



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 sub criterion 1b).

Brief Measure Information

NQF #: 2474

Corresponding Measures:

Measure Title: Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation

Measure Steward: American College of Cardiology

sp.02. Brief Description of Measure: Rate of cardiac tamponade and/or pericardiocentesis following atrial fibrillation (AF) ablation.

1b.01. Developer Rationale: This is an important measure since development of cardiac tamponade or requirement for pericardiocentesis is a serious complication to any ablation procedure and leads to significant patient morbidity and mortality. Although there are a number of different techniques for atrial fibrillation ablation, there are minimal covariables (patient-specific conditions, etc.) that would meaningfully impact on the development of this complication.

sp.12. Numerator Statement: The number of patients from the denominator with cardiac tamponade and/or pericardiocentesis occurring within 30 days following atrial fibrillation ablation.

sp.14. Denominator Statement: All patients aged 18 years and older with atrial fibrillation ablation performed during the reporting period.

sp.16. Denominator Exclusions: No exclusions.

Measure Type: Outcome

sp.28. Data Source:

Claims

sp.07. Level of Analysis:

Facility

Clinician: Individual

IF Endorsement Maintenance – Original Endorsement Date: 2015-06-29 12:00 AM

Most Recent Endorsement Date: 6/29/2015 12:00:00 AM

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

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

sp.03. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?:

1. 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 sub criteria to pass this criterion and be evaluated against the remaining criteria

1ma.01. Indicate whether there is new evidence about the measure since the most recent maintenance evaluation. If yes, please briefly summarize the new evidence, and ensure you have updated entries in the Evidence section as needed.

[Response Begins]

[Response Ends]

Please separate added or updated information from the most recent measure evaluation within each question response in the Importance to Measure and Report: Evidence section. For example:

Current Submission:

Updated evidence information here.

Previous (Year) Submission:

Evidence from the previous submission here.

1a.01. Provide a logic model.

Briefly describe the steps between the healthcare structures and processes (e.g., interventions, or services) and the patient's health outcome(s). The relationships in the diagram should be easily understood by general, non-technical audiences. Indicate the structure, process or outcome being measured.

[Response Begins]

[Response Ends]

1a.02. Provide evidence that the target population values the measured outcome, process, or structure and finds it meaningful.

Describe how and from whom input was obtained.

[Response Begins]

[Response Ends]

1a.03. Provide empirical data demonstrating the relationship between the outcome (or PRO) and at least one healthcare structure, process, intervention, or service.

[Response Begins]

[Response Ends]

1b.01. Briefly explain the rationale for this measure.

Explain how the measure will improve the quality of care, and list the benefits or improvements in quality envisioned by use of this measure.

[Response Begins]

This is an important measure since development of cardiac tamponade or requirement for pericardiocentesis is a serious complication to any ablation procedure and leads to significant patient morbidity and mortality. Although there are a number of different techniques for atrial fibrillation ablation, there are minimal covariables (patient-specific conditions, etc.) that would meaningfully impact on the development of this complication.

[Response Ends]

1b.02. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.

Include mean, std dev, min, max, interquartile range, and 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 include. This information also will be used to address the sub-criterion on improvement (4b) under Usability and Use.

[Response Begins]

Unfortunately, ACC is unable to provide updated performance scores. CMS does not currently allow the use of claims data for the purposes of performance metric reporting.

[Response Ends]

1b.03. If no or limited performance data on the measure as specified is reported above, 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. Include citations.

[Response Begins]

Research suggests that cardiac tamponade results in 0.5-5% percent of patients within 30 days following an AF ablation. Moreover, evidence suggests that tamponade is often a direct result of the procedure and is preventable. Implementation of this measure will provide patients with critical information regarding the risk of complication associated with AF ablation.

Friedman DJ, Pokorney SD, Khanna R, Goldstein L, Atwater BD, Bahnson TD, Daubert JP, Jackson KP, Heist EK, Singh JP, Calkins H, Piccini JP. Catheter Ablation of Atrial Fibrillation With and Without On-Site Cardiothoracic Surgery. J Am Coll Cardiol. 2019 May 21;73(19):2487-2489. doi: 10.1016/j.jacc.2019.02.036. PMID: 31076234.

[Response Ends]

1b.04. 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.

Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included. Include mean, std dev, min, max, interquartile range, and scores by decile. For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b) under Usability and Use.

[Response Begins]

[Response Ends]

1b.05. If no or limited data on disparities from the measure as specified is reported above, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in above.

[Response Begins]

[Response Ends]

2. 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 sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.

spma.01. Indicate whether there are changes to the specifications since the last updates/submission. If yes, update the specifications in the Measure Specifications section of the Measure Submission Form, and explain your reasoning for the changes below.

[Response Begins]

Yes

[Yes Please Explain]

This measure is being used in the CMS Quality Payment Program (QPP). The QPP staff provides yearly updates to the coding for this measure. These are minor changes but ACC does align the work done in QPP with this application.

[Response Ends]

spma.02. Briefly describe any important changes to the measure specifications since the last measure update and provide a rationale.

For annual updates, please explain how the change in specifications affects the measure results. If a material change in specification is identified, data from re-testing of the measure with the new specifications is required for early maintenance review.

For example, specifications may have been updated based on suggestions from a previous NQF CDP review.

[Response Begins]

The testing portion of the application for this measure was unable to be updated. This uniquely valuable measure was developed when access to CMS claims data was feasible. Current data access restrictions to the same CMS claims data has prevented ACC from conducting the patient matching to assess long term follow up. Imposing requirements upon hospitals to acquire follow up data themselves during the past two plus years of the pandemic-induced hospital crisis was not possible. Thus, ACC-NCDR was prevented from linking claims data to our registry data. Legislation to reverse this decision has been introduced to Congress. If passed, we would be able to acquire the CMS Claims data these measures require to promptly update our Testing and Validity data. We are watching this legislation move through Congress closely. More information of the bill is below

21st Century Cures 2.0 Package builds on progress since the 2016 21st Century Cures Act was signed into law. The 173-page bill is “designed to revolutionize how the U.S. provides care to patients” and includes “several provisions aimed at speeding up the delivery of groundbreaking, new – and potentially lifesaving – cures, treatments and innovations to those who need them most.” The legislation includes many provisions of interest to the cardiovascular community and our patients. The aspect most relevant to this NQF endorsed measure includes the **Meaningful Access to Federal Health Plan Claims Data Act**, H.R.5394 - 117th Congress (2021-2022): Meaningful Access to Federal Health Plan Claims Data Act of 2021 which ACC and our colleagues at the Society of Thoracic Surgeons, worked to introduce. This will allow clinician-led clinical data registries with access to Medicare claims data for purposes of research to improve quality and cost efficiency

[Response Ends]

sp.01. Provide the measure title.

