



## 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 #: 2438**

**Corresponding Measures:**

**De.2. Measure Title:** Beta-Blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) for LVSD Prescribed at Discharge

**Co.1.1. Measure Steward:** The Joint Commission

**De.3. Brief Description of Measure:** Proportion of heart failure patients age 18 and older with LVSD for whom beta-blocker therapy (i.e., bisoprolol, carvedilol, or sustained-release metoprolol succinate) is prescribed at discharge. For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.

**1b.1. Developer Rationale:** Rationale: Beta-blocker therapy has been recommended for the treatment of patients with heart failure and reduced left ventricular ejection fraction (LVEF) since the 1970's (HFSA, 2010). Several large-scale clinical trials have provided unequivocal evidence of important reductions in both morbidity and mortality. The marked beneficial effects of beta blockade has been well demonstrated in large-scale clinical trials of symptomatic patients with New York Heart Association (NYHA) class II-IV heart failure and reduced LVEF using carvedilol, bisoprolol, and sustained-release metoprolol succinate (Hunt et al., 2009). These beta-blockers, in addition to ACE inhibitors and diuretics, are considered routine therapy for heart failure patients with reduced LVEF. Beta-blocker therapy is well tolerated by the majority of patients, even those with co-morbidities such as, diabetes mellitus, chronic obstructive lung disease, and peripheral vascular disease.

**S.4. Numerator Statement:** Patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for LVSD at hospital discharge.

**S.6. Denominator Statement:** Heart failure patients with current or prior documentation of left ventricular ejection fraction (LVSD) < 40%.

**S.8. Denominator Exclusions:** Excluded Populations:

- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-10-PCS procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2)
- Patients less than 18 years of age
- Patients who have a Length of Stay greater than 120 days
- Patients with Comfort Measures Only documented
- Patients enrolled in a Clinical Trial
- Patients discharged to another hospital
- Patients who left against medical advice
- Patients who expired
- Patients discharged to home for hospice care
- Patients discharged to a healthcare facility for hospice care
- Patients with a documented Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate Prescribed for LVSD at Discharge

**De.1. Measure Type:** Process

**S.17. Data Source:** Electronic Health Records, Paper Medical Records

**S.20. Level of Analysis:** Facility, Other

**IF Endorsement Maintenance – Original Endorsement Date:** Jul 01, 2015 **Most Recent Endorsement Date:** Jun 29, 2015

**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?** This is the first in a set of measures developed for advanced certification in heart failure. The other measures in the set include ACHF-02 Post-Discharge Appointment for Heart Failure Patients; ACHF-03 Care Transition Record Transmitted; ACHF-04 Discussion of Advance Directives/Advance Care Planning; ACHF-05 Advance Directive Executed; ACHF-06 Post-Discharge Evaluation for Heart Failure Patients. Although it is not required that these measures are reported in conjunction with each other, The Joint Commission develops measures in sets in order to provide as comprehensive a view of quality for a particular clinical topic as possible.

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

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

[ACHF-01\\_Measure\\_Evidence\\_2013\\_Final-635248619296817718.docx](#)

#### 1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

### 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., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

*If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.*

Rationale: Beta-blocker therapy has been recommended for the treatment of patients with heart failure and reduced left ventricular ejection fraction (LVEF) since the 1970's (HFSA, 2010). Several large-scale clinical trials have provided unequivocal evidence of important reductions in both morbidity and mortality. The marked beneficial effects of beta blockade has been well demonstrated in large-scale clinical trials of symptomatic patients with New York Heart Association (NYHA) class II-IV heart failure and reduced LVEF using carvedilol, bisoprolol, and sustained-release metoprolol succinate (Hunt et al., 2009). These beta-blockers, in addition to ACE inhibitors and diuretics, are considered routine therapy for heart failure patients with reduced LVEF. Beta-blocker therapy is well tolerated by the majority of patients, even those with co-morbidities such as, diabetes mellitus, chronic obstructive lung disease, and peripheral vascular disease.

#### 1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for maintenance of endorsement. 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 include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.

Not Applicable

#### 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.

Citation:

Fonarow, G. C., W. T. Abraham, N. M. Albert, W. Gattis Stough, M. Gheorghiade, B. H. Greenberg, C. M. O'Connor, et al. "Influence of a Performance-Improvement Initiative on Quality of Care for Patients Hospitalized with Heart Failure: Results of the Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients with Heart Failure (Optimize-Hf)." [In eng]. Arch Intern Med 167, no. 14 (Jul 23 2007): 1493-502.

