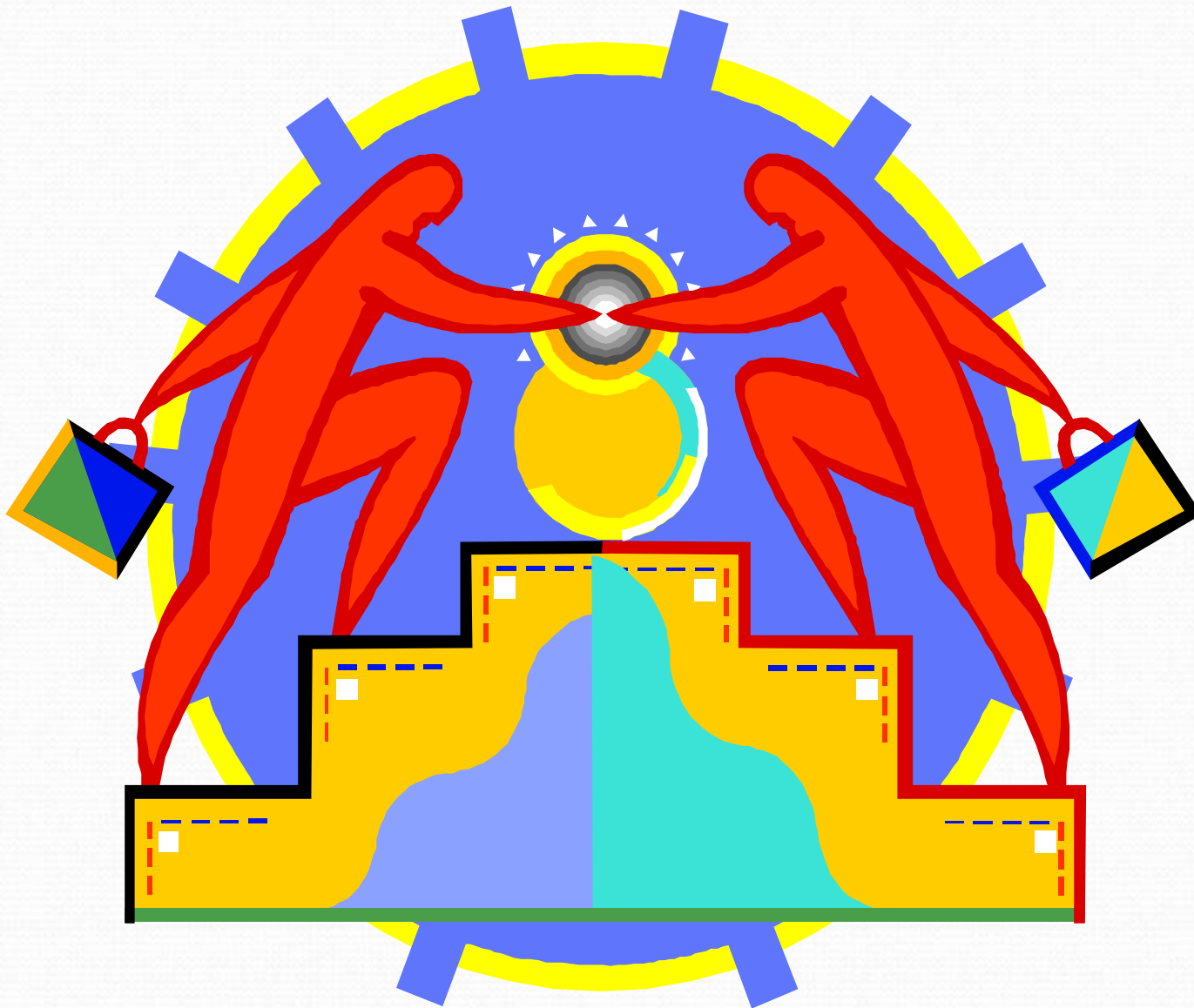
## READMISSION:

- Monthly data revealed 30% of all CHF readmissions were from Skilled Nursing Facilities (SNFs)
- Review of readmissions of SNF patients/families demonstrated inconsistency with
  - Daily weights
  - Low sodium diets
  - Medications as per the discharge instructions
  - Response to fluid volume overload

# Problem Statement-SNF initiative

- Need for collaboration apparent
- Aim was to close the gap between acute care and SNF care
- Dialogue revealed differences in priorities;
  - Weight gain versus weight loss
  - Patient satisfaction-Patient choice

# CHF-SNF Collaboration



# Methods-Pilot program with SNFs

## Sharing staff development tools

**“A N-E-W L-E-A-F”--Screening Tool for Direct Caregivers**

- **A: Acute Agitation/Anxiety**
- **N: Night time shortness of breath or ↑ night time urination**
- **E: Edema in lower extremities**
- **W: Weight gain (2-4 pounds/week)**
- **L: Lightheadedness**
- **E: Extreme shortness of breath lying down**
- **A: Abdominal Symptoms (nausea, decreased appetite, distension)**
- **F: Fatigue**

# Methods-Pilot program with SNFs

- Sharing patient education material

## HEART FAILURE ZONES

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### EVERYDAY ZONE

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Go to the emergency room or call 911 if you:

- Are struggling to breathe. Unrelieved shortness of breath while sitting still.
- Are having chest pain.
- Are having confusion or can't think clearly.