Measure titles should be concise yet convey who and what is being measured (see [What Good Looks Like](#)).

[Response Begins]

Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation

[Response Ends]

sp.02. Provide a brief description of the measure.

Including type of score, measure focus, target population, timeframe, (e.g., Percentage of adult patients aged 18-75 years receiving one or more HbA1c tests per year).

[Response Begins]

Rate of cardiac tamponade and/or pericardiocentesis following atrial fibrillation (AF) ablation.

[Response Ends]

sp.04. Check all the clinical condition/topic areas that apply to your measure, below.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- Surgery: General

[Response Begins]

Cardiovascular

Cardiovascular: Arrhythmia

[Response Ends]

sp.05. Check all the non-condition specific measure domain areas that apply to your measure, below.

[Response Begins]

Safety

Safety: Complications

[Response Ends]

sp.06. Select one or more target population categories.

Select only those target populations which can be stratified in the reporting of the measure's result.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- Populations at Risk: Populations at Risk

[Response Begins]

Adults (Age >= 18)

Populations at Risk: Populations at Risk

[Response Ends]

sp.07. Select the levels of analysis that apply to your measure.

Check ONLY the levels of analysis for which the measure is SPECIFIED and TESTED.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- Clinician: Clinician
- Population: Population

[Response Begins]

Clinician: Individual

Facility

[Response Ends]

sp.08. Indicate the care settings that apply to your measure.

Check ONLY the settings for which the measure is SPECIFIED and TESTED.

[Response Begins]

Inpatient/Hospital

Outpatient Services

[Response Ends]

sp.09. 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. If no URL is available, indicate "none available".

[Response Begins]

[Quality ID #392 \(NQF 2474\): Cardiac Tamponade and/or Pericardiocentesis Following Atrial Fibrillation Ablation \(cms.gov\)](https://www.cms.gov/Quality-Improvement/Benchmarking/Quality-Improvement-Partners/Quality-Improvement-Partners-Data-Dictionaries/Quality-Improvement-Partners-Data-Dictionaries-2019-2020)

[Response Ends]

sp.12. Attach the data dictionary, code table, or value sets (and risk model codes and coefficients when applicable). Excel formats (.xlsx or .csv) are preferred.

Attach an excel or csv file; if this poses an issue, [contact staff](#). Provide descriptors for any codes. Use one file with multiple worksheets, if needed.

[Response Begins]

Available in attached Excel or csv file

[Response Ends]

Attachment: NQF 2474 -Code_list.xlsx

For the question below: state the outcome being measured. Calculation of the risk-adjusted outcome should be described in sp.22.

sp.13. State the numerator.

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).

DO NOT include the rationale for the measure.

[Response Begins]

The number of patients from the denominator with cardiac tamponade and/or pericardiocentesis occurring within 30 days following atrial fibrillation ablation.

[Response Ends]

For the question below: describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in sp.22.

sp.14. Provide details needed to calculate the numerator.

All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, 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 sp.11.

[Response Begins]

- Diagnosis code for cardiac tamponade (ICD-10-CM): I31.4
- AND/OR
- Any of the following pericardiocentesis procedure codes (ICD-10-PCS): 0W9D00Z, 0W9D0ZZ, 0W9D30Z, 0W9D3ZZ, 0W9D40Z, 0W9D4ZZ
- AND/OR
- Any of the following pericardiocentesis procedure codes (CPT): 33010, 33011

[Response Ends]

For the question below: state the target population for the outcome. Calculation of the risk-adjusted outcome should be described in sp.22.

sp.15. State the denominator.

Brief, narrative description of the target population being measured.

[Response Begins]

All patients aged 18 years and older with atrial fibrillation ablation performed during the reporting period.

[Response Ends]

For the question below: describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in sp.22.

sp.16. Provide details needed to calculate the denominator.

All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, 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 sp.11.

[Response Begins]

All patients aged 18 years and older with atrial fibrillation ablation performed during the reporting period. Include in the cohort patients with any one or more of the following CPT code or ICD-10 procedure codes:

- Diagnosis code for atrial fibrillation (ICD-10-CM): I48.0, I48.1, I48.2, I48.91

AND

- Procedure code for atrial fibrillation ablation (ICD-10-PCS): 02583ZZ OR 02584ZZ

AND/OR

- Ablation procedure performed (CPT): 93656 WITH OR WITHOUT +93655 or +93657

[Response Ends]

sp.17. Describe the denominator exclusions.

Brief narrative description of exclusions from the target population.

[Response Begins]

No exclusions.

[Response Ends]

sp.18. Provide details needed to calculate the denominator exclusions.

All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, 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 sp.11.

[Response Begins]

Not applicable.

[Response Ends]

sp.19. Provide all information required to stratify the measure results, if necessary.

Include the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate. Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format in the Data Dictionary field.

[Response Begins]

Stratify measure by the following categories: age and gender.

Stratification 1: Females 18-64 years old

Stratification 2: Males 18-64 years old

Stratification 3: Females 65 years of age and older

Stratification 4: Males 65 years of age and older

[Response Ends]

sp.20. Is this measure adjusted for socioeconomic status (SES)?

[Response Begins]

No

[Response Ends]

sp.21. Select the risk adjustment type.

Select type. Provide specifications for risk stratification and/or risk models in the Scientific Acceptability section.

[Response Begins]

Stratification by risk category/subgroup (specify number of risk factors)

[Stratification by risk category/subgroup (specify number of risk factors) Please Explain]

4 subgroups as described in sp.19

[Response Ends]

sp.22. Select the most relevant type of score.

Attachment: If available, please provide a sample report.

[Response Begins]

Rate/proportion

[Response Ends]

sp.23. Select the appropriate interpretation of the measure score.

