



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

Brief Measure Information

NQF #: 2450

De.2. Measure Title: Heart Failure: Symptom and Activity Assessment

Co.1.1. Measure Steward: American College of Cardiology

De.3. Brief Description of Measure: Percentage of patient visits for those patients aged 18 years and older with a diagnosis of heart failure with quantitative results of an evaluation of both current level of activity and clinical symptoms documented

1b.1. Developer Rationale: Initial and ongoing evaluation of patients with heart failure should include an assessment of symptoms and their functional consequences. These assessments should then serve as the basis for making treatment decisions, monitoring the effects of treatment, and modifying treatment as appropriate. Decreasing symptoms and improving function are two of the primary goals of heart failure treatment and represent important patient-centric outcomes for heart failure care.

S.4. Numerator Statement: Patient visits with quantitative results of an evaluation of both current level of activity and clinical symptoms documented

S.7. Denominator Statement: All patient visits for those patients aged 18 years and older with a diagnosis of heart failure

S.10. Denominator Exclusions: Not applicable. No exclusions for this measure.

De.1. Measure Type: Process

S.23. Data Source: Electronic Clinical Data : Registry

S.26. Level of Analysis: Clinician : Individual

IF Endorsement Maintenance – Original Endorsement Date: Sep 08, 2014 **Most Recent Endorsement Date:** Sep 08, 2014

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? Not applicable

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.**

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

[1a_NQF_2450_Heart_Failure_Symptom_and_Activity_Assessment_Evidence_Attachment-635234002116164909.docx](#)

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure)

Initial and ongoing evaluation of patients with heart failure should include an assessment of symptoms and their functional consequences. These assessments should then serve as the basis for making treatment decisions, monitoring the effects of treatment, and modifying treatment as appropriate. Decreasing symptoms and improving function are two of the primary goals of heart failure treatment and represent important patient-centric outcomes for heart failure care.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*

See appendix A1 for data depicted below.

2011

# of providers	1262
# of visits	456547
Minimum	0.00%
Lower Quartile	0.43%
Mean	36.80%
Upper Quartile	79.60%
Maximum	100%
Quartile Range	79.20%
Std Dev	39.30%

Mean Performance

Decile 3	0.2%
Decile 4	3.7%
Decile 5	10.7%
Decile 6	25.5%
Decile 7	55.0%
Decile 8	78.7%
Decile 9	94.1%
Decile 10	99.5%

2012

# of providers	1270
# of visits	539430
Minimum	0.00%
Lower Quartile	1.06%
Mean	35.30%
Upper Quartile	73.30%
Maximum	100%
Quartile Range	72.20%
Std Dev	37.50%

Mean Performance

Decile 3	0.3%
Decile 4	4.8%
Decile 5	11.7%
Decile 6	24.1%
Decile 7	49.4%
Decile 8	73.1%
Decile 9	90.1%
Decile 10	98.7%

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

Using baseline data from the Registry to Improve the Use of Evidence-Based Heart Failure Therapies in the Outpatient Setting (IMPROVE HF), Fonarow and colleagues assessed contemporary care patterns for heart failure in the outpatient setting among 167 outpatient cardiology practices in the United States. New York Heart Association (NYHA) functional class was found to be qualitatively documented by symptoms and functional limitations in 60.3% of medical records and quantitatively documented in 34.2% of medical records (94.5% total)¹. It should be noted that data included in the IMPROVE HF registry is collected on a voluntary basis, and is therefore not a truly representative sample. Because participation in the IMPROVE HF registry is voluntary, participating facilities likely have higher performance than non-participating facilities.

