

## Clinical Performance Measures

# Heart Failure

Tools Developed by Physicians for Physicians

Provided by:

**American College of Cardiology**

**American Heart Association**

**Physician Consortium for Performance Improvement**

### *Purpose*

This measurement tool provides physicians with *evidence-based*<sup>1</sup> clinical performance measures, including a data collection flowsheet, that may be useful for quality improvement activities within physician practices. The measures and flowsheet are intended for prospective data collection only. The ability to track changes over time is integral to the concept of continuous quality improvement in patient care. Evidence-based clinical performance measures have been identified as a means for tracking these changes.

These measures are provided for physicians by the **American College of Cardiology (ACC)**, the **American Heart Association (AHA)**, and the **Physician Consortium for Performance Improvement (The Consortium)**. The ACC, a professional society of over 25,000 cardiovascular physicians and scientists committed to providing optimal cardiovascular care, and the AHA, a national voluntary health organization with over 30,000 scientist and physician volunteers dedicated to reducing disability and death from cardiovascular diseases and stroke, have joined with The Consortium to ensure that the cardiovascular community speaks with one voice on clinical performance measurement. The ACC and the AHA have a long-standing partnership in publishing clinical practice guidelines and are now developing physician-level performance measures for implementation in both the inpatient and outpatient setting.

The Consortium is a physician-led initiative that includes methodological experts, clinical experts representing more than 50 national medical specialty societies, state medical societies, the Agency for Healthcare Research and Quality, and the Centers for Medicare and Medicaid Services. The Consortium's vision is to fulfill the responsibility of physicians to patient care, public health, and safety by becoming the leading source organization for evidence-based clinical performance measures and outcomes reporting tools for physicians.

Performance measures must be designed based on their intended purpose.<sup>2,3</sup> The measures presented here are intended to facilitate individual physician quality improvement. Therefore, there are no minimum sample size requirements, and the suggested feedback is sufficiently detailed to pinpoint areas of concern for the physician. The measures defined in this measurement tool are not intended, and should not be used, for physician comparison.<sup>4</sup>

Performance measures are not clinical guidelines; rather, measures are derived from evidence-based clinical guidelines and indicate whether or not or how often a process or outcome of care occurs.<sup>2</sup> Performance measures provide important information to a physician, allowing him or her to enhance the quality of care delivered to patients.

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This Physician Performance Measurement Set (PPMS) was developed by the Physician Consortium for Performance Improvement (The Consortium) to facilitate quality improvement activities by physicians. The performance measures contained in this PPMS are not clinical guidelines and do not establish a standard of medical care. This PPMS is intended to assist physicians in enhancing quality of care and is not intended for comparing individual physicians to each other or for individual physician accountability by comparing physician performance against the measure or guideline. The Consortium has not tested this PPMS.

This PPMS is subject to review and may be revised or rescinded at any time by The Consortium. The PPMS may not be altered without the prior written approval of The Consortium. A PPMS developed by The Consortium, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes. Any other use is subject to the approval of The Consortium. Neither The Consortium nor its members shall be responsible for any use of this PPMS. Clinical measures and data are being provided in accordance with the Data Rights Agreement between the Centers for Medicare & Medicaid Services and the American Medical Association.

## Statistics on Heart Failure

A person aged 40 years or older has a 1 in 5 chance of developing heart failure (HF).<sup>5</sup> Currently, about 5 million Americans are living with HF, and about 550,000 new cases are diagnosed each year.<sup>6</sup> The high prevalence combined with multiple complications from this condition increase health care costs significantly.

- From 1979 to 2000, HF deaths increased 148%.<sup>6</sup>
- About 22% of male and 46% of female heart attack victims will be disabled with HF within 6 years.<sup>6</sup>
- In individuals diagnosed with HF, sudden cardiac death occurs at 6 to 9 times the rate in the general population.<sup>6</sup>
- In 2003, the annual direct and indirect costs of HF in the United States are expected to exceed \$24 billion.<sup>6</sup>

## Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some patients are not being managed optimally for their disease. It has been reported that in some states:

