**National Quality Forum—Evidence (subcriterion 1a)**

**Measure Number** (*if previously endorsed*)**:** Click here to enter NQF number

**Measure Title**: Post-Discharge Appointment for Heart Failure Patients

**IF the measure is a component in a composite performance measure, provide the title of the Composite Measure here:** n/a

**Date of Submission**: 12/23/2013

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| **Instructions**   * *For composite performance measures:*    + *A separate evidence form is required for each component measure unless several components were studied together.*   + *If a component measure is submitted as an individual performance measure, attach the evidence form to the individual measure submission.* * Respond to all questions as instructed with answers immediately following the question. All information needed to demonstrate meeting the evidence subcriterion (1a) must be in this form. An appendix of *supplemental* materials may be submitted, but there is no guarantee it will be reviewed. * If you are unable to check a box, please highlight or shade the box for your response. * Maximum of 10 pages (*incudes questions/instructions*; minimum font size 11 pt; do not change margins). ***Contact NQF staff if more pages are needed.*** * Contact NQF staff regarding questions. Check for resources at [Submitting Standards webpage](http://www.qualityforum.org/Measuring_Performance/Submitting_Standards.aspx). |

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| **Note: The information provided in this form is intended to aid the Steering Committee and other stakeholders in understanding to what degree the evidence for this measure meets NQF’s evaluation criteria.**   1a. Evidence to Support the Measure Focus The measure focus is evidence-based, demonstrated as follows:   * Health outcome: [**3**](#h.30j0zll) a rationale supports the relationship of the health outcome to processes or structures of care. Applies to patient-reported outcomes (PRO), including health-related quality of life/functional status, symptom/symptom burden, experience with care, health-related behavior. * Intermediate clinical outcome: a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#h.1fob9te) that the measured intermediate clinical outcome leads to a desired health outcome. * Process: [**5**](#h.3znysh7) a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#h.1fob9te) that the measured process leads to a desired health outcome. * Structure: a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#h.1fob9te)  that the measured structure leads to a desired health outcome. * Efficiency: [**6**](#h.2et92p0) evidence not required for the resource use component.   **Notes**  **3.** Generally, rare event outcomes do not provide adequate information for improvement or discrimination; however, serious reportable events that are compared to zero are appropriate outcomes for public reporting and quality improvement.  **4.** The preferred systems for grading the evidence are the U.S. Preventive Services Task Force (USPSTF) [grading definitions](http://www.uspreventiveservicestaskforce.org/uspstf/grades.htm) and [methods](http://www.uspreventiveservicestaskforce.org/methods.htm), or Grading of Recommendations, Assessment, Development and Evaluation [(GRADE) guidelines](http://www.gradeworkinggroup.org/publications/index.htm).  **5.** Clinical care processes typically include multiple steps: assess  identify problem/potential problem  choose/plan intervention (with patient input)  provide intervention  evaluate impact on health status. If the measure focus is one step in such a multistep process, the step with the strongest evidence for the link to the desired outcome should be selected as the focus of measurement. Note: A measure focused only on collecting PROM data is not a PRO-PM.  **6.** Measures of efficiency combine the concepts of resource use and quality (see NQF’s [Measurement Framework: Evaluating Efficiency Across Episodes of Care](http://www.qualityforum.org/Publications/2010/01/Measurement_Framework__Evaluating_Efficiency_Across_Patient-Focused_Episodes_of_Care.aspx); [AQA Principles of Efficiency Measures](http://www.aqaalliance.org/files/PrinciplesofEfficiencyMeasurementApril2006.doc)). |

**1a.1.This is a measure of**: (*should be consistent with type of measure entered in De.1*)

Outcome

☐ Health outcome: Click here to name the health outcome

☐Patient-reported outcome (PRO): Click here to name the PRO

*PROs include HRQoL/functional status, symptom/symptom burden, experience with care, health-related behaviors*

