Liberty Health Advantage

CLINICAL PRACTICE GUIDELINE REVIEW WORKSHEET

Procedure:	Congestive Heart Failure
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Review Date:	August 2007
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Approval Date:	August 2007

MEMBERS PRESENT:

☐ Credentialing/ Peer Review Committee (see minutes

PURPOSE:

To guide the LHA network physicians in the diagnosis and treatment of Congestive Heart Failure. To prevent hospitalization and re-admission and to achieve best practice in managing CHF patients. This CPG is not intended to replace a physician's clinical medical judgment that should be based on current medical knowledge and practices.

FINDINGS:

Congestive Heart Failure (CHF) is a clinical syndrome defined by the inability of heart to meet metabolic demands due to diastolic or systolic dysfunction. An estimated 4.8 million Americans have congestive heart failure (CHF). CHF is the first-listed diagnosis in 875,000 hospitalizations, and the most common diagnosis in hospital patients age 65 years and older. In that age group, one fifth of all hospitalizations have a primary or secondary diagnosis of heart failure. Heart Failure accounted for approximately 2.9 million physician office visits in 1993 with an estimated $17.8 billion spent for the care of CHF patients in hospitals, physicians' offices, home care, and nursing homes as well as for medication.

RECOMMENDATIONS:

Liberty Health Advantage recommends the adoption of the American College of Cardiology/American Heart Association 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult.

- Adopt SCAN® Congestive Heart Failure Treatment Algorithm.
- To control and monitor symptom and weight and maximum medical intervention.
- High-Risk Team, Hospitalist Team and Primary Care Physician to work together with effective CHF guidelines.
- Use ACE inhibitors, Beta-Blockers, and Diuretic.

ATTACHMENTS:

- The SCAN® Congestive Heart Failure Treatment Algorithm
- American College of Cardiology/American Heart Association 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult. http://circ.ahajournals.org/cgi/reprint/112/12/e154

GOAL

To provide guidelines for:

- Early and ongoing control of congestive heart failure symptoms through lifestyle management and pharmacotherapy to reduce complications, improve outcomes and life expectancy.
- Preserving the left ventricular myocardium
- Achieving optimal pharmacotherapy with minimal or no side effects
- Minimizing the need for acute services (ER encounters, urgent care and hospitalizations)

ASSESSMENT AND DIAGNOSIS:

- Complaints of paroxysmal nocturnal dyspnea, orthopnea or new-onset dyspnea on exertion
- History and physical examination to include chest X-ray, electrocardiogram (ECG), complete blood count (CBC), serum electrolytes, serum creatinine, serum albumin, liver function tests and urinalysis
- Echocardiography or radionuclide ventriculography to measure left ventricular ejection fraction «35% to 40%)
- T4 and thyroid-stimulating hormone (TSH) level for patients> 65 years of age, or who have atrial fibrillation or evidence of thyroid disease
- F or Stages of CHF, see Table I, excerpted from the report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (IACC-Vol. 38, Nov. 7,2001 pages 2102-2103).

RECOMMENDED THERAPIES:

- Routine Outpatient Management
- Daily weight recording/monitoring. Instruct the member when to call the physician for unexplained weight gain of greater than three to five pounds, unless a lower range is prescribed.
- Daily fluid intake monitoring
- Low sodium diet
- Prescribed exercise program
- Smoking cessation
- Alcohol restriction
- Annual influenza vaccine
- Pneumococcal vaccine (generally once in a lifetime)

Medications commonly used

- Thiazide diuretics, loop diuretics, Potassium-sparing diuretics or Thiazide related diuretics
- ACE Inhibitors
- Beta Blockers
- Digoxin
- Hydralazine
- Isosorbide Dinitrate

Hospital Management

- May be indicated if the following findings are present:
- Clinical or electrocardiographic evidence of acute myocardial ischemia
- Pulmonary edema or severe respiratory distress
- Oxygen saturation below 90% (not due to pulmonary disease)
- Severe complicating medical illness (e.g., pneumonia)
- Anasarca
- Symptomatic hypotension or syncope
- Persistent NYHA Class 3 or 4 despite maximal outpatient therapy
- Post hospital patient contact should be within one week following discharge to ensure patient understanding and compliance with treatment plan.

PATIENT EDUCATION

General Counseling

- Explanation of heart failure and the reason for symptoms
- Cause or probable cause of heart failure
- Expected symptoms
- Symptoms of worsening heart failure
- What to do if symptoms worsen
- Self-monitoring of daily weights
- Explanation of treatment/plan of care
- Clarification of patient's responsibilities
- Importance of cessation of tobacco use
- Role of family members or other caregivers in the treatment/plan of care
- Availability and value of qualified local support group
- Importance of obtaining vaccinations against influenza and pneumococcaJ disease
- Importance of compliance with treatment/plan of care

Prognosis

- Life expectancy
- Advance directives
- Advice for family members in the event of sudden death

Activity Recommendations

- Recreation, leisure and work activity
- Exercise
- Sexual activity and coping strategies

Dietary Recommendations

- Sodium restriction
- A voidance or excessive fluid intake
- Alcohol restriction