1. Fonarow GC, Albert NM, Curtis AB, et al. Improving evidence-based care for heart failure in outpatient cardiology practices: primary results of the Registry to Improve the Use of Evidence-Based Heart Failure Therapies in the Outpatient Setting (IMPROVE HF). *Circulation*. 2010;122:585-596.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

See appendix A1 for data depicted below

2011										
label	# of providers	# of visits	Minimum	Lower Quartile	Mean	Upper Quartile	Maximum	Quartile		
Range	Std Dev									
Male	1261	251890	0.00%	0.10%	37.5%	81.1%	100%	81.0%	39.7%	
Female	1261	204304	0.00%	0.00%	35.9%	76.9%	100%	76.9%	39.3%	
Age: <60	1252	97158	0.00%	0.00%	38.3%	82.4%	100%	82.4%	40.0%	
Age: 60 -< 70	1258	110148	0.00%	0.00%	36.7%	80.0%	100%	80.0%	39.8%	
Age: 70 -< 80	1253	127786	0.00%	0.00%	36.7%	80.0%	100%	80.0%	39.7%	
Age: >= 80	1249	121455	0.00%	0.00%	35.7%	78.0%	100%	78.0%	40.0%	
Insurance: None	573	25742	0.00%	0.00%	40.3%	100%	100%	100%	43.9%	
Insurance: Private		1178	206909	0.00%	0.18%	38.5%	83.5%	100%	83.3%	40.0%
Insurance: Medicaid		1181	149328	0.00%	0.00%	39.0%	83.3%	100%	83.3%	40.2%
Insurance: Medicare		744	8174	0.00%	0.00%	34.1%	86.6%	100%	86.6%	42.7%
Insurance: Other	385	3416	0.00%	0.00%	37.5%	100%	100%	100%	46.4%	
Race: White	1152	244177	0.00%	0.00%	40.8%	85.7%	100%	85.7%	40.5%	
Race: Black	904	31683	0.00%	0.00%	42.4%	94.7%	100%	94.7%	42.8%	
Race: Other	564	4698	0.00%	0.00%	38.1%	100%	100%	100%	45.8%	
2012										
label	# of providers	# of visits	Minimum	Lower Quartile	Mean	Upper Quartile	Maximum	Quartile		
Range	Std Dev									
Male	1269	297783	0.00%	0.99%	36.1%	74.7%	100%	73.7%	37.9%	
Female	1270	241608	0.00%	0.19%	34.4%	71.1%	100%	70.9%	37.5%	
Age: <60	1263	109912	0.00%	0.00%	36.3%	75.8%	100%	75.8%	38.4%	
Age: 60 -< 70	1267	130544	0.00%	0.00%	35.3%	75.0%	100%	75.0%	38.0%	
Age: 70 -< 80	1269	153103	0.00%	0.00%	35.3%	74.1%	100%	74.1%	38.0%	
Age: >= 80	1257	145871	0.00%	0.00%	34.1%	71.4%	100%	71.4%	37.7%	
Insurance: None	559	28518	0.00%	0.00%	36.7%	80.0%	100%	80.0%	41.1%	
Insurance: Private		1184	275693	0.00%	1.26%	36.9%	75.8%	100%	74.5%	38.1%
Insurance: Medicaid		1205	172172	0.00%	0.14%	36.7%	77.1%	100%	77.0%	38.4%
Insurance: Medicare		787	10925	0.00%	0.00%	37.4%	84.6%	100%	84.6%	41.8%
Insurance: Other	378	3455	0.00%	0.00%	24.7%	44.4%	100%	44.4%	38.9%	
Race: White	1150	325420	0.00%	0.53%	37.2%	77.7%	100%	77.2%	38.7%	
Race: Black	899	39807	0.00%	0.00%	40.4%	87.5%	100%	87.5%	40.9%	
Race: Other	644	8313	0.00%	0.00%	32.7%	85.4%	100%	85.4%	42.8%	

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

We are not aware of any additional studies that address disparities in symptom and activity assessment for heart failure patients.

1c. High Priority (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare

Affects large numbers, A leading cause of morbidity/mortality, Patient/societal consequences of poor quality, Severity of illness

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.

List citations in 1c.4.

Heart failure (HF) is a very common condition, with approximately 5.1 million Americans aged 20 years and older currently suffering from HF. The impact of heart failure is especially apparent among elderly patients, with an incidence rate of nearly 10 per 1000 population among patients aged 65 years and older. While survival after HF diagnosis has improved somewhat over time, heart failure is still associated with approximately one in nine deaths in the United States [1]. It is estimated that approximately 50% of people diagnosed with HF will die within 5 years [2,3].