Summary:

Data analyzed: March 1, 2003 – December 31, 2004; 259 U.S. hospitals; 48,612 patients. Baseline data demonstrated that only 78% of eligible patients were prescribed beta-blockers at discharge. Use of Bisoprolol, Carvedilol, or Metoprolol Succinate was significantly lower, only 56% of eligible patients.

Citation:

Fonarow, G. C., C. W. Yancy, N. M. Albert, A. B. Curtis, W. G. Stough, M. Gheorghiade, J. T. Heywood, et al. "Heart Failure Care in the Outpatient Cardiology Practice Setting: Findings from Improve Hf." [In eng]. Circ Heart Fail 1, no. 2 (Jul 2008): 98-106.

Summary:

Data analyzed: between 2005 and 2007; 167 outpatient cardiology practices in the U. S; 15,381 patients. Baseline data demonstrated beta-blockers prescribed to 86% of eligible patients. Care varied greatly across practices in that beta-blockers were prescribed between a range as low as 8.6% and as high as 100%.

Pilot Test Findings:

During the six-month pilot test, nine sites submitted data 878 patient records. The performance rates varied widely across sites for this measure with results ranging from a low of 61.5% to a high of 100%.

**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 maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) 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 (4b1) under Usability and Use.**

This is the initial submission of this measure.

**1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, 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 1b.4**

Agency for Healthcare Research and Quality. 2009 National Healthcare Disparities Report.

<http://www.ahrq.gov/qual/nhdr09/nhdr09.pdf>. Published March 2010. Accessed December 5, 2013.

The 2009 National Healthcare Disparities Report notes that from 2005 to 2007, disparities in hospital care for heart failure for American Indians/Alaska Native (AI/ANs) have been worsening at a rate of 12.4% per year. Additionally noted is that hospital care is worsening for Hispanics. Although quality of hospital care for heart failure has improved overall, care for Whites continues to improve at a higher rate than for minority populations.

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Roger, V. L., A. S. Go, D. M. Lloyd-Jones, E. J. Benjamin, J. D. Berry, W. B. Borden, D. M. Bravata, et al. "Heart Disease and Stroke Statistics--2012 Update: A Report from the American Heart Association." [In eng]. Circulation 125, no. 1 (Jan 3 2012): e2-e220.

It is noted in this update that hospitalization for congestive heart failure (CHF) was greater among women. Among Medicare enrollees, CHF hospitalization was higher among blacks, Hispanics, and American Indian/Alaska Natives than among whites. Hospitalizations for CHF were highest in the southeastern United States.

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Yancy CW, Jessup M, Bozkurt B, Masoudi FA, Butler J, McBride PE, Casey, Jr DE, McMurray JJV, Drazner MH, Mitchell JE, Fonarow GC, Peterson PN, Geraci SA, Horwich T, Januzzi JL, Johnson MR, Kasper EK, Levy WC, Riegel B, Sam F, Stevenson LW, Tang WHW, Tsai EJ,

Wilkoff BL, 2013 ACCF/AHA Guideline for the Management of Heart Failure: Executive Summary, Journal of the American College of Cardiology (2013), doi: 10.1016/j.jacc.2013.05.020.

The 2013 ACCF/AHA Guideline for the Management of Heart Failure notes disparities in the epidemiology of heart failure: the highest risk for heart failure is among blacks; the incidence rate is lowest among white women and highest among black men; there is a greater prevalence of heart failure among non-Hispanic black males and females compared with non-Hispanic white males and females.

The guidelines note a major concern in that the majority of randomized controlled trials fail to randomize a sufficient number of the elderly, women, and underrepresented minorities thus limiting insight into these patient cohorts.

Although the literature has identified differences in prevalence in the incidence of heart failure and some disparities in hospital care across race/ethnicity, we found no data on disparities in care related to prescription of beta-blockers at discharge.

## 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 sub criteria 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 : Congestive Heart Failure

**De.6. Non-Condition Specific**(check all the areas that apply):

Health and Functional Status : Change

**De.7. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

Populations at Risk

**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.)

<https://manual.jointcommission.org/releases/TJC2017A/AdvancedCertificationHeartFailure.html>

**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)

No data dictionary Attachment:

**S.2c.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Attachment:

**S.2d.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

**S.3.1. For maintenance of endorsement:** Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

No

**S.3.2. For maintenance of endorsement,** please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

Not applicable

**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) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for LVSD at hospital discharge.