- Only 70% of Medicare patients with HF received an evaluation of ejection fraction.<sup>7</sup>
- Only 68% of Medicare patients with left ventricular ejection fraction <0.40 were prescribed an angiotensin-converting enzyme (ACE) inhibitor.<sup>7</sup>
- Only 75% of all HF patients who are candidates for ACE inhibitors are prescribed them.<sup>8</sup>

## Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for the management of heart failure. This measurement set is based on clinical guidelines from:

- American College of Cardiology/American Heart Association<sup>9</sup>

The performance measures found in this document have been developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. *Please note that treatment must be based on individual patient needs and professional judgment.*

For more information and updates, including a list of practicing physicians and other experts who developed this measurement set, please visit The Consortium's Web site

[www.ama-assn.org/go/quality](http://www.ama-assn.org/go/quality)

## Relevant Physician Specialties, Patient Population, and Settings of Care

These performance measures are designed for:

- Use by any physician who manages the ongoing care of patients with diagnosed HF, aged  $\geq 18$  years.
- Prospective data collection in the office-based practice setting only.

A note on terminology for this condition: Some HF patients have exercise intolerance but little evidence of fluid retention, whereas others complain primarily of edema and report few symptoms of dyspnea or fatigue. Because not all patients have volume overload at the time of initial or subsequent evaluation, the term "heart failure" is preferred over the older term "congestive heart failure."<sup>9</sup>

**American College of Cardiology, American Heart Association, and  
Physician Consortium for Performance Improvement  
Heart Failure Core Physician Performance Measurement Set<sup>a</sup>**

|   | <b>Clinical Recommendations<sup>a</sup></b>  | <b>Clinical Performance Measures Per Reporting Year</b>   |  |
|---|--|---|--|
| <b>Laboratory Tests</b>   | <p>Evaluation of patients with HF (Class I Recommendation)<br/>Initial measurement of the following:<br/>complete blood count, urinalysis, serum electrolytes (including calcium and magnesium), blood urea nitrogen, serum creatinine, blood glucose, liver function tests, thyroid-stimulating hormone<sup>b</sup> (Level-C Evidence)<br/>Serial monitoring of serum electrolytes and renal function. (Level-C Evidence)</p> | <p>Percentage of patients for whom initial laboratory testing was performed<br/><b>Numerator</b> = Patients for whom initial laboratory testing was performed<br/><b>Denominator</b> = All patients aged ≥ 18 years with HF</p>                                     |  |
|   |  | <p><i>Per Patient:</i><br/>Whether or not initial laboratory testing was performed</p>  | <p><i>Per Patient Population:</i><br/>Percentage of all patients for whom initial laboratory testing was performed</p>   |
| <b>Left Ventricular Function (LVF) Assessment</b>   | <p>In patients with HF, an assessment of left ventricular systolic function with 2-dimensional echocardiography or radionuclide ventriculography is recommended. (Class I Recommendation, Level-C Evidence)<br/>In patients with a change in clinical status or clinical event/treatment with significant effect on cardiac function, repeat measurement of ejection fraction is recommended. (Level-C Evidence)</p>           | <p>Percentage of patients with quantitative or qualitative results of LVF assessment recorded<br/><b>Numerator</b> = Patients with quantitative or qualitative results of LVF assessment recorded<br/><b>Denominator</b> = All patients aged ≥ 18 years with HF</p> |  |
|   |  | <p><i>Per Patient:</i><br/>Quantitative or qualitative results of LVF assessment</p>  | <p><i>Per Patient Population:</i><br/>Percentage of patients with quantitative or qualitative results of LVF assessment recorded</p>   |
| <b>Weight Measurement</b><br><i>Denominator Exclusion:</i><br>Patient visits in which physician was unable to weigh patient | <p>A thorough physical examination is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF.<br/>This physical examination may include initial and ongoing assessments of the patient's volume status. (Class I Recommendation, Level-C Evidence)</p>   | <p>Percentage of patient visits with weight measurement recorded<br/><b>Numerator</b> = Patient visits with weight measurement recorded<br/><b>Denominator</b> = All patient visits for patients aged ≥ 18 years with HF</p>  |  |
|   |  | <p><i>Per Patient:</i><br/>Number of visits with weight measurement recorded/Number of visits</p>   | <p><i>Per Patient Population:</i><br/>Percentage of patient visits with weight measurement recorded</p>  |
| <b>Blood Pressure Measurement</b>   | <p>A thorough physical examination is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF. (Class I Recommendation, Level-C Evidence)</p>   | <p>Percentage of patient visits with blood pressure measurement recorded<br/><b>Numerator</b> = Patient visits with blood pressure measurement recorded<br/><b>Denominator</b> = All patient visits for patients aged ≥18 years with HF</p>                         |  |
|   |  | <p><i>Per Patient:</i><br/>Number of visits with blood pressure measurement recorded/Number of visits<br/>Most recent systolic and diastolic blood pressure values</p>  | <p><i>Per Patient Population:</i><br/>Percentage of patient visits with a blood pressure measurement recorded<br/>Distribution of systolic and diastolic blood pressure values</p> |