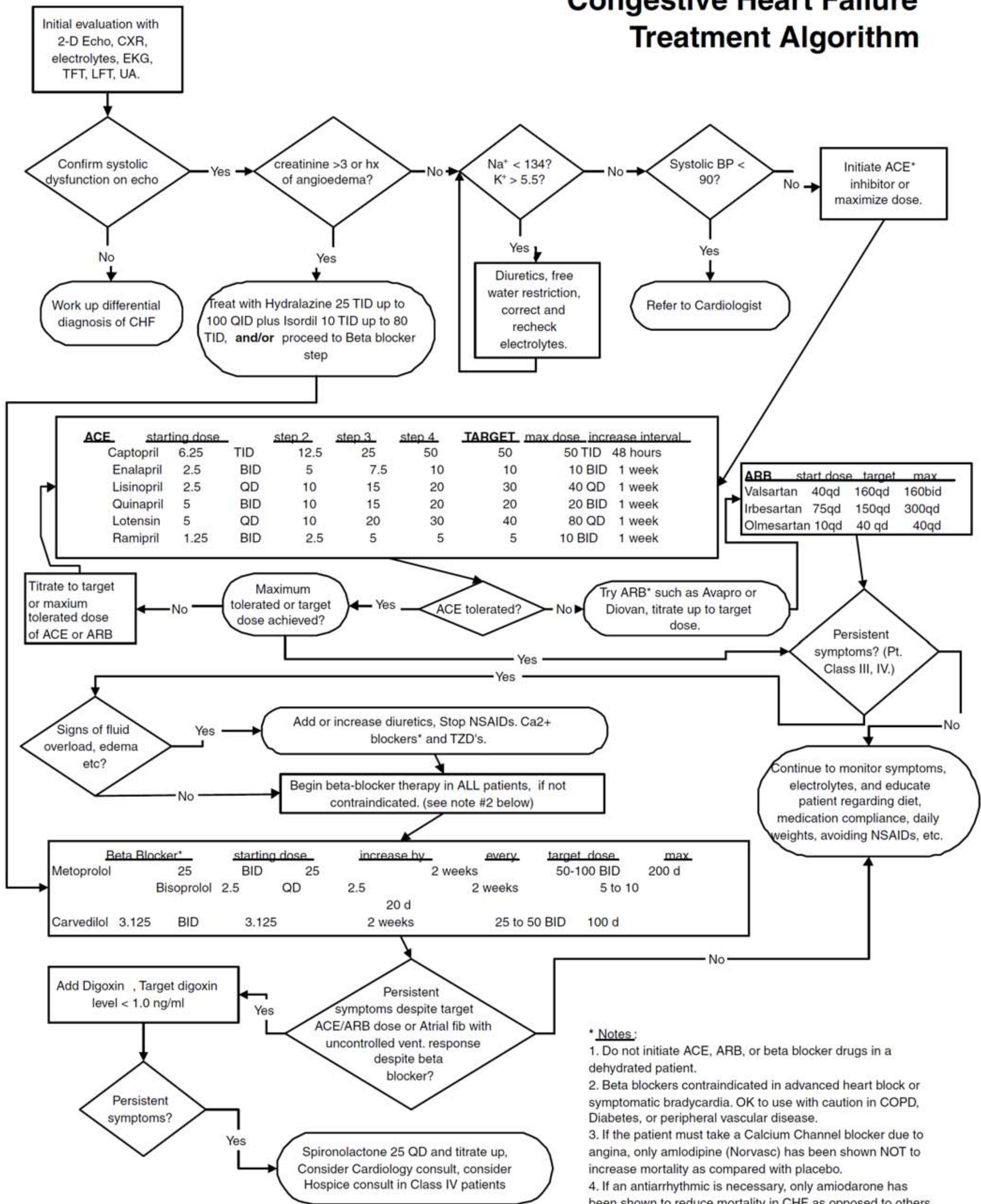
Medications

- Effects of medications on quality of life and survival
- Dosing
- Likely side effects and what to do if they occur
- Coping mechanisms for complicated medical regimens
- Availability of lower cost medications or financial assistance

SPECIALIST INVOLVEMENT

- Specialist involvement is indicated when the following findings are present:
- Intolerance of ACE inhibitors
- Atrial or ventricular arrhythmias
- Suspicion of correctable cause of heart failure (ischemia, valve disease)
- Diastolic dysfunction
- Difficulty achieving or maintaining control of symptoms

Congestive Heart Failure Treatment Algorithm



ACE	starting dose		step 2	step 3	step 4	TARGET	max dose	increase interval
Captopril	6.25	TID	12.5	25	50	50	50 TID	48 hours
Enalapril	2.5	BID	5	7.5	10	10	10 BID	1 week
Lisinopril	2.5	QD	10	15	20	30	40 QD	1 week
Quinapril	5	BID	10	15	20	20	20 BID	1 week
Lotensin	5	QD	10	20	30	40	80 QD	1 week
Ramipril	1.25	BID	2.5	5	5	5	10 BID	1 week

ARB	start dose	target	max
Valsartan	40qd	160qd	160bid
Irbesartan	75qd	150qd	300qd
Olmesartan	10qd	40 qd	40qd

Beta Blocker*	starting dose		increase by	every	target dose	max
Metoprolol	25	BID	25	2 weeks	50-100 BID	200 d
Bisoprolol	2.5	QD	2.5	2 weeks	5 to 10	20 d
Carvedilol	3.125	BID	3.125	2 weeks	25 to 50 BID	100 d

* Notes:

1. Do not initiate ACE, ARB, or beta blocker drugs in a dehydrated patient.
2. Beta blockers contraindicated in advanced heart block or symptomatic bradycardia. OK to use with caution in COPD, Diabetes, or peripheral vascular disease.
3. If the patient must take a Calcium Channel blocker due to angina, only amlodipine (Norvasc) has been shown NOT to increase mortality as compared with placebo.
4. If an antiarrhythmic is necessary, only amiodarone has been shown to reduce mortality in CHF as opposed to others that may increase mortality.

by REB, last rev. 2/04