1c.4. Citations for data demonstrating high priority provided in 1a.3

1. Go AS, Mozaffarian D, Roger VL, et al. Heart disease and stroke statistics—2013 update: a report from the American Heart Association. *Circulation*. 2013;127:e6-e245.
2. Roger VL, Weston SA, Redfield MM, et al. Trends in heart failure incidence and survival in a community-based population. *JAMA*. 2004;292:344-350.
3. Levy D, Kenchaiah S, Larson MG, et al. Long-term trends in the incidence of and survival with heart failure. *N Engl J Med*. 2002;347:1397-1402.

1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)

Not applicable. Not a PRO-PM.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

Cardiovascular, Cardiovascular : Congestive Heart Failure

De.6. Cross Cutting Areas (check all the areas that apply):

Functional Status, Health and Functional Status

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

The specifications for this measure are attached with this form. Additional measure information can be found at <http://www.ama-assn.org/apps/listserv/x-check/qmeasure.cgi?submit=PCPI>.

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

[This is not an eMeasure Attachment:](#)

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: [S.2b_NQF_2450_Heart_Failure_Symptom_and_Activity_Assessment_Value_Set-635234005641496564-635854399891770619.xls](#)

S.3. For endorsement maintenance, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

[Not applicable. Submission for initial endorsement.](#)

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

[Patient visits with quantitative results of an evaluation of both current level of activity and clinical symptoms documented](#)

S.5. Time Period for Data (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

[Measurement period may vary by implementation program. For the PINNACLE registry, the measurement period is as follows:](#)

[Denominator: during the 3 month \(quarterly\) measurement period](#)

[Numerator: At each visit during the measurement period](#)

S.6. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

[Evaluation and quantitative results documented should include:](#)

- [Documentation of New York Heart Association \(NYHA\) Class OR](#)
- [Documentation of completion of a valid, reliable, disease-specific instrument \(eg, Kansas City Cardiomyopathy Questionnaire, Minnesota Living with Heart Failure Questionnaire, Chronic Heart Failure Questionnaire\)](#)

[Definitions:](#)

[The NYHA functional classification reflects a subjective assessment by a healthcare provider of the severity of a patient's symptoms. Patients are assigned to one of the following 4 classes](#)

- [Class I: patients with cardiac disease but without resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea, or anginal pain.](#)
- [Class II: patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or anginal pain.](#)
- [Class III: patients with marked limitation of physical activity. They are comfortable at rest. Less than ordinary activity causes fatigue, palpitation, dyspnea, or anginal pain.](#)
- [Class IV: patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of heart failure or of the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort is increased.](#)

[Patient-reported health status as assessed by a structured survey/questionnaire instrument offers another, more patient-centric approach to assessing and summarizing the patient's overall heart failure symptom burden. These instruments serve as important constructs for delivering and evaluating heart failure care.](#)

[For EHR options:](#)

eSpecification developed and is included in this submission.

S.7. Denominator Statement (Brief, narrative description of the target population being measured)

All patient visits for those patients aged 18 years and older with a diagnosis of heart failure

S.8. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Senior Care

S.9. Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

For EHR options:

eSpecification developed and is included in this submission.

S.10. Denominator Exclusions (Brief narrative description of exclusions from the target population)

Not applicable. No exclusions for this measure.

S.11. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

Not applicable. No exclusions for this measure.

S.12. Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)

Consistent with CMS' Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, payer and primary written and spoken language, and have included these variables as recommended data elements to be collected.

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification

If other:

S.14. Identify the statistical risk model method and variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

Not applicable. No risk adjustment or stratification.

S.15. Detailed risk model specifications (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

S.15a. Detailed risk model specifications (if not provided in excel or csv file at S.2b)

Not Applicable.

S.16. Type of score:

Rate/proportion

If other:

S.17. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Higher score

S.18. Calculation Algorithm/Measure Logic *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)*

To calculate performance rates:

- 1) Find the patients who meet the initial patient population (ie, the general group of patients that a set of performance measures is designed to address).
- 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.
- 3) From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator

If the patient does not meet the numerator, this case represents a quality failure.
Calculation algorithm is included in data dictionary/code table attachment (see A.1).