a Refers to patients aged ≥18 years with diagnosed HF.

b For this measure, documentation required for only the following tests: complete blood count, serum electrolytes, blood urea nitrogen, serum creatinine, blood glucose, thyroid-stimulating hormone.

**American College of Cardiology, American Heart Association, and  
Physician Consortium for Performance Improvement  
Heart Failure Core Physician Performance Measurement Set<sup>a</sup>**

|  | <b>Clinical Recommendations<sup>9</sup></b>  | <b>Clinical Performance Measures Per Reporting Year</b>   |   |
|--|--|---|---|
| <b>Assessment of Clinical Symptoms of Volume Overload (Excess)</b>   | A thorough history is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF.<br><br>This history may include initial and ongoing assessments of the patient's volume status.<br>(Class I Recommendation, Level-C Evidence)  | Percentage of patient visits with assessment of clinical <i>symptoms</i> of volume overload (excess)<br><b>Numerator</b> = Patient visits with assessment of clinical <i>symptoms</i> of volume overload (excess) OR documentation of standardized scale or completion of assessment tool <sup>c</sup><br><b>Denominator</b> = All patient visits for patients aged ≥18 years with HF   |   |
|  |  | <i>Per Patient:</i><br>Number of visits with assessment of clinical <i>symptoms</i> of volume overload (excess)/<br>Number of visits  | <i>Per Patient Population:</i><br>Percentage of patient visits with assessment of clinical <i>symptoms</i> of volume overload (excess)  |
| <b>Assessment of Activity Level</b>  | A thorough history is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF.<br><br>This history may include initial and ongoing assessments of the patient's activity level.<br>(Class I Recommendation, Level-C Evidence)   | Percentage of patient visits with assessment of activity level<br><b>Numerator</b> = Patient visits with assessment of current level of activity OR documentation of standardized scale or completion of assessment tool <sup>c</sup><br><b>Denominator</b> = All patient visits for patients aged ≥18 years with HF  |   |
|  |  | <i>Per Patient:</i><br>Number of visits with assessment of activity level/Number of visits  | <i>Per Patient Population:</i><br>Percentage of patient visits with assessment of activity level  |
| <b>Assessment of Clinical Signs of Volume Overload (Excess)</b>  | A thorough physical examination is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF.<br><br>This physical examination may include initial and ongoing assessments of the patient's volume status.<br>(Class I Recommendation, Level-C Evidence)  | Percentage of patient visits with assessment of clinical <i>signs</i> of volume overload (excess)<br><b>Numerator</b> = Patient visits with assessment of clinical <i>signs</i> of volume overload (excess)<br><b>Denominator</b> = All patient visits for patients aged ≥18 years with HF  |   |
|  |  | <i>Per Patient:</i><br>Number of visits with assessment of clinical <i>signs</i> of volume overload (excess)/Number of visits   | <i>Per Patient Population:</i><br>Percentage of patient visits with assessment of clinical <i>signs</i> of volume overload (excess)   |
| <b>Examination of the Heart</b>  | A thorough physical examination is recommended to identify cardiac and noncardiac disorders that may accelerate the progression of HF.<br>(Class I Recommendation, Level-C Evidence)   | Percentage of patient visits with examination of the heart<br><b>Numerator</b> = Patient visits with examination of the heart<br><b>Denominator</b> = All patient visits for patients aged ≥ 18 years with HF   |   |
|  |  | <i>Per Patient:</i><br>Number of visits with examination of the heart/Number of visits  | <i>Per Patient Population:</i><br>Percentage of patient visits with examination of the heart  |
| <b>Patient Education</b><br><i>Denominator Inclusion:</i><br>Patients with one or more visit(s) during a six-month period. | Patient education and close supervision is recommended for patients with HF to reduce the likelihood of noncompliance and lead to the detection of changes in body weight or clinical status early enough for effective treatment to be instituted.<br><br>Avoidance of patient behaviors that may increase the risk of HF (eg, smoking, alcohol, and illicit drug use) should also be encouraged.<br>(Class I Recommendation, Level-C Evidence) | Percentage of patients who were provided with patient education on disease management and health behavior changes during one or more visit(s) within a six-month period<br><b>Numerator</b> = Patients who were provided with written and/or verbal education at one or more visit(s) during a six-month care period under evaluation <sup>d</sup><br><b>Denominator</b> = All patients aged ≥ 18 years with HF and with one or more visit(s) during a six-month period |   |
|  |  | <i>Per Patient:</i><br>Whether or not patient education was provided  | <i>Per Patient Population:</i><br>Percentage of patients who were provided with patient education on disease management and health behavior changes during one or more visit(s) within a six-month period |