Classifies interpretation of score according to whether better quality or resource use is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score

[Response Begins]

Better quality = Lower score

[Response Ends]

sp.24. Diagram or describe the calculation of the measure score as an ordered sequence of steps.

Identify the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period of data, aggregating data; risk adjustment; etc.

[Response Begins]

Determine rate of cardiac tamponade and/or pericardiocentesis following atrial fibrillation ablation.

1. Search records to build file of all patients who are 18 years or older as of event start date.
2. The denominator is determined by narrowing search file by retaining only those with an Atrial Fibrillation Ablation. Include in the cohort patients with any one or more of the following:

Note: Attached code table provides definitions for each diagnosis/procedure

- Procedure = Atrial Fibrillation Ablation (ICD-10-PCS): 02583ZZ, 02584ZZ

AND

- Diagnosis on date of procedure = Atrial Fibrillation (ICD-10-CM): I48.0, I48.11, I48.19, I48.20, I48.21, I48.91; the presence of any additional ablation-related diagnosis code(s) is immaterial for purpose of inclusion in the denominator population.

If there is no diagnosis code present on the date of the ablation procedure, identify all of the procedure codes (and corresponding dates) coded in the 30-days prior to the procedure for the following:

- Diagnosis = Atrial Fibrillation
- Diagnosis = Paroxysmal Supraventricular Tachycardia
- Diagnosis = Paroxysmal Ventricular Tachycardia
- Diagnosis = Paroxysmal Tachycardia, Unspecified
- Diagnosis = Atrial Flutter
- Diagnosis = Wolf-Parkinson-White Syndrome
- Diagnosis = Nonparoxysmal Atrioventricular Nodal Tachycardia
- Diagnosis = Atrioventricular Nodal Reentrant Tachycardia

Include in the denominator only those patients whose most recent diagnosis code (i.e., the code dated most proximal to the ablation procedure) is Atrial Fibrillation; when Atrial Fibrillation is the most recent diagnosis code, the presence of any additional ablation-related diagnosis code(s) on the same date is immaterial for purpose of inclusion in the denominator population.

3. To calculate the numerator, select the patients retained in the denominator, and identify the patients who had cardiac tamponade and/or pericardiocentesis occurring within 30 days following atrial fibrillation ablation. The following CPT codes should be used:

- Diagnosis = Cardiac tamponade and/or pericardiocentesis occurring within 30-days (G9408, G9409)

4. The performance is calculated as numerator/denominator.

[Response Ends]

sp.27. If measure testing is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.

Examples of samples used for testing:

- Testing may be conducted on a sample of the accountable entities (e.g., hospital, physician). The analytic unit specified for the particular measure (e.g., physician, hospital, home health agency) determines the sampling strategy for scientific acceptability testing.
- The sample should represent the variety of entities whose performance will be measured. The [2010 Measure Testing Task Force](#) recognized that the samples used for reliability and validity testing often have limited generalizability because measured entities volunteer to participate. Ideally, however, all types of entities whose performance will be measured should be included in reliability and validity testing.
- The sample should include adequate numbers of units of measurement and adequate numbers of patients to answer the specific reliability or validity question with the chosen statistical method.
- When possible, units of measurement and patients within units should be randomly selected.

[Response Begins]

Not applicable.

[Response Ends]

sp.30. Select only the data sources for which the measure is specified.

[Response Begins]

Claims

[Response Ends]

sp.31. Identify the specific data source or data collection instrument.

For example, provide the name of the database, clinical registry, collection instrument, etc., and describe how data are collected.

[Response Begins]

Claims data. Future use may include implementation to the NCDR Atrial Fibrillation Ablation Registry. This measure is included in the QPP Electrophysiology Cardiac Specialist specialty set, however, no reporting data is currently available from the QPP program PY2020.

[Response Ends]

sp.32. Provide the data collection instrument.

[Response Begins]

Available at measure-specific web page URL identified in sp.09

[Response Ends]

2ma.01. Indicate whether additional empirical reliability testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Reliability - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

No

[Response Ends]

2ma.02. Indicate whether additional empirical validity testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Validity - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

No

[Response Ends]

2ma.03. For outcome, patient-reported outcome, resource use, cost, and some process measures, risk adjustment/stratification may be conducted. Did you perform a risk adjustment or stratification analysis?

[Response Begins]

No

[Response Ends]

2ma.04. For maintenance measures in which risk adjustment/stratification has been performed, indicate whether additional risk adjustment testing has been conducted since the most recent maintenance evaluation. This may include updates to the risk adjustment analysis with additional clinical, demographic, and social risk factors.

Please update the Scientific Acceptability: Validity - Other Threats to Validity section.

Note: This section must be updated even if social risk factors are not included in the risk adjustment strategy.

[Response Begins]

No additional risk adjustment analysis included

[Response Ends]

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate fields in the Scientific Acceptability sections of the Measure Submission Form.

- Measures must be tested for all the data sources and levels of analyses that are specified. If there is more than one set of data specifications or more than one level of analysis, contact NQF staff about how to present all the testing information in one form.
- All required sections must be completed.
- For composites with outcome and resource use measures, Questions 2b.23-2b.37 (Risk Adjustment) also must be completed.
- If specified for multiple data sources/sets of specifications (e.g., claims and EHRs), Questions 2b.11-2b.13 also must be completed.
- An appendix for supplemental materials may be submitted (see Question 1 in the Additional section), but there is no guarantee it will be reviewed.
- Contact NQF staff with any questions. Check for resources at the [Submitting Standards webpage](#).
- For information on the most updated guidance on how to address social risk factors variables and testing in this form refer to the release notes for the [2021 Measure Evaluation Criteria and Guidance](#).

Note: The information provided in this form is intended to aid the Standing Committee and other stakeholders in understanding to what degree the testing results for this measure meet NQF's evaluation criteria for testing.

2a. Reliability testing demonstrates the measure data elements are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period and/or that the measure score is precise. For instrument-based measures (including PRO-PMs) and composite performance measures, reliability should be demonstrated for the computed performance score.

2b1. Validity testing demonstrates that the measure data elements are correct and/or the measure score correctly reflects the quality of care provided, adequately identifying differences in quality. For instrument based measures (including PRO-PMs) and composite performance measures, validity should be demonstrated for the computed performance score.