S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
Available in attached appendix at A.1

S.20. Sampling *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

Not applicable. The measure is not based on a sample.

S.21. Survey/Patient-reported data *(If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)*

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

Not applicable. The measure is not based on a survey.

S.22. Missing data (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

If data required to determine if an individual patient should be included in a specific performance measure based on defined criteria is missing, those cases would ineligible for inclusion in the denominator and therefore the case would be deleted.

If data required to determine if a denominator eligible patient qualifies for the numerator (or has a valid exclusion/exception) is missing, this case would represent a quality failure.

S.23. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*

If other, please describe in S.24.

Electronic Clinical Data : Registry

S.24. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)*

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

This measure is currently being used in the ACCF PINNACLE registry for the outpatient office setting. This registry is located at www.pinnacledata.org

S.25. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

No data collection instrument provided

S.26. Level of Analysis *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*

Clinician : Individual

S.27. Care Setting (Check *ONLY* the settings for which the measure is SPECIFIED AND TESTED)

[Ambulatory Care : Clinician Office/Clinic](#)

If other:

S.28. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

Not applicable. Not a composite measure.

2a. Reliability – See attached Measure Testing Submission Form

2b. Validity – See attached Measure Testing Submission Form

[2450_HF_Symptom_and_Activity_Assessment_MeasTesting_Form_122313_FINAL.pdf](#)

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

[Abstracted from a record by someone other than person obtaining original information \(e.g., chart abstraction for quality measure or registry\)](#)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields? (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)

[ALL data elements are in defined fields in electronic clinical data \(e.g., clinical registry, nursing home MDS, home health OASIS\)](#)

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.

[We have not identified any areas of concern or made any modifications as a result of testing and operational use of the measure in relation to data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient](#)

confidentiality, time and cost of data collection, and other feasibility issues unless otherwise noted.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT[R]) or other coding contained in the specifications.

CPT(R) contained in the Measure specifications is copyright 2004-2012 American Medical Association. LOINC(R) copyright 2004-2012 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2012 International Health Terminology Standards Development Organisation. ICD-10 copyright 2012 World Health Organization. All Rights Reserved.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Planned	Current Use (for current use provide URL)
Public Reporting	Professional Certification or Recognition Program ACC Cardiology Practice Improvement Pathway (CPIP)/Bridges to Excellence Cardiovascular Practice Recognition Program No URL available The BTE Cardiovascular Practice Recognition Program No URL available Quality Improvement with Benchmarking (external benchmarking to multiple organizations) PINNACLE Registry http://www.ncdr.com/webncdr/pinnacle/

4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

PINNACLE Registry (URL: <http://www.ncdr.com/webncdr/pinnacle/>)

In 2008, the American College of Cardiology Foundation launched the PINNACLE program (Formerly known as the Improving Continuous Cardiac Care or IC3). The PINNACLE Registry® continues to grow rapidly, with more than 2400 providers representing almost 800 unique office locations across the U.S submitting data to the registry. As of the fourth quarter of 2013, the registry has more than 13 million patient encounter records. PINNACLE assists practices in understanding and improving care through the production and distribution of quarterly performance reports. These reports, covering all valid patient encounters, detail adherence to 28 cardiovascular clinical measures at the physician, location, and practice levels across coronary artery disease, hypertension, heart failure and atrial fibrillation. All jointly developed ACC/AHA/PCPI performance measures for these topics are reported by the registry.

ACC Cardiology Practice Improvement Pathway(CPIP)/Bridges to Excellence (BTE) Cardiovascular Practice Recognition Program: (no URL available)

The American College of Cardiology's Cardiology Practice Improvement Pathway (CPIP) is a practice-level performance improvement program designed specifically to enhance and instill quality in cardiovascular practice. Practices can submit their CPIP data to apply for the Bridges to Excellence Cardiology Practice Recognition endorsed by the ACCF.

