

<b>CLINICAL PRACTICE GUIDELINE NAME:</b>	<i>Congestive Heart Failure in Adults (Left-sided heart failure, right-sided heart failure, systolic heart failure, diastolic heart failure)</i>
<b>ORIGINAL DATE APPROVED BY QMC:</b>	11/06 SHPO
<b>DATES RE-REVIEWED BY QMC:</b>	7-14-09 SHPO

**GUIDELINE DESCRIPTION: (actual guideline attached)**

This guideline provides facts about Congestive Heart Failure (CHF) and guidelines for physicians and other health care providers on screening and management of patients with CHF.

**FACTS ABOUT CHF:**

- Quality of life and life expectancy can be improved with early diagnosis and treatment, usually with 3 to 4 medications (ACE inhibitors, diuretics, digoxin, & beta-blockers)
- About 5 million people in the US have heart failure and the number is growing with 550,000 new cases diagnoses each year. It contributes to about 300,000 deaths each year.
- **The risk of death within 5 years of being diagnosed with heart failure is more than 50%.**
- Approx 80% of men and 70% of women with heart failure **under** age 65 die within 8 years
- Leading causes of heart failure are:
  - o Coronary artery disease (CAD) is the most common underlying cause of heart failure. Persons who have a heart attack are at high risk of developing heart failure. Approx 22% of men and 46 % of women will develop heart failure within 6 years of having a heart attack.
  - o Hypertension - 7 out of 10 people had hypertension before being diagnosed with CHF
  - o Diabetes - about 1 in 3 persons with heart failure have diabetes
- Heart failure is more common in people age 65 and older. It is the number one reason for hospital visit among people on Medicare
- African Americans
  - o More likely to have heart failure **and** suffer more severely from it
    - Develop symptoms at an earlier age
    - Have heart failure get worse faster
    - Have more hospital visits
    - Die from heart failure
- Men have a higher rate of heart failure than women
  - o In actual numbers, more women have heart failure because they live into their 70s and 80s when heart failure is common
- Children with congenital heart disease get heart failure
  - o *They **DO NOT** have the same symptoms or get the same treatment for heart failure as adults and is not discussed here*
- Patient's need to know that there is no cure for heart failure. Once diagnosed, medications are needed for the rest of the person's life.

**REFERENCES:**

1. National Heart, Lung, and Blood Institute, Heart Failure ([http://www.nhlbi.nih.gov/health/dci/Diseases/Hf/HF\\_WhatIs.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Hf/HF_WhatIs.html) )
2. American College of Cardiology/American Heart Association (ACC/AHA) Task Force on Practice Guidelines ([http://www.guideline.gov/summary/summary.aspx?doc\\_id=7664&nbr=004463&string=acc%20faha+AND+guideline+AND+update+AND+congestive+AND+heart+AND+failure](http://www.guideline.gov/summary/summary.aspx?doc_id=7664&nbr=004463&string=acc%20faha+AND+guideline+AND+update+AND+congestive+AND+heart+AND+failure) )
3. American College of Cardiology Foundation/American Heart Association (ACCF/AHA) Guidelines for Diagnosis and Management of Heart Failure 2009. (<http://www.circ.ahajournals.org/cgi/content/full/119/14/1977>)
4. CDC Heart Failure Fact Sheet 2006 ([http://www.cdc.gov/DHDSP/library/fs\\_heart\\_failure.htm](http://www.cdc.gov/DHDSP/library/fs_heart_failure.htm) )
5. New York Heart Association Functional Classification System for Heart Failure ([http://aboutfh.org/questions\\_stages.htm](http://aboutfh.org/questions_stages.htm) )
6. ACC/AHA vs. NYHA Classification of Heart Failure ([http://cme.medscape.com/viewarticle/520123\\_2](http://cme.medscape.com/viewarticle/520123_2))

*"These recommendations are designed to be guidelines but do not guarantee coverage by each plan. For coverage/benefit information please contact our member services department."*

## Congestive Heart Failure Management in Adults

**Initial Evaluation includes the following:**

1. H & P, including hx of current & past alcohol & drug use, orthostatic blood pressure changes, weight & height & BMI
2. Lab testing: CBC, UA, serum electrolytes (including calcium & magnesium), BUN, serum creatinine, FBS, lipid profile, liver fxn tests & TSH
3. Assess ability to perform routine & desired activities of daily living
4. 12 lead ECG
5. Chest x-ray (PA & lateral)
6. Two-dimensional echocardiogram coupled with Doppler flow studies
7. Coronary arteriography in appropriate patients
8. Maximal exercise testing with or without measurement of respiratory gas exchange &/or blood oxygen saturation in appropriate patients
9. Diagnostic tests for rheumatologic diseases, amyloidosis, or pheochromocytoma, if indicated
10. Endomyocardial biopsy, when specific diagnosis is suspected that would influence therapy
11. Holter monitoring, if indicated

