

Congestive Heart Failure Tutorial

One of the costliest illnesses from both a financial point of view and a quality of life point of view is Congestive Heart Failure. Many organizations, including CMS, have initiated targeted CHF Treatment programs to address both. The reality is that a growing number of people are developing CHF at a younger age. And, aggressively treated, it is possible to decrease the morbidity, delay the mortality and decrease the cost of care for this illness.

This is why SETMA developed a CHF Clinic in which to aggressively treat patients with this illness through standardization of therapy and frequent monitoring of the patient's progress.

This disease management tool is built to the standards established by the Physician Consortium for Performance Improvement.

How to find the CHF Templates

AAA Home

SOUTHEAST TEXAS MEDICAL ASSOCIATES, LLP

Patient: Robert Test Jr, Sex: M, Age: 39, DOB: 03/25/1970
 Home Phone: (409)888-8888, Work Phone: () -
 Patient's Code Status: DNR

Patient has one or more alerts! [Click Here to View Alerts](#)

[SETMA's LESS Initiative](#) | [Preventing Diabetes](#) | [Preventing Hypertension](#) | [Medical Home Coordination](#)
[Charge Posting Tutorial](#) | [ICD-9 Code Tutorial](#) | [E&M Coding Recommendations](#) | **Needs Attention!!**

[Master GP](#) | [Nursing Home](#) | [Ophthalmology](#) | [Pediatrics](#) | [Physical Therapy](#) | [Podiatry](#) | [Rheumatology](#)
[Daily Progress](#) | [Admission Orders](#) | [Discharge](#) | [Insulin Infusion](#) | [Colorectal Surgery](#) | [Pain Management](#)

[Exercise](#) | [CHF Exercise](#) | [Diabetic Exercise](#) | [Drug Interactions](#) | [Smoking Cessation](#)
[Hydration](#) | [Nutrition](#) | [Guidelines](#) | [Lab Future](#) | [Lab Results](#)

Disease Management

[Acute Coronary Syn](#) | [Angina](#) | [Asthma](#) | **CHF** | [Diabetes](#) | [Headaches](#) | [Hypertension](#) | [Lipids](#) | [Cardiometabolic Risk Syndrome](#)
[Weight Management](#) | [Renal Failure](#) | [Diabetes Edu](#)

Patient's Pharmacy: Daleo Pharmacy
 Phone: (409)833-2255
 Fax: (409)833-8549

Rx Sheet - Active
 Rx Sheet - New
 Rx Sheet - Complete
 Home Health

Pending Referrals

Status	Priority	Referral	Referring Provider

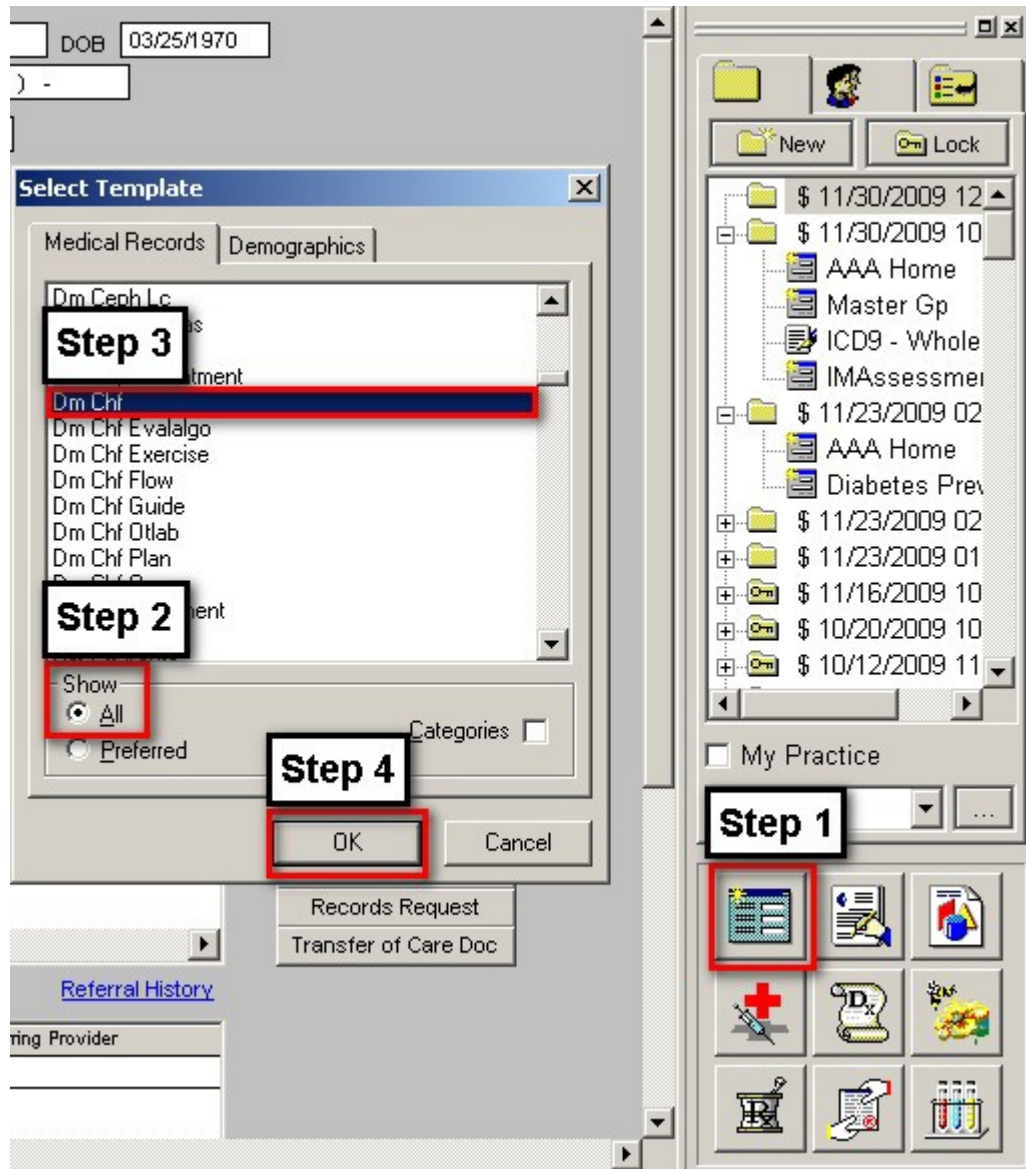
Archived Referrals - Do not use for new referrals [Referral History](#)

Status	Priority	Referral	Referring Provider

Chart Note

- Return Info
- Return Doc
- Email
- Telephone
- Records Request
- Transfer of Care Doc

Master Tool Bar Icon



SETMA's CHF Suite of Templates contains the following templates:

1. Master CHF
2. Nursing
3. Histories
4. Health
5. Questionnaires
6. System Review
7. Physical Exam
8. Radiology
9. Procedures

10. Treatment Guide
11. Treatment Plan
12. CHF Questionnaire
13. Flowsheet

CHF Management

Patient: Robert Test Jr
Sex: M Age: 39

Goals of Therapy: Diagnosing, Classification

Vital Signs

Height: 72.00 inches
Weight: .00 pounds
BMI: [Link]
Body Fat: 22 %
BMR: [Link]
Waist: .00 inches
Hips: .00 inches
Risk Ratio: .00
Blood Pressure: [] / [] mmHg
Pulse: []
Last Echo: []
Ejection Fraction: [] [Help]
Ventricular Dys: Systolic [Help]
CHF Class: Class II [Help]
Framingham 10-Yr Risk: [] %
Mortality Risk: []
Global Cardio Risk: 1.4

Most Recent Labs [Check for New Labs]

Sodium	[]	[]	Cholesterol	150	06/06/2007
Potassium	[]	[]	Triglycerides	175	06/06/2007
Chloride	[]	[]	HDL	[]	[]
CO2	[]	[]	LDL	[]	[]
Glucose	[]	[]	Chol/HDL	[]	[]
BUN	[]	[]	Trig/HDL	[]	[]
Creatinine	[]	[]	UA Protein	[]	[]
Calcium	[]	[]	T3	[]	[]
Troponin	[]	[]	T4	[]	[]
CPK	[]	[]	T7	[]	[]
Digoxin	[]	[]	T-Uptake	[]	[]
PT	[]	[]	TSH	[]	[]
INR	[]	[]	proBNP	[]	[]
Fibrinogen	[]	[]	Sed Rate	[]	[]
PAI-1	[]	[]	D-Dimer	[]	[]

Medical History [] Labs Over Time []

Navigation Menu: Home, Nursing, Histories, Health, Questionnaires, System Review, Physical Exam, Radiology, Procedures, Treatment Guide, Treatment Plan, CHF Questionnaire, Flowsheet, Patient Info, Provider Info, CHF Primer, Treatment, Diagnosing Adults

Templates 2-9 are exact copies of the templates in the Master GP suite of templates. For explanations of these templates, please refer to the tutorial on the [Master GP](#)

The CHF tutorial will focus on:

- Master CHF template
- Treatment Guide template
- Treatment Plan template
- CHF Questionnaire template
- Flowsheet template

Master CHF Template

This template has a top portion and three columns below the materials which are presented at the top of the template.

Top

- Title of the template
- Patient's name, gender and age
- Five buttons:
 1. Goals of Therapy
 2. Differentiating
 3. Causes
 4. Diagnosing
 5. Classification

CHF Management

Patient:
 Sex: Age:

Goals of Therapy Differentiating Causes
 Diagnosing Classification

Vital Signs		Most Recent Labs		Check for New Labs	
Height	<input type="text" value="72.00"/> inches	Sodium	<input type="text" value="///"/>	Cholesterol	<input type="text" value="150"/> 06/06/2007
Weight	<input type="text" value=".00"/> pounds	Potassium	<input type="text" value="///"/>	Triglycerides	<input type="text" value="175"/> 06/06/2007
BMI	<input type="text"/>	Chloride	<input type="text" value="///"/>	HDL	<input type="text" value="///"/>
Body Fat	<input type="text" value="22"/> %	CO2	<input type="text" value="///"/>	LDL	<input type="text" value="///"/>
BMR	<input type="text"/> cal/day	Glucose	<input type="text" value="///"/>	Chol/HDL	<input type="text"/>
Waist	<input type="text" value=".00"/> inches	BUN	<input type="text" value="///"/>	Trig/HDL	<input type="text"/>
Hips	<input type="text" value=".00"/> inches	Creatinine	<input type="text" value="///"/>	UA Protein	<input type="text" value="///"/>
Risk Ratio	<input type="text" value=".00"/>	Calcium	<input type="text" value="///"/>	T3	<input type="text" value="///"/>
Blood Pressure	<input type="text"/> / <input type="text"/> mmHg	Troponin	<input type="text" value="///"/>	T4	<input type="text" value="///"/>
Pulse	<input type="text"/>	CPK	<input type="text" value="///"/>	T7	<input type="text" value="///"/>
Last Echo	<input type="text" value="///"/>	Digoxin	<input type="text" value="///"/>	T-Uptake	<input type="text" value="///"/>
Ejection Fraction	<input type="text"/> Help	PT	<input type="text" value="///"/>	TSH	<input type="text" value="///"/>
Ventricular Dys	<input type="text" value="Systolic"/> Help	INR	<input type="text" value="///"/>	proBNP	<input type="text" value="///"/>
CHF Class	<input type="text" value="Class II"/> Help	Fibrinogen	<input type="text" value="///"/>	Sed Rate	<input type="text" value="///"/>
Framingham 10-Yr Risk	<input type="text"/> %	PAI-1	<input type="text" value="///"/>	D-Dimer	<input type="text" value="///"/>
Mortality Risk	<input type="text"/>	Medical History Labs Over Time			
Global Cardio Risk	<input type="text" value="1.4"/>				

Home

Nursing

Histories

Health

Questionnaires

System Review

Physical Exam

Radiology

Procedures

Treatment Guide

Treatment Plan

CHF Questionnaire

Flowsheet

Patient Info

Provider Info

CHF Primer

Treatment

Diagnosing Adults

This pop-up gives the patient a sense of what the successful treatment of CHF should be. This material is printed on the CHF Follow-up note which is given to the patient. The pop-up states:

Goals of Therapy

The screenshot displays a medical software interface for CHF Management. A pop-up window titled "Goals of Therapy" is centered on the screen. The background window shows patient information for Robert Test Jr, a 39-year-old male. The "Goals of Therapy" pop-up lists the following goals:

- Improve Symptoms:**
 - * Improve Symptoms
 - * Improve Functional Capacity
 - * Improve Quality of Life
 - * Slow or decrease progression
 - * Decrease need for Hospitalization
 - * Prolong Survival
- Control:**
 - * Systolic BP < 120 mmHg
 - * Heart Rate
 - * Weight
 - * Fluid Volume

The pop-up window includes "OK" and "Cancel" buttons at the bottom.

Clues for Differentiating between Systolic and Diastolic Dysfunction in patients with Heart Failure

One of the most important elements of the treatment of CHF is to determine whether the patient has Diastolic, Systolic or Combined Diastolic/Systolic failure, as the treatment of each differ significantly.

This pop-up lists 18 history, physical exam and procedure results from 5 categories, which are common in the evaluation and treatment of a patient with CHF. When the appropriate check boxes are marked and the "Calculate" button is depressed, a conclusion will appear which suggests the probability of the patient having systolic or diastolic CHF.

Note: It is a useful exercise to click one element at a time and then depressed “Calculate.” This will allow you to see the probable impact each of the 18 elements have on the differentiation between systolic and diastolic dysfunction.

When you depress the button entitled **Differentiating**, the following directions and conclusion will be displayed:

“Select the following clues that are present in the evaluation of this patient. Click the ‘Calculate’ button at the bottom to view the conclusion.”

Conclusion -- this will state “The presentation of symptoms is most suggestive of (Diastolic or Systolic) heart failure.”

CHF Management

Patient: Robert Test Jr
Sex: M Age: 39

Goals of Therapy **Differentiating** Causes
Diagnosing Classification

Vital Signs **Most Recent Labs** Check for New Labs

Dm Chf Disting

Clues for Differentiating Between Systolic and Diastolic Dysfunction in Patients with Heart Failure

Select the following clues that are present in the evaluation of this patient. Click the "Calculate" button at the bottom to view the conclusion.

History	Chest Radiography
<input type="checkbox"/> Hypertension	<input type="checkbox"/> Cardiomegaly
<input type="checkbox"/> Coronary Artery Disease	<input type="checkbox"/> Pulmonary Congestion
<input checked="" type="checkbox"/> Diabetes Mellitus	Electrocardiogram
<input type="checkbox"/> Valvular Heart Disease	<input type="checkbox"/> Q Wave
Physical Exam	<input type="checkbox"/> Left Ventricle Hypertrophy
<input type="checkbox"/> Third Heart Sound (S3) Gallop	Echocardiogram
<input type="checkbox"/> Fourth Heart Sound (S4) Gallop	<input type="checkbox"/> Decreased Ejection Fraction
<input type="checkbox"/> Rales	<input type="checkbox"/> Dilated Left Ventricle
<input type="checkbox"/> Jugular Venous Distention	<input type="checkbox"/> Left Ventricle Hypertrophy
<input type="checkbox"/> Edema	
<input type="checkbox"/> Displaced Point of Maximal Impulse	<input type="button" value="Calculate"/>
<input type="checkbox"/> Mitral Regurgitation	

Causes of CHF

This is a good review of the differential diagnoses for the causes of CHF. Check Boxes are present to allow you to document any of the conditions which might affect this patient. Any elements of this pop-up which are captured elsewhere in the EMR are automatically populated here.