CPIP provides a platform for practices to evaluate themselves against a comprehensive measure set designed to support the delivery of cardiovascular care that achieves the six national quality aims identified by the Institute of Medicine (IOM): safe, timely, effective, efficient, equitable, and patient-centered (STEEEP).

The CPIP uses clinical measure sets that are developed and specified by the Physician Consortium for Performance Improvement and is approved through the American Board of Internal Medicine's (ABIM) Approved Quality Improvement (AQI) Pathway and is eligible for 20 points towards the Self-Evaluation of Practice Performance requirement of Maintenance of Certification (MOC). The Heart Failure Symptom and Activity Assessment measure was tested in CPIP version 1.0 and most were scored in the Bridges to Excellence recognition program. The CPIP is no longer available as an ACC-sponsored option for MOC; however version 2 of the BTE Cardiology Practice Recognition endorsed by the ACC will be implemented in early 2014. All of the ACC/AHA/PCPI cardiovascular measures (whether NQF endorsed or not) will be included and scored in the BTE recognition program (see below).

The BTE Cardiovascular Practice Recognition Program is a practice-level recognition program designed to identify cardiovascular practices that demonstrate a commitment to the delivery of quality care while providing clear direction about opportunities for improvement for practices that may not. Practice data are aggregated and sent to one of the independent Performance Assessment Organizations (PAOs) with which BTE has a relationship. The PAO applies the scoring rules and evaluates whether established recognition thresholds are achieved. Recognized practices and the individual cardiologists within the practice are reported to BTE for display on BTE's consumer portal for recognition information and transmission to BTE-licensed health plans for associated incentives.

PQRS Qualified Clinical Data Registry:

In addition to the current use for quality improvement with benchmarking in the PINNACLE registry, the measure will be reported to CMS by the registry as part of PQRS in 2014 if the PINNACLE registry's application to become a Qualified Clinical Data Registry is approved by CMS. Eligible professionals will be considered to have satisfactorily participated in PQRS if they submit quality measures data or results to CMS via a qualified clinical data registry. All measures currently collected in PINNACLE would be reported to CMS under this model.

4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

We are continuously seeking opportunities to advocate for expanded use of this measure in government or other programs, including those intended for accountability or public reporting. The ACC, AHA and PCPI do not have any policies that would restrict access to the performance measure specifications or results or that would impede implementation of the measure for any application. We would welcome its implementation in emerging applications such as accountable care organizations (ACO), Medicare Advantage insurance plans or health plans selling on the new insurance marketplace.

4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

PQRS Qualified Clinical Data Registry:

In addition to the current use for quality improvement with benchmarking in the PINNACLE registry, the measure will be reported to CMS by the registry as part of PQRS in 2014 if the PINNACLE registry's application to become a Qualified Clinical Data Registry is approved by CMS. Eligible professionals will be considered to have satisfactorily participated in PQRS if they submit quality measures data or results to CMS via a qualified clinical data registry. All measures currently collected in PINNACLE would be reported to CMS under this model.

4b. Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)
- Geographic area and number and percentage of accountable entities and patients included

In 2011 the mean performance in the PINNACLE registry was 36.8% based on 1,262 providers reporting on 456,547 visits. In 2012, the mean performance in the PINNACLE registry was 35.3% based on 1,270 providers reporting on 539,430 visits. The statistical significance of this data has not been analyzed. However, based on this data, there does not seem to have been a meaningful change in performance between 2011 and 2012.

4b.2. If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

While the ACCF/AHA and PCPI create measures with an ultimate goal of improving the quality of care, measurement is a mechanism to drive improvement but does not equate with improvement. Measurement can help identify opportunities for improvement with actual improvement requiring making changes to health care processes and structure. In order to promote improvement, quality measurement systems need to provide feedback to front-line clinical staff in as close to real time as possible and at the point of care whenever possible. (1)

1.Conway PH, Mostashari F, Clancy C. The future of quality measurement for improvement and accountability. JAMA. 2013 Jun 5;309(21):2215-6.

4c. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.