2b2. Exclusions are supported by the clinical evidence and are of sufficient frequency to warrant inclusion in the specifications of the measure;

AND

If patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that the exclusion impacts performance on the measure; in such cases, the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2b3. For outcome measures and other measures when indicated (e.g., resource use):

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified; is based on patient factors (including clinical and social risk factors) that influence the measured outcome and are present at start of care; 14,15 and has demonstrated adequate discrimination and calibration

OR

- rationale/data support no risk adjustment/ stratification.

2b4. Data analysis of computed measure scores demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful 16 differences in performance;

OR

there is evidence of overall less-than-optimal performance.

2b5. If multiple data sources/methods are specified, there is demonstration they produce comparable results.

2b6. Analyses identify the extent and distribution of missing data (or nonresponse) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and non-responders) and how the specified handling of missing data minimizes bias.

2c. For composite performance measures, empirical analyses support the composite construction approach and demonstrate that:

2c1. the component measures fit the quality construct and add value to the overall composite while achieving the related objective of parsimony to the extent possible; and

2c2. the aggregation and weighting rules are consistent with the quality construct and rationale while achieving the related objective of simplicity to the extent possible.

(if not conducted or results not adequate, justification must be submitted and accepted)

Definitions

Reliability testing applies to both the data elements and computed measure score. Examples of reliability testing for data elements include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing of the measure score addresses precision of measurement (e.g., signal-to-noise).

Validity testing applies to both the data elements and computed measure score. Validity testing of data elements typically analyzes agreement with another authoritative source of the same information. Examples of validity testing of the measure score include, but are not limited to: testing hypotheses that the measures scores indicate quality of care, e.g., measure scores are different for groups known to have differences in quality assessed by another valid quality measure or method; correlation of measure scores with another valid indicator of quality for the specific topic; or relationship to conceptually related measures (e.g., scores on process measures to scores on outcome measures). Face validity of the measure score as a quality indicator may be adequate if accomplished through a systematic and transparent process, by identified experts, and explicitly addresses whether performance scores resulting from the measure as specified can be used to distinguish good from poor quality. The degree of consensus and any areas of disagreement must be provided/discussed.

Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, variability of exclusions across providers, and sensitivity analyses with and without the exclusion.

Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Risk factors that influence outcomes should not be specified as exclusions.

With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74 percent v. 75 percent) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall less-than-optimal performance may not demonstrate much variability across providers.

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous (Year) Submission:

Testing from the previous submission here.

2a.01. Select only the data sources for which the measure is tested.

[Response Begins]

Claims

[Response Ends]

2a.02. If an existing dataset was used, identify the specific dataset.

The dataset used for testing must be consistent with the measure specifications for target population and healthcare entities being measured; e.g., Medicare Part A claims, Medicaid claims, other commercial insurance, nursing home MDS, home health OASIS, clinical registry).

[Response Begins]

This measure was initially developed with data from the Medical Outcomes Research for Effectiveness and Economics Registry (MORE2 Registry®). This warehouse of healthcare data contains information derived from more than 7.7 billion medical events generated by over 99.6 million unique and de-identified individuals nationwide. Encompassing more than 3.2 billion member-months of data, the registry goes beyond claims data to include information about demographics, enrollment, diagnoses, procedures, pharmacy and laboratory results and represents a significant mix of commercial, Medicare Advantage, and managed Medicaid plan members. The data resided on an IBM--Netezza data warehouse server.

Please note that ACC was unable to update testing data for the measure due to data access restrictions. All data supporting scientific acceptability has been previously submitted. The ACC's intention is to use CMS claims data to support this measure. Unfortunately, this data is not currently available to us. While this measure is a part of the QPP program no performance data or benchmarks are available.

[Response Ends]

2a.03. Provide the dates of the data used in testing.

Use the following format: "MM-DD-YYYY - MM-DD-YYYY"

[Response Begins]

01-01-2007 – 12-31-2012

[Response Ends]

2a.04. Select the levels of analysis for which the measure is tested.

Testing must be provided for all the levels specified and intended for measure implementation, e.g., individual clinician, hospital, health plan.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- Clinician: Clinician
- Population: Population

[Response Begins]

Clinician: Clinician

Facility

[Response Ends]

2a.05. List the measured entities included in the testing and analysis (by level of analysis and data source).

Identify the number and descriptive characteristics of measured entities included in the analysis (e.g., size, location, type); if a sample was used, describe how entities were selected for inclusion in the sample.

[Response Begins]

At the time of testing, 2013, the database included 666,617 physicians. Please refer to the appendix for an additional attachment with testing results from the initial review cycle.

[Response Ends]

2a.06. Identify the number and descriptive characteristics of patients included in the analysis (e.g., age, sex, race, diagnosis), separated by level of analysis and data source; if a sample was used, describe how patients were selected for inclusion in the sample.

If there is a minimum case count used for testing, that minimum must be reflected in the specifications.

[Response Begins]

In 2013, the database included approximately 99.6 million unique and de-identified individuals' records.

[Response Ends]

2a.07. If there are differences in the data or sample used for different aspects of testing (e.g., reliability, validity, exclusions, risk adjustment), identify how the data or sample are different for each aspect of testing.

[Response Begins]

N/A

[Response Ends]

2a.08. List the social risk factors that were available and analyzed.

For example, patient-reported data (e.g., income, education, language), proxy variables when social risk data are not collected from each patient (e.g. census tract), or patient community characteristics (e.g. percent vacant housing, crime rate) which do not have to be a proxy for patient-level data.

[Response Begins]

Data on social risk factors were not included in the original data set used for testing. The ACC's intention is to use CMS claims data to support this measure and take advantage of the robust data variables assessing social risk factors. Unfortunately, this data is not currently available to us.

[Response Ends]

Note: If accuracy/correctness (validity) of data elements was empirically tested, separate reliability testing of data elements is not required – in 2a.09 check patient or encounter-level data; in 2a.010 enter “see validity testing section of data elements”; and enter “N/A” for 2a.11 and 2a.12.

2a.09. Select the level of reliability testing conducted.

Choose one or both levels.