☐ Intermediate clinical outcome (*e.g., lab value*): Click here to name the intermediate outcome

☒ Process: post-discharge appointment for heart failure patients

☐ Structure: Click here to name the structure

☐ Other: Click here to name what is being measured

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**HEALTH OUTCOME/PRO PERFORMANCE MEASURE**  *If not a health outcome or PRO, skip to* [*1a.3*](#h.tyjcwt)

**1a.2.** **Briefly state or diagram the path between the health outcome (or PRO) and the healthcare structures, processes, interventions, or services that influence it.**

**1a.2.1.** **State the rationale supporting the relationship between the health outcome (or PRO) to at least one healthcare structure, process, intervention, or service (*i.e., influence on outcome/PRO*).**

*Note: For health outcome/PRO performance measures, no further information is required; however, you may provide evidence for any of the structures, processes, interventions, or service identified above.*

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**intermediate outcome, PROCESS, or STRUCTURE PERFORMANCE measure**

**1a.3.****Briefly state or diagram the path between structure, process, intermediate outcome, and health outcomes**. Include all the steps between the measure focus and the health outcome.

**1a.3.1.** **What is the source of the systematic review of the body of evidence that supports the performance measure?**

x Clinical Practice Guideline recommendation – ***complete sections*** [***1a.4,***](#h.3dy6vkm) ***and*** [***1a.7***](#h.2s8eyo1)

☐ US Preventive Services Task Force Recommendation – ***complete sections*** [***1a.5***](#h.1t3h5sf) ***and*** [***1a.7***](#h.2s8eyo1)

x Other systematic review and grading of the body of evidence (*e.g., Cochrane Collaboration, AHRQ Evidence Practice Center*) – ***complete sections*** [***1a.6***](#h.4d34og8) ***and*** [***1a.7***](#h.2s8eyo1)

☐ Other – ***complete section*** [***1a.8***](#h.17dp8vu)

*Please complete the sections indicated above for the source of evidence. You may skip the sections that do not apply.*

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**1a.4. CLINICAL PRACTICE GUIDELINE RECOMMENDATION**

**1a.4.1.** **Guideline citation** (*including date*) and **URL for guideline** (*if available online*):

Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE, Drazner MH, Fonorow GC, Geraci SA, Horwich T, Januzzi JL, Johnson MR, Kasper EK, Levy WC, Masoudi FA, McBride PE, McMurray JJV, Mitchell JE, Peterson PN, Riegel B, Sam F, Stevenson LW, Tang WHW, Tsai EJ, Wilkoff BL. 2013 ACCF/AHA Guideline for the Management of Heart Failure: A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2013;62: e147–e239. Available at: <http://dx.doi.org/10.1016/j.jacc.2013.05.019>.

**1a.4.2.** **Identify guideline recommendation number and/or page number** and **quote verbatim, the specific guideline recommendation**.

A follow-up visit within 7 to 14 d and/or a telephone follow-up within 3 d of hospital discharge are reasonable(Level of Evidence: B)Page e199

Effective systems of care coordination with special attention to care transitions should be deployed for every patient with chronic HF that facilitate and ensure effective care that is designed to achieve GDMT and prevent hospitalization. (Level of Evidence: B), Page e205

Every patient with HF should have a clear, detailed, and evidence-based plan of care that ensures the achievement of GDMT goals, effective management of comorbid conditions, timely follow-up with the healthcare team, appropriate dietary and physical activities, and compliance with secondary prevention guidelines for cardiovascular disease. This plan of care should be updated regularly and made readily available to all members of each patient’s healthcare team. (Level of Evidence: C), Page e205

**1a.4.3.** **Grade assigned to the quoted recommendation with definition of the grade:**

The first quoted recommendation, found on page e199, has been assigned a class IIa grade, defined by the ACCF/AHA Task Force on Practice Guidelines as meaning “it is reasonable to perform procedure/administer treatment.” The second and third quoted recommendations in 1a.4.2, found on page e205 have been assigned a Class I recommendation. Class I recommendations refer to “Conditions for which there is evidence and/or general agreement that a given procedure or treatment is beneficial, useful, and effective.”