Diagnosing Heart Failure (Boston Criteria for Diagnosing Heart Failure)

This tool is based on the evaluation of three categories: History, Physical, and Chest Radiograph. Once the relevant elements are documented, depressing the “Calculate” button will display a result.

Each element has different values based on the weighted score developed by the Boston Criteria. For instance, “resting dyspnea,” results in a score of 4, while “dyspnea climbing stairs,” only rates a score of 1. The following is the scoring and the conclusions based on the numerical score:

- 1-3 CHF Unlikely
- 4-7 CHF Possible
- 8 and higher CHF Definite

The instructions on the pop-up state, “Select the following criteria for this patient and click “Calculate” to review the conclusion.”

The screenshot shows the 'CHF Management' software interface. A pop-up window titled 'Diagnosing Heart Failure (Boston Criteria for Diagnosing Heart Failure)' is open. The window contains the following elements:

- Header:** 'Diagnosing Heart Failure (Boston Criteria for Diagnosing Heart Failure)'. Below this is the instruction: 'Select the following criteria for this patient and click calculate to review the conclusion.'
- Category I - History:**
 - Rest Dyspnea
 - Orthopnea
 - Paroxysmal Nocturnal Dyspnea
 - Dyspnea while walking on level area
 - Dyspnea while climbing
- Category II - Physical Exam:**
 - Heart Rate Abnormality [] bpm
 - Jugular Venous Elevation [] cm H2O
 - Hepatomegaly
 - Edema
 - Lung Crackles
 - Basilar
 - More than basilar
 - Wheezing
 - Third Heart Sound
- Category III - Chest Radiography:**
 - Alveolar Pulmonary Edema
 - Interstitial Pulmonary Edema
 - Bilateral Pleural Effusion
 - Cardiothoracic ratio greater than 0.50
 - Upper zone flow redistribution
- Buttons:** A 'Calculate' button is located to the right of the Physical Exam section. At the bottom right are 'OK' and 'Cancel' buttons.

Classification

This pop-up is instructional and addresses the various pathophysiological classifications of CHF. The pop-up allows you to check the box beside the type of CHF the patient has and this material will then print on the **CHF Follow-up note** and **CHF Chart Document**.

Classification of Heart Failure

Heart failure is defined as a pathophysiological state in which an abnormality of cardiac function is responsible for failure of the heart to pump blood at a rate commensurate with metabolic requirements or to do so only from an elevated filling pressure.

Definitions and descriptions are given for the following classes of CHF:

CHF Management

Patient
 Sex Age

[Home](#)
[Nursing](#)
[Histories](#)
[Health](#)
[Questionnaires](#)
[System Review](#)
[Physical Exam](#)
[Radiology](#)
[Procedures](#)
[Treatment Guide](#)
[Treatment Plan](#)
[CHF Questionnaire](#)
[Flowsheet](#)

[Patient Info](#)
[Provider Info](#)
[CHF Primer](#)
[Treatment](#)
[Diagnosing Adults](#)

Goals of Therapy Differentiating Causes

Diagnosing **Classification**

Vital Signs

Height inches

Weight pounds

[BMI](#)

[Body Fat](#) %

[BMR](#) cal/day

Waist inches

Hips inches

[Risk Ratio](#)

Blood Pressure / mmHg

Pulse

Last Echo

Ejection Fraction

Ventricular Dys

CHF Class

[Framingham 10-Yr Risk](#) %

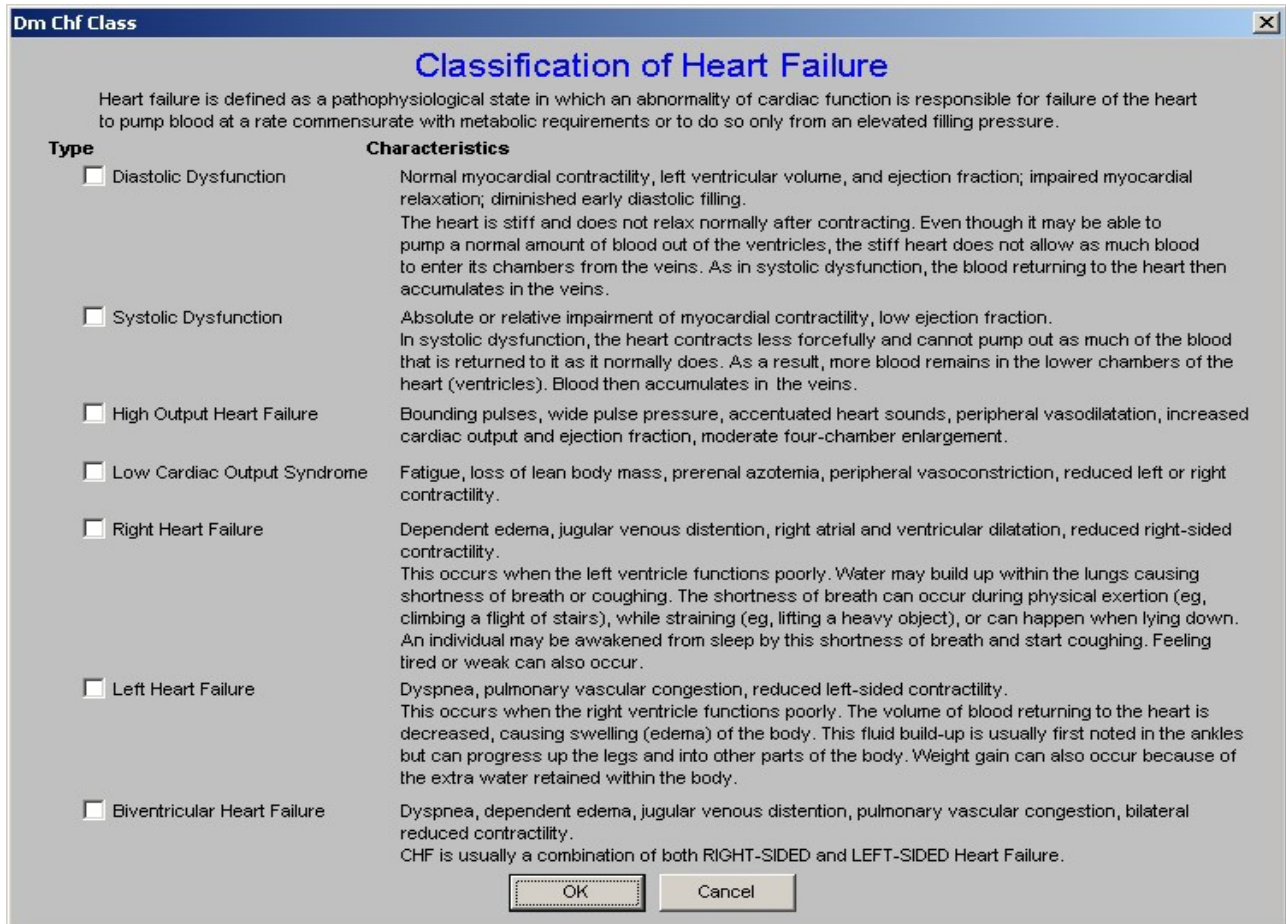
[Mortality Risk](#)

[Global Cardio Risk](#)

Most Recent Labs

Sodium	<input type="text" value="///"/>
Potassium	<input type="text" value="///"/>
Chloride	<input type="text" value="///"/>
CO2	<input type="text" value="///"/>
Glucose	<input type="text" value="///"/>
BUN	<input type="text" value="///"/>
Creatinine	<input type="text" value="///"/>
Calcium	<input type="text" value="///"/>
Troponin	<input type="text" value="///"/>
CPK	<input type="text" value="///"/>
Digoxin	<input type="text" value="///"/>
PT	<input type="text" value="///"/>
INR	<input type="text" value="///"/>
Fibrinogen	<input type="text" value="///"/>
PAI-1	<input type="text" value="///"/>

Cholesterol	<input type="text" value="150"/>	<input type="text" value="06/06/2007"/>
Triglycerides	<input type="text" value="175"/>	<input type="text" value="06/06/2007"/>
HDL	<input type="text" value="///"/>	
LDL	<input type="text" value="///"/>	
Chol/HDL	<input type="text" value=""/>	
Trig/HDL	<input type="text" value=""/>	
UA Protein	<input type="text" value="///"/>	
T3	<input type="text" value="///"/>	
T4	<input type="text" value="///"/>	
T7	<input type="text" value="///"/>	
T-Uptake	<input type="text" value="///"/>	
TSH	<input type="text" value="///"/>	
proBNP	<input type="text" value="///"/>	
Sed Rate	<input type="text" value="///"/>	
D-Dimer	<input type="text" value="///"/>	



Beneath these five buttons are three columns on the Master CHF Template

Column 1

Vital Signs

Height

Weight

BMI

Body Fat

BMR

Waist

Hips

Risk Ratio

Blood Pressure

Pulse

Last Echo -- this will interact with the Health Maintenance template to note the date of the last echo.

Ejection Fraction -- the percent value for the ejection fraction should be manually entered here.

Ventricular Dysfunction -- the evaluation of whether the patient has diastolic or systolic

dysfunction, both or neither, needs to be documented here. When this is documented here, it interacts with the Treatment Guide template.

CHF Class -- the description of the classes of CHF are attached to this name. When this is documented here, it interacts with the Treatment Guide template.

Framingham 10-Yr Risk -- this documents the Framingham Risk Score. For information on how to use the Framingham template see the [Framingham tutorial](#).

Mortality Risk -- this is a new algorithm which assesses the risk of short term death from CHF. This was developed for in-patient use and has limited benefit in the outpatient setting.

Global Cardio Risk -- for information on this score and its significance see the [Framingham tutorial](#).

Column 2

Check for New Labs

Most Recent Labs

Medical History -- this launches a pop-up on which 14 different issues related to cardiac history are documented. Where this information is captured in the EMR, it is auto posted here. Where it is not, it will need to be manually added.

Labs Over time

CHF Management

Patient
 Sex Age

Goals of Therapy Differentiating Causes

Diagnosing

Home

Nursing

Histories

Health

Questionnaires

System Review

Physical Exam

Radiology

Procedures

Treatment Guide

Treatment Plan

CHF Questionnaire

Flowsheet

Vital Signs

Height inches
 Weight pounds
[BMI](#)
[Body Fat](#) %
[BMR](#) cal/day
 Waist inches
 Hips inches
[Risk Ratio](#)
 Blood Pressure / mmHg
 Pulse
 Last Echo
 Ejection Fraction
 Ventricular Dys
 CHF Class
[Framingham 10-Yr Risk](#) %
[Mortality Risk](#)
[Global Cardio Risk](#)

Most Recent Labs

Sodium	<input type="text" value=""/>	<input type="text" value=""/>	Cholesterol	<input type="text" value="150"/>	<input type="text" value="06/06/2007"/>
Potassium	<input type="text" value=""/>	<input type="text" value=""/>	Triglycerides	<input type="text" value="175"/>	<input type="text" value="06/06/2007"/>
Chloride	<input type="text" value=""/>	<input type="text" value=""/>	HDL	<input type="text" value=""/>	<input type="text" value=""/>
CO2	<input type="text" value=""/>	<input type="text" value=""/>	LDL	<input type="text" value=""/>	<input type="text" value=""/>
Glucose	<input type="text" value=""/>	<input type="text" value=""/>	Chol/HDL	<input type="text" value=""/>	<input type="text" value=""/>
BUN	<input type="text" value=""/>	<input type="text" value=""/>	Trig/HDL	<input type="text" value=""/>	<input type="text" value=""/>
Creatinine	<input type="text" value=""/>	<input type="text" value=""/>	UA Protein	<input type="text" value=""/>	<input type="text" value=""/>
Calcium	<input type="text" value=""/>	<input type="text" value=""/>	T3	<input type="text" value=""/>	<input type="text" value=""/>
Troponin	<input type="text" value=""/>	<input type="text" value=""/>	T4	<input type="text" value=""/>	<input type="text" value=""/>
CPK	<input type="text" value=""/>	<input type="text" value=""/>	T7	<input type="text" value=""/>	<input type="text" value=""/>
Digoxin	<input type="text" value=""/>	<input type="text" value=""/>	T-Uptake	<input type="text" value=""/>	<input type="text" value=""/>
PT	<input type="text" value=""/>	<input type="text" value=""/>	TSH	<input type="text" value=""/>	<input type="text" value=""/>
INR	<input type="text" value=""/>	<input type="text" value=""/>	proBNP	<input type="text" value=""/>	<input type="text" value=""/>
Fibrinogen	<input type="text" value=""/>	<input type="text" value=""/>	Sed Rate	<input type="text" value=""/>	<input type="text" value=""/>
PAI-1	<input type="text" value=""/>	<input type="text" value=""/>	D-Dimer	<input type="text" value=""/>	<input type="text" value=""/>

Dm Chf Medhx X

Medical History

No Yes History of myocardial infarction?

No Yes Hypertension

No Yes Valvular Heart Disease

No Yes Diabetes

No Yes Peripheral Vascular Disease

No Yes Hypercholesterolemia

No Yes Rheumatic Fever

No Yes Chest Irradiation

No Yes Exposure to Antineoplastic Agents (e.g. Anthracycline, Trastuzumab)

No Yes Alcohol Use

No Yes Illicit Drug Use

No Yes Does the patient smoke?

No Yes Exposure to Sexually Transmitted Disease

No Yes Family History of Atherosclerotic disease or cardiomyopathy, sudden death, conduction system disease and cardiomyopathy

Column 3

Navigation Buttons

The screenshot displays the CHF Management software interface. At the top, the title "CHF Management" is centered. Below it, there are tabs for "Goals of Therapy", "Differentiating", and "Causes". The patient information section shows "Patient Robert Test Jr", "Sex M", and "Age 39". The main content area is divided into "Vital Signs" and "Most Recent Labs". The "Vital Signs" section includes fields for Height (72.00 inches), Weight (.00 pounds), BMI, Body Fat (22%), BMR, Waist (.00 inches), Hips (.00 inches), Risk Ratio (.00), Blood Pressure, Pulse, Last Echo, Ejection Fraction, Ventricular Dys (Systolic), CHF Class (Class II), Framingham 10-Yr Risk, Mortality Risk, and Global Cardio Risk (1.4). The "Most Recent Labs" section lists various lab tests with their values and dates, such as Sodium, Potassium, Cholesterol (150), Triglycerides (175), HDL, LDL, UA Protein, T3, T4, T7, T-Uptake, TSH, proBNP, Sed Rate, and D-Dimer. A navigation sidebar on the right contains buttons for Home, Nursing, Histories, Health, Questionnaires, System Review, Physical Exam, Radiology, Procedures, Treatment Guide, Treatment Plan, CHF Questionnaire, Flowsheet, Patient Info, Provider Info, CHF Primer, Treatment, and Diagnosing Adults. The bottom five buttons (Patient Info, Provider Info, CHF Primer, Treatment, and Diagnosing Adults) are highlighted with a red border.

The final five buttons within the navigation scheme are all document related.

Patient Info – This button will launch a pop-up window that will allow the user to choose from a list of 15 patient-related documents.