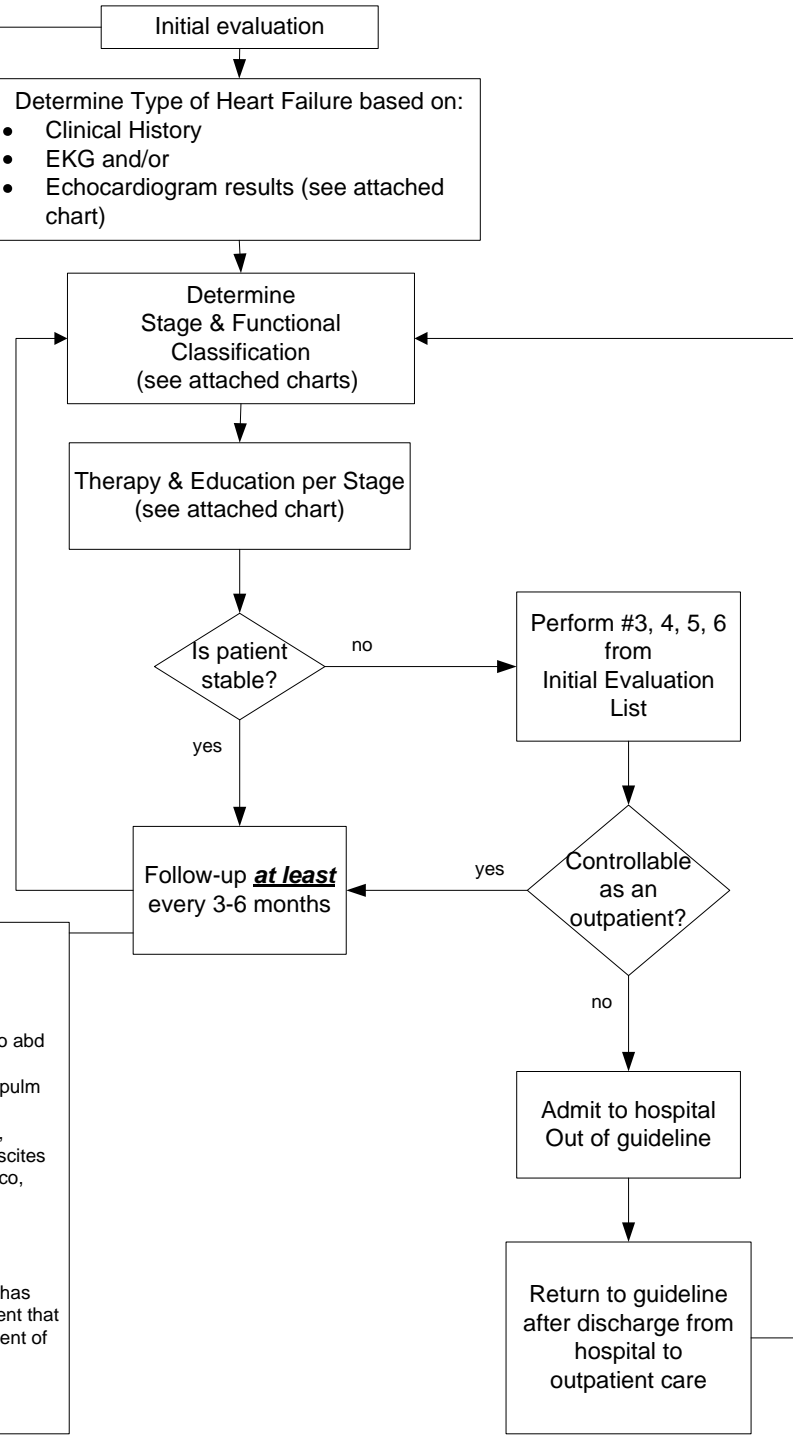
**At every visit:**

Assess patient's volume status & weight

- Record body weight
- Sitting & standing BP
- Determine degree of JVD & its response to abd pressure
- Presence & severity of organ congestion (pulm rales & hepatomegally)
- Magnitude of peripheral edema (legs, abd, presacral area & scrotum) & abdominal ascites
- Careful hx of current use of alcohol, tobacco, illicit drugs, "alternative therapies" & chemotherapy drugs
- Diet & sodium intake

