Measure #8 (NQF 0083): Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) – National Quality Strategy Domain: Effective Clinical Care

2017 OPTIONS FOR INDIVIDUAL MEASURES:

REGISTRY ONLY

MEASURE TYPE:

Process

DESCRIPTION:

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting OR at each hospital discharge

INSTRUCTIONS:

This measure is to be reported for all heart failure patients a minimum of <u>once per performance period</u> when seen in the outpatient setting AND reported at <u>each</u> hospital discharge (99238* and 99239*) during the performance period. Only patients who had at least two denominator eligible visits during the performance period will be counted for Reporting Criteria 1.

*NOTE: When reporting CPT code 99238 and 99239, it is recommended the measure be reported each time the code is submitted for hospital discharge.

This measure is intended to reflect the quality of services provided for patients with heart failure and decreased left ventricular systolic function. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. Only patients who had at least two denominator eligible visits during the performance period will be counted for Reporting Criteria 1.

Measure Reporting:

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

THERE ARE TWO REPORTING CRITERIA FOR THIS MEASURE:

1) Patients who are 18 years and older with a diagnosis of HF with a current or prior LVEF < 40% seen in the outpatient setting with two denominator eligible visits

OR

2) Patients who are 18 years and older with a diagnosis of HF with a current or prior LVEF < 40% and discharged from hospital

REPORTING CRITERIA 1: ALL PATIENTS WITH A DIAGNOSIS OF HF SEEN IN THE OUTPATIENT SETTING

DENOMINATOR (REPORTING CRITERIA 1):

All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

DENOMINATOR NOTE: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The left ventricular systolic dysfunction may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of left ventricular systolic dysfunction or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

To meet the denominator criteria, a patient must have an active diagnosis of heart failure at the time of the encounter which is used to qualify for the denominator and evaluate the numerator.

The encounter used to evaluate the numerator counts as 1 of the 2 encounters required for denominator inclusion. If the patient meets the heart failure diagnosis criterion, the diagnosis needs to be active only at the encounter being evaluated for the numerator action.

*Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for registry-based measures.

Denominator Criteria (Eligible Cases) 1:

Patients aged ≥ 18 years on date of encounter

AND

Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.9

AND

Patient encounter during performance period – to be used for numerator evaluation (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241*, 99242*, 99243*, 99244*, 99245*, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT

AND

At least one additional patient encounter during performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241*, 99242*, 99243*, 99244*, 99245*, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT

Telehealth Modifier: GQ, GT

AND

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8923

NUMERATOR (REPORTING CRITERIA 1):

Patients who were prescribed beta-blocker therapy within a 12 month period when seen in the outpatient setting

Definitions:

Prescribed - Outpatient Setting — prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

Beta-blocker Therapy — For patients with prior LVEF < 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate.

NUMERATOR NOTE: To meet the intent of the measure, the numerator quality action must be performed at the encounter at which the active diagnosis of heart failure is documented.

Numerator Options:

Performance Met:

Beta-blocker therapy prescribed (G8450)

<u>OR</u>

Denominator Exception: Beta-Blocker Therapy for LVEF < 40% not prescribed for

reasons documented by the clinician (e.g., low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, or other reasons attributable to the

patient reasons, or other reasons attributable to the

healthcare system) (G8451)

OR

Performance Not Met: Beta-blocker therapy not prescribed (G8452)

OR

REPORTING CRITERIA 2: ALL PATIENTS WITH A DIAGNOSIS OF HF AND DISCHARGED FROM HOSPITAL

DENOMINATOR (REPORTING CRITERIA 2):

All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF <40%

DENOMINATOR NOTE: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The left ventricular systolic dysfunction may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of left ventricular systolic dysfunction or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

Denominator Criteria (Eligible Cases) 2:

Patients aged ≥ 18 years on date of encounter

AND

Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.9

AND

Patient encounter during performance period (CPT): 99238, 99239

AND

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8923

NUMERATOR (REPORTING CRITERIA 2):

Patients who were prescribed beta-blocker therapy at each hospital discharge

Definitions:

Prescribed - Inpatient Setting — prescription given to the patient for beta-blocker therapy at discharge OR beta-blocker therapy to be continued after discharge as documented in the discharge medication list. **Beta-blocker Therapy** — For patients with prior LVEF < 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate.

NUMERATOR NOTE: To meet the intent of the measure, the numerator quality action must be performed at the each denominator eligible discharge.