CHF Management

Patient: Robert Test Jr
Sex: M Age: 39

Goals of Therapy | Differentiating | Causes
Diagnosing | Classification

Vital Signs

Height: 72.00 inches
Weight: .00 pounds
BMI: [BMI](#)
Body Fat: 22 %
BMR: [BMR](#) cal/day
Waist: .00 inches
Hips: .00 inches
Risk Ratio: [Risk Ratio](#) .00
Blood Pressure: / mmHg
Pulse:
Last Echo: / /
Ejection Fraction:
Ventricular Dys: Systolic
CHF Class: Class II
[Framingham 10-Yr Risk](#)
[Mortality Risk](#)
[Global Cardio Risk](#) 1.4

Dm Chf Docs

Patient Information

- Welcome Letter
- Glossary
- What is CHF?
- How is CHF Treated?
- Treatment Options
- Recovery Prospects
- Low Sodium
- Potassium in Foods
- What is Echocardiogram?
- When To Call Your Doctor
- Questions for Your Doctor
- CPET
- Fluid Restriction
- Hyponatremia
- CHF and Inactivity

06/06/2007
06/06/2007
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OK Cancel

Home
Nursing
Histories
Health
Questionnaires
System Review
Physical Exam
Radiology
Procedures
Treatment Guide
Treatment Plan
CHF Questionnaire
Flowsheet
Patient Info
Provider Info
CHF Primer
Treatment
Diagnosing Adults

Provider Info – This button will launch a pop-up window that will allow the user to choose from a list of 20 provider-related documents.

CHF Management

Patient: Robert Test Jr
 Sex: M Age: 39

Goals of Therapy | Differentiating | Causes
 Diagnosing | Classification

Vital Signs

Height: 72.00 inches
 Weight: .00 pounds
 BMI:
 Body Fat: 22 %
 BMR:
 Waist: .00 inches
 Hips: .00 inches
 Risk Ratio: .00
 Blood Pressure: / mmHg
 Pulse:
 Last Echo: / /
 Ejection Fraction:
 Ventricular Dys: Systolic
 CHF Class: Class II
 Framingham 10-Yr Risk:
 Mortality Risk:
 Global Cardio Risk: 1.4

Dm Chf Prodocs

Provider Information

- CHF Introduction
- Causes of CHF
- DHF and Primary Physicians
- Drug Therapy for CHF
- Aggressive Treatment is Necessary
- Pathophysiology of CHF
- BP, Heart Rate, Diastolic Heart Failure
- Types of CHF
- C-Reactive Protein
- BNP Level
- Glitazones and Insulin
- DHF
- DHF II
- Systolic and Diastolic Dysfunction Causes
- Forms of Heart Failure
- Left, Right-Sided Heart Failure
- Diagnosing CHF
- Characteristics of DHF
- Causes of SHF
- Causes of DHF

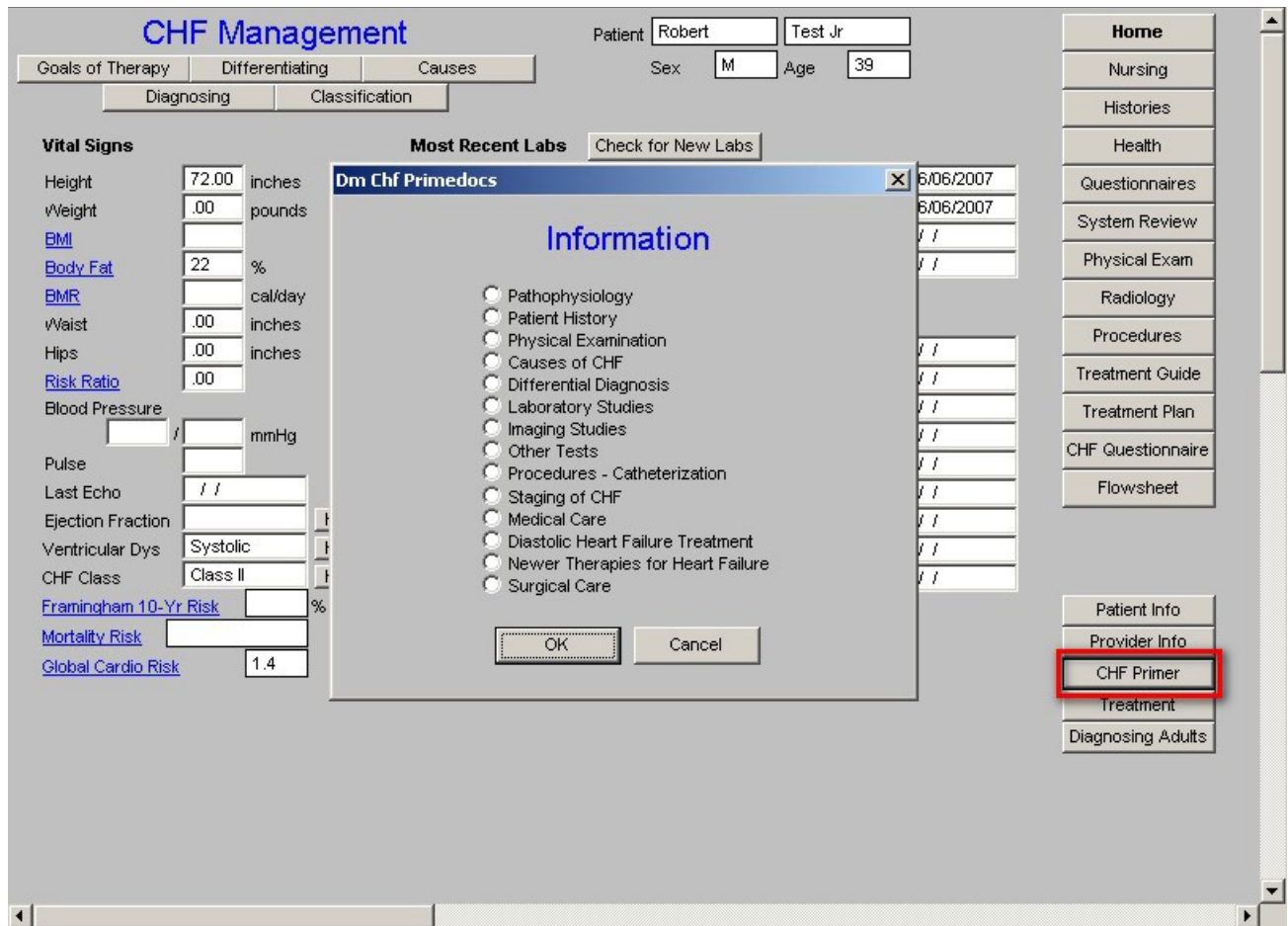
06/06/2007
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OK Cancel

Home
 Nursing
 Histories
 Health
 Questionnaires
 System Review
 Physical Exam
 Radiology
 Procedures
 Treatment Guide
 Treatment Plan
 CHF Questionnaire
 Flowsheet

Patient Info
Provider Info
 CHF Primer
 Treatment
 Diagnosing Adults

CHF Primer -- This button will launch a pop-up window that will allow the user to choose from a list of 14 documents designed to educate in the area of CHF.



Treatment – This button will launch a single document for printing entitled "Outpatient Treatment of Systolic Heart Failure".

Diagnosing Adults – This button will launch a single document for printing entitled "Diagnosis of Heart Failure in Adults".

Treatment Guide Template

CHF Management

Patient:
 Sex: Age:

[Home](#)
[Nursing](#)
[Histories](#)
[Health](#)
[Questionnaires](#)
[System Review](#)
[Physical Exam](#)
[Radiology](#)
[Procedures](#)
[Treatment Guide](#)
[Treatment Plan](#)
[CHF Questionnaire](#)
[Flowsheet](#)

[Patient Info](#)
[Provider Info](#)
[CHF Primer](#)
[Treatment](#)
[Diagnosing Adults](#)

Vital Signs

Height	<input type="text" value="72.00"/>	inches	
Weight	<input type="text" value=".00"/>	pounds	
BMI	<input type="text"/>		
Body Fat	<input type="text" value="22"/>	%	
BMR	<input type="text"/>	cal/day	
Waist	<input type="text" value=".00"/>	inches	
Hips	<input type="text" value=".00"/>	inches	
Risk Ratio	<input type="text" value=".00"/>		
Blood Pressure	<input type="text"/>	/ <input type="text"/>	mmHg
Pulse	<input type="text"/>		
Last Echo	<input type="text" value="//"/>		
Ejection Fraction	<input type="text"/>		Help
Ventricular Dys	<input type="text" value="Systolic"/>		Help
CHF Class	<input type="text" value="Class II"/>		Help
Framingham 10-Yr Risk	<input type="text"/>	%	
Mortality Risk	<input type="text"/>		
Global Cardio Risk	<input type="text" value="1.4"/>		

Most Recent Labs

Sodium	<input type="text" value="//"/>	Cholesterol	<input type="text" value="150"/>	<input type="text" value="06/06/2007"/>
Potassium	<input type="text" value="//"/>	Triglycerides	<input type="text" value="175"/>	<input type="text" value="06/06/2007"/>
Chloride	<input type="text" value="//"/>	HDL	<input type="text" value="//"/>	
CO2	<input type="text" value="//"/>	LDL	<input type="text" value="//"/>	
Glucose	<input type="text" value="//"/>	Chol/HDL	<input type="text"/>	
BUN	<input type="text" value="//"/>	Trig/HDL	<input type="text"/>	
Creatinine	<input type="text" value="//"/>	UA Protein	<input type="text"/>	<input type="text" value="//"/>
Calcium	<input type="text" value="//"/>	T3	<input type="text"/>	<input type="text" value="//"/>
Troponin	<input type="text" value="//"/>	T4	<input type="text"/>	<input type="text" value="//"/>
CPK	<input type="text" value="//"/>	T7	<input type="text"/>	<input type="text" value="//"/>
Digoxin	<input type="text" value="//"/>	T-Uptake	<input type="text"/>	<input type="text" value="//"/>
PT	<input type="text" value="//"/>	TSH	<input type="text"/>	<input type="text" value="//"/>
INR	<input type="text" value="//"/>	proBNP	<input type="text"/>	<input type="text" value="//"/>
Fibrinogen	<input type="text" value="//"/>	Sed Rate	<input type="text"/>	<input type="text" value="//"/>
PAI-1	<input type="text" value="//"/>	D-Dimer	<input type="text"/>	<input type="text" value="//"/>

This template guides you through the 12 steps of the standard treatment of CHF. They are:

1. Atrial Fibrillation or History of Thromboembolism?
2. Diastolic Dysfunction
3. Systolic Dysfunction Symptoms of Volume Overload
4. Add ACEI & Titrate to Target Dose?
5. Ace intolerant
6. NYHA Class I HF? ([Help](#))
7. NYHA Class II HF? ([Help](#))
8. Acceptable Level of functional Status
9. Add Digoxin (IF no Bradycardia)
10. Acceptable level of functional Status
11. Recent NYHA Class IV HF and Class III Or Class IV Symptoms ([Help](#))
12. Acceptable Level of Functional Status

Also at the bottom of the template is a Cardiologist Referral Template.

Step by Step Review of Treatment Guide Template

The first five steps have the following instruction permanently displayed on the template, “Continue to Next Question.” After that, this instruction appears according to your response. (See below)

Step 1 – Atrial Fibrillation or History of Thromboembolism?

There are two choices:

- No, if the patient does not have atrial fibrillation
- Yes, if the patient does have atrial fibrillation

The screenshot shows a web-based form titled "CHF Guidelines". It contains five rows of questions, each with a "No" and "Yes" radio button option. The "Continue to Next Question" text is visible below each question. A "Return" button is located on the right side of the form. The first row is highlighted with a red border.

CHF Guidelines			
<input checked="" type="radio"/> No	Atrial Fibrillation or History of Thromboembolism? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Diastolic Dysfunction? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Ace Intolerant? Continue to Next Question	<input type="radio"/> Yes	

If the answer is, “No,” move on to Step 2.

If the answer is “Yes,” the following will appear in two columns:

The screenshot shows the 'CHF Guidelines' form. In the 'Yes' column, there are three options: 'Anticoagulate with Warfarin', 'Patient Refuses Coumadin' (with a checked checkbox), and 'Coumadin' (with a button). To the right, there are two buttons: 'Coumadin' and 'Coumadin Refer'. A red box highlights the 'Patient Refuses Coumadin' checkbox and the 'Coumadin' and 'Coumadin Refer' buttons. Another red box highlights the 'Continue to Next Question' button in the 'No' column.

Column 1 –

- Anticoagulate with warfarin
- **Patient refuses Coumadin** – this is a check box which allows you to document the patient’s refusal to begin Coumadin.

Note: If the patient refuses Coumadin, it is important to document the reason why. When you check the box beside the “Patient Refuses Coumadin,” a pick list appears with the following options:

The screenshot shows the 'CHF Guidelines' form with a 'Medrefusal' pick list open. The pick list contains the following options: 'allergy', 'economical', 'medical', 'religious', and 'social'. The 'Patient Refuses Coumadin' checkbox is checked. The 'Coumadin' button is visible in the top right corner. A red box highlights the 'Patient Refuses Coumadin' checkbox and the 'Medrefusal' pick list.

Column 2 –

There are two buttons which are entitled:

- **Coumadin** – this takes you to the **Coumadin Template** which will be discussed elsewhere.
- **Coumadin Refer** – this launches the referral template with which you may send the patient to Coumadin clinic. When you depress this button, you will be asked whether to associate a template or not. Click “**This template**” and then click **OK**. An e-mail will appear which can be send to referral. The patient will then be called with an appointment to the Coumadin Clinic.

CHF Guidelines

<input type="radio"/> No	Atrial Fibrillation or History of Thromboembolism? Continue to Next Question	<input checked="" type="radio"/> Yes	Anticoagulate with Warfarin	<input type="checkbox"/> Patient Refuses Coumadin	<input type="text"/>	<input type="button" value="Coumadin"/> <input type="button" value="Coumadin Refer"/>
--------------------------	----------------------------------------------------------------------------------------	--------------------------------------	-----------------------------	---------------------------------------------------	----------------------	------------------------------------------------------------------------------------------

To the right of Step 1 is a **Return** button which will take you back to the **Master CHF template**,

CHF Guidelines

<input type="radio"/> No	Atrial Fibrillation or History of Thromboembolism? Continue to Next Question	<input checked="" type="radio"/> Yes	Anticoagulate with Warfarin	<input type="checkbox"/> Patient Refuses Coumadin	<input type="text"/>	<input type="button" value="Coumadin"/> <input type="button" value="Coumadin Refer"/> <input type="button" value="Return"/>
--------------------------	----------------------------------------------------------------------------------------	--------------------------------------	-----------------------------	---------------------------------------------------	----------------------	-----------------------------------------------------------------------------------------------------------------------------------

Step 2 -- Diastolic Dysfunction

There are two choices:

- No, if the patient **does not** have Diastolic Dysfunction
- Yes, if the patient **does** have Diastolic Dysfunction

Note: If the echocardiogram data is filled out at the bottom of **Column I on the Master CHF Template** and if the ventricular dysfunction – either diastolic or systolic – is completed, Step 2 will have been automatically completed before you go to the Treatment Guide.