**S.5. 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, 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 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 (S.14).

One data element used to calculate numerator: Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge

Data element defined: Documentation that bisoprolol, carvedilol, or sustained-release metoprolol was prescribed at discharge. Beta-blockers are agents which block beta-adrenergic receptors, thereby decreasing the rate and force of heart contractions, and reducing blood pressure. Over time beta-blockers improve the heart's pumping ability. The marked beneficial effects of beta blockade has been well demonstrated in large-scale clinical trials of symptomatic patients with New York Heart Association (NYHA) class II-IV heart failure and reduced LVEF using bisoprolol, carvedilol, and sustained-release metoprolol succinate.

**S.6. Denominator Statement** (Brief, narrative description of the target population being measured)

Heart failure patients with current or prior documentation of left ventricular ejection fraction (LVSD) < 40%.

**S.7. Denominator Details** (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 S.2b.)

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Included Populations:

- Discharges with ICD-10-CM Principal Diagnosis Code for HF as defined in Appendix A, Table 2.1, and
- Documentation of LVSD < 40%

ICD-10-CM Table 2.1 Heart Failure (HF)

Code Code Description

I110 Hypertensive heart disease with heart failure

I130 Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease

I132 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease

I501 Left ventricular failure

I5020 Unspecified systolic (congestive) heart failure

I5021 Acute systolic (congestive) heart failure

I5022 Chronic systolic (congestive) heart failure

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I5023 Acute on chronic systolic (congestive) heart failure  
 I5030 Unspecified diastolic (congestive) heart failure  
 I5031 Acute diastolic (congestive) heart failure  
 I5032 Chronic diastolic (congestive) heart failure  
 I5033 Acute on chronic diastolic (congestive) heart failure  
 I5040 Unspecified combined systolic (congestive) and diastolic (congestive) heart failure  
 I5041 Acute combined systolic (congestive) and diastolic (congestive) heart failure  
 I5042 Chronic combined systolic (congestive) and diastolic (congestive) heart failure  
 I5043 Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure  
 I509 Heart failure, unspecified

12 data elements are used to calculate the denominator. Data elements and definitions:

- Admission Date: The month, day, and year of admission to acute inpatient care.
- Birthdate: The month, day, and year the patient was born.
- Clinical Trial: Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied.
- Comfort Measures Only: Comfort Measures Only refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. Comfort Measures Only is commonly referred to as "comfort care" by the general public. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).
- Discharge Date: The month, day, and year the patient was discharged from acute care, left against medical advice, or expired during this stay.
- Discharge Disposition: The final place or setting to which the patient was discharged on the day of discharge.
- ICD-10-PCS Other Procedure Codes: The other or secondary (ICD-10-PCS) codes identifying all significant procedures other than the principal procedure.
- ICD-10-CM Principal Diagnosis Code: The ICD-10-CM diagnosis code that is primarily responsible for the admission of the patient to the hospital for care during this hospitalization.
- ICD-10-PCS Principal Procedure Code: The principal procedure is the procedure performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.
- ICD-10-PCS Principal Procedure Date: The month, day, and year when the principal procedure was performed.
- LVSD < 40%: Left ventricular systolic dysfunction (LVSD) documented in medical record. LVSD is defined as a left ventricular ejection fraction less than 40% or a narrative description consistent with moderate or severe systolic dysfunction.
- Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge: Reasons for not prescribing bisoprolol, carvedilol, or sustained-release metoprolol succinate at discharge:
  - o Beta-blocker allergy
  - o Second or third-degree heart block on ECG on arrival or during hospital stay and does not have a pacemaker
  - o Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist

**S.8. Denominator Exclusions** (*Brief narrative description of exclusions from the target population*)

Excluded Populations:

- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-10-PCS

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procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2)

- Patients less than 18 years of age
- Patients who have a Length of Stay greater than 120 days
- Patients with Comfort Measures Only documented
- Patients enrolled in a Clinical Trial
- Patients discharged to another hospital
- Patients who left against medical advice
- Patients who expired
- Patients discharged to home for hospice care
- Patients discharged to a healthcare facility for hospice care
- Patients with a documented Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate Prescribed for LVSD at Discharge