c Standardized scale or assessment tools may include the New York Heart Association Functional Classification of Congestive Heart Failure (level of activity only); Kansas City Cardiomyopathy Questionnaire; Minnesota Living with Heart Failure™ Questionnaire; or Chronic Heart Failure Questionnaire (Guyatt).

d Patient education should include one or more of the following: weight monitoring; diet (sodium restriction); symptom management; physical activity; smoking cessation; medication instruction; minimizing or avoiding use of NSAIDs; follow-up plans (eg, next appointment, visiting nurse); referral for specific educational or management programs; or prognosis/end-of-life issues.

**American College of Cardiology, American Heart Association, and  
Physician Consortium for Performance Improvement  
Heart Failure Core Physician Performance Measurement Set<sup>®</sup>**

|  | <b>Clinical Recommendations<sup>9</sup></b>   | <b>Clinical Performance Measures Per Reporting Year</b>  |  |
|--|---|--|--|
| <p><b>Beta-Blocker Therapy</b></p> <p><i>Denominator Inclusion:</i> Patients with HF and left ventricular systolic dysfunction (LVSD) (left ventricular ejection fraction [LVEF] &lt; 40% or moderately or severely depressed left ventricular systolic function)</p> <p><i>Denominator Exclusion:</i> Documentation that a beta-blocker was not indicated; documentation of medical reason(s)<sup>e</sup> for not prescribing beta-blocker; documentation of patient reason(s)<sup>f</sup> for not prescribing beta-blocker</p> | <p>Patients with asymptomatic LVSD (Stage B):</p> <p>Beta-blocker therapy is recommended for all HF patients with recent myocardial infarction (MI) (Level-A Evidence) and patients with reduced ejection fraction (Level-B Evidence)</p> <p>Patients with symptomatic LVSD (Stage C):</p> <p>Beta-adrenergic blockade in all stable patients unless contraindicated (Class I Recommendation, Level-A Evidence)</p> | <p>Percentage of HF patients who also have LVSD who were prescribed beta-blocker therapy</p> <p><b>Numerator</b> = Patients who were prescribed beta-blocker therapy</p> <p><b>Denominator</b> = All HF patients aged ≥18 years with LVEF &lt; 40% or with moderately or severely depressed left ventricular systolic function</p>   |  |
|  |   | <p><i>Per Patient:</i></p> <p>Whether or not patient with LVSD was prescribed beta-blocker therapy</p>   | <p><i>Per Patient Population:</i></p> <p>Percentage of all patients with LVSD who were prescribed beta-blocker therapy</p> <p>Percentage of patients with LVSD who were prescribed beta-blocker therapy, with all denominator exclusions applied</p>   |
| <p><b>ACE Inhibitor Therapy</b></p> <p><i>Denominator Inclusion:</i> Patients with HF and LVSD (LVEF &lt; 40% or moderately or severely depressed left ventricular systolic function)</p> <p><i>Denominator Exclusion:</i> Documentation that ACE inhibitor was not indicated (eg, patients on angiotensin receptor blockers [ARB]); documentation of medical reason(s)<sup>e</sup> for not prescribing ACE inhibitor therapy; documentation of patient reason(s)<sup>f</sup> for not prescribing ACE inhibitor therapy</p>      | <p>Patients with asymptomatic LVSD (Stage B):</p> <p>ACE inhibitor therapy is recommended for HF patients with recent MI (Level-A Evidence) and in patients with reduced ejection fraction (Level-B Evidence).