CHF Guidelines

<input checked="" type="radio"/> No	Atrial Fibrillation or History of Thromboembolism? Continue to Next Question	<input type="radio"/> Yes				<input type="button" value="Return"/>
<input checked="" type="radio"/> No	Diastolic Dysfunction? Continue to Next Question	<input type="radio"/> Yes				
<input checked="" type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload? Continue to Next Question	<input type="radio"/> Yes				
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose? Continue to Next Question	<input type="radio"/> Yes				
<input checked="" type="radio"/> No	Ace Intolerant? Continue to Next Question	<input type="radio"/> Yes			<input type="text"/>	

If the answer is, “No,” move on to Step 3.

<input checked="" type="radio"/> No	Diastolic Dysfunction?	<input type="radio"/> Yes	
Continue to Next Question			

If the answer is, “Yes,” the following three instructions will appear:

1. Adequate blood pressure control
2. Diuretic
3. Control Ventricular rate with CCB's

<input type="radio"/> No	Diastolic Dysfunction?	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Adeqaute blood pressure control <input type="button" value="Help"/> <input type="checkbox"/> Digoxin
Continue to Next Question			<input type="checkbox"/> Diuretic <input type="button" value="Help"/> <input type="checkbox"/> Nitrates
			<input type="checkbox"/> Control ventricular rate with CCB's <input type="button" value="Help"/> <input type="checkbox"/> Beta-blockers, ARBs
			Brand Name

In the third, column there are the following three drugs and/or classes of drugs which can be used in Diastolyic Dysfunction:

- Digoxin
- Nitrates
- Beta-Blockers and ARBs

<input type="radio"/> No	Diastolic Dysfunction?	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Adeqaute blood pressure control <input type="button" value="Help"/> <input type="checkbox"/> Digoxin
Continue to Next Question			<input type="checkbox"/> Diuretic <input type="button" value="Help"/> <input type="checkbox"/> Nitrates
			<input type="checkbox"/> Control ventricular rate with CCB's <input type="button" value="Help"/> <input type="checkbox"/> Beta-blockers, ARBs
			Brand Name


In a second column are three **Help** buttons which have the following content:

<input type="radio"/> No	Diastolic Dysfunction?	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Adeqaute blood pressure control <input type="button" value="Help"/> <input type="checkbox"/> Digoxin
Continue to Next Question			<input type="checkbox"/> Diuretic <input type="button" value="Help"/> <input type="checkbox"/> Nitrates
			<input type="checkbox"/> Control ventricular rate with CCB's <input type="button" value="Help"/> <input type="checkbox"/> Beta-blockers, ARBs
			Brand Name


<input type="radio"/> No	Diastolic Dysfunction?	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Adeqaute blood pressure control <input type="button" value="Help"/> <input type="checkbox"/> Digoxin
Continue to Next Question			<input type="checkbox"/> Diuretic <input type="button" value="Help"/> <input type="checkbox"/> Nitrates
			<input type="checkbox"/> Control ventricular rate with CCB's <input type="button" value="Help"/> <input type="checkbox"/> Beta-blockers, ARBs
			Brand Name

<input type="radio"/> No	Diastolic Dysfunction? Continue to Next Question	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Adequate blood pressure control <input type="checkbox"/> Diuretic <input type="checkbox"/> Control ventricular rate with CCB's	<input type="button" value="Help"/> <input type="button" value="Help"/> <input type="button" value="Help"/>	<input type="button" value="Digoxin"/> <input type="button" value="Nitrates"/> <input type="button" value="Beta blockers"/> <input type="button" value="ARBs"/>	Brand Name
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Nitrates [X]

 Vasodilators which lower blood pressure are associated with tachycardia that inhibits diastolic filling and aggravate diastolic CHF.

Digoxin [X]

 Digoxin is not recommended with the exception of a patient with atrial fibrillation. On the other hand, it can improve symptoms and decrease hospitalizations in patients with isolated diastolic dysfunction. (Digitalis Investigation Group Trial)

There is then a link to the Medication Module. For instructions on how to use the Medication Module, [Click Here](#). At each point in the CHF treatment guide that medications are recommended, you will find a link to the Medication Module.

Step 3 – Systolic Dysfunction Symptoms of Volume Overload

There are two choices:

- No, if the patient does not have Systolic Dysfunction
- Yes, if the patient does have Systolic Dysfunction

Note: If the echocardiogram data is filled out at the bottom of Column I on the Master CHF Template and if the ventricular dysfunction – either diastolic or systolic – is completed, Step 3 will be automatically completed.

CHF Guidelines

<input checked="" type="radio"/> No	Atrial Fibrillation or History of Thromboembolism? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Diastolic Dysfunction? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose? Continue to Next Question	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Ace Intolerant? Continue to Next Question	<input type="radio"/> Yes	<input type="text"/>

If the answer is, “No,” proceed to Step 4.
 If the answer is, “Yes,” the following will appear.

<input type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload? Continue to Next Question	<input checked="" type="radio"/> Yes	<div style="border: 2px solid red; padding: 5px;"> <p>Add Diuretic; Titrate Euvolumic State</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><input type="checkbox"/> Bumetanide</td> <td style="width: 20%;">Bumex</td> <td style="width: 30%;">0.5 - 10 mg/day</td> <td style="width: 10%;"></td> </tr> <tr> <td><input type="checkbox"/> Hydrochlorothiazide</td> <td>HCTZ</td> <td>12.5 - 50 mg/day</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Indapamide</td> <td>Lozol</td> <td>2.5 - 5 mg/day</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Metozolone</td> <td>Zaroxolyn</td> <td>5 - 20 mg/day</td> <td></td> </tr> </table> <div style="margin-top: 5px;"> <input type="checkbox"/> Patient Refuses Diuretic <input style="width: 100px;" type="text"/> </div> </div>	<input type="checkbox"/> Bumetanide	Bumex	0.5 - 10 mg/day		<input type="checkbox"/> Hydrochlorothiazide	HCTZ	12.5 - 50 mg/day		<input type="checkbox"/> Indapamide	Lozol	2.5 - 5 mg/day		<input type="checkbox"/> Metozolone	Zaroxolyn	5 - 20 mg/day	
<input type="checkbox"/> Bumetanide	Bumex	0.5 - 10 mg/day																	
<input type="checkbox"/> Hydrochlorothiazide	HCTZ	12.5 - 50 mg/day																	
<input type="checkbox"/> Indapamide	Lozol	2.5 - 5 mg/day																	
<input type="checkbox"/> Metozolone	Zaroxolyn	5 - 20 mg/day																	

Beside this list is a link to the Medication Module

Beneath this list is a box entitled **Patient Refuses Diuretic**. The pick list associated with the box is:

<input type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload?	<input checked="" type="radio"/> Yes	<input type="checkbox"/> Bumetanide Bumex 0.5 - 10 mg/day <input type="checkbox"/> Hydrochlorothiazide HCTZ 12.5 - 50 mg/day <input type="checkbox"/> Indapamide Lozol 2.5 - 5 mg/day <input type="checkbox"/> Metozolone Zaroxolyn 5 - 20 mg/day <input checked="" type="checkbox"/> Patient Refuses Diuretic <input type="text"/>	Brand Name <input type="text"/>
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose?	<input type="radio"/> Yes		Medrefusal allergy economical medical religious social Close
<input type="radio"/> No	Ace Intolerant?	<input type="radio"/> Yes		

Step 4 – Add ACEI & Titrate to Target Dose?

There are two choices:

CHF Guidelines			
<input checked="" type="radio"/> No	Atrial Fibrillation or History of Thromboembolism?	<input type="radio"/> Yes	<input type="text"/>
<input checked="" type="radio"/> No	Diastolic Dysfunction?	<input type="radio"/> Yes	<input type="text"/>
<input checked="" type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload?	<input type="radio"/> Yes	<input type="text"/>
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose?	<input type="radio"/> Yes	<input type="text"/>
<input checked="" type="radio"/> No	Ace Intolerant?	<input type="radio"/> Yes	<input type="text"/>

If you choose, “Yes,” the following will appear:

Link to [Medication Module](#)

<input type="radio"/> No	Add ACEI & Titrate to Target Dose?	<input type="radio"/> Yes	<input type="checkbox"/> Catopril <input type="checkbox"/> Enalapril <input type="checkbox"/> Fosinopril <input type="checkbox"/> Lisinopril <input type="checkbox"/> Altace	Capoten Vasotec Monopril Prinivil, Zestril Ramipril	6.25 - 50 mg TID 2.5 - 20 mg BID 5 - 40 mg QD 2.5 - 40 mg QD 1.25 - 10 mg QD	Brand Name [Dropdown]
<input type="radio"/> No			<input type="checkbox"/> Patient refuses an ACE [Text Field]			

Patient Refuses an ACE

If the patient refuses an ACE, a pick list for the reasons pops up from which you should select the applicable one.

<input type="radio"/> No	Add ACEI & Titrate to Target Dose?	<input type="radio"/> Yes	<input type="checkbox"/> Catopril <input type="checkbox"/> Enalapril <input type="checkbox"/> Fosinopril <input type="checkbox"/> Lisinopril <input type="checkbox"/> Altace	Capoten Vasotec Monopril Prinivil, Zestril Ramipril	6.25 - 50 mg TID 2.5 - 20 mg BID 5 - 40 mg QD 2.5 - 40 mg QD 1.25 - 10 mg QD	Brand Name [Dropdown]
<input type="radio"/> No			<input checked="" type="checkbox"/> Patient refuses an ACE [Text Field]			
<input type="radio"/> No	Ace Intolerant?	<input type="radio"/> Yes				

Medrefusal

- allergy
- economical
- medical
- religious
- social

Close

Step 5 – ACEI tolerant?

There are two options:

Answer, “No,” if the patient is not intolerant of ACEIs.

Answer, “Yes,” if patient had to stop ACEIs due to cough, etc. If you answer that the patient is intolerant of ACEIs, the following appears:

Thromboembolism?				Return
<input checked="" type="radio"/> No	Diastolic Dysfunction?	<input type="radio"/> Yes		
Continue to Next Question				
<input checked="" type="radio"/> No	Systolic Dysfunction Symptoms of Volume Overload?	<input type="radio"/> Yes		
Continue to Next Question				
<input checked="" type="radio"/> No	Add ACEI & Titrate to Target Dose?	<input type="radio"/> Yes		
Continue to Next Question				
<input checked="" type="radio"/> No	Ace Intolerant?	<input type="radio"/> Yes		
Continue to Next Question				
<input checked="" type="radio"/> No	NYHA Class I/II?	Help	<input type="radio"/> Yes	

[Medication Module](#) link

<input type="radio"/> No	Ace Intolerant?	<input checked="" type="radio"/> Yes	<div style="border: 2px solid red; padding: 5px;"> <p>Consider Hydralazine/Isosorbide Dinitrate or ARB</p> <table border="0"> <tr> <td><input type="checkbox"/> Hydralazine</td> <td></td> <td>75 - 300 mg QD - QID</td> </tr> <tr> <td><input type="checkbox"/> Isosorbide Dinitrate</td> <td></td> <td>30 - 160 mg QD - TID</td> </tr> <tr> <td><input type="checkbox"/> Eprosartan</td> <td>Teventen</td> <td>400 - 800 mg QD - BID</td> </tr> <tr> <td><input type="checkbox"/> Candesartan</td> <td>Atacand</td> <td>4 - 32 mg QD - BID</td> </tr> <tr> <td><input type="checkbox"/> Irbesartan</td> <td>Avapro</td> <td>75 - 300 mg QD</td> </tr> <tr> <td><input type="checkbox"/> Losartan</td> <td>Cozaar</td> <td>25 - 100 mg QD</td> </tr> <tr> <td><input type="checkbox"/> Olmesartan</td> <td>Benicar</td> <td>5 - 40 mg QD</td> </tr> <tr> <td><input type="checkbox"/> Telmisartan</td> <td>Micardis</td> <td>20 - 80 mg QD</td> </tr> <tr> <td><input type="checkbox"/> Valsartan</td> <td>Diovan</td> <td>80 - 320 mg QD</td> </tr> </table> <p><input type="checkbox"/> Patient refuses an ARB</p> </div>	<input type="checkbox"/> Hydralazine		75 - 300 mg QD - QID	<input type="checkbox"/> Isosorbide Dinitrate		30 - 160 mg QD - TID	<input type="checkbox"/> Eprosartan	Teventen	400 - 800 mg QD - BID	<input type="checkbox"/> Candesartan	Atacand	4 - 32 mg QD - BID	<input type="checkbox"/> Irbesartan	Avapro	75 - 300 mg QD	<input type="checkbox"/> Losartan	Cozaar	25 - 100 mg QD	<input type="checkbox"/> Olmesartan	Benicar	5 - 40 mg QD	<input type="checkbox"/> Telmisartan	Micardis	20 - 80 mg QD	<input type="checkbox"/> Valsartan	Diovan	80 - 320 mg QD
<input type="checkbox"/> Hydralazine		75 - 300 mg QD - QID																												
<input type="checkbox"/> Isosorbide Dinitrate		30 - 160 mg QD - TID																												
<input type="checkbox"/> Eprosartan	Teventen	400 - 800 mg QD - BID																												
<input type="checkbox"/> Candesartan	Atacand	4 - 32 mg QD - BID																												
<input type="checkbox"/> Irbesartan	Avapro	75 - 300 mg QD																												
<input type="checkbox"/> Losartan	Cozaar	25 - 100 mg QD																												
<input type="checkbox"/> Olmesartan	Benicar	5 - 40 mg QD																												
<input type="checkbox"/> Telmisartan	Micardis	20 - 80 mg QD																												
<input type="checkbox"/> Valsartan	Diovan	80 - 320 mg QD																												
Continue to Next Question																														

Patient refuses an ARB

<input type="radio"/> No	Ace Intolerant?	<input checked="" type="radio"/> Yes	Consider Hydralazine/Isosorbide Dinitrate or ARB <input type="checkbox"/> Hydralazine 75 - 300 mg QD - QID <input type="checkbox"/> Isosorbide Dinitrate 30 - 160 mg QD - TID <input type="checkbox"/> Eprosartan Teventen 400 - 800 mg QD - BID <input type="checkbox"/> Candesartan Atacand 4 - 32 mg QD - BID <input type="checkbox"/> Irbesartan Avapro 75 - 300 mg QD <input type="checkbox"/> Losartan Cozaar 25 - 100 mg QD <input type="checkbox"/> Olmesartan Benicar 5 - 40 mg QD <input type="checkbox"/> Telmisartan Micardis 20 - 80 mg QD <input type="checkbox"/> Valsartan Diovan 80 - 320 mg QD <input checked="" type="checkbox"/> Patient refuses an ARB	Brand Name <input type="text"/>
<input checked="" type="radio"/> No	NYHA Class I HF?	<input type="radio"/> Yes		
<input checked="" type="radio"/> No	NYHA Class II - III HF?	<input type="radio"/> Yes		

Medrefusal

allergy
 economical
 medical
 religious
 social

Close


Step 6 – NYHA Class I HF?

Note: If the Class of CHF is filled out at the bottom of Column I on the Master CHF Template, Step 6 will be automatically completed.

<input checked="" type="radio"/> No	NYHA Class I HF?	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	NYHA Class II - III HF?	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes	
<input checked="" type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms?	<input type="radio"/> Yes	

If the patient does not have NYHA Class I HF, proceed to Step Seven.

If the answer is, “Yes,” i.e., the patient has NYHA Class I HF, the following will appear

<input type="radio"/> No	NYHA Class I HF?	Help	<input checked="" type="radio"/> Yes	 1. Continue present management 2. Schedule regular follow-up 3. Manage concomitant cardiac conditions
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Step 7 – NYHA Class II – III HF?