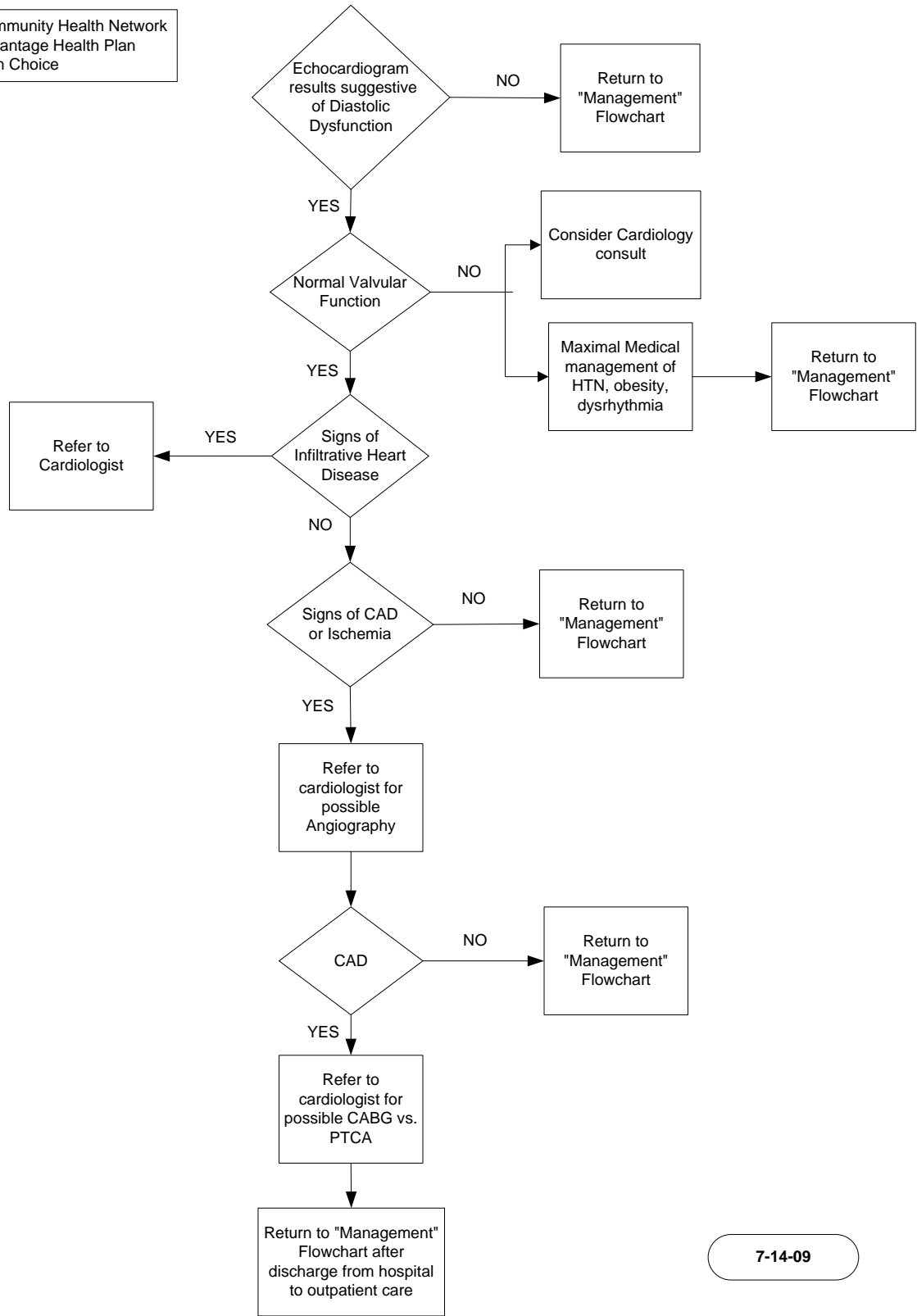
**IF** there is a change in clinical status or patient has experienced a clinical event or received treatment that might effect cardiac function, repeat measurement of EF & severity of structural remodeling