**S.9. Denominator Exclusion Details** (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 S.2b.)

Exclusion Details:

- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-10-PCS procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2):

ICD-10-PCS Table 2.2 Left Ventricular Assistive Device (LVAD) and Heart Transplant

Code      Code Description

02HA0QZ	Insertion of Implantable Heart Assist System into Heart, Open Approach
02HA0RS	Insertion of Biventricular External Heart Assist System into Heart, Open Approach
02HA0RZ	Insertion of External Heart Assist System into Heart, Open Approach
02HA3QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Approach
02HA3RS	Insertion of Biventricular External Heart Assist System into Heart, Percutaneous Approach
02HA3RZ	Insertion of External Heart Assist System into Heart, Percutaneous Approach
02HA4QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Endoscopic Approach
02HA4RS	Insertion of Biventricular External Heart Assist System into Heart, Percutaneous Endoscopic Approach
02HA4RZ	Insertion of External Heart Assist System into Heart, Percutaneous Endoscopic Approach
02HL3DZ	Insertion of Intraluminal Device into Left Ventricle, Percutaneous Approach
02WA0JZ	Revision of Synthetic Substitute in Heart, Open Approach
02WA0QZ	Revision of Implantable Heart Assist System in Heart, Open Approach
02WA0RZ	Revision of External Heart Assist System in Heart, Open Approach
02WA3QZ	Revision of Implantable Heart Assist System in Heart, Percutaneous Approach
02WA3RZ	Revision of External Heart Assist System in Heart, Percutaneous Approach
02WA4QZ	Revision of Implantable Heart Assist System in Heart, Percutaneous Endoscopic Approach
02WA4RZ	Revision of External Heart Assist System in Heart, Percutaneous Endoscopic Approach
02YA0Z0	Transplantation of Heart, Allogeneic, Open Approach
02YA0Z1	Transplantation of Heart, Syngeneic, Open Approach
02YA0Z2	Transplantation of Heart, Zooplasmic, Open Approach

- Patients less than 18 years of age.
  - o Patient age (in years) equals Admission Date minus Birthdate.
- Patients who have a Length of Stay greater than 120 days.
  - o Length of Stay (in days) equals Discharge Date minus Admission Date.
- Patients with Comfort Measures Only documented:
  - o Physician/APN/PA documentation of comfort measures only (hospice, comfort care, etc.) mentioned in the following contexts suffices to exclude a case from the measure:
    - x Comfort measures only recommendation
    - x Order for consultation or evaluation by a hospice care service



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- x Patient or family request for comfort measures only
- x Plan for comfort measures only
- x Referral to hospice care service

- Patients enrolled in a Clinical Trial.
  - o Patients are excluded if “Yes” is selected for Clinical Trial.
- Patients discharged to another hospital
  - o Determined by the data element Discharge Disposition, allowable value #4 Acute Care Facility
- Patients who left against medical advice
  - o Determined by the data element Discharge Disposition, allowable value #7 Left Against Medical Advice/AMA
- Patients who expired
  - o Determined by the data element Discharge Disposition allowable value #6 Expired
- Patients discharged to home for hospice care
  - o Determined by the data element Discharge Disposition allowable value #2 Hospice-Home
- Patients discharged to a healthcare facility for hospice care
  - o Determined by the data element Discharge Disposition allowable value #3 Hospice-Health Care Facility
- Patients with a documented Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate Prescribed for LVSD at Discharge
  - o Reasons for not prescribing bisoprolol, carvedilol, or sustained-release metoprolol succinate at discharge:
    - x Beta-blocker allergy
    - x Second or third-degree heart block on ECG on arrival or during hospital stay and does not have a pacemaker
    - x Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist

**S.10. Stratification Information** (Provide all information required to stratify the measure results, if necessary, including 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 with at S.2b.)

Not Applicable

**S.11. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

**S.12. Type of score:**

Rate/proportion

If other:

**S.13. 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.14. Calculation Algorithm/Measure Logic** (Diagram or 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; time period for data, aggregating data; risk adjustment; etc.)

Advanced Certification Heart Failure (ACHF) Initial Patient Population Algorithm

Variable Key: Patient Age, Length of Stay and Initial Patient Population Reject Case Flag

1. Start ACHF Initial Patient Population logic sub-routine. Process all cases that have successfully reached the point in the Transmission Data Processing Flow: Clinical which calls this Initial Patient Population Algorithm. Do not process cases that have been



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rejected before this point in the Transmission Data Processing Flow: Clinical.