</p> <p>Patients with symptomatic LVSD (Stage C):</p> <p>ACE inhibitor therapy in all patients, unless contraindicated. (Class I Recommendation, Level-A Evidence)</p>                                | <p>Percentage of HF patients who also have LVSD who were prescribed ACE inhibitor therapy</p> <p><b>Numerator</b> = Patients who were prescribed ACE inhibitor therapy</p> <p><b>Denominator</b> = All HF patients aged ≥18 years with LVEF &lt; 40% or with moderately or severely depressed left ventricular systolic function</p> |  |
|  |   | <p><i>Per Patient:</i></p> <p>Whether or not patient with LVSD was prescribed ACE inhibitor therapy</p>  | <p><i>Per Patient Population:</i></p> <p>Percentage of all (including patients on ARBs) patients with LVSD who were prescribed ACE inhibitor therapy</p> <p>Percentage of patients with LVSD who were prescribed ACE inhibitor therapy, with all denominator exclusions applied</p>                                    |
| <p><b>Warfarin Therapy for Patients with Atrial Fibrillation</b></p> <p><i>Denominator Inclusion:</i> Patients with HF and paroxysmal or chronic atrial fibrillation</p> <p><i>Denominator Exclusion:</i> Documentation that warfarin was not indicated; documentation of medical reason(s)<sup>e</sup> for not prescribing warfarin; documentation of patient reason(s)<sup>f</sup> for not prescribing warfarin</p>  | <p>Anticoagulant use is recommended for patients with HF and concomitant diseases (eg, paroxysmal or chronic atrial fibrillation or a previous thromboembolic event). (Class I Recommendation, Level-A Evidence)</p>  | <p>Percentage of HF patients who also have paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy</p> <p><b>Numerator</b> = Patients who were prescribed warfarin therapy</p> <p><b>Denominator</b> = All HF patients aged ≥18 years with paroxysmal or chronic atrial fibrillation</p>                      |  |
|  |   | <p><i>Per Patient:</i></p> <p>Whether or not patient with paroxysmal or chronic atrial fibrillation was prescribed warfarin therapy</p>  | <p><i>Per Patient Population:</i></p> <p>Percentage of all patients with paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy</p> <p>Percentage of patients with paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy, with all denominator exclusions applied</p> |

e Medical reasons for not prescribing **beta-blocker**: bradycardia < 50 bpm without beta-blocker therapy, history of Class IV heart failure, history of second- or third-degree AV block without permanent pacemaker, etc.

Medical reasons for not prescribing **ACE inhibitor**: allergy, angioedema due to ACE inhibitor, anuric renal failure due to ACE inhibitor, pregnancy, moderate or severe aortic stenosis, etc.

Medical reasons for not prescribing **warfarin**: allergy to warfarin, risk of bleeding or bleeding disorder, compliance, etc.

f Patient reasons for not prescribing beta-blocker, ACE inhibitor, or warfarin: economic, social, and/or religious, etc.