**1a.4.4. Provide all other grades and associated definitions for recommendations in the grading system.** (*Note: If separate grades for the strength of the evidence, report them in section 1a.7.*)

ACCF/AHA guideline methodology categorizes indications as class I, II, or III on the basis of a multifactorial assessment of risk and expected efficacy viewed in the context of current knowledge and the relative strength of this knowledge. These classes summarize the recommendations for procedures or treatments as follows and noted in the table below:

Class I: Conditions for which there is evidence and/or general agreement that a given procedure or treatment is useful and effective.

Class II: Conditions for which there is conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of a procedure or treatment.

* •IIa: Weight of evidence/opinion is in favor of usefulness/efficacy
* •IIb: Usefulness/efficacy is less well established by evidence/opinion.

Class III: Conditions for which there is evidence and/or general agreement that the procedure/treatment is not useful/effective e and in some cases may be harmful.

* No Benefit- Procedure/Test not helpful or Treatment w/o established proven benefit
* Harm- Procedure/Test leads to excess cost w/o benefit or is harmful, and or Treatment is harmful



**1a.4.5. Citation and URL for methodology for grading recommendations** (*if different from 1a.4.1*)**:**

ACCF/AHA Task Force on Practice Guidelines. Methodology Manual and Policies From the ACCF/AHA Task Force on Practice Guidelines. American College of Cardiology Foundation and American Heart Association, Inc. Cardiosource.com. 2010. Available at: http://assets.cardiosource.com/Methodology\_Manual\_for\_ACC\_AHA\_Writing\_Committees.pdf and <http://my.americanheart.org/idc/groups/ahamah-public/@wcm/@sop/documents/downloadable/ucm_319826.pdf>

**1a.4.6. If guideline is evidence-based (rather than expert opinion), are the details of the quantity, quality, and consistency of the body of evidence available (e.g., evidence tables)?**

☐Yes **→ *complete section*** [***1a.7 YES***](#h.2s8eyo1)

xNo **→ *report on another systematic review of the evidence in sections*** [***1a.6***](#h.4d34og8) ***and*** [***1a.7;***](#h.2s8eyo1) ***if another review does not exist, provide what is known from the guideline review of evidence in*** [***1a.7***](#h.2s8eyo1)

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**1a.5.** **UNITED STATES PREVENTIVE SERVICES TASK FORCE RECOMMENDATION**

**1a.5.1.** **Recommendation citation** (*including date*) and **URL for recommendation** (*if available online*):

**1a.5.2.** **Identify recommendation number and/or page number** and **quote verbatim, the specific recommendation**.

**1a.5.3.** **Grade assigned to the quoted recommendation with definition of the grade**:

**1a.5.4. Provide all other grades and associated definitions for recommendations in the grading system.** (*Note: the* *grading system for the evidence should be reported in section 1a.7.*)

**1a.5.5. Citation and URL for methodology for grading recommendations** (*if different from 1a.5.1*)**:**

***Complete section*** [***1a.7***](#h.2s8eyo1)

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**1a.6. OTHER SYSTEMATIC REVIEW OF THE BODY OF EVIDENCE**

**1a.6.1.** **Citation** (*including date*) and **URL** (*if available online*):

Takeda A, Taylor SJC, Taylor RS, Khan F, Krum H, Underwood M. Clinical service organisation for heart failure. The Cochrane Library 2012; Issue 9. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002752.pub3/abstract;jsessionid=A3634890666ADC7093FD6D27171E2F71.f04t01>.

**1a.6.2.** **Citation and** **URL for methodology for evidence review and grading** (*if different from 1a.6.1*)**:**

As of publication of this Cochrane review, the Cochrane Collaboration was not reporting the results of a standardized approach to grading the evidence. The recent Cochrane information indicates future reviews will feature evidence finding tables representing evidence review and grading.

