

These protocols are designed to implement standard guidelines, based on the best evidence, that provide a consistent clinical experience for AHC II Integrated Clinical Delivery Network patients and allow to quantitatively demonstrate to payers the high-value care provided. They are not intended to replace a clinician's judgment or to establish a protocol for all patients with a particular condition.

SCREENING AND PREVENTION

Careful medical history, review of symptoms, and performance of a physical examination checking for the presence of risk factors, such as high blood pressure, coronary artery disease or diabetes, hyperlipidemia, thyroid disorders, tachycardia, and examination of veins in neck and check for fluid buildup in the abdomen and legs.

Several classes of medications have been shown to prevent heart failure in at-risk populations. These include hydroxymethylglutaryl coenzyme A reductase inhibitors in patients with hyperlipidemia, ACE inhibitors in patients with diabetes, and nearly all antihypertensive medications when used to lower blood pressure to goal levels. Nondrug interventions include maintaining a healthy weight, regular exercise, and smoking cessationⁱ.

DIAGNOSIS

Patients with underlying risk factors, including CAD, valvular heart disease, and longstanding hypertension may be asymptomatic. Do not wait for symptoms to develop before evaluating and treating these patients for early left ventricular dysfunction.

Dyspnea and fatigue are the primary symptoms of heart failure. In addition to history and physical examination, use 2-dimensional Doppler echocardiography to assess left ventricular function along with ECG and additional studies to determine the cause of the heart failure and to identify exacerbating factors.

Heart failure has many causes, and it is sometimes useful to divide them into dilated, hypertrophic, and restrictive types.

Determine New York Heart Association (NYHA) Classification:

1. NYHA class I (mild): Patient has asymptomatic left ventricular dysfunction. Normal physical activity does not cause undue fatigue, palpitation, or shortness of breath.
2. NYHA class II (mild): Patient has fatigue, palpitation, or shortness of breath with normal physical activity
3. NYHA class III (moderate): Patient has shortness of breath with minimal activity, including usual activities of daily living.
4. NYHA class IV (severe): Patient has shortness of breath at rest and is unable to perform any physical activity without discomfort. Physical activity of any kind increases discomfortⁱⁱ.

COLLABORATIVE MANAGEMENT PLAN/INTEGRATED REFERRALS

1. Follow the flow diagram by provider on pages 3 – 4.
2. Assess symptoms and activity level each visit using the following:
New York Heart Association Functional Classification of HF
 - I No limitations of physical activity
No heart failure symptoms
 - II Mild limitation of physical activity
Heart failure symptoms with significant exertion; comfortable at rest or with mild activity

- III Marked limitation of physical activity
Heart failure symptoms with mild exertion; only comfortable at rest
- IV Discomfort with any activity
Heart failure symptoms occur at rest