[Response Begins]

Accountable Entity Level (e.g., signal-to-noise analysis)

[Response Ends]

2a.10. For each level of reliability testing checked above, describe the method of reliability testing and what it tests.

Describe the steps—do not just name a method; what type of error does it test; what statistical analysis was used.

[Response Begins]

The statistical reliability scores are based on an analysis of the relative value of variation in measure scores due to signal (i.e., variation between measured entities) versus noise (i.e., variation within measured entities) using a "signal to noise test" statistic based on a beta--binomial model described in a paper by John L. Adams for the National Committee for Quality Assurance ("The Reliability of Provider Profiling: A Tutorial", 2009, RAND Corporation). Reliability scores range from 0.0 to 1.00. Generally, a reliability score of .70 or higher is considered good (the higher the better).

[Response Ends]

2a.11. For each level of reliability testing checked above, what were the statistical results from reliability testing?

For example, provide the percent agreement and kappa for the critical data elements, or distribution of reliability statistics from a signal-to-noise analysis. For score-level reliability testing, when using a signal-to-noise analysis, more than just one overall statistic should be reported (i.e., to demonstrate variation in reliability across providers). If a particular method yields only one statistic, this should be explained. In addition, reporting of results stratified by sample size is preferred (pg. 18, [NQF Measure Evaluation Criteria](#)).

[Response Begins]

Note: This table refers to the measure as HRS-12. This is the designation that was given to this measure during measure development.

HRS-12: Three-year Period Reliability Scores by Provider Type						
Physician 3-Year Avg.			Facility 3-Year Avg.			
Avg. Reliability Score			Avg. Reliability Score			
Minimum Procedures			Minimum Procedures			
Years	2	10	20	2	10	20
2007-2009	94.3%	84.4%	78.9%	91.9%	80.8%	69.3%
2008-2010	93.2%	83.2%	78.9%	90.6%	76.9%	65.0%
2009-2011	93.3%	84.6%	75.5%	91.6%	78.9%	71.5%
2010-2012	93.8%	83.4%	68.4%	90.8%	75.1%	61.1%
Count of Physicians			Count of Facilities			
Minimum Procedures			Minimum Procedures			
Years	2	10	20	2	10	20
2007-2009	2,535	388	127	1,996	568	262
2008-2010	2,949	445	144	2,068	581	292
2009-2011	2,734	399	105	1,757	486	240
2010-2012	2,296	299	68	1,519	395	175
Estimate of Mu			Estimate of Mu			
Minimum Procedures			Minimum Procedures			
Years	2	10	20	2	10	20
2007-2009	1.43%	1.17%	1.14%	1.38%	1.33%	1.37%
2008-2010	1.64%	1.08%	0.80%	1.46%	1.33%	1.39%
2009-2011	1.42%	0.95%	0.98%	1.38%	1.34%	1.40%
2010-2012	1.30%	1.13%	1.20%	1.36%	1.38%	1.49%
Estimate of Alpha			Estimate of Alpha			
Minimum Procedures			Minimum Procedures			
Years	2	10	20	2	10	20
2007-2009	0.3114	0.7870	0.7813	0.6733	1.1764	2.1955
2008-2010	0.3627	1.4171	1.9254	1.0540	2.4620	3.8363
2009-2011	0.7685	3.7448	1.9316	0.7881	1.3692	1.4794
2010-2012	1.9127	3.8970	11.6531	3.3033	8.9849	12.6406
Estimate of Beta			Estimate of Beta			
Minimum Procedures			Minimum Procedures			
Years	2	10	20	2	10	20
2007-2009	21.49	66.21	67.58	47.94	87.18	157.53
2008-2010	21.71	129.87	238.17	71.36	182.48	271.88
2009-2011	53.51	390.90	194.49	56.45	101.15	104.06
2010-2012	145.11	340.30	956.84	238.88	642.04	837.22

Three year period reliability scores by provider type

[Response Ends]

2a.12. Interpret the results, in terms of how they demonstrate reliability.

(In other words, what do the results mean and what are the norms for the test conducted?)

[Response Begins]

The results indicate that the measure is reliable at physician and facility level of analysis.

[Response Ends]

2b.01. Select the level of validity testing that was conducted.

[Response Begins]

Empirical validity testing

[Response Ends]

2b.02. For each level of testing checked above, describe the method of validity testing and what it tests.

Describe the steps—do not just name a method; what was tested, e.g., accuracy of data elements compared to authoritative source, relationship to another measure as expected; what statistical analysis was used.

[Response Begins]

Validity testing of the computed measure scores was completed to assure measure scores do not vary by type of data (i.e., provider level data vs. hospital level data) and to provide evidence that the measure can be used for the purpose of differentiating quality of care across providers and facilities. Measure scores were also compared across age groups, gender groups and by procedure type, with resulting measure rates consistent with expected outcomes and the literature.

[Response Ends]

2b.03. Provide the statistical results from validity testing.

Examples may include correlations or t-test results.

[Response Begins]

Distribution of HRS-12 for Physicians											
Minimum Denominator	Time Period	N	Percentile								Maximum
			25th	50th	75th	80th	85th	90th	95th	99th	
2	2007-2009	2,535	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	50.00%	100.00%
	2008-2010	2,949	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	50.00%	100.00%
	2009-2011	2,734	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	50.00%	100.00%
	2010-2012	2,296	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	50.00%	100.00%
10	2007-2009	388	0.00%	0.00%	0.00%	0.00%	3.13%	5.56%	8.33%	14.29%	18.18%
	2008-2010	445	0.00%	0.00%	0.00%	0.00%	3.13%	5.56%	8.33%	14.29%	18.18%
	2009-2011	399	0.00%	0.00%	0.00%	0.00%	1.79%	5.00%	7.14%	10.00%	11.76%
	2010-2012	299	0.00%	0.00%	0.00%	0.00%	2.94%	5.88%	8.33%	18.18%	20.00%
20	2007-2009	127	0.00%	0.00%	1.32%	2.52%	3.23%	4.55%	6.90%	12.00%	13.64%
	2008-2010	144	0.00%	0.00%	0.00%	1.67%	3.03%	3.85%	4.35%	6.06%	9.09%
	2009-2011	105	0.00%	0.00%	1.01%	2.50%	3.03%	3.57%	4.35%	6.82%	8.70%
	2010-2012	68	0.00%	0.00%	2.60%	3.23%	3.70%	4.76%	5.71%	8.33%	8.33%

Distribution for physicians

[Response Ends]

2b.04. Provide your interpretation of the results in terms of demonstrating validity. (i.e., what do the results mean and what are the norms for the test conducted?)