We are not aware of any unintended consequences at this time, but we continuously monitor for them.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0078 : Heart Failure (HF) : Assessment of Clinical Symptoms of Volume Overload (Excess)

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

Not applicable.

5a. Harmonization

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications completely harmonized?

No

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

The specifications are not harmonized because this measure is intended to replace Measure 0078: Assessment of Clinical Symptoms of Volume Overload. The intention is for Measure 0078 to be retired.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

Not applicable. No competing measures.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

[Attachment Attachment: Appendix_A1_NQF_2450_Heart_Failure_Symptom_and_Activity_Assessment.pdf](#)

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): American College of Cardiology

Co.2 Point of Contact: Penelope, Solis, comment@acc.org, 202-375-6576-

Co.3 Measure Developer if different from Measure Steward: American College of Cardiology

Co.4 Point of Contact: Jensen, Chiu, jensen.chiu@acc.org, 202-375-6285-

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

[Robert O. Bonow, MD, MACC, FAHA, FACP \(Co-Chair\) \(cardiology\)](#)

[Theodore G. Ganiats, MD \(Co-Chair\) \(family medicine; measure methodology\)](#)

[Craig T. Beam, CRE \(patient representative\)](#) [Ileana L. Piña, MD, FACC \(cardiology, heart failure\)](#)

[Kathleen Blake, MD \(cardiac electrophysiology\)](#)

[Paul D. Rockswold, MD, MPH \(family medicine\)](#)

[Donald E. Casey, Jr., MD, MPH, MBA, FACP, FAHA \(internal medicine\)](#) [Lawrence B. Sadwin \(patient representative\)](#)

[Sarah J. Goodlin, MD \(geriatrics, palliative medicine\)](#) [Joanna D. Sikkema, MSN, ANP-BC, FAHA \(cardiology\)](#)

[Kathleen L. Grady, PhD, APN, FAAN, FAHA \(cardiac surgery\)](#) [Carrie A. Sincak, PharmD, BCPS \(pharmacy\)](#)

[Randal F. Hundley, MD, FACC \(cardiology, health plan representative\)](#) [John Spertus, MD, MPH \(cardiology\)](#)

[Mariell Jessup, MD, FACC, FAHA, FESC \(cardiology, heart failure\)](#) [Patrick J. Torcson, MD, FACP, MMM \(hospital medicine\)](#)

[Thomas E. Lynn, MD \(family medicine, measure implementation\)](#) [Elizabeth Torres, MD \(internal medicine\)](#)

[Frederick A. Masoudi, MD, MSPH \(cardiology\)](#) [Mark V. Williams, MD, FHM \(hospital medicine\)](#)

[David Nilasena MD, MSPH, MS \(general preventive medicine, public health, measure implementation\)](#) [John B Wong, MD \(internal medicine\)](#)

PCPI/ACCF/AHA measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study are invited to participate as equal contributors to the measure development process. In addition, the PCPI/ACCF/AHA strives to include on its work

groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2003

Ad.3 Month and Year of most recent revision: 05, 2012

Ad.4 What is your frequency for review/update of this measure? Coding/Specifications updates occur annually. For more information, see Ad.8.

Ad.5 When is the next scheduled review/update for this measure? 12, 2014

Ad.6 Copyright statement: This Physician Performance Measurement Set (PPMS) and related data specifications were developed by the Physician Consortium for Performance Improvement® (the Consortium) including the American College of Cardiology (ACC), the American Heart Association (AHA) and the American Medical Association (AMA) 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, and have not been tested for all potential applications. While copyrighted, they can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the performance measures for commercial gain, or incorporation of the performance measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the PPMS require a license agreement between the user and the AMA, (on behalf of the Consortium) or the ACC or the AHA. Neither the AMA, ACC, AHA, the Consortium nor its members shall be responsible for any use of this PPMS.

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Ad.8 Additional Information/Comments: The PCPI/ACCF/AHA has a formal measurement review process that stipulates regular (usually on a three-year cycle, when feasible) review of the measures. The process can also be activated if there is a major change in scientific evidence, results from testing or other implementation issues are noted that materially affect the integrity of the measure.