<input checked="" type="radio"/> No	NYHA Class II - III HF?	Help	<input type="radio"/> Yes	
	Continue to Next Question			
<input checked="" type="radio"/> No	Acceptable level of functional status?		<input type="radio"/> Yes	
	Continue to Next Question			
<input checked="" type="radio"/> No	Add Digoxin (If No Bradycardia)		<input type="radio"/> Yes	
	Continue to Next Question			
<input checked="" type="radio"/> No	Acceptable level of functional status?		<input type="radio"/> Yes	
	Continue to Next Question			
<input checked="" type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms?	Help	<input type="radio"/> Yes	
	Continue to Next Question			
<input checked="" type="radio"/> No	Acceptable level of functional status?		<input type="radio"/> Yes	

Note: If the Class of CHF is filled out at the bottom of Column I on the Master CHF Template, Step 6 will be automatically completed.

There are two options:

If the answer is “No,” you move on to Step 8.

If the answer is “Yes,” the following pops up:

[Medication Module](#) Link

<input type="radio"/> No	NYHA Class II - III HF?	<input type="radio"/> Yes	<input type="checkbox"/> Add a B-blocker; Titrate to target dose <input type="checkbox"/> Metoprolol Metoprolol XL 12.5 - 200 mg QD <input type="checkbox"/> Bisoprolol Zebeta 1.25 - 10 mg QD <input type="checkbox"/> Carvedilol Coreg 3.125 - 25 mg BID <input type="checkbox"/> Patient refuses a B-blocker	Brand Name
Continue to Next Question				

Patient Refuses a B-Blocker – document the reason why the patient refused.

<input type="radio"/> No	NYHA Class II - III HF?	<input type="radio"/> Yes	<input type="checkbox"/> Add a B-blocker; Titrate to target dose <input type="checkbox"/> Metoprolol Metoprolol XL 12.5 - 200 mg QD <input type="checkbox"/> Bisoprolol Zebeta 1.25 - 10 mg QD <input type="checkbox"/> Carvedilol Coreg 3.125 - 25 mg BID <input checked="" type="checkbox"/> Patient refuses a B-blocker	Brand Name
Continue to Next Question				
<input type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes		
Continue to Next Question				
<input type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes		
Continue to Next Question				

Medrefusal

allergy
economical
medical
religious
social


Close

Help—there are help buttons on Step 6, 7 and 10 which give the descriptions of the Four Classes of Congestive Heart Failure. If the Class is checked on the pop-up, it will interact with all other places where the Class of CHF is captured.

Step 8 – Acceptable Level of Functional Status?

<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes																
Continue to Next Question																		
<input checked="" type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes																
Continue to Next Question																		
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes																
Continue to Next Question																		
<input checked="" type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input type="radio"/> Yes																
Continue to Next Question																		
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes																
<p>Refer to Cardiologist</p> <table border="1"> <thead> <tr> <th>Status</th> <th>Priority</th> <th>Referring First</th> <th>Referring Last</th> <th>Referral</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p style="text-align: right;">Back To Top</p>				Status	Priority	Referring First	Referring Last	Referral										
Status	Priority	Referring First	Referring Last	Referral														

If the answer is “Yes,” the following appears:

<input type="radio"/> No	Acceptable level of functional status?	<input checked="" type="radio"/> Yes	<div style="border: 2px solid red; padding: 5px;">  <ul style="list-style-type: none"> 1. Continue present management 2. Schedule regular follow-up 3. Manage concomitant cardiac conditions </div>
--------------------------	----------------------------------------	--------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

If the answer is, “No,” then the following instruction appears, “Continue to Next Question.”

Step 9 – Add Digoxin (if no Bradycardia)

Continue to Next Question

No Add Digoxin (If No Bradycardia) Yes
Continue to Next Question

No Acceptable level of functional status? Yes
Continue to Next Question

No Recent NYHA Class IV HF and Class III or Class IV symptoms? Yes
Continue to Next Question

No Acceptable level of functional status? Yes

Refer to Cardiologist

Status	Priority	Referring First	Referring Last	Referral

Back To Top

If the answer is “Yes,” the following appears:

Trough level 6 hrs post dose should be monitored for:

1. HF worsens or renal function deteriorates
2. Signs of toxicity develop (like nausea, vomiting, confusion, visual disturb)
3. Dose adjustments are made
4. Meds added (e.g. antibiotics, amiodarone, quinidine, vararpamil, anticholinergics)

[Medication Module](#) link

No Add Digoxin (If No Bradycardia) Yes
Continue to Next Question

Trough level 6 hrs post dose should be monitored for:

1. HF worsens or renal function deteriorates
2. Signs of toxicity develop (like nausea, vomiting, confusion, visual disturb, etc)
3. Dose adjustments are made.
4. Meds added (e.g. antibiotics, amiodarone, quinidine, varapamil, anticholinergics)

Brand Name

If the answer is “No,” the following appears, “Continue to Next Question.”

Step 10 – Acceptable level of functional Status?

The screenshot shows a web-based interface with a question: "Acceptable level of functional status?". The "No" radio button is selected, and the text "Continue to Next Question" is displayed in green below the question. Above this question, another question is partially visible: "Add Digoxin (If No Bradycardia)", with its "No" radio button selected and "Continue to Next Question" also displayed in green. Below the main question, there is a section titled "Refer to Cardiologist" with a table and a "Back To Top" button.

Status	Priority	Referring First	Referring Last	Referral

Back To Top

If the answer is “yes,” the following appears:

The screenshot shows the same question: "Acceptable level of functional status?". The "Yes" radio button is selected. To the right of the question, a red-bordered box contains a red octagonal "STOP" sign and the following instructions:

- 1. Continue present management
- 2. Schedule regular follow-up
- 3. Manage concomitant cardiac conditions

If the answer is “no,” the following appears, “Continue to Next Question.”

Step 11 – Recent NYHA Class IV HF and Class III or Class IV symptoms?

<input checked="" type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes	
Continue to Next Question			
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes	
Continue to Next Question			
<input checked="" type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input type="radio"/> Yes	
Continue to Next Question			
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes	

Refer to Cardiologist [Back To Top](#)

Status	Priority	Referring First	Referring Last	Referral

Help – see above

If the answer is, Yes,” the following appears

[Medical Module](#) Link

<input type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input checked="" type="radio"/> Yes	<div style="border: 2px solid red; padding: 5px;"> <p>Consider Spironolactone Brand Name</p> <p><input type="checkbox"/> Spironolactone Aldactone 25 - 100 mg QD</p> <p><input type="checkbox"/> Patient refuses spironolactone <input type="text"/></p> </div>
Continue to Next Question			

Patient refuses – document the reason for refusal

<input type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input type="radio"/> Yes	Consider Spironolactone <input type="checkbox"/> Spironolactone Aldactone 25 - 100 mg QD <input checked="" type="checkbox"/> Patient refuses spironolactone	Brand Name <input type="text"/>
Continue to Next Question				
<input type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes		
Continue to Next Question				
Refer to Cardiologist				
Status	Priority	Referring First	Referring Last	Referral

Medrefusal [X]

allergy
 economical
 medical
 religious
 social

[Close](#)

Step 12 – Acceptable Level of functional capacity?

Continue to Next Question							
<input type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes					
Continue to Next Question							
<input type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes					
Continue to Next Question							
<input type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input type="radio"/> Yes					
Continue to Next Question							
<input type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes					
Refer to Cardiologist							
Status	Priority	Referring First	Referring Last				
<table border="1" style="width: 100%; height: 40px;"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>							
Back To Top							

If the answer is “yes,” the following appears:

<input type="radio"/> No	Acceptable level of functional status?	<input checked="" type="radio"/> Yes	 <ol style="list-style-type: none"> 1. Continue present management 2. Schedule regular follow-up 3. Manage concomitant cardiac conditions
--------------------------	----------------------------------------	--------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

If no, the following instruction appears, “Refer to Cardiologist.”

<input checked="" type="radio"/> No	Add Digoxin (If No Bradycardia)	<input type="radio"/> Yes												
Continue to Next Question														
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes												
Continue to Next Question														
<input checked="" type="radio"/> No	Recent NYHA Class IV HF and Class III or Class IV symptoms? Help	<input type="radio"/> Yes												
Continue to Next Question														
<input checked="" type="radio"/> No	Acceptable level of functional status?	<input type="radio"/> Yes												
Refer to Cardiologist														
Back To Top														
<table border="1"> <thead> <tr> <th>Status</th> <th>Priority</th> <th>Referring First</th> <th>Referring Last</th> <th>Referral</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					Status	Priority	Referring First	Referring Last	Referral					
Status	Priority	Referring First	Referring Last	Referral										

CHF Treatment Plan Template

Across the top of this template are links to:

- Lipids
- Diabetes
- Metabolic Syndrome
- Weight Management
- Hypertension

Each of these conditions contributes to the development and/or worsening of CHF. The effective treatment of CHF includes the effective management of each of these five areas.

CHF Treatment Plan

[Hydration](#) |

[Lipids](#) |
 [Diabetes](#) |
 [Metabolic Syndrome](#) |
 [Weight Management](#) |
 [Hypertension](#)

CHF Status
 Improved
 No Change
 Worse

Ordering Provider [Redacted]

Laboratory

BMP Potassium
 proBNP PT/INR
 CMP Thyroid Profile
 CPK Troponin
 Digoxin Urinalysis
 Lipid Panel w/LLDL **Venipuncture**

Immunizations Flu Shot Pneumovax

Dx 1 []
 Dx 2 []
 Dx 3 []

Radiology

EKG Chest PA/Lat
 Chest 1 View

[Medication Info](#)

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXYZINE HCL	25MG
apidra	100 unit p
apidra	100 unit p

Follow Up

Education Booklet Given

//

Information

[Echocardiography](#)
[Relapse Control](#)
[Take Care Self](#)
[Lifestyle Changes](#)

[Return](#)
[Document](#)
[Follow-Up Doc](#)

[Seven Steps to Success](#)
[Focus of Treatment](#)
[Evaluation](#)
[General Measures](#)
[Fluid Management](#)
[Weight Loss](#) [Info]
[Exercise](#)
[Smoking Cessation](#)
[Lung Congestion](#)
[CHF Compliance](#)
[Meds Precipitating CHF](#) [Info]
[Additional Management](#)
[Follow Up Instructions](#)
[CHF Compliance Email](#)

Down the left hand side of this template there are the following buttons and/or links:

- Hydration
- Seven Steps to Success
- Focus of Treatment
- Evaluation
- General Measures
- Fluid Management
- Weight Loss
- Exercise
- Smoking Cessation
- Lung Congestion
- CHF compliance
- Meds Precipitating CHF
- Additional Management
- Follow up Instructions

- CHF Compliance E-Mail

CHF Treatment Plan

[Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

CHF Status Improved No Change Worse

Ordering Provider [Redacted]

Laboratory

- BMP
- proBNP
- CMP
- CPK
- Digoxin
- Lipid Panel w/LDL
- Potassium
- PT/INR
- Thyroid Profile
- Troponin
- Urinalysis
- Venipuncture

Immunizations

- Flu Shot
- Pneumovax

Radiology

- EKG
- Chest PA/Lat
- Chest 1 View

Medication Info

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXY ZINE HCL	25MG
apidra	100 unit p
apidra	100 unit p

Follow Up

Education Booklet Given

Information

- Echocardiography
- Relapse Control
- Take Care Self
- Lifestyle Changes

CHF Compliance Email (highlighted in red box)

Four of these are explained in tutorials linked below:

- [Hydration](#)
- [Weight Loss](#)
- [Exercise](#)
- [Smoking Cessation](#)

The other eleven are functions which are:

1. Educational for the provider
2. Educational for the patient
3. Evaluational as to how the patient's care for CHF is proceeding

Each of the eleven **CHF-Template-Plan-Template Pop-ups**, which are specific to the CHF templates, will be explained below.

- **Hydration** – because dehydration and azoemia are such common problems in patients with CHF, this link to the **Hydration Evaluation Template** allows for you to document the state of the patient’s hydration while treating their volume overload due to CHF.

Hydration Assessment

Setting: Clinic Nursing Home Hospital Hospital Discharge

Increased Risk of Dehydration

- Recent Infection
- Febrile
- Temp
- Recent Weight Loss
- Impaction
- Decreased Appetite
- Change in Mental Status
- Paralysis
- Inability to Feed Self
- Diabetes Mellitus
- On Diuretics
- Hypoalbuminemia
- Age over 60
- Nursing Home Resident
- Nausea
- Nausea w/vomiting
- Diarrhea
- Unable to turn and position

Physical Evidence of Dehydration

Skin Turgor

Buccal Mucosa

Urine Output < 30 cc/hr

Orthostatics: / /

Pulse: Lying, Sitting, Standing

Drop greater than 20 mmHg
 Drop less than 20 mmHg

Metabolic & Chemical Analysis of Hydration

Urine Specific Gravity BUN

Glucose Creatinine

Sodium BUN/Creat Ratio

Potassium

Chloride

HCO₃

Calculate: Serum Osmolality Serum Osmolarity Anion Gap Osmolar Gap Est. Creat Clearance