[Response Begins]

In reviewing rates by ablation type, the data validate that catheter procedure is by far the most common type of ablation completed and that rates of complications are lower, consistent with clinical knowledge. The rates of complications are far higher for less frequently performed procedures (extensive and limited approaches), also consistent with expectations. Similarly, complication rates are higher in older patients, consistent with clinical expectations of greater risk of complications in older patients. Complication rates are also higher in females as compared to males, again supported by the literature.

[Response Ends]

2b.05. Describe the method for determining if statistically significant and clinically/practically meaningful differences in performance measure scores among the measured entities can be identified.

Describe the steps—do not just name a method; what statistical analysis was used? Do not just repeat the information provided in Importance to Measure and Report: Gap in Care/Disparities.

[Response Begins]

Validity testing of the computed measure scores was completed to provide evidence that the measure can be used for the purpose of differentiating quality of care across providers and facilities. Measure scores were also compared across age groups, gender groups and by procedure type, with resulting measure rates consistent with expected outcomes and the literature. For example, in reviewing rates by ablation type, the data validate that catheter procedure is by far the most common type of ablation completed and that rates of complications are lower, consistent with clinical knowledge. The rates of complications are far higher for less frequently performed procedures (extensive and limited approaches), also consistent with expectations. Similarly, we see that rates are higher in older patients, consistent with clinical expectations of greater risk of complications in older patients. Complication rates are also higher in females as compared to males, again supported by the literature.

Please note that ACC was unable to update this section due to lack of data availability.

Average HRS-12									
Minimum Number of Procedures by Physician									
Years	1	2	3	5	10	15	20	30	60
2007-2009	1.59%	1.63%	1.38%	1.28%	1.20%	1.19%	1.21%	0.79%	1.31%
2008-2010	1.85%	1.98%	1.67%	1.45%	1.18%	1.00%	0.79%	0.80%	0.61%
2009-2011	1.71%	1.69%	1.53%	1.37%	0.92%	1.02%	0.94%	1.33%	0.72%
2010-2012	1.57%	1.50%	1.28%	1.20%	1.17%	1.05%	1.25%	0.93%	0.95%
HRS-12 Standard Error									
Minimum Number of Procedures by Physician									
Years	1	2	3	5	10	15	20	30	60
2007-2009	0.15%	0.17%	0.15%	0.14%	0.16%	0.19%	0.23%	0.18%	0.44%
2008-2010	0.15%	0.17%	0.15%	0.15%	0.14%	0.15%	0.14%	0.18%	0.25%
2009-2011	0.15%	0.15%	0.15%	0.15%	0.12%	0.15%	0.18%	0.27%	0.37%
2010-2012	0.15%	0.15%	0.14%	0.15%	0.18%	0.19%	0.26%	0.24%	0.41%

[Response Ends]

2b.06. Describe the statistical results from testing the ability to identify statistically significant and/or clinically/practically meaningful differences in performance measure scores across measured entities.

Examples may include number and percentage of entities with scores that were statistically significantly different from mean or some benchmark, different from expected; how was meaningful difference defined.

[Response Begins]

Please refer to 2b.05 and the attached documents.

[Response Ends]

2b.07. Provide your interpretation of the results in terms of demonstrating the ability to identify statistically significant and/or clinically/practically meaningful differences in performance across measured entities.

In other words, what do the results mean in terms of statistical and meaningful differences?

[Response Begins]

Please refer to 2b.05 and the attached documents.

[Response Ends]

2b.08. Describe the method of testing conducted to identify the extent and distribution of missing data (or non-response) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and non-responders). Include how the specified handling of missing data minimizes bias.

Describe the steps—do not just name a method; what statistical analysis was used.

[Response Begins]

During the initial testing the threat of bias due to missing data was addressed by calculating performance results based on varying numbers of minimum procedures. Please note that no updated data was available to reassess the rates of missing data.

[Response Ends]

2b.09. Provide the overall frequency of missing data, the distribution of missing data across providers, and the results from testing related to missing data.

For example, provide results of sensitivity analysis of the effect of various rules for missing data/non-response. If no empirical sensitivity analysis was conducted, identify the approaches for handling missing data that were considered and benefits and drawbacks of each).

[Response Begins]

During initial results demonstrate good validity at a minimum of 10 procedures as compared to minimum of 20 procedures. The results also show better reliability at the physician level as compared to the facility level, which is consistent with expectations, and shows the complication rates are more dependent on the physician performing the procedure than the hospital facility at which the procedure is performed.

[Response Ends]

2b.10. Provide your interpretation of the results, in terms of demonstrating that performance results are not biased due to systematic missing data (or differences between responders and non-responders), and how the specified handling of missing data minimizes bias.

In other words, what do the results mean in terms of supporting the selected approach for missing data and what are the norms for the test conducted; if no empirical analysis was conducted, justify the selected approach for missing data.

[Response Begins]

Performance results were consistent with expectations, demonstrating that complication rates are more dependent on the physician performing the procedure than the hospital facility at which the procedure is performed.

[Response Ends]

Note: This item is directed to measures that are risk-adjusted (with or without social risk factors) OR to measures with more than one set of specifications/instructions (e.g., one set of specifications for how to identify and compute the measure from medical record abstraction and a different set of specifications for claims or eQMs). It does not apply to measures that use more than one source of data in one set of specifications/instructions (e.g., claims data to identify the denominator and medical record abstraction for the numerator). Comparability is not required when comparing performance scores with and without social risk factors in the risk adjustment model. However, if comparability is not demonstrated for measures with more than one set of specifications/instructions, the different specifications (e.g., for medical records vs. claims) should be submitted as separate measures.

2b.11. Indicate whether there is more than one set of specifications for this measure.

[Response Begins]

No, there is only one set of specifications for this measure

[Response Ends]

2b.12. Describe the method of testing conducted to compare performance scores for the same entities across the different data sources/specifications.