**American College of Cardiology, American Heart Association, and  
Physician Consortium for Performance Improvement  
Heart Failure Core Physician Performance Measurement Set  
Prospective Data Collection Flowsheet**

|                                 |
|---------------------------------|
| <b>Allergies</b><br><hr/> <hr/> |
|---------------------------------|

Provider No. \_\_\_\_\_ Patient Name or Code \_\_\_\_\_ Birth Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Gender M  F   
(mm / dd / yyyy)

|  |   |   |   |   |
|--|---|---|---|---|
| <b>Initial Laboratory Tests Performed:</b> (select all that apply)   |   |   |   |   |
| <input type="checkbox"/> CBC <input type="checkbox"/> BUN <input type="checkbox"/> Blood glucose <input type="checkbox"/> Other  |   |   |   |   |
| <input type="checkbox"/> Serum electrolytes <input type="checkbox"/> Serum creatinine <input type="checkbox"/> Thyroid stimulating hormone   |   |   |   |   |
| <input type="checkbox"/> Left ventricular function assessed: ____ / ____ / ____ <input type="checkbox"/> Left ventricular systolic dysfunction (left ventricular ejection fraction < 40% or moderately or severely depressed left ventricular systolic function) |   |   |   |   |
| <b>Results:</b>  |   |   |   |   |
| <b>Date of Visit</b><br>(mm / dd / yyyy)   | ____ / ____ / ____  | ____ / ____ / ____  | ____ / ____ / ____  | ____ / ____ / ____  |
| <b>Weight</b> (lb/kg)  | <input type="checkbox"/> Unable to weigh  | <input type="checkbox"/> Unable to weigh  | <input type="checkbox"/> Unable to weigh  | <input type="checkbox"/> Unable to weigh  |
| <b>Heart Rate</b>  |   |   |   |   |
| <b>Blood Pressure</b>  | L                      R  | L                      R  | L                      R  | L                      R  |
|  | ____<br>sitting    supine    standing   | ____<br>sitting    supine    standing   | ____<br>sitting    supine    standing   | ____<br>sitting    supine    standing   |
| <b>Assessment of Clinical Symptoms of Volume Overload (Excess)</b>   | <input type="checkbox"/> Dyspnea<br><input type="checkbox"/> Fatigue<br><input type="checkbox"/> Orthopnea<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>  | <input type="checkbox"/> Dyspnea<br><input type="checkbox"/> Fatigue<br><input type="checkbox"/> Orthopnea<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>  | <input type="checkbox"/> Dyspnea<br><input type="checkbox"/> Fatigue<br><input type="checkbox"/> Orthopnea<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>  | <input type="checkbox"/> Dyspnea<br><input type="checkbox"/> Fatigue<br><input type="checkbox"/> Orthopnea<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>  |
| <b>Level of Activity</b>   | _____<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>   | _____<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>   | _____<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>   | _____<br><input type="checkbox"/> Standardized scale or assessment tool used <sup>a</sup>   |
| <b>Assessment of Clinical Signs of Volume Overload (Excess)</b>  | <input type="checkbox"/> Peripheral edema<br><input type="checkbox"/> Rales<br><input type="checkbox"/> Hepatomegaly<br><input type="checkbox"/> Ascites<br><input type="checkbox"/> Assessment of jugular venous pressure<br><input type="checkbox"/> Other: | <input type="checkbox"/> Peripheral edema<br><input type="checkbox"/> Rales<br><input type="checkbox"/> Hepatomegaly<br><input type="checkbox"/> Ascites<br><input type="checkbox"/> Assessment of jugular venous pressure<br><input type="checkbox"/> Other: | <input type="checkbox"/> Peripheral edema<br><input type="checkbox"/> Rales<br><input type="checkbox"/> Hepatomegaly<br><input type="checkbox"/> Ascites<br><input type="checkbox"/> Assessment of jugular venous pressure<br><input type="checkbox"/> Other: | <input type="checkbox"/> Peripheral edema<br><input type="checkbox"/> Rales<br><input type="checkbox"/> Hepatomegaly<br><input type="checkbox"/> Ascites<br><input type="checkbox"/> Assessment of jugular venous pressure<br><input type="checkbox"/> Other: |
| <b>Examination of the Heart</b>  | <input type="checkbox"/> Performed Findings:  | <input type="checkbox"/> Performed Findings:  | <input type="checkbox"/> Performed Findings:  | <input type="checkbox"/> Performed Findings:  |
| <b>Education</b>   | <input type="checkbox"/> Patient education provided <sup>b</sup>  | <input type="checkbox"/> Patient education provided <sup>b</sup>  | <input type="checkbox"/> Patient education provided <sup>b</sup>  | <input type="checkbox"/> Patient education provided <sup>b</sup>  |

a Standardized scale or assessment tools may include the New York Heart Association Functional Classification of Congestive Heart Failure (level of activity only), Kansas City Cardiomyopathy Questionnaire; Minnesota Living with Heart Failure Questionnaire; or Chronic Heart Failure Questionnaire (Guyatt).

b Patient education should include one or more of the following: weight monitoring; diet (sodium restriction); symptom management; physical activity; smoking cessation; medication instruction; minimizing or avoiding use of NSAIDs; follow-up plans (eg, next appointment, visiting nurse); referral for specific educational or management programs; or prognosis/end-of-life issues.