Check for New Labs Laboratory Dates

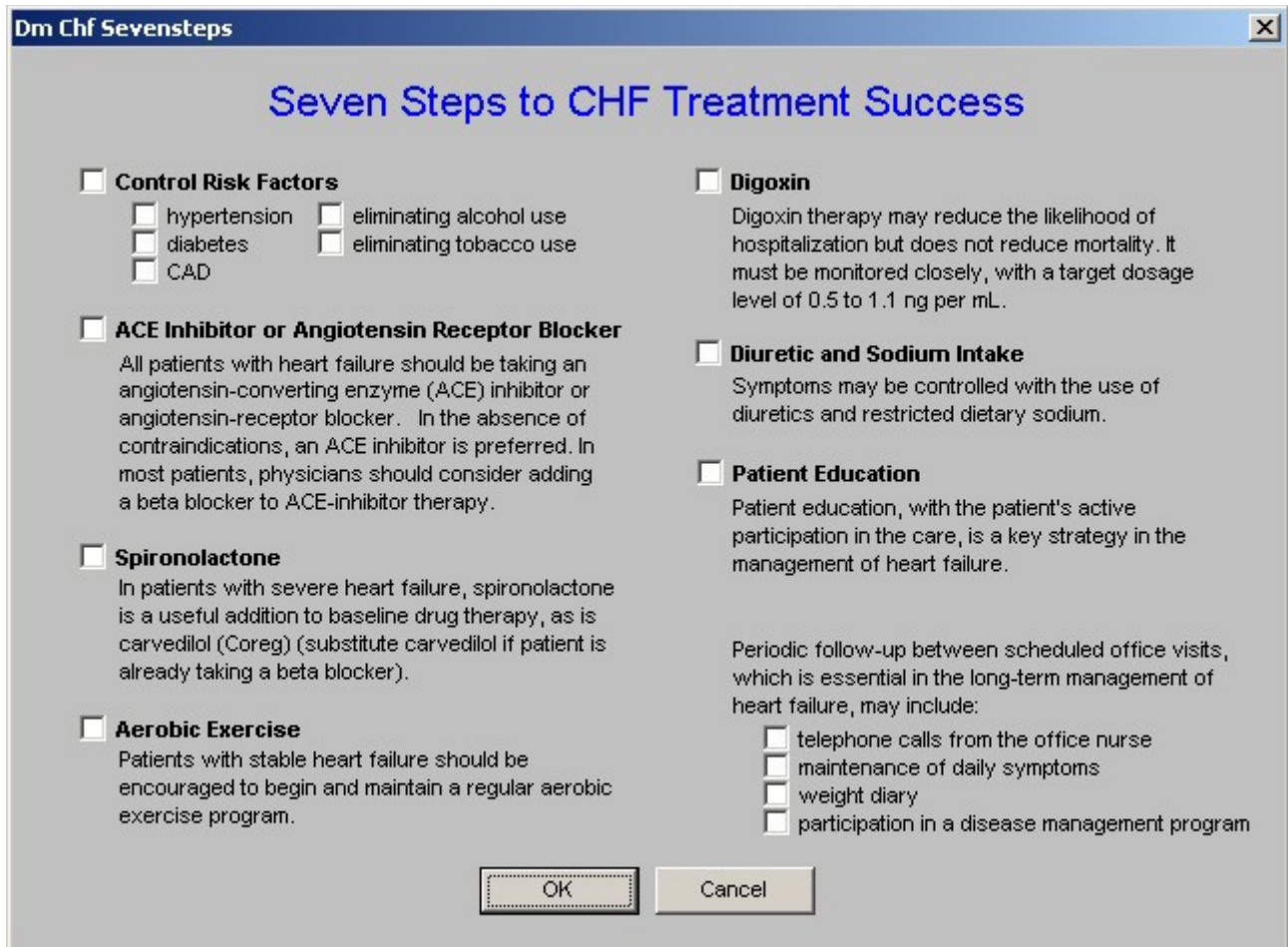
Hydration Status

Calculate Good Marginal Adequate Dehydrated **Hydration Orders**

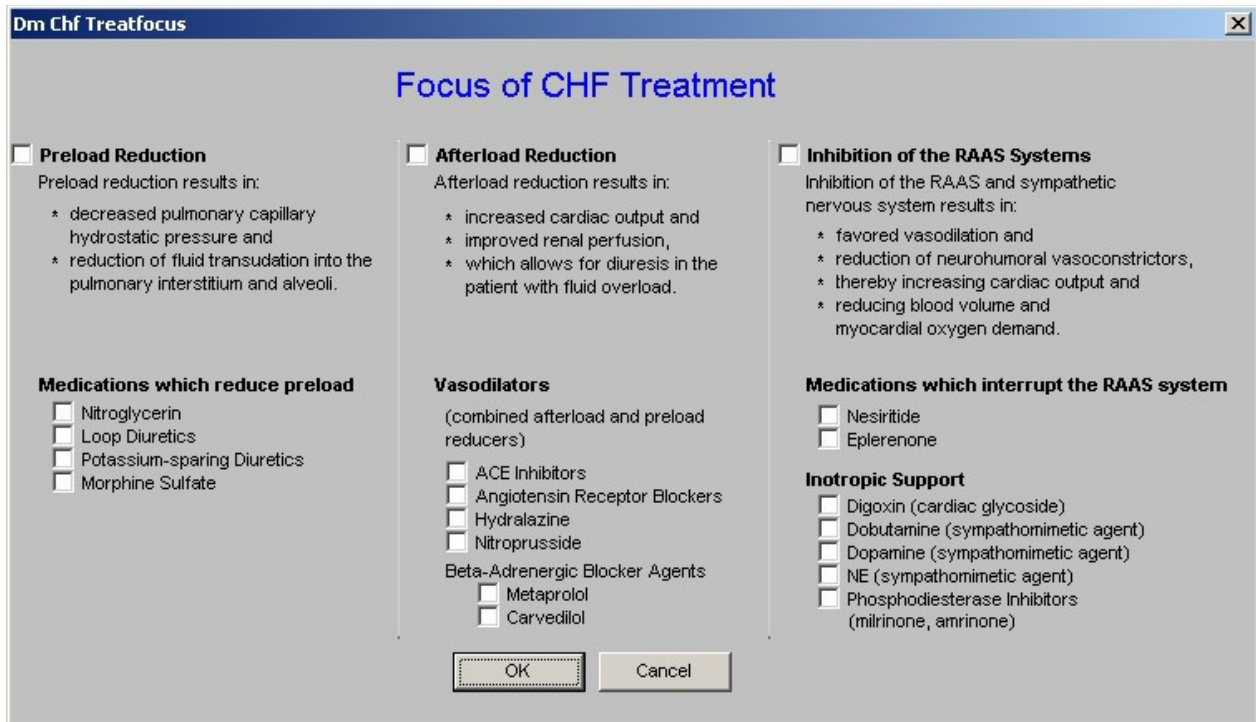
Help Documents

- Degree of Dehydration
- Electrolytes and Osmolarity
- Ethical Issues about Hydration
- Factors Affecting Creat, BUN
- Fluid Requirements
- Osmolality Norms
- Osmolality Theory
- Renal Physiology and Hydration
- Signs of Dehydration

- **Seven Steps to CHF Treatment Success** – this document allows you to review seven steps which are crucial to the success of treating CHF. These seven steps are imperative to effective treatment of CHF.



- **Focus of CHF Treatment** – this pop-up documents the four sites of action of CHF treatment: preload reduction, afterload reduction, inhibition of RAAS system and Inotropic support.



- **Evaluation**

This is an interesting tool for evaluating the patient with CHF. By following a series of questions with yes and no answers, you are led through a differential diagnosis of the patient with possible CHF.

This pop-up is entitled, **“Evaluation of Heart Failure.”**

The process begins with the following instruction, **“Begin answering the questions to the left. Additional questions and/or recommendations will appear.”**

Evaluation of Heart Failure

Begin answering the questions to the left. Additional questions and/or recommendations will appear.

Dyspnea present? Yes No Return

<p>Medical History</p> <input type="checkbox"/> anemia <input type="checkbox"/> cardiotoxic medications <input type="checkbox"/> chest irradiation <input type="checkbox"/> collagen vascular disease <input type="checkbox"/> CAD <input type="checkbox"/> diabetes mellitus <input type="checkbox"/> hemochromatosis <input type="checkbox"/> hypercholesterolemia	<input type="checkbox"/> hypertension <input type="checkbox"/> infectious disease <input type="checkbox"/> peripheral vascular disease <input type="checkbox"/> pheochromocytoma <input type="checkbox"/> rheumatic fever <input type="checkbox"/> STDs <input type="checkbox"/> thyroid disease <input type="checkbox"/> valvular heart disease	<p>Physical Exam</p> <input type="checkbox"/> tachycardia <input type="checkbox"/> bronze skin <input type="checkbox"/> cardiac arrhythmia <input type="checkbox"/> dependent edema <input type="checkbox"/> displaced cardiac apex <input type="checkbox"/> elevated blood pressure <input type="checkbox"/> heart murmur <input type="checkbox"/> joint inflammation <input type="checkbox"/> jugular venous distention	<input type="checkbox"/> pallor <input type="checkbox"/> pericardial rub <input type="checkbox"/> pulmonary rales <input type="checkbox"/> third heart sound <input type="checkbox"/> weight loss or gain <input type="checkbox"/> abnormal deep tendon reflexes <input type="checkbox"/> diminished peripheral pulses or arterial bruits <input type="checkbox"/> hepatomegaly or hepatojugular reflux <input type="checkbox"/> thyromegaly or thyroid nodule
<p>Social History</p> <input checked="" type="checkbox"/> alcohol <input type="checkbox"/> drugs	<input type="checkbox"/> international travel	<p>Laboratory Tests</p> <input type="checkbox"/> ANA <input type="checkbox"/> BMP <input type="checkbox"/> CMP <input type="checkbox"/> Electrolyte Panel <input type="checkbox"/> HIV (in high risk patients) <input type="checkbox"/> Lipid Panel <input type="checkbox"/> CBC	<input type="checkbox"/> Liver Function Test <input type="checkbox"/> Metanephrines <input type="checkbox"/> Rheumatoid Factor (if connective tissue disease suspected) <input type="checkbox"/> Serum Ferritin <input type="checkbox"/> TSH <input type="checkbox"/> Urinalysis <input type="checkbox"/> Viral Titers (if patient had recent viral infection)
<p>Family History</p> <input type="checkbox"/> CAD <input type="checkbox"/> cardiomyopathy <input type="checkbox"/> sudden death	<input type="checkbox"/> skeletal myopathy <input type="checkbox"/> cardiac conduction abnormality		

The first question is, “**Dyspnea Present?**” if the answer is, “no,” the recommendation is “**consider other causes.**” If the answer is “yes,” the recommendation is **Obtain ECG and chest radiograph.**”

Evaluation of Heart Failure

Begin answering the questions to the left. Additional questions and/or recommendations will appear.

Dyspnea present? Yes No Return

Obtain ECG and chest radiograph.

ECG or chest radiograph abnormal? Normal Abnormal

This second question asks, “**ECG or chest radiograph abnormal?**” if the answer is normal, the recommendation is, “**consider other causes.**” If the answer is “**abnormal,**” the recommendation is, “**obtain echocardiogram.**”

Evaluation of Heart Failure

Begin answering the questions to the left. Additional questions and/or recommendations will appear.

Dyspnea present? Yes No

ECG or chest radiograph abnormal? Normal Abnormal

Echocardiogram results? Normal Abnormal
 Technically Unsatisfactory

Obtain ECG and chest radiograph.

Obtain echocardiogram.

Return

The third question is, “**echocardiogram results?**” If the response is, “normal,” the recommendation is “**consider other causes.**” If the response is “abnormal,” the recommendation is “**more detailed history, physical and laboratory testing. See below.**”

Evaluation of Heart Failure

Begin answering the questions to the left. Additional questions and/or recommendations will appear.

Dyspnea present? Yes No

ECG or chest radiograph abnormal? Normal Abnormal

Echocardiogram results? Normal Abnormal
 Technically Unsatisfactory

Cause identified? Yes No

Obtain ECG and chest radiograph.

Obtain echocardiogram.

More detailed history, physical, and laboratory testing. See below.

Return

A second option under the third question is related to the echocardiogram and states, “**Technically unsatisfactory.**” If the echo is considered “**technically inadequate,**” the recommendation is “**obtain radionucleotide scan.**”

The fifth question is “**Radionucleotide scan results.**” If the answer is normal, the recommendation is, “**consider other causes.**” If the answer is “abnormal,” the recommendation is “**more detailed history, physical, and laboratory testing. See below.**”

Evaluation of Heart Failure

Begin answering the questions to the left. Additional questions and/or recommendations will appear.

Dyspnea present? Yes No

ECG or chest radiograph abnormal? Normal Abnormal

Echocardiogram results? Normal Abnormal
 Technically Unsatisfactory

Radionucleotide scan results? Normal Abnormal

Obtain ECG and chest radiograph.

Obtain echocardiogram.

Obtain radionucleotide scan.

Return

Beneath this series of questions is a section which includes:

Dyspnea present? Yes No

Obtain ECG and chest radiograph.

ECG or chest radiograph abnormal? Normal Abnormal

Obtain echocardiogram.

Echocardiogram results? Normal Abnormal

Technically Unsatisfactory

Obtain radionucleotide scan.

Radionucleotide scan results? Normal Abnormal

Medical History

anemia hypertension infectious disease tachycardia pallor

cardiotoxic medications peripheral vascular disease cardiac arrhythmia bronze skin pericardial rub

chest irradiation pheochromocytoma dependent edema cardiac arrhythmia pulmonary rales

collagen vascular disease rheumatic fever displaced cardiac apex third heart sound

CAD STDs elevated blood pressure weight loss or gain

diabetes mellitus thyroid disease heart murmur abnormal deep tendon reflexes

hemochromatosis valvular heart disease joint inflammation diminished peripheral pulses or arterial bruits

hypercholesterolemia jugular venous distention thyromegaly or thyroid nodule

Social History

alcohol international travel Laboratory Tests

drugs

Family History

CAD skeletal myopathy ANA Liver Function Test

cardiomyopathy cardiac conduction abnormality BMP Metanephrines

sudden death Lipid Panel HIV (in high risk patients) CMP Rheumatoid Factor (if connective tissue disease suspected)

Serum Ferritin

TSH

Urinalysis

Viral Titers (if patient had recent viral infection)

Each of these categories gives the opportunity to review and think about pertinent issues related to CHF, its diagnosis and evaluation. Some of the information will have already auto-populated from other parts of the EMR

The laboratory tests listed on this pop-up, when checked, will appear either on the CHF Plan template, or on the Laboratory Charge Posting template, if the lab test is not listed on the Plan template.

Note: If you check in the review of this **Evaluation** template that a lab test needs to be ordered and if that lab test is not on the CHF Plan template, it will be necessary to:

- Go to the Master GP Lab Charge Posting template
- Uncheck the lab test(s) which were placed there from the CHF Evaluation template
- Select the ICD-9 Codes
- Re-select the lab tests which you indicated you want to order from the CHF Evaluation template
- Click Submit to charge posting.

Dyspnea present? Yes No

Obtain ECG and chest radiograph.

ECG or chest radiograph abnormal? Normal Abnormal

Obtain echocardiogram.

Echocardiogram results? Normal Abnormal

Obtain radionuclide scan.