Describe the steps—do not just name a method. Indicate what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.13. Provide the statistical results from testing comparability of performance scores for the same entities when using different data sources/specifications.

Examples may include correlation, and/or rank order.

[Response Begins]

[Response Ends]

2b.14. Provide your interpretation of the results in terms of the differences in performance measure scores for the same entities across the different data sources/specifications.

In other words, what do the results mean and what are the norms for the test conducted.

[Response Begins]

[Response Ends]

2b.15. Indicate whether the measure uses exclusions.

[Response Begins]

N/A or no exclusions

[Response Ends]

2b.16. Describe the method of testing exclusions and what was tested.

Describe the steps—do not just name a method; what was tested, e.g., whether exclusions affect overall performance scores; what statistical analysis was used?

[Response Begins]

N/A

[Response Ends]

2b.17. Provide the statistical results from testing exclusions.

Include overall number and percentage of individuals excluded, frequency distribution of exclusions across measured entities, and impact on performance measure scores.

[Response Begins]

N/A

[Response Ends]

2b.18. Provide your interpretation of the results, in terms of demonstrating that exclusions are needed to prevent unfair distortion of performance results.

In other words, the value outweighs the burden of increased data collection and analysis. Note: If patient preference is an exclusion, the measure must be specified so that the effect on the performance score is transparent, e.g., scores with and without exclusion.

[Response Begins]

N/A

[Response Ends]

2b.19. Check all methods used to address risk factors.

[Response Begins]

Stratification by risk category (specify number of categories)

[Stratification by risk category (specify number of categories) Please Explain]

2 - gender and age

[Response Ends]

2b.20. If using statistical risk models, provide detailed risk model specifications, including the risk model method, risk factors, risk factor data sources, coefficients, equations, codes with descriptors, and definitions.

[Response Begins]

N/A

[Response Ends]

2b.21. If an outcome or resource use measure is not risk-adjusted or stratified, provide rationale and analyses to demonstrate that controlling for differences in patient characteristics (i.e., case mix) is not needed to achieve fair comparisons across measured entities.

[Response Begins]

N/A

[Response Ends]

2b.22. Select all applicable resources and methods used to develop the conceptual model of how social risk impacts this outcome.

[Response Begins]

Other (specify)

[Other (specify) Please Explain]

Physician experts

[Response Ends]

2b.23. Describe the conceptual and statistical methods and criteria used to test and select patient-level risk factors (e.g., clinical factors, social risk factors) used in the statistical risk model or for stratification by risk.

Please be sure to address the following: potential factors identified in the literature and/or expert panel; regression analysis; statistical significance of $p < 0.10$ or other statistical tests; correlation of x or higher. Patient factors should be present at the start of care, if applicable. Also discuss any "ordering" of risk factor inclusion; note whether social risk factors are added after all clinical factors. Discuss any considerations regarding data sources (e.g., availability, specificity).

[Response Begins]

There was no statistical analysis used to develop and validate the adequacy of the stratification approach. The two factors were determined by a Committee of physician experts who affirmed that these factors contribute to the risk of complication.

[Response Ends]

2b.24. Detail the statistical results of the analyses used to test and select risk factors for inclusion in or exclusion from the risk model/stratification.

[Response Begins]

No statistical results to select social risk factors was used. Age and gender were selected as part of the stratification model as research indicates that these factors contribute to the risk of this complication. Stratification will be reassessed as new research emerges. Future efforts with this model will include adjusting for social risk factors. At this time we cannot update this without data availability.

[Response Ends]

2b.25. Describe the analyses and interpretation resulting in the decision to select or not select social risk factors.

Examples may include prevalence of the factor across measured entities, availability of the data source, empirical association with the outcome, contribution of unique variation in the outcome, or assessment of between-unit effects and within-unit effects. Also describe the impact of adjusting for risk (or making no adjustment) on providers at high or low extremes of risk.

[Response Begins]

No analyses were performed. It is ACC's intention to use CMS claims data and possible future registry data to support this measure. Both offer robust opportunities to examine social risk factors and adjust the measure as needed.

[Response Ends]

2b.26. Describe the method of testing/analysis used to develop and validate the adequacy of the statistical model or stratification approach (describe the steps—do not just name a method; what statistical analysis was used). Provide the statistical results from testing the approach to control for differences in patient characteristics (i.e., case mix) below. If stratified ONLY, enter “N/A” for questions about the statistical risk model discrimination and calibration statistics.

Validation testing should be conducted in a data set that is separate from the one used to develop the model.

[Response Begins]

There was no statistical analysis used to develop and validate the adequacy of the stratification approach. The two factors were determined by a Committee of physician experts who affirmed that these factors contribute to the risk of complication.

[Response Ends]

2b.27. Provide risk model discrimination statistics.

For example, provide c-statistics or R-squared values.

[Response Begins]

N/A

[Response Ends]

2b.28. Provide the statistical risk model calibration statistics (e.g., Hosmer-Lemeshow statistic).

[Response Begins]

N/A

[Response Ends]

2b.29. Provide the risk decile plots or calibration curves used in calibrating the statistical risk model.

The preferred file format is .png, but most image formats are acceptable.

[Response Begins]

N/A

[Response Ends]

2b.30. Provide the results of the risk stratification analysis.

[Response Begins]

This measure is not risk adjusted, however this measure does have subgroups that have been stratified by age and gender. The results showed that the rate of complication was 1.25 times higher for women (1.28%) compared to men (1.02%). These results are consistent with the literature. The results demonstrated that the rate of complication was slightly higher for patients 65 years of age and old (1.43%) compared to patients 18 to 64 years of age (1.23%).

[Response Ends]

2b.31. Provide your interpretation of the results, in terms of demonstrating adequacy of controlling for differences in patient characteristics (i.e., case mix).

In other words, what do the results mean and what are the norms for the test conducted?

[Response Begins]

Rather than controlling for differences in patient characteristics, the measure stratifies results by two patient variables identified by our committee of physician experts and corroborated by contemporary peer-reviewed scientific literature—age and gender. Measure testing confirmed that AF ablation complication rates are higher in females and in patients ≥ 65 years of age, supporting the recommendation to stratify results accordingly.