2. Check ICD-10-CM Principal Diagnosis Code

- a. If ICD-10-CM Principal Diagnosis Code is not on Table 2.1, the patient is not in the ACHF Topic Population and is not eligible to be sampled for the ACHF measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If ICD-10-CM Principal Diagnosis Code is on Table 2.1, continue processing and proceed to ICD-10-PCS Principal or Other Procedure Codes.

3. Check ICD-10-PCS Principal or Other Procedure Codes

- a. If at least one of the ICD-10-PCS Principal or Other Procedure Codes is on Table 2.2, the patient is not in the ACHF Initial Patient Population and is not eligible to be sampled for the ACHF measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If all of the ICD-10-PCS Principal or Other Procedure Codes are missing or none are on Table 2.2, continue processing and proceed to the Patient Age Calculation.

4. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age.

5. Check Patient Age

- a. If the Patient Age is less than 18 years, the patient is not in the ACHF Initial Patient Population and is not eligible to be sampled for the ACHF measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If the Patient Age is greater than or equal to 18 years, continue processing and proceed to Length of Stay Calculation.

6. Calculate the Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.

7. Check Length of Stay

- a. If the Length of Stay is greater than 120 days, the patient is not in the ACHF Initial Patient Population and is not eligible to be sampled for the ACHF measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
- b. If the Length of Stay is less than or equal to 120 days, the patient is in the ACHF Initial Patient Population and is eligible to be sampled for the ACHF measure set. Set Initial Patient Population Reject Case Flag to equal No. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

ACHF-01: Beta-Blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) for LVSD Prescribed at Discharge

Numerator: Patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for LVSD at hospital discharge.

Denominator: Heart failure patients with current or prior documentation of left ventricular ejection fraction (LVSD) < 40%.

1. Start processing. Run cases that are included in the ACHF Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Check Clinical Trial

- a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
- b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
- c. If Clinical Trial equals No, continue processing and proceed to Discharge Disposition.

3. Check Discharge Disposition

- a. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop

processing.

b. Discharge Disposition equals 2, 3, 4, 6 or 7, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Discharge Disposition equals 1, 5 or 8, continue processing and proceed to Comfort Measures Only.

#### 4. Check Comfort Measures Only

a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Comfort Measures Only equals 1, 2 or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Comfort Measures Only equals 4, continue processing and proceed to LVSD <40%.

#### 5. Check LVSD <40%

a. If LVSD <40% is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If LVSD <40% equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If LVSD <40% equals Yes, continue processing and proceed to Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge.

#### 6. Check Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge

a. If Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

c. If Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge equals No, continue processing and proceed to Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge.

#### 7. Check Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge

a. If Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Prescribed for LVSD at Discharge equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

**S.15. Sampling** (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

If an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

Hospitals that choose to sample have the option of sampling quarterly or sampling monthly. A hospital may choose to use a larger sample size than is required. Hospitals whose Initial Patient Population size is less than the minimum number of cases per quarter for the measure set cannot sample. Regardless of the option used, hospital samples must be monitored to ensure that sampling procedures consistently produce statistically valid and useful data. Due to exclusions, hospitals selecting sample cases MUST submit AT LEAST the minimum required sample size.

#### Quarterly Sampling

Hospitals performing quarterly sampling for HF must ensure that their Initial Patient Population and sample size meet the following conditions:

#### Quarterly Sample Size Based on Initial Patient Population Size for the HF Measure Set

Initial Patient Population = 1516

Minimum Required Sample Size: 304

Initial Patient Population: 381 – 1515

#2438 Beta-Blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) for LVSD Prescribed at Discharge, Last Updated: Sep 25, 2018

Minimum Required Sample Size: 20% of Initial Patient Population size

Initial Patient Population: 76 – 380

Minimum Required Sample Size: 76

Initial Patient Population: 6 - 75

Minimum Required Sample Size: No sampling; 100% Initial Patient Population required

Initial Patient Population: 0 - 5

Minimum Required Sample Size: Submission of patient level data is encouraged but not required

#### Monthly Sampling

Hospitals performing monthly sampling for HF must ensure that their Initial Patient Population and sample size meet the following conditions:

#### Monthly Sample Size Based on Initial Patient Population Size for the HF Measure Set

Initial Patient Population: = 506

Minimum Required Sample Size: 102

Initial Patient Population: 131 - 505

Minimum Required Sample Size: 20% of Initial Patient Population Size

Initial Patient Population: 26 -130

Minimum Required Sample Size: 26

Initial Patient Population < 26

Minimum Required Sample Size: No sampling; 100% Initial Patient Population required

**S.16. Survey/Patient-reported data** (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

Not Applicable

**S.17. Data Source** (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Electronic Health Records, Paper Medical Records

**S.18. Data Source or Collection Instrument** (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

A web-based data collection tool was developed by The Joint Commission for the pilot process. Moving forward, hospitals have the flexibility of creating their own tool modeled after the pilot tool or they may develop their own data collection tools using the data element dictionary and allowable values specified in the implementation guide.

**S.19. 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.20. Level of Analysis** (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Facility, Other

**S.21. Care Setting** (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Inpatient/Hospital

If other:

**S.22. 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

## 2. Validity – See attached Measure Testing Submission Form

[ACHF-01\\_MeasSubm\\_MeasTesting\\_2013\\_Final-635231230667490675.docx](#)

### 2.1 For maintenance of endorsement

*Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.*

### 2.2 For maintenance of endorsement

*Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.*

### 2.3 For maintenance of endorsement

*Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.*

## 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)** Update this field for **maintenance of endorsement**.

[Some data elements are in defined fields in electronic sources](#)

**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.** For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM). [Once measure endorsement is achieved, it is the intent of The Joint Commission to retool this measure to an eMeasure.](#)

**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. Please also complete and attach the NQF Feasibility Score Card.**

**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. Required for maintenance of endorsement. 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.**

**IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.**

[This measure was collected as part of a 6 month pilot process for Joint Commission Advanced Certification in Heart Failure. A summary of the findings during the pilot process is as follows:](#)

**Staff Training and Education:**

[The time spent on staff training and education ranged from 12 to 15 hours per site to prepare for the data collection. Primarily this was done by Registered Nurse\(s\) or Core Measure Abstractor\(s\).](#)

**Case Identification/Medical Record Retrieval:**

[The total time spent during the pilot test on both the case identification and the medical record retrieval ranged from 13 hours to 104 hours. Again, staff responsible for this task included RNs and Core Measure Abstractor or a Program Coordinator.](#)

**Cost of Data Abstraction:**

[At an average of 33 minutes per measure, the cost to abstract data for each measure was approximately \\$10.34, contingent upon the level of personnel used. This was estimated using 2011/2012 national average wages.](#)

**Case Identification:**

[Case identification was not a problem; the inpatient heart failure population was identified by the ICD-9-CM principal diagnosis codes for this population.](#)

**Case Selection:**

[For the pilot, inpatient records were randomly abstracted for review each month to meet the minimum sample size requirement of 26 records.](#)

[It was learned via discussions and written pilot evaluation materials that there were some issues related to data abstraction of the following data elements:](#)

- [Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate prescribed for LVSD at Discharge](#)
  - o [Allowable value 'Yes' was selected at times when other beta-blockers were prescribed.](#)
  - o [Allowable value 'Yes' selected on some occasions when bisoprolol, carvedilol, or sustained-release metoprolol succinate were prescribed for indications other than LVSD < 40%, e.g., hypertension..](#)
  - o [Clarification requested regarding what value to select for patients taking beta-blockers at home prior to arrival.](#)
- [Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate prescribed for LVSD at Discharge](#)
  - o [Sites did not realize that documentation of a reason for not administering the beta-blockers was not required for an LVSD > 40 %](#)

[These issues related to data abstraction have been easily resolved through clarification of guidelines for abstraction.](#)

**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).

This measure is one of six in a measure set being implemented with discharges effective January 1, 2014 for Joint Commission Advanced Certification in Heart Failure. These measures are available in the public domain, and there are no fees associated with their use.

## 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.

Specific Plan for Use	Current Use (for current use provide URL)
Public Reporting	
Professional Certification or Recognition Program	
Quality Improvement (Internal to the specific organization)	

**4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:**

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

Not Applicable

**4a1.2. 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?)

Not Applicable

**4a1.3. 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.)

Program: Advanced Certification in Heart Failure

Purpose: The Joint Commission has approved a set of standardized performance measures for Advanced Certification in Heart Failure (ACHF). These measures have been developed to better evaluate the care provided to the Heart Failure patient with an emphasis on transitions of care.