Technically Unsatisfactory

Radionuclide scan results? Normal Abnormal

Medical History

anemia hypertension

cardiotoxic medications infectious disease

chest irradiation peripheral vascular disease

collagen vascular disease pheochromocytoma

CAD rheumatic fever

diabetes mellitus STDs

hemochromatosis thyroid disease

hypercholesterolemia valvular heart disease

Physical Exam

tachycardia pallor

bronze skin pericardial rub

cardiac arrhythmia pulmonary rales

dependent edema third heart sound

displaced cardiac apex weight loss or gain

elevated blood pressure abnormal deep tendon reflexes

heart murmur diminished peripheral pulses or arterial bruits

joint inflammation hepatomegaly or hepatojugular reflux

jugular venous distention thyromegaly or thyroid nodule

Social History

alcohol international travel

drugs

Family History

CAD skeletal myopathy

cardiomyopathy cardiac conduction abnormality

sudden death

Laboratory Tests

ANA Liver Function Test

BMP Metanephrines

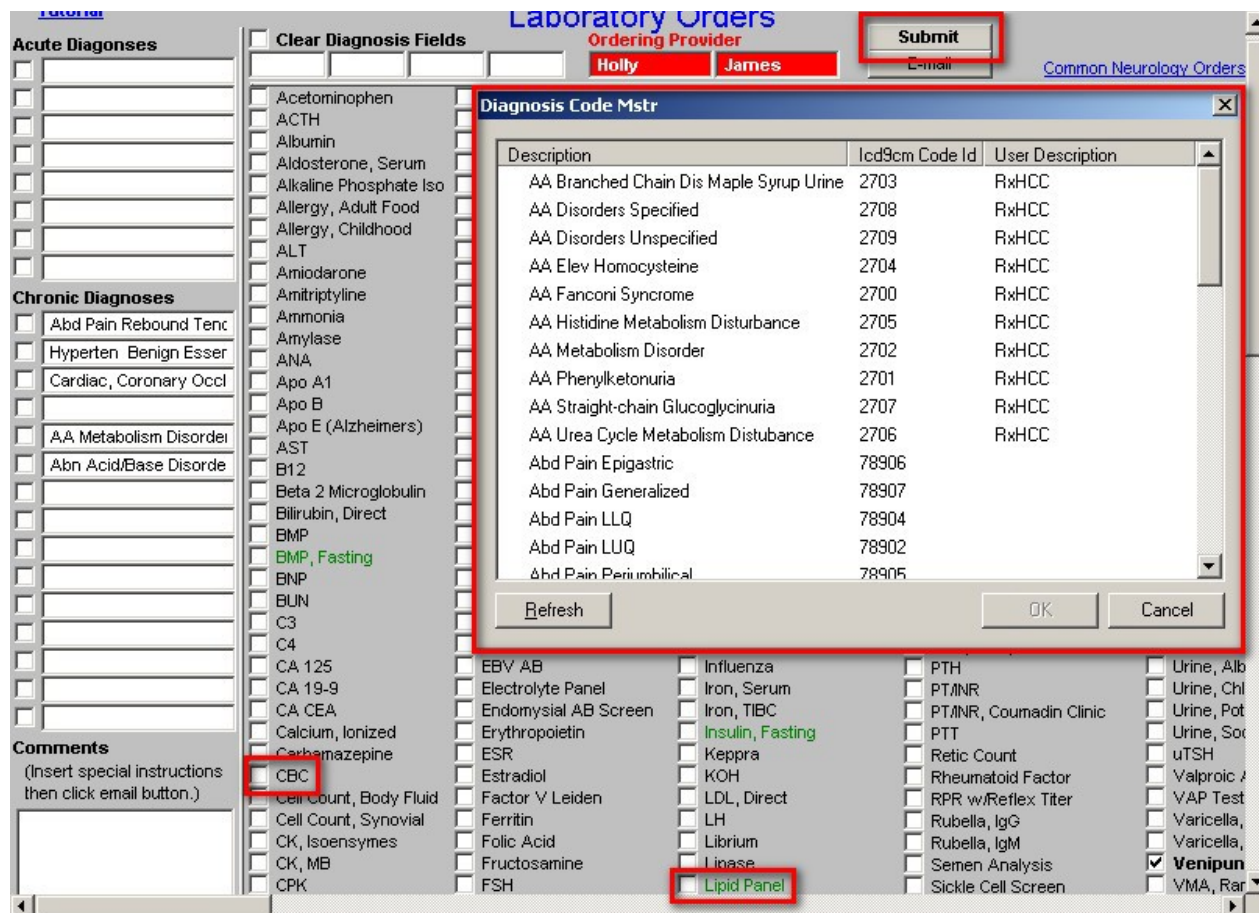
CMP Rheumatoid Factor (if connective tissue disease suspected)

Electrolyte Panel Serum Ferritin

HIV (in high risk patients) TSH

Lipid Panel Urinalysis

CBC Viral Titers (if patient had recent viral infection)



- **General Measures**

This pop-up reviews seven conditions which are closely linked with CHF which are reviewed on this pop-up. They are:

- Blood Pressure**

The patient's blood pressure will be automatically posted to this pop-up. If it is elevated, the following recommendation will appear, **“Better blood pressure control (systolic 110-120 mmHg) is needed. Use hypertension templates and adjust medications.”**

- Hyperlipidemia**

- Cholesterol/HDL Ratio
- Triglyceride/HDL Ratio

The patient's cholesterol/HDL Ratio will be automatically posted. If it is above 4, the recommendation will state, **"Improved lipid management needed."**

The patient's Triglyceride/HDL Ratio will be automatically posted. If it is above 2, the recommendation will state, **"Insulin resistance should be evaluated."**

c. Smoking Cessation

- Does the patient smoke

If the patient's history indicates tobacco use, the following recommendation will appear, **"Discuss smoking cessation with the patient."**

d. Alcohol use Print patient (info)

- Does the patient drink alcohol? Yes No

If the patient's history indicates alcohol use, the following recommendation will appear, **"Continued alcohol use in the face of CHF is harmful."**

e. Illicit Drug Use

- Does the patient use illicit drugs? Yes No

If the patient's medical history indicates whether drugs are used or not, it will be automatically posted here. If drugs are used, the following recommendation will appear, **"Increasingly illicit drug use is appearing as a cause of CHF, particularly with inhaled cocaine and stimulants."**

f. Diabetes

- Hemoglobin A1C

The patient's Hemoglobin A1C is automatically posted in the box labeled as above. If the value is abnormal the following recommendation appears, **"Optimal control of CHF requires tighter control of hyperglycemia."**

g. Thyroid

- T3
- TSH

The patient's Thyroid values are automatically posted in the boxes labeled as above. If the values are abnormal, the following recommendation appears, **“The heart is very dependent on thyroid for proper function. Attention should be given to controlling the patient's thyroid function.”**

Dm Chf Genplan

General Measures

1. Blood Pressure
 / mmHg

2. Hyperlipidemia
 Cholesterol/HDL Ratio
 Triglyceride/HDL Ratio

3. Smoking Cessation
 Does the patient smoke? Yes No

4. Alcohol Use Print patient info
 Does the patient drink alcohol? Yes No

5. Illicit Drug Use
 Does the patient use illicit drugs? Yes No

6. Diabetes
 Hemoglobin A1C

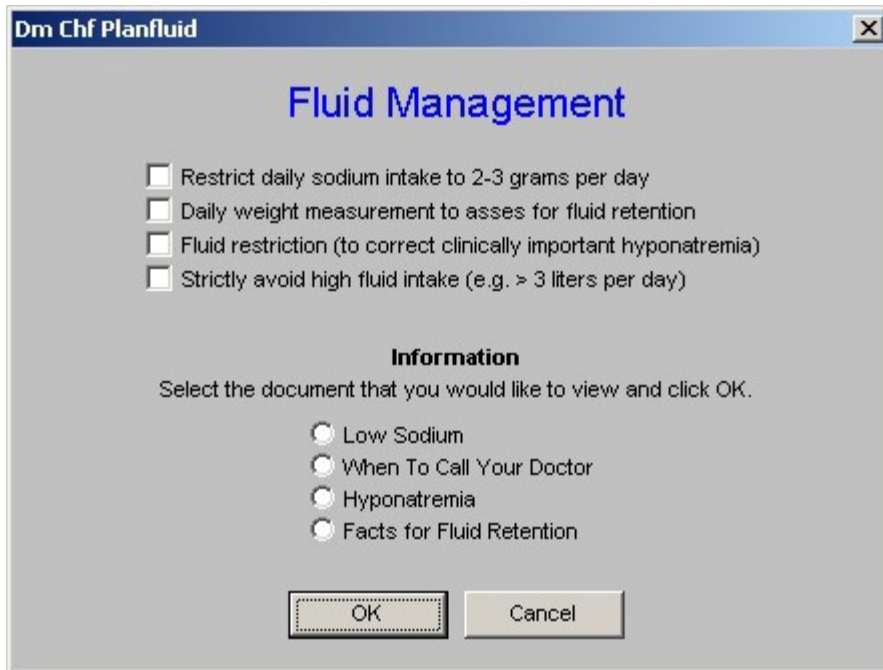
7. Thyroid
 T3
 TSH

Recommended Action

The heart is very dependent on thyroid for proper function. Attention should be given to controlling the patient's thyroid function.

- **Fluid Management**

This pop-up displays the following options, which can be selected for patient treatment:



- **Lung Congestion**

The first step in treating DHF patients is to reduce lung congestion. You do that by lowering pulmonary (lung) pressure. This has 3 steps:

2. Reduce heart size.
3. Make the heart's chambers work together as a team.
4. Slowing the heart rate.

Dm Chf Lung X

Lung Congestion

The first step in treating DHF patients is to reduce lung congestion. You do that by lowering pulmonary (lung) pressure. This has 3 steps:

1. Reduce heart size.

At first, heart size can be reduced by restricting fluid and sodium intake, by dialysis or filtering the blood, plasmapheresis, and diuretics. Relaxing (dilating) the blood vessels using nitro or morphine is effective but should be started at low doses to avoid low blood pressure. Low blood pressure can be a real problem in DHF patients. Long-term treatment should include small to moderate diuretic doses, mild doses of long-acting nitro, and restricted sodium intake. Aldactone (spironolactone) may be effective long-term because it suppresses the RAS. ACE inhibitors and ARBs reduce fluid retention and oxygen demand.

2. Make the heart's chambers work together as a team.

The second step in lowering pulmonary pressure is to keep the heart's upper chambers (atria) beating properly. Atrial fibrillation is poorly tolerated in DHF patients because it increases diastolic pressures, causing lung congestion and low blood pressure. In patients with a-fib, restoring normal rhythm should be a priority. Patients who need a pacemaker should have atrial pacing as well as ventricular pacing.

3. Slowing the heart rate.

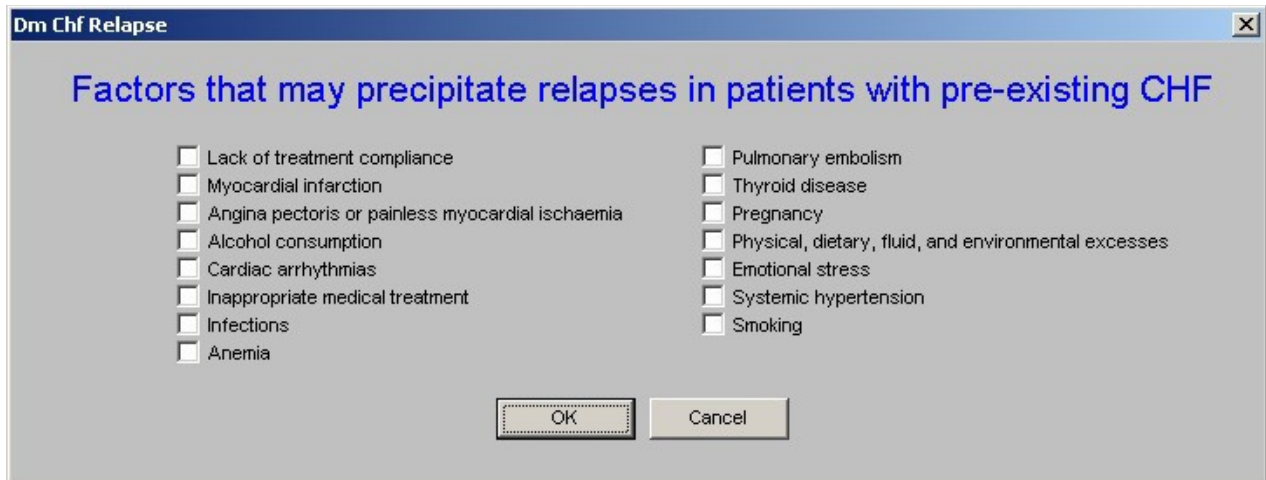
The third step in lowering pulmonary pressures is to slow the heart rate. This gives the heart more time to relax so it can fill with blood. Fast heart rate is poorly tolerated in DHF patients because rapid heart rate:

1. increases the heart's oxygen demand and reduces blood flow to the heart, causing ischemia even without CAD
2. prevents full relaxation of the heart muscle, which raises pressure and reduces the heart's flexibility
3. shortens the heart's relaxation period, making it incomplete, which reduces the amount of blood pumped per beat

Select this box and click OK to view and print this information.

- **CHF Compliance**

The pop-up launched from this button is entitled, “**Factors that may precipitate relapses in patients with pre-existing CHF.**” This is a quick and good review of the potential causes for patient’s not responding to treatment for CHF. There is an option to check mark any issue relevant for the care of the patient.



- **Medications Precipitating CHF**

The pop-up launched from this button is entitled, “**Medications Which May Precipitate/Exacerbate Heart Failure.**” A quick review of the patient’s medications and this list will help in making certain that the treatment of another condition is not fighting against the treatment of CHF.

Dm Chf Precipmeds [X]

Medications Which May Precipitate/Exacerbate Heart Failure

**Listed below are some drugs which are known to have effects on patients with heart failure.
Document any of the following medications that this patient may be taking and adjust medications appropriately.**

<p>Negative Inotropes</p> <p>Antiarrhythmics</p> <p><input type="checkbox"/> disopyramide (Norpace)</p> <p><input type="checkbox"/> flecainide (Tambocor)</p> <p>Beta Blockers</p> <p><input type="checkbox"/> pindolol (Blocarden, Corgard, Sectral, Visken)</p> <p><input type="checkbox"/> acebutolol</p> <p>Calcium Channel Agonists</p> <p><input type="checkbox"/> verapamil</p> <p><input type="checkbox"/> diltiazem</p> <p><input type="checkbox"/> nifedipine (Adalat CC)</p> <p><input type="checkbox"/> felodipine (Plendil)</p> <p>Expansion of Blood Volume</p> <p><input type="checkbox"/> hydralazine</p> <p><input type="checkbox"/> minoxidil (Loniten)</p>	<p>Medications with Cardiotoxic Properties</p> <p>Chemotherapeutic Agents</p> <p><input type="checkbox"/> doxorubicin</p> <p><input type="checkbox"/> daunorubicin</p> <p><input type="checkbox"/> cyclophosphamide</p> <p><input type="checkbox"/> Cocaine</p> <p><input type="checkbox"/> Amphetamines</p> <p>Agents Causing Sodium and Water Retention</p> <p><input type="checkbox"/> Estrogen</p> <p><input type="checkbox"/> NSAIDs</p> <p><input type="checkbox"/> glucocorticoids</p> <p><input type="checkbox"/> salicylates (high-dose)</p> <p><input type="checkbox"/> Drugs with high sodium content (carbenicillin, ticarcillin)</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- **Additional Management**

This is a list of important, but ancillary issues for the effective and excellent treatment of CHF. There is an option for check marking the ones related to this patient.

Dm Chf Planmng [X]

Additional Management

Flu vaccination every fall
 Last Flu Shot:

Pneumovax every 5 years
 Last Pneumovax:

Living Will

Advance directives

Availability of hospice care

CoQ10 200 mg

L-Arginine mg

L-Carnitine mg

Refer for Echo

- **Follow Up Instructions**

This is a list of instructions which are automatically checked and placed on the patient's CHF follow-up note.

Dm Chf Planfollow [X]

Follow Up Instructions

Blood Pressure Diary

SETMA CHF educational booklet given to patient or family

Compliance encouraged

Adherence to non-pharmacological measures

Adverse effects of therapy discussed

- Blood in stool
- Blood in urine
- Chest pain
- Decreased appetite
- Easy bruising
- Fatigue
- Light headiness
- Muscle cramps
- Shortness of breath

- **CHF Compliance E-mail**

This is a link which launches an **electronic tickler file**. When activated, the following steps are taken:

- A pop-up appears which asks “Attach Patient’s Document.” The option entitled “This template” should be selected.
- Then click OK.
- An e-mail appears which has the following text automatically placed:
 - *Please call Test IBM Serv AAA at 4098354550 to remind them to: (1) weigh daily and call if more than 3 pounds is gained, (2) take all medications as prescribed, (3) avoid salt in diet, (4) keep appointments, (5) follow their CHF exercise prescription, (6) review their CHF follow-up document, and (7) review their CHF patient education booklet. This patient should be called at least once a week and the telephone call documented in the EMR.*
- Send the e-mail to your nurse and/or your unit clerk. You can also copy it to yourself.
- Before clicking send, go to “Options.”
- On the Options pop-up select, “Do not send delivery before,” and select a date one week, two weeks or whatever appropriate interval the patient’s condition warrants the telephone follow-up.
- Then click send.