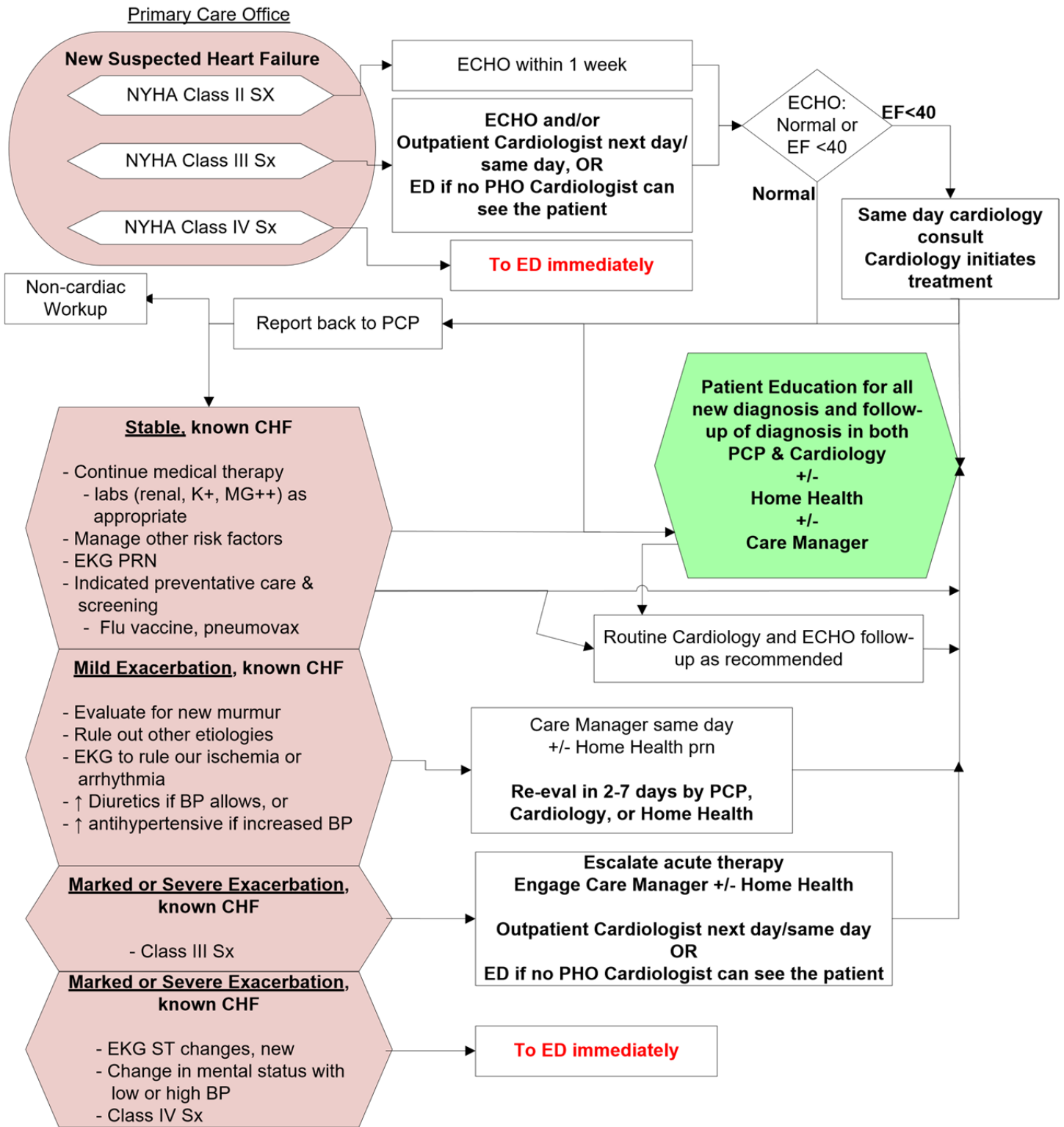
3. Pharmacological guidelines:

- Regardless of symptoms, begin first line drug therapy with ACE Inhibitors or ARBs (or, if these are not tolerated, hydralazine and nitrates) as well as beta-blockers in patients who are not volume overloaded. When given a choice, ACEI/ARB should get priority over beta-blockers as trials have shown mortality benefits for beta-blockers with a background of ACEI/ARB therapy.
- Add loop diuretics and digoxin in patients with NYHA classes II, III, and IV heart failure and aldosterone antagonists in those with class III and IV heart failure.
- Document which particular ACEI/ARB/beta-blocker the patient was taking at home prior to inpatient admission. In the event that the patient's medication was changed while in the hospital, ensure they are discharged with their existing medication so as to not disrupt optimal therapy.
- Teach patients to participate in their own care by encouraging them to exercise and to monitor their diet, medical regimen, and weightⁱⁱⁱ.
- Record daily weights. Report increase in weight by 2 pounds in one day or 5 lbs in one week to the Primary Care Physician (PCP).
- Limit dietary sodium intake.
- Regular exercise as tolerated
- Adult smoking cessation is important