Determine appropriate follow-up time

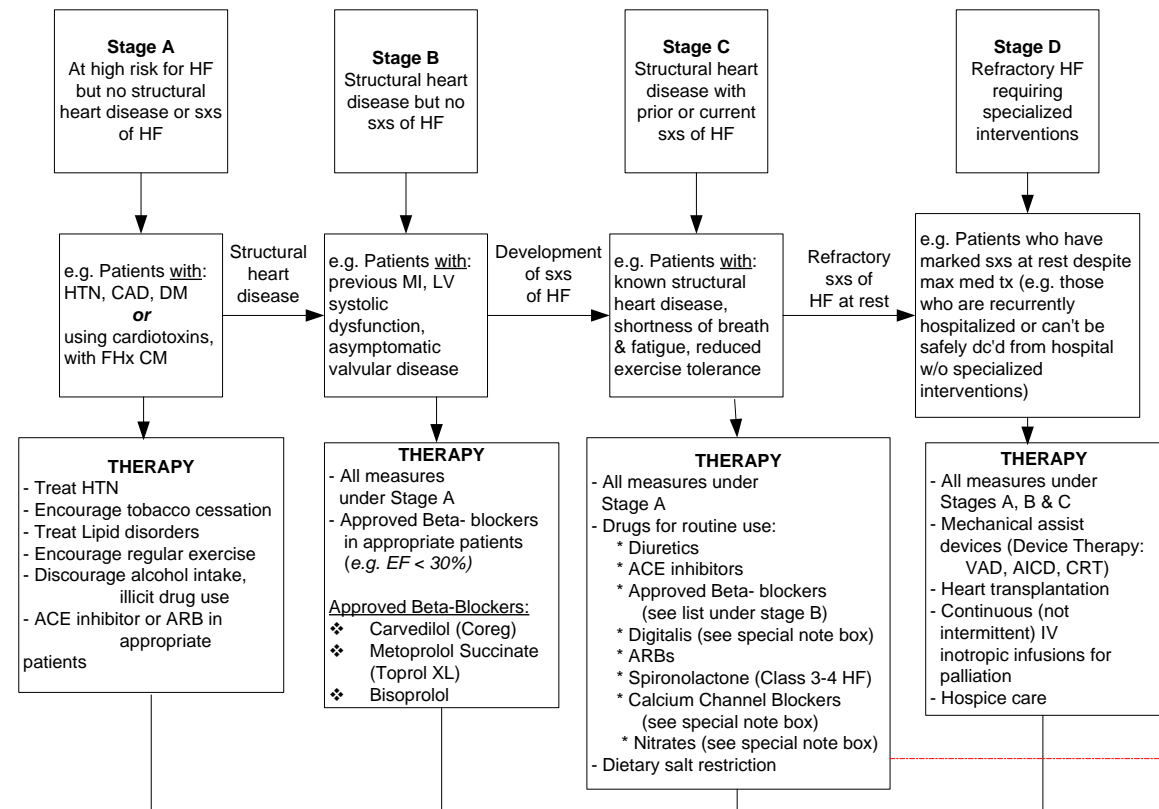


## Determining Type of Heart Failure [Diastolic vs. Systolic Dysfunction] Based on Echocardiogram Results

Samaritan InterCommunity Health Network  
 Samaritan Advantage Health Plan  
 Sam Choice



## Stages of Congestive Heart Failure (based on ACC/AHA)



- PATIENT EDUCATION**
- Patients must know there is no cure for heart failure. Once diagnosed, medications are needed for the rest of their life.
  - Take prescribed medications **each** day.
  - Report changes in ability to perform routine & desired activities of daily living.
  - Counseling for avoidance of behaviors that increase risk of HF (tobacco use, excessive alcohol use, drug use).
  - Reduce dietary intake of salt.
  - Get daily physical activity.
  - Be aware of & tell health care provider of HF symptoms.
  - Keep track of weight every day & check for fluid buildup in the body.
  - Report changes in weight over a short time period.
  - Learn ways to deal with depression & stress & get treatment if needed.
  - Make living will to state wishes for care to family members & health care providers.
  - Alternative therapies that could interfere with CHF medications: Ephedra, Ephedrine Metabolites, Chinese herbs, Hawthorne (Crataegus) products, etc.
  - Alternative therapies that could interact with blood thinners: Garlic, Ginseng, Gingko, Coenzyme Q-10

## NYHA Functional Classification System for Congestive Heart Failure

Class	Patient Symptoms
Class I (Mild)	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea.
Class II (Mild)	Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in fatigue, palpitation, or dyspnea.
Class III (Moderate)	Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitation, or dyspnea.
Class IV (Severe)	Unable to carry out any physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.

### Special Note Box for patients with Diastolic Dysfunction

Digitalis: Contraindicated except with atrial fibrillation  
Calcium Channel Blockers: Consider these for symptomatic treatment (heart rate control) however there is no clear survival benefit in these patients  
Nitrates: Consider these for symptomatic relief of dyspnea (pre-load reduction)