Intended Audience: Acute care hospitals with Heart Failure programs.

Timeline:

January 1, 2014 Data collection and reporting commence

2014 NQF Endorsement

**4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.**

**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.**

Not applicable. Not seeking endorsement + designation at this time.

**4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.**

Not applicable. Not seeking endorsement + designation at this time.

**4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.**

**Describe how feedback was obtained.**

Not applicable. Not seeking endorsement + designation at this time.

**4a2.2.2. Summarize the feedback obtained from those being measured.**

Not applicable. Not seeking endorsement + designation at this time.

**4a2.2.3. Summarize the feedback obtained from other users**

Not applicable. Not seeking endorsement + designation at this time.

**4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.**

Not applicable. Not seeking endorsement + designation at this time.

**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.

**4b1. Refer to data provided in 1b 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, 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.**

**4b2. 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).

**4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.**

There were no unintended negative consequences reported or detected during testing.

**4b2.2. Please explain any unexpected benefits from implementation of this measure.**



## 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)

0083 : Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

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

### 5a. Harmonization of Related Measures

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 harmonized to the extent possible?

No

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

The numerator and denominator statements are harmonized. Principal differences in measure specifications are noted below, and are thought to be artifacts of the different levels of measurement (organization vs. practitioner) addressed by the 2 measures.

Differences ACHF-01 Denominator Exclusions: • Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-9-CM procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2) •

Patients less than 18 years of age • Patients who have a Length of Stay greater than 120 days • Patients with Comfort Measures Only documented • Patients enrolled in a Clinical Trial • Patients discharged to another hospital • Patients who left against medical advice • Patients who expired • Patients discharged to home for hospice care • Patients discharged to a healthcare facility for hospice care • Patients with a documented Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate Prescribed for LVSD at Discharge 0083 Denominator Exceptions: • Documentation of medical reason(s) for not prescribing beta-blocker therapy (eg, low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent) • Documentation of patient reason(s) for not prescribing beta-blocker therapy •

Documentation of system reason(s) for not prescribing beta-blocker therapy Impact on interpretability and data collection burden: These two measures are specified to different levels of measurement (facility vs. practitioner). As such they are specified in order to be effectively and efficiently collected by the systems developed for each type of measure. Therefore, measure results should be easily interpretable with no adverse impact on data collection burden.

### 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

## 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.

Available at measure-specific web page URL identified in S.1 Attachment:

## Contact Information

**Co.1 Measure Steward (Intellectual Property Owner):** The Joint Commission

**Co.2 Point of Contact:** JohnMarc, Alban, [jalban@jointcommission.org](mailto:jalban@jointcommission.org), 630-792-5304-

**Co.3 Measure Developer if different from Measure Steward:** The Joint Commission

**Co.4 Point of Contact:** Ann, Watt, [awatt@jointcommission.org](mailto:awatt@jointcommission.org), 630-792-5944-

## 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.**

The role of the Technical Advisory Panel was to provide advisory oversight in the literature review, measure construct and content, review of testing results, and endorsement of draft and finalized measures. Additionally they may be called upon in the future to provide measure content oversight and updates.

Technical Advisory Panel

Nancy Albert, PhD

Director, Nursing Research and Innovation-Nursing Institute and Clinical Nurse Specialist-  
Kaufman Center for Heart Failure  
Cleveland Clinic

Linda Baas

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The Christ Hospital  
Professor, University of Cincinnati College of Nursing  
AAHFN Representative  
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Kristie Baus, RN, MS

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#2438 Beta-Blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) for LVSD Prescribed at Discharge, Last Updated: Sep 25, 2018

Chicago, IL
<b>Measure Developer/Steward Updates and Ongoing Maintenance</b> <b>Ad.2</b> Year the measure was first released: 2014 <b>Ad.3</b> Month and Year of most recent revision: 03, 2013 <b>Ad.4</b> What is your frequency for review/update of this measure? Yearly <b>Ad.5</b> When is the next scheduled review/update for this measure? 12, 2014
<b>Ad.6</b> Copyright statement: This measure resides in the public domain and is not copyrighted <b>Ad.7</b> Disclaimers:
<b>Ad.8</b> Additional Information/Comments: The Measure Steward Agreement is under discussion between the legal representatives of NQF and The Joint Commission.