4. Referral Considerations

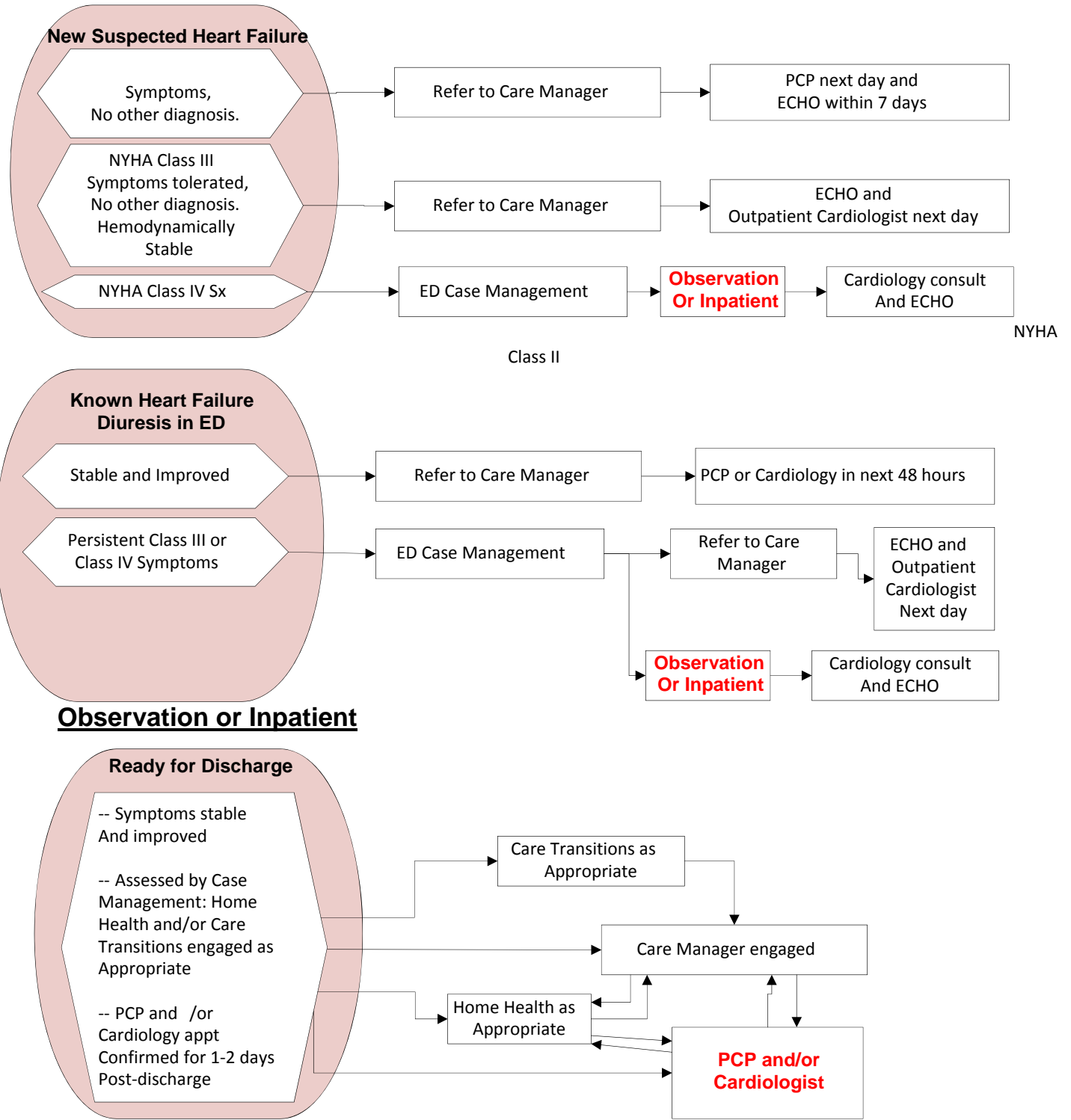
- Short-term consult with PCP or cardiology visit for ED visits
- Consult cardiologist in patients with severe HF
- Referral to Heart Failure Center
- Entry into Care Transitions program +/- Home Health