| Nutrition Facts                |                       |
|--------------------------------|-----------------------|
| Serving Size 1 cup (228g)      |                       |
| Servings Per Container about 2 |                       |
| Amount Per Serving             |                       |
| Calories 250                   | Calories from Fat 110 |
| % Daily Value*                 |                       |
| Total Fat 12g                  | 18%                   |
| Saturated Fat 3g               | 15%                   |
| Trans Fat 3g                   |                       |
| Cholesterol 0mg                | 0%                    |
| <b>Sodium 360mg</b>            | <b>15%</b>            |
| <b>Total Carbohydrate 31g</b>  | <b>10%</b>            |
| Dietary Fiber 0g               | 0%                    |
| Sugars 5g                      |                       |
| Proteins 5g                    |                       |
| Vitamin A                      |                       |
| Vitamin C                      | 4%                    |
| Calcium                        | 2%                    |
| Iron                           | 20%                   |
|                                | 4%                    |

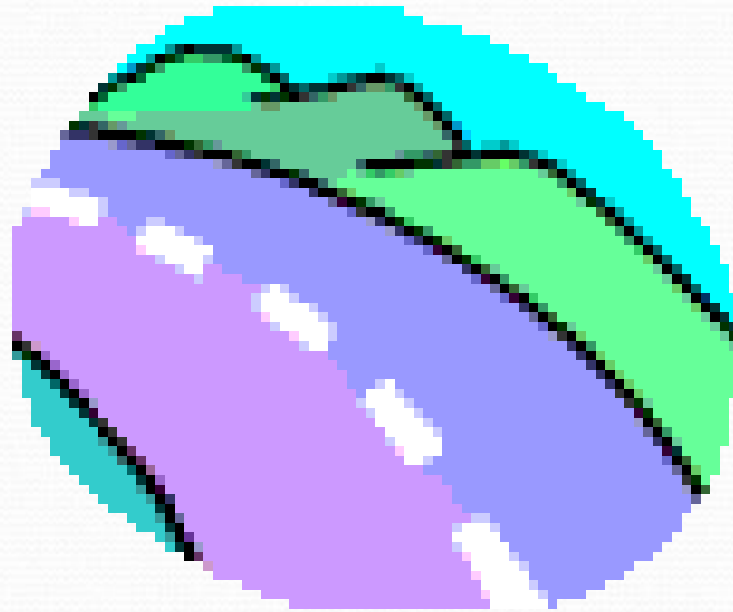
  

|                    | Calories: 2,000   | 2,500   |
|--------------------|-------------------|---------|
| Total Fat          | Less than 65g     | 80g     |
| Saturated Fat      | Less than 20g     | 25g     |
| Cholesterol        | Less than 300mg   | 300mg   |
| Sodium             | Less than 2,400mg | 2,400mg |
| Total Carbohydrate | 300g              | 375g    |
| Dietary Fiber      | 25g               | 30g     |

\* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

# Methods-Pilot program with SNFs

- Cardiology Clinical Nurse Specialist visited several facilities to do presentations regarding CHF management



# Methods-Pilot program with SNFs

- Some SNF staff came to the hospital and shadowed Case Managers, Cardiac Rehab & Cardiology CNS



# Methods-Pilot program with SNFs

## CHF Specific 16-C Discharge/Transfer



*St. Vincent Health*

*Indianapolis*  
2001 West 86th Street  
Indianapolis, IN 46240-0970

*Carmel*  
13500 N. Meridian Street  
Carmel, IN 46032

Addressograph \_\_\_\_\_

### CHF DISCHARGE/TRANSFER FORM

**PATIENT NAME** (Last, First, Middle Initial): \_\_\_\_\_ **Admit Date** \_\_\_\_\_ **Discharge Date** \_\_\_\_\_

**Receiving Agency** \_\_\_\_\_ **City** \_\_\_\_\_ **State** \_\_\_\_\_

**Phone:** ( ) \_\_\_\_\_ **Fax:** ( ) \_\_\_\_\_

Completed 16C is to be faxed to above  {or to: \_\_\_\_\_ @ Fax:( ) \_\_\_\_\_}

**ALLERGIES (Drugs/Food/Latex):** \_\_\_\_\_

**Vaccinations Given:**  Pneumococcal (date) \_\_\_\_\_  Influenza (date) \_\_\_\_\_  Other \_\_\_\_\_ (date) \_\_\_\_\_

### PHYSICIAN'S ORDERS

**Diagnoses:** CHF, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Procedure Date(s):** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Diet:** 2 Gram Sodium Diet, \_\_\_\_\_  
\_\_\_\_\_

**Activity:** Ambulate 50 feet three times daily and advance as tolerated

**Care instructions:** Daily weights and call for weight gain of 2-3 pounds overnight or 5 pounds in a week  
Call for new or increased swelling in legs or abdomen

**Therapies:** (PT, OT, Oxygen) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ O<sub>2</sub> Saturation %

**Lab Tests:** \_\_\_\_\_  
\_\_\_\_\_

**Follow up Appointment with** \_\_\_\_\_

**Location** \_\_\_\_\_

**Phone** \_\_\_\_\_

**Medications (see attached sheet)**

Do not change meds

**DISCHARGE/TRANSFER FORM**

# Methods-Pilot program with SNFs

Providing scales to patients upon discharge from SNF



# Methods-Pilot program with SNFs

Home Health/Tele-monitoring upon discharge from SNF



# Methods-Pilot program with SNFs

Active Participation by Dr. Diane Healey and a Jean Kolp NP from Center for Healthy Aging

- Attend Monthly CHF Multidisciplinary Meetings
- Presented a Lunch and Learn for our CHF Resource RN group



# Discussion/Conclusions about CHF-SNF Pilot

- Very positive experience between the facilities
- Allows patients additional opportunities to learn and practice CHF survival skills during their rehab phase
- Provides the opportunity for health care providers at the SNFs to learn new skills for better patient care
- Based upon education on diet compliance, a patient gained confidence in eating out and making appropriate selections and challenging the menu

# Readmission Rates

**SVI Congestive Heart Failure (CHF) 30 day Readmission**  
(Reports for May, June and July are preliminary)