This flowsheet is intended for prospective data collection only.

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Physician Consortium for Performance Improvement  
Heart Failure Core Physician Performance Measurement Set  
Prospective Data Collection Flowsheet**

Provider No. \_\_\_\_\_ Patient Name or Code \_\_\_\_\_

**Adverse Drug Reactions**  
\_\_\_\_\_

|                              |  |   |   |   |   |
|------------------------------|--|---|---|---|---|
| <b>Medication Management</b> | <b>Date of Visit</b><br>(mm / dd / yyyy)   | ____/____/____  | ____/____/____  | ____/____/____  | ____/____/____  |
|                              | <b>Beta-Blocker Therapy</b>  | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*)   | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) |
|                              | <b>ACE Inhibitor Therapy</b>   | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*)   | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) |
|                              |  | <input type="checkbox"/> Patient receiving angiotensin receptor blocker   | <input type="checkbox"/> Patient receiving angiotensin receptor blocker   | <input type="checkbox"/> Patient receiving angiotensin receptor blocker   | <input type="checkbox"/> Patient receiving angiotensin receptor blocker   |
| <b>Other Medications</b>     | <b>Warfarin Therapy</b>  | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Chronic or paroxysmal atrial fibrillation<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) | <input type="checkbox"/> Not indicated<br><input type="checkbox"/> Prescribed<br><input type="checkbox"/> Not prescribed (medical reasons*)<br><input type="checkbox"/> Not prescribed (patient reasons*) |
|                              | *Specify medical (eg, allergy, contraindication) or patient (eg, economic, social, religious) reasons for not prescribing therapy: |   |   |   |   |
|                              |  |   |   |   |   |
|                              |  |   |   |   |   |
|                              |  |   |   |   |   |

This flowsheet is intended for prospective data collection only.

## References

- 1 Sackett DL, Straus SE, Richardson WS, et al. *Evidence-based Medicine: How to Practice & Teach EBM. 2nd edition.* London, England:Churchill Livingstone;2000.
- 2 Performance Measurement Coordinating Council. Desirable Attributes of Performance Measures. A Consensus Document from the AMA, JCAHO, and NCQA.1999. Available at: <http://www.ama-assn.org/ama/pub/category/2946.html>. Accessed August 2002.
- 3 Solberg LI, Mosser G, McDonald S. The three faces of performance measurement: improvement, accountability, and research. *Jt Comm J Qual Improv.* 1997;23:135-147.
- 4 Hofer TP, Hayward RA, Greenfield S, Wagner EH, Kaplan SH, Manning WG. The unreliability of individual physician "report cards" for assessing the costs and quality of care of a chronic disease. *JAMA.* 1999;28:2098-2105.
- 5 Lloyd-Jones DM, Larson MG, Leip EP, et al. Lifetime risk for developing congestive heart failure: The Framingham Heart Study. *Circulation.* 2002;106:3068-3072.
- 6 American Heart Association. *Heart Disease and Stroke Statistics – 2003 Update.* Dallas, Tex.: American Heart Association; 2002.
- 7 Jencks SF, Huff ED, Cuerdon T. Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998-1999 to 2000-2001. *JAMA.* 2003;289:305-312.
- 8 Gheorghide M, Gattis WA, O'Connor CM. Treatment Gaps in the Pharmacologic Management of Heart Failure. *Reviews in Cardiovascular Medicine.* 2002; 3(suppl 3):S11-S19.
- 9 Hunt SA, Baker DW, Chin MH, et al. ACC/AHA Guidelines for the Evaluation and Management of Chronic Heart Failure in the Adult: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. 2001.