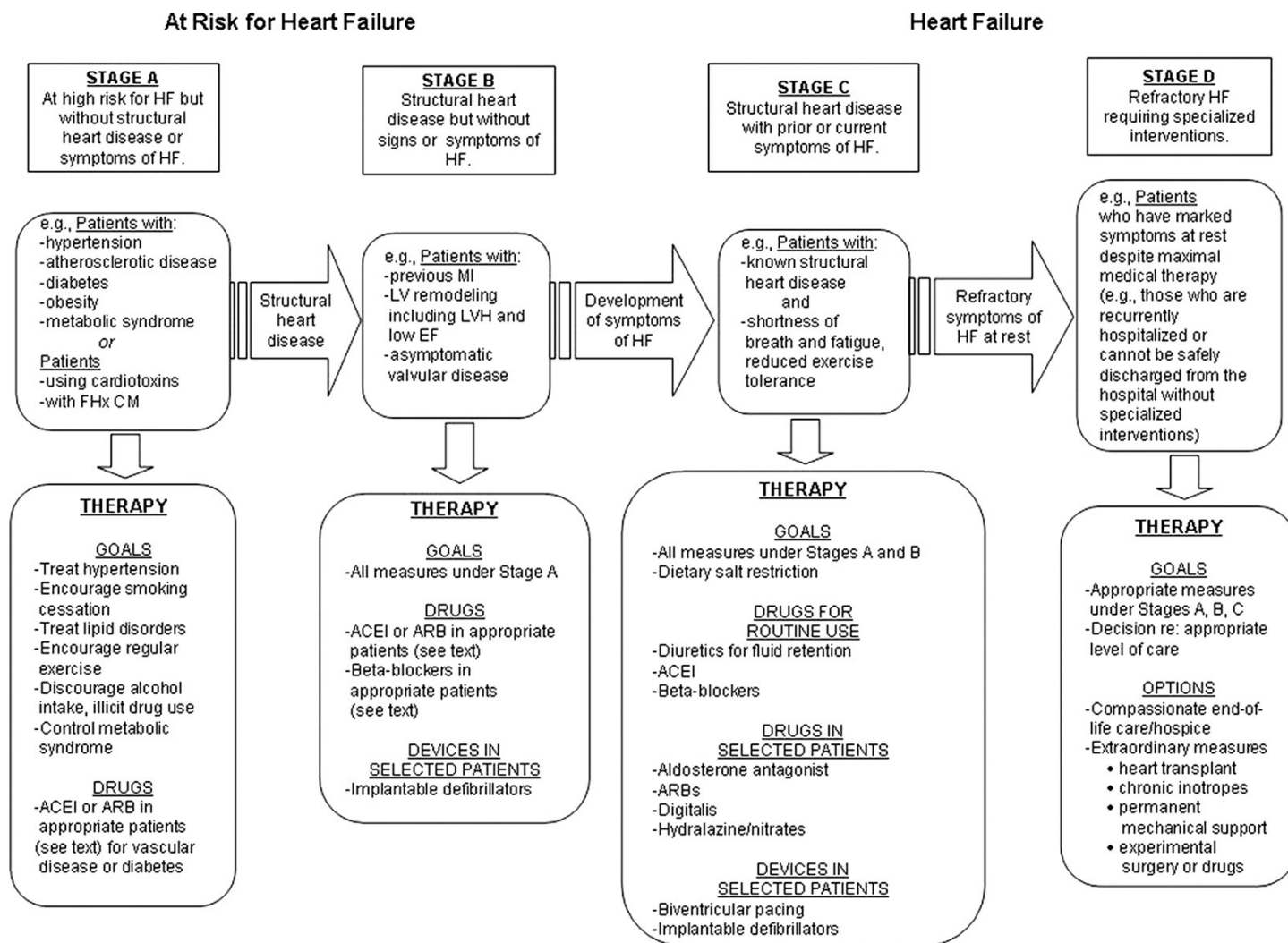
Congestive Heart Failure



Congestive Heart Failure

Emergency Department





ACC/AHA Guidelines for the Diagnosis and Management of HF in Adults: Focused Update 2009: Stages in the Evolution of HF with Recommended Therapy by Stage