[Response Ends]

2b.32. Describe any additional testing conducted to justify the risk adjustment approach used in specifying the measure.

Not required but would provide additional support of adequacy of the risk model, e.g., testing of risk model in another data set; sensitivity analysis for missing data; other methods that were assessed.

[Response Begins]

N/A

[Response Ends]

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.

3.01. Check all methods below that are used to generate the data elements needed to compute the measure score.

[Response Begins]

Coded by someone other than person obtaining original information (e.g., DRG, ICD-10 codes on claims)

[Response Ends]

3.02. Detail to what extent the specified data elements are available electronically in defined fields.

In other words, indicate whether data elements that are needed to compute the performance measure score are in defined, computer-readable fields.

[Response Begins]

ALL data elements are in defined fields in electronic claims

[Response Ends]

3.03. 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 data elements not from electronic sources.

[Response Begins]

[Response Ends]

3.04. Describe any efforts to develop an eCQM.

[Response Begins]

[Response Ends]

3.06. Describe difficulties (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.

[Response Begins]

[Response Ends]

Consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

3.07. Detail 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),

Attach the fee schedule here, if applicable.

[Response Begins]

None.

[Response Ends]

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.

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making.

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 demonstrating performance improvement.

4a.01. Check all current uses. For each current use checked, please provide:

Name of program and sponsor

URL

Purpose

Geographic area and number and percentage of accountable entities and patients included

Level of measurement and setting

[Response Begins]

[Response Ends]

4a.02. Check all planned uses.

[Response Begins]

Public reporting

Payment Program

[Response Ends]

4a.03. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing), explain why the measure is not in use.

For example, do policies or actions of the developer/steward or accountable entities restrict access to performance results or block implementation?

[Response Begins]

This measure is under consideration by the Centers for Medicare and Medicaid Services for use in its quality reporting programs starting in 2015.

[Response Ends]

4a.04. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes: used in any accountability application within 3 years, and publicly reported within 6 years of initial endorsement.

A 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.

[Response Begins]

This measure is under consideration by the Centers for Medicare and Medicaid Services for use in its quality reporting programs starting in 2015.

[Response Ends]

4a.05. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

Detail how many and which types of measured entities and/or others were included. If only a sample of measured entities were included, describe the full population and how the sample was selected.

[Response Begins]

[Response Ends]

4a.06. Describe the process for providing measure results, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

[Response Begins]

[Response Ends]

4a.07. Summarize the feedback on measure performance and implementation from the measured entities and others. Describe how feedback was obtained.

[Response Begins]

[Response Ends]

4a.08. Summarize the feedback obtained from those being measured.

[Response Begins]

[Response Ends]

4a.09. Summarize the feedback obtained from other users.

[Response Begins]

[Response Ends]

4a.10. Describe how the feedback described has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

[Response Begins]

[Response Ends]

4b.01. You may refer to data provided in Importance to Measure and Report: Gap in Care/Disparities, but do not repeat here. Discuss any progress on improvement (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). If no improvement was demonstrated, provide an explanation. 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.

[Response Begins]

Not applicable; initial endorsement submission.

[Response Ends]

4b.02. Explain any unexpected findings (positive or negative) during implementation of this measure, including unintended impacts on patients.

[Response Begins]

Not applicable; initial endorsement submission.

[Response Ends]

4b.03. Explain any unexpected benefits realized from implementation of this measure.

[Response Begins]

[Response Ends]

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.

If you are updating a maintenance measure submission for the first time in MIMS, please note that the previous related and competing data appearing in question 5.03 may need to be entered in to 5.01 and 5.02, if the measures are NQF endorsed. Please review and update questions 5.01, 5.02, and 5.03 accordingly.

5.01. Search and select all NQF-endorsed related measures (conceptually, either same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.02. Search and select all NQF-endorsed competing measures (conceptually, the measures have both the same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.03. If there are related or competing measures to this measure, but they are not NQF-endorsed, please indicate the measure title and steward.

[Response Begins]

[Response Ends]

5.04. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s), indicate whether the measure specifications are harmonized to the extent possible.

[Response Begins]

[Response Ends]

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

[Response Begins]

Not applicable.

[Response Ends]

5.06. Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality). Alternatively, justify endorsing an additional measure.

Provide analyses when possible.

[Response Begins]

Not applicable.

[Response Ends]

Appendix

Supplemental materials may be provided in an appendix.:

Available in attached file

Attachment: HRS-12MeasTestingFormUpdated.pdf

Attachment: 2474_NQF 2474 -Code_list.xlsx

Contact Information

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

Measure Steward Point of Contact: Mayfield, Jarrott, jmayfield@acc.org

Denton, Beth, bdenton@acc.org

Inbox, ACC Comment, comment@acc.org

Measure Developer if different from Measure Steward: Heart Rhythm Society

Measure Developer Point(s) of Contact: Mayfield, Jarrott, jmayfield@acc.org

Denton, Beth, bdenton@acc.org

Additional Information

1. Provide any supplemental materials, if needed, as an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be collated one file with a table of contents or bookmarks. If material pertains to a specific criterion, that should be indicated.

[Response Begins]

Available in attached file

[Response Ends]

Attachment: HRS-12MeasTestingFormUpdated.pdf

Attachment: 2474_NQF 2474 -Code_list.xlsx

2. List the workgroup/panel members' names and organizations.

Describe the members' role in measure development.

[Response Begins]

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Paul Varosy, MD

Ex Officio:

Douglas Packer, MD, FHRS

Bruce Wilkoff, MD, FHRS

[Response Ends]

3. Indicate the year the measure was first released.

[Response Begins]

[Response Ends]

4. Indicate the month and year of the most recent revision.

[Response Begins]

[Response Ends]

5. Indicate the frequency of review, or an update schedule, for this measure.

[Response Begins]

Yearly

[Response Ends]

6. Indicate the next scheduled update or review of this measure.

[Response Begins]

[Response Ends]

7. Provide a copyright statement, if applicable. Otherwise, indicate "N/A".

[Response Begins]

[Response Ends]

8. State any disclaimers, if applicable. Otherwise, indicate "N/A".

[Response Begins]

[Response Ends]

9. Provide any additional information or comments, if applicable. Otherwise, indicate "N/A".

[Response Begins]

[Response Ends]