This electronic tickler file will sit on the server until the appointed date, at which time it will appear on the addressee’s desktop. The follow-up telephone call can be made; the information can be given; the contract can be documented; and if appropriate, another electronic tickler file for one week, etc. can be created to remind you to follow-up with this patient.

CHF Treatment Plan

[Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

[Hydration](#)

Seven Steps to Success
 Focus of Treatment
 Evaluation
 General Measures
 Fluid Management
 Weight Loss Info
 Exercise
 Smoking Cessation
 Lung Congestion
 CHF Compliance
 Meds Precipitating CHF Info
 Additional Management
 Follow Up Instructions
CHF Compliance Email

CHF Status Improved No Change Worse

Ordering Provider Holly James

Laboratory

BMP Potassium

proBNP P

CMP T

CPK U

Digoxin V

Lipid Panel w/LDL

Radiology

EKG Che

Che

Immunizations

Flu Shot Pneumovax

Attach X

Attach Patient's Document

OK

Cancel

No Attachment

This Template

Template

Document

Image

ICS Image

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications

Brand Name	
HYDROXYZ	
apidra	100 unit p
apidra	100 unit p

Education Booklet Given

Information

Echocardiography

Relapse Control

Take Care Self

Lifestyle Changes

Return

Document

Follow-Up Doc

At the top of the middle section of the CHF Plan Template, there is a place to document the CHF Status of the patient. The options are:

CHF Treatment Plan

[Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

[Hydration](#)

- Seven Steps to Success
- Focus of Treatment
- Evaluation
- General Measures
- Fluid Management
- Weight Loss Info
- Exercise
- Smoking Cessation
- Lung Congestion
- CHF Compliance
- Meds Precipitating CHF Info
- Additional Management
- Follow Up Instructions
- [CHF Compliance Email](#)

CHF Status Improved No Change Worse

Ordering Provider **Holly** **James**

Laboratory

- BMP
- proBNP
- CMP
- CPK
- Digoxin
- Lipid Panel w/LDL

Radiology

- EKG

Immunizations

- Potassium
- PT/INR
- Thyroid Profile
- Troponin
- Urinalysis
- Venipuncture

Flu Shot Pneumovax

Dx 1:

Dx 2:

Dx 3:

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXYZINE HCL	25MG
apicdra	100 unit p
apicdra	100 unit p

Follow Up

Education Booklet Given

Information

-
-
-
-

Beneath the Status in the middle section of the CHF Plan Template is a list of Laboratory studies, procedures and Immunizations which can be ordered and charge posted from the CHF Plan Template.

CHF Treatment Plan

[Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

[Hydration](#)

CHF Status Improved No Change Worse

Ordering Provider Holly James

Laboratory

BMP Potassium
 proBNP PT/INR
 CMP Thyroid Profile
 CPK Troponin
 Digoxin Urinalysis
 Lipid Panel w/LDL **Venipuncture**

Radiology

EKG Chest P/A/Lat
 Chest 1 View

Immunizations

Flu Shot Pneumovax

Dx 1
 Dx 2
 Dx 3

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXYZINE HCL	25MG
apidra	100 unit p
apidra	100 unit p

Follow Up

Education Booklet Given

Information

[Follow-Up Instructions](#) [CHF Compliance Email](#)

Once the ICD-9 Code has been added and once the lab studies or procedures have been selected, click on the “Submit Charge Posting” button.

The right side of the CHF Plan has three buttons:

CHF Treatment Plan

[Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

[Hydration](#)
 Seven Steps to Success
 Focus of Treatment
 Evaluation
 General Measures
 Fluid Management
 Weight Loss Info
 Exercise
 Smoking Cessation
 Lung Congestion
 CHF Compliance
 Meds Precipitating CHF Info
 Additional Management
 Follow Up Instructions
[CHF Compliance Email](#)

CHF Status Improved No Change Worse

Ordering Provider Holly James

Laboratory

BMP Potassium

proBNP PT/INR

CMP Thyroid Profile

CPK Troponin Dx: 1

Digoxin Urinalysis Dx: 2

Lipid Panel w/LDL Venipuncture Dx: 3

Immunizations

Flu Shot Pneumovax

Submit Charge Posting

Medication Info

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXYZINE HCL	25MG
apicra	100 unit p
apicra	100 unit p

Follow Up

Education Booklet Given

Information

Echocardiography

Relapse Control

Take Care Self

Lifestyle Changes

Across the bottom of the CHF Plan Template there are the following:

- [Referral](#) Link
- [Medications Module](#) Link
- Follow-up Visit documentation
- Education Booklet Given Documentation
- **Information** – these are printable documents:

1. Echocardiography
2. Relapse Control
3. Take Care Self
4. Lifestyle Changes

Medication Information

Above the medication Module Link, there is a button entitled “**Medication Info.**” Depressing this button launches a pop-up entitled CHF Medications.

CHF Treatment Plan

[Hydration](#) [Lipids](#) [Diabetes](#) [Metabolic Syndrome](#) [Weight Management](#) [Hypertension](#)

Seven Steps to Success
 Focus of Treatment
 Evaluation
 General Measures
 Fluid Management
 Weight Loss Info
 Exercise
 Smoking Cessation
 Lung Congestion
 CHF Compliance
 Meds Precipitating CHF Info
 Additional Management
 Follow Up Instructions
[CHF Compliance Email](#)

CHF Status Improved No Change Worse

Ordering Provider **Holly** **James**

Laboratory

BMP Potassium

proBNP PT/INR

CMP Thyroid Profile

CPK Troponin

Digoxin Urinalysis

Lipid Panel w/LDL **Venipuncture**

Immunizations

Flu Shot Pneumovax

Dx 1

Dx 2

Dx 3

Submit Charge Posting

Medication Info

Referrals (double-click to add)

Priority	Referring First	Referring Last	Referral

Medications (double-click to add)

Brand Name	Dose
HYDROXYZINE HCL	25MG
apidra	100 unit p
apidra	100 unit p

Follow Up

Education Booklet Given

Information

Echocardiography

Relapse Control

Take Care Self

Lifestyle Changes

By selecting a category of medications and then selecting a drug in that category, it is possible to review on line the following:

- Adult Dose
- Pediatric Dose
- Pregnancy Warning
- General Information
- Interactions
- Precautions
- Contraindications

for each of the drugs used in the treatment of congestive heart failure.

CHF Medications

1. Select a drug category.

- ACE Inhibitors Angiotensin Receptor Blockers Beta-Adrenergic Blockers Calcium Channel Blockers Diuretics
 Human B-Type Natriuretic Peptides Inotropic Agents Phosphodiesterase Enzyme Inhibitors Vasodilators

2. Select a drug.

3. View the available information.

(If necessary, click in a box and use the arrow keys to scroll through additional information in the boxes below.)

General Information

Adult Dose

Pediatric Dose

Pregnancy

Interactions

Precautions

Contraindications

OK

Cancel

Dm Chf Medics X

CHF Medications

1. Select a drug category.

ACE Inhibitors
 Angiotensin Receptor Blockers
 Beta-Adrenergic Blockers
 Calcium Channel Blockers
 Diuretics
 Human B-Type Natriuretic Peptides
 Inotropic Agents
 Phosphodiesterase Enzyme Inhibitors
 Vasodilators

2. Select a drug.

Captopril (Capoten)
 Enalapril (Vasotec)
 Quinapril (Accupril)
 Lisinopril (Prinivil, Zestril)
 Ramipril (Altace)
 Fosinopril (Monopril)

3. View the available information.
 (If necessary, click in a box and use the arrow keys to scroll through additional information in the boxes below.)

General Information

Prevent conversion of Ang I to Ang II (a potent vasoconstrictor), resulting in increased levels of plasma renin and a reduction in aldosterone secretion.

Adult Dose	Interactions	Precautions	Contraindications
<p>10 mg/d PO initially; may increase to 20-40 mg/d qd or divided bid</p>	<p>NSAIDs may reduce hypotensive effects of ACE inhibitors; ACE inhibitors may increase digoxin, lithium, and allopurinol levels; nifampin decreases ACE inhibitor levels; probenecid may increase ACE inhibitor levels; hypotensive effects of ACE inhibitors may be enhanced when concurrently administered with diuretics</p>	<p>Category D in second and third trimester of pregnancy; caution in renal impairment, valvular stenosis, or severe CHF</p>	<p>Documented hypersensitivity; renal impairment, angioedema</p>
<p>Pediatric Dose</p> <p>Not established</p>			
<p>Pregnancy</p> <p>D - Unsafe in pregnancy</p>			

Dm Chf Medics X

CHF Medications

1. Select a drug category.

ACE Inhibitors
 Angiotensin Receptor Blockers
 Beta-Adrenergic Blockers
 Calcium Channel Blockers
 Diuretics
 Human B-Type Natriuretic Peptides
 Inotropic Agents
 Phosphodiesterase Enzyme Inhibitors
 Vasodilators

2. Select a drug.

Milrinone (Primacor)
 Milrinone (Inocor)

3. View the available information.
(If necessary, click in a box and use the arrow keys to scroll through additional information in the boxes below.)

General Information

Positive inotropic agent and vasodilator. Results in reduced afterload, reduced preload, and increased cardiac output. Several studies comparing milrinone to dobutamine have demonstrated that milrinone showed greater improvements in preload and afterload and improvements in cardiac output, without significant increases in myocardial oxygen consumption.

Adult Dose	Interactions	Precautions	Contraindications
50 mcg/kg IV loading dose over 10 min, followed by continuous infusion at 0.25-1.0 mcg/kg/min; titrate to maintain adequate systolic blood pressure and cardiac output	Precipitates in presence of furosemide	Monitor fluids, electrolyte changes, and renal function during therapy; excessive diuresis may increase potassium loss and predispose digitalized patients to arrhythmias (correct hypokalemia with potassium supplementation prior to treatment); slow rates or stop infusion in patients showing excessive decreases in blood pressure; previous vigorous diuretic therapy has caused significant decreases in cardiac filling pressure; administer cautiously and monitor bloodpressure, heart rate, and clinical symptomatology	Documented hypersensitivity; obstructive hypertrophic cardiomyopathy
Pediatric Dose Not established			
Pregnancy C - Safety for use during pregnancy has not been established.			

CHF Questionnaire Template

This is a 21-question tool which scores the functional capacity of a patient with CHF. The lower the score the better the patient is doing. When the questionnaire is scored, it is possible to review all of the scores for this patient in a longitudinal fashion which will give some indication of the progress the patient is or is not making.

Living With Heart Failure Questionnaire

If you are sure an item does not apply to you or is not related to your heart failure, then select "0".
If an item does apply to you then select the number rating how much it prevented you from living as you wanted.

	No 0	Very Little 1	2	3	4	Very Much 5
1. Causing swelling in your ankles, legs, etc.?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Making your working around the house or yard more difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Making your relating to or doing things with your friends or family difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Making you sit or lie down to rest during the day?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Making you tired, fatigued or low on energy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Making your working to earn a living difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Making your walking about or climbing up stairs difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Making you short of breath?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Making your sleeping well at night difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Making you eat less of the foods you like?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Making your going places away from home difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Making your sexual activities difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Making your recreational pastimes, sports, or hobbies difficult?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Making it difficult for you to concentrate and remember things?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Giving you side effects from medications?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Making you worry?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Making you feel depressed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Costing you money for medical care?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Making you feel a loss of self-control of your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Making you stay in the hospital?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Making you feel you are a burden to your family or friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Previous Questionnaire Results

Encounter Date:Time	Total Points

**The lower your score
the better off you are.**

Flow sheet Template

The name of this template is, “**Prospective Data Collection Flow sheet.**” The data which is automatically collected on each patient when the CHF templates are given is in accordance with the Physician Consortium for Performance Improve Data Set on CHF. The elements of this data set are:

- Assessment of clinical Symptoms of Volume Overload (Excess)
- Level of Activity
- Assessment of clinical Sign of Volume overload (excess)
- Patient Education
- Beta-Blocker Therapy
- Ace Inhibitor Therapy
- Warfarin Therapy

Chronic Hx paroxysmal Atrial Fib

Once the evaluation of a patient with CHF is complete, the provider can review this template to see if all of the elements of a quality evaluation of a patient with CHF have been met.

CHF Management

Patient Test Jr
Sex Age

Goals of Therapy Differentiating Causes
Diagnosing Classification

Vital Signs

Height inches
Weight pounds
[BMI](#)
[Body Fat](#) %
[BMR](#) cal/day
wWaist inches
Hips inches
[Risk Ratio](#)
Blood Pressure / mmHg
Pulse
Last Echo
Ejection Fraction
Ventricular Dys
CHF Class
[Framingham 10-Yr Risk](#) %
[Mortality Risk](#)
[Global Cardio Risk](#)

Most Recent Labs

Sodium	<input type="text" value="//"/>	Cholesterol	<input type="text" value="150"/>	<input type="text" value="06/06/2007"/>
Potassium	<input type="text" value="//"/>	Triglycerides	<input type="text" value="175"/>	<input type="text" value="06/06/2007"/>
Chloride	<input type="text" value="//"/>	HDL	<input type="text" value="//"/>	
CO2	<input type="text" value="//"/>	LDL	<input type="text" value="//"/>	
Glucose	<input type="text" value="//"/>	Chol/HDL	<input type="text" value=""/>	
BUN	<input type="text" value="//"/>	Trig/HDL	<input type="text" value=""/>	
Creatinine	<input type="text" value="//"/>	UA Protein	<input type="text" value="//"/>	
Calcium	<input type="text" value="//"/>	T3	<input type="text" value="//"/>	
Troponin	<input type="text" value="//"/>	T4	<input type="text" value="//"/>	
CPK	<input type="text" value="//"/>	T7	<input type="text" value="//"/>	
Digoxin	<input type="text" value="//"/>	T-Uptake	<input type="text" value="//"/>	
PT	<input type="text" value="//"/>	TSH	<input type="text" value="//"/>	
INR	<input type="text" value="//"/>	proBNP	<input type="text" value="//"/>	
Fibrinogen	<input type="text" value="//"/>	Sed Rate	<input type="text" value="//"/>	
PAI-1	<input type="text" value="//"/>	D-Dimer	<input type="text" value="//"/>	

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Prospective Data Collection Flowsheet

Assessment of Clinical Symptoms of Volume Overload (Excess)

Level of Activity

Assessment of Clinical Signs of Volume Overload (Excess)

Patient Education

Beta-Blocker Therapy

Ace Inhibitor Therapy

Warfarin Therapy

Chronic Hx Paroxysmal Atrial Fib

No Yes

Dyspnea

Fatigue

Orthopnea

Standardized scale or assessment tool used

Standardized scale or assessment tool used

Peripheral Edema

Rales

Liver Enlarged (Hepatomegaly)

Ascites

Jugular Venous Pulse - Normal Jugular Venous Pulse - Distended

Patient Education Given

Not Indicated

Prescribed

Not Prescribed (Medical Reasons)

Not Prescribed (Patient Reasons)

Patient refuses a B-blocker

Not Indicated

Prescribed

Not Prescribed (Patient Reasons)

Patient Receiving Angiotensin Receptor Blocker

Patient refuses an ACE

Patient refuses an ARB

Not Indicated

Prescribed

Not Prescribed (Medical Reasons)

Not Prescribed (Patient Reasons)

Questionnaire Score

Rails – automatic documentation from respiratory physical examination template. The documentation of the presences or the absence of rails is one of the quality indicators established by the Physicians Consortium for performance improvements.

The final step is to give the patient a copy of the CHF follow-up note.