***Complete section*** [***1a.7***](#h.2s8eyo1)

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**1a.7. FINDINGS FROM SYSTEMATIC REVIEW OF BODY OF THE EVIDENCE supporting the measure**

*If more than one systematic review of the evidence is identified above, you may choose to summarize the one (or more) for which the best information is available to provide a summary of the quantity, quality, and consistency of the body of evidence. Be sure to identify which review is the basis of the responses in this section and if more than one, provide a separate response for each review.*

**1a.7.1.** **What was the specific structure, treatment, intervention, service, or intermediate outcome addressed in the evidence review?**

The sections of the ACCF/AHA guideline supporting the recommendations on page e199 and e205 address the scheduling of a follow-up appointment prior to discharge for heart failure patients. The evidence review in the Cochrane Collaboration systematic review addresses clinical service organization for heart failure, including follow up care for heart failure patients following a hospital discharge.

**1a.7.2.** **Grade assigned for the quality of the quoted evidence with definition of the grade**:

ACCF/AHA Levels of Evidence are classified as follows:

-Level of Evidence A: Data derived from multiple randomized clinical trials or meta-analyses

-Level of Evidence B: Data derived from a single randomized trial or nonrandomized studies

-Level of Evidence C: Only consensus opinion of experts, case studies, or standard-of-care

Methodologies and policies from the ACC/AHA Task Force on Practice Guidelines state that “a recommendation with Level of Evidence B or C does not imply that the recommendation is weak. Many important clinical questions addressed in the guidelines do not lend themselves to clinical trials. Although randomized trials are unavailable, there may be a very clear clinical consensus that a particular test or therapy is useful or effective.

The first and second ACCF/AHA cited recommendation (found on page e199 and e205) received a Grade B level of evidence. The third ACCF/AHA cited recommendation (found on page e205) received a Grade C level of evidence.

As of publication of this Cochrane review, the Cochrane Collaboration was not reporting the results of a standardized approach to grading the evidence. The recent Cochrane information indicates future reviews will feature evidence finding tables representing evidence review and grading.

**1a.7.3. Provide all other grades and associated definitions for strength of the evidence in the grading system.**

Not applicable

**1a.7.4.** **What is the time period covered by the body of evidence? (*provide the date range, e.g., 1990-2010*). Date range**: The date range covered by the body of evidence included in the ACCF/AHA guideline is 1995-2011. The date range covered by the body of evidence included in the Cochrane Collaboration systematic review is 1998-2008.

**QUANTITY AND QUALITY OF BODY OF EVIDENCE**

**1a.7.5.****How many and what type of study designs are included in the body of evidence**? (*e.g., 3 randomized controlled trials and 1 observational study*)

The body of evidence supporting the ACCF/AHA recommendation found on page e199 includes 1 observational study and 1 retrospective study.

The body of evidence supporting the first ACCF/AHA recommendation found on page e205 includes 8 randomized controlled trials, 2 systematic reviews, 1 meta-analysis, 1 AHA policy statement, and 1 cross-sectional assessment.

The body of evidence supporting the second ACCF/AHA recommendation found on page e205 includes 1 AHA/ACCF guideline.

The Cochrane Collaboration systematic review includes seventeen randomized controlled trials focusing on a case management intervention, six randomized controlled trials focusing on clinic model interventions, and two randomized controlled trails focusing on a multidisciplinary model intervention.

**1a.7.6.** **What is the overall quality of evidence across studies in the body of evidence**? (*discuss the certainty or confidence in the estimates of effect particularly in relation to study factors such as design flaws, imprecision due to small numbers, indirectness of studies to the measure focus or target population*)

The ACCF/AHA guideline did not provide an analysis of the quality of the body of evidence.

As of publication of this Cochrane review, the Cochrane Collaboration was not reporting the results of a standardized approach to grading the evidence. The recent Cochrane information indicates future reviews will feature evidence finding tables representing evidence review and grading.