KEY MEASURES OF PERFORMANCE

Aligned with CMS' ACO/PQRS/Meaningful Use CQM measures and the NCQA Diabetes Recognition Program

Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (ACO #31;

NQF #83; PQRS #8)

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting OR at each hospital discharge.

Domain: Clinical Process/Effectiveness

Numerator 1: Patients who were prescribed beta-blocker therapy within a 12 month period when seen in the outpatient setting

Denominator 1: All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

Numerator 2: Patients who were prescribed beta-blocker therapy at each hospital discharge

Denominator 2: All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy – Diabetes or left Ventricular Systolic

Dysfunction (LVEF < 40%) (ACO #33; NQF #66; PQRS #118)

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have diabetes OR a current or prior Left Ventricular Ejection Fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy.

Domain: Clinical Process/Effectiveness

Numerator 1: Patients who were prescribed ACE inhibitor or ARB therapy

Denominator 1: All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have a current or prior LVEF < 40%

Numerator 2: Patients who were prescribed ACE inhibitor or ARB therapy

Denominator 2: All patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have diabetes

Key tools

American Heart Association – Heart Failure

http://www.heart.org/HEARTORG/Conditions/HeartFailure/HeartFailure_UCM_002019_SubHomePage.jsp

Centers for Disease Control – Heart Failure Fact Sheet

http://www.cdc.gov/dhdsdp/data_statistics/fact_sheets/docs/fs_heart_failure.pdf

Heart Failure Society of America – Heart Failure Guidelines <http://www.hfsa.org/hfsa-wp/wp/heart-failure-guidelines-2/>

American Academy of Family Physicians – Heart Failure

<http://www.aafp.org/afp/topicModules/viewTopicModule.htm?topicModuleId=26>

REFERENCES

National Heart, Lung, and Blood Institute, Heart Failure

(http://www.nhlbi.nih.gov/health/dci/Diseases/Hf/HF_WhatIs.html)

American College of Cardiology/American Heart Association (ACC/AHA) Task Force on Practice Guidelines

(<http://www.guideline.gov/summary/summary.aspx?docid=7664&nbr=004463&string=acc%2faha+AND+guideline+AND+update+AND+congestive+AND+heart+AND+failure>)

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>)

CDC Heart Failure Fact Sheet 2006 (http://www.cdc.gov/DHDSP/library/fs_heart_failure.htm)

New York Heart Association Functional Classification System for Heart Failure

(http://abouthf.org/questions_stages.htm)

ACC/AHA vs. NYHA Classification of Heart Failure (http://cme.medscape.com/viewarticle/520123_2)

ACCF/AHA/AMA-PCPI Performance Measures for Adults with Heart Failure. Update May 15, 2012.

Heart Failure Society of America Guidelines 2010

MEASUREMENT REFERENCES:

Heart Failure: <http://www.ama-assn.org/ama1/pub/upload/mm/pcpi/hfset-12-5.pdf>

Tobacco Cessation: http://www.ama-assn.org/ama1/pub/upload/mm/370/pcs_final08.pdf

ⁱ Center for Disease Control. Heart Failure Fact Sheet:

http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_heart_failure.pdf

ⁱⁱ Goldberg, MD, MPH, Lee R. In the Clinic. Heart Failure. Ann Intern Med. 2010; ITC6.

ⁱⁱⁱ Ibid.