**ESTIMATES OF BENEFIT AND CONSISTENCY ACROSS STUDIES IN BODY OF EVIDENCE**

**1a.7.7.** **What are the estimates of benefit—magnitude and direction of effect on outcome(s) across studies in the body of evidence**? (*e.g., ranges of percentages or odds ratios for improvement/ decline across studies, results of meta-analysis, and statistical significance*)

The estimate of benefit across studies is not listed in the ACCF/AHA guideline in a quantitative way. A review of the cited evidence shows that, across studies, reductions in heart failure-related readmissions ranged from45.7%[[1]](#footnote-1) to 56.2%[[2]](#footnote-2), all-cause readmissions were reduced by as much as 28.5%[[3]](#footnote-3), and reduced mortality (RR .75)[[4]](#footnote-4) for those patients receiving a case management intervention, including clinical follow-up.

Evidence included in the Cochrane collaboration systematic review found that, for those studies featuring case management interventions and reporting on deaths attributed to heart failure or cardiovascular causes, there was a reduction of mortality at 12 months follow up. For those studies reporting all-cause mortality, a meta-analysis found a substantial and statistically significant reduction in all-cause mortality at 12 months, OR 0.66 (95% CI 0.47 to 0.91). Analysis also found a highly significant overall reduction in readmissions to secondary care at 12 months (OR 0.75, 95% CI 0.57 to 0.99). In the studies that looked at multidisciplinary interventions, both all cause and CHF related readmissions were reduced (OR 0.46, 95% CI 0.57 to 0.99).

**1a.7.8.** **What harms were studied and how do they affect the net benefit (benefits over harms)?**

No harms were studied.

**UPDATE TO THE SYSTEMATIC REVIEW(S) OF THE BODY OF EVIDENCE**

**1a.7.9.** **If new studies have been conducted since the systematic review of the body of evidence, provide for each new study: 1) citation, 2) description, 3) results, 4) impact on conclusions of systematic review**.

1. Citation:

Horwitz, Leora I., et al. "Quality of Discharge Practices and Patient Understanding at an Academic Medical CenterDischarge Process QualityDischarge Process Quality." *JAMA internal medicine* 173.18 (2013): 1715-1722. Available at: <http://archinte.jamanetwork.com/article.aspx?articleid=1754366>.

Description: This study describes the findings of a prospective, observational cohort study of patients discharged from the hospital with a diagnosis of heart failure. The patients were contacted by phone within one week of discharge, and interviewed regarding their post-discharge instructions.

Results: Interviews found that only 32.6% of interviewed patients were discharged with an appointment for a follow up primary care or cardiovascular visit.

Impact on conclusions of systematic review: This study supports the evidence of a gap in practice.

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**1a.8 OTHER SOURCE OF EVIDENCE**

*If source of evidence is NOT from a clinical practice guideline, USPSTF, or systematic review, please describe the evidence on which you are basing the performance measure.*

**1a.8.1** **What process was used to identify the evidence?**

**1a.8.2.** **Provide the citation and summary for each piece of evidence.**

1. Riegel B, Carlson B, Kopp Z, et al. Effect of a standardized nurse case-management telephone intervention on

   resource use in patients with chronic heart failure. Arch Intern Med. 2002;162:705-12. [↑](#footnote-ref-1)
2. Rich MW, Beckham V, Wittenberg C, et al. A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure. N Engl J Med 1995;333:1190–5. [↑](#footnote-ref-2)
3. Rich MW, Beckham V, Wittenberg C, et al. A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure. N Engl J Med 1995;333:1190–5. [↑](#footnote-ref-3)
4. McAlister FA, Stewart S, Ferrua S, et al. Multidisciplinary strategies for the management of heart failure patients at high risk for admission:a systematic review of randomized trials. JAmColl Cardiol 2004;44:810–9. [↑](#footnote-ref-4)