Numerator Options:

Performance Met: Beta-blocker therapy prescribed (G8450)

<u>OR</u>

Denominator Exception:

Beta-Blocker Therapy for LVEF < 40% not prescribed for reasons documented by the clinician (e.g., low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, other reasons attributable to the healthcare system) (G8451)

OR

Performance Not Met: Beta-blocker therapy not prescribed (G8452)

RATIONALE:

Beta-blockers are recommended for all patients with stable heart failure and left ventricular systolic dysfunction, unless contraindicated. Treatment should be initiated as soon as a patient is diagnosed with left ventricular systolic dysfunction and does not have low blood pressure, fluid overload, or recent treatment with an intravenous positive inotropic agent. Beta-blockers have been shown to lessen the symptoms of heart failure, improve the clinical status of patients, reduce future clinical deterioration, and decrease the risk of mortality and the combined risk of mortality and hospitalization.

CLINICAL RECOMMENDATION STATEMENTS:

Use of 1 of the 3 beta blockers proven to reduce mortality (e.g., bisoprolol, carvedilol, and sustained-release metoprolol succinate) is recommended for all patients with current or prior symptoms of HFrEF [heart failure with reduced ejection fraction], unless contraindicated, to reduce morbidity and mortality. (Class I, Level of Evidence: A) (ACCF/AHA, 2013)

Treatment with a beta blocker should be initiated at very low doses [see excerpt from guideline table below] followed by gradual increments in dose if lower doses have been well tolerated... Clinicians should make every effort to achieve the target doses of the beta blockers shown to be effective in major clinical trials. Even if symptoms do not improve, long-term treatment should be maintained to reduce the risk of major clinical events. Abrupt withdrawal of treatment with a beta blocker can lead to clinical deterioration and should be avoided. (ACCF/AHA, 2013)

Drugs Commonly Used for Stage C HFrEF (abbreviated to align with focus of measure to include only Beta-blocker therapy)

Table 1: Drugs Commonly Used for Stage C HFrEF Beta Blocker Therapy

Drug	Initial Daily Dose(s)	Maximum Dose(s)	Mean Doses Achieved in Clinical Trials
Beta blockers			
Bisoprolol	1.25 mg once	10 mg once	8.6 mg/d
Carvedilol	3.125 mg twice	50 mg twice	37 mg/d
Carvedilol CR	10 mg once	80 mg once	N/A
Metoprolol succinate extended release (metoprolol CR/XL)	12.5 to 25 mg once	200 mg once	159 mg/d

For the hospitalized patient:

In patients with HFrEF experiencing a symptomatic exacerbation of HF requiring hospitalization during chronic maintenance treatment with GDMT[guideline-directed medical therapy; GDMT represents optimal medical therapy as defined by ACCF/AHA guideline-recommended therapies (primarily Class I)], it is recommended that GDMT be continued in the absence of hemodynamic instability or contraindications. (Class I, Level of Evidence: B) (ACCF/AHA, 2013)

Initiation of beta-blocker therapy is recommended after optimization of volume status and successful discontinuation of intravenous diuretics, vasodilators, and inotropic agents. Beta-blocker therapy should be initiated at a low dose and only in stable patients. Caution should be used when initiating beta blockers in patients who have required inotropes during their hospital course. (Class I, Level of Evidence: B) (ACCF/AHA, 2013)

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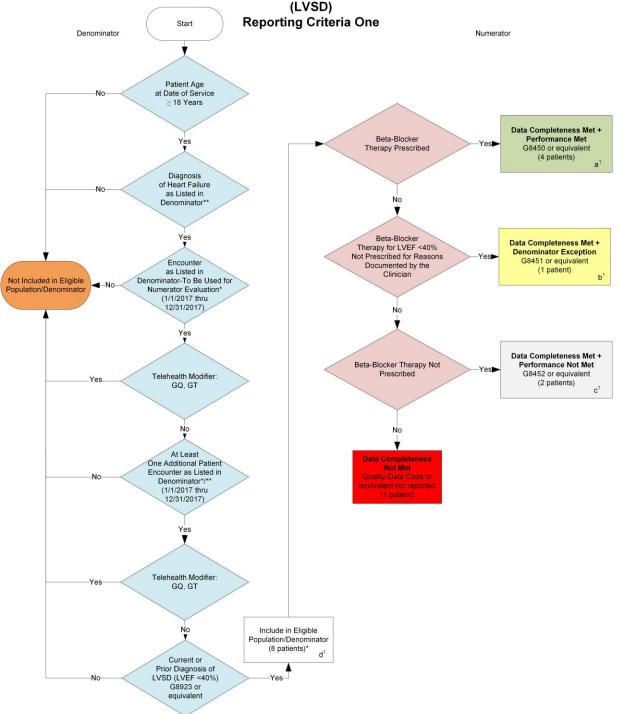
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2017 Registry Individual Measure Flow #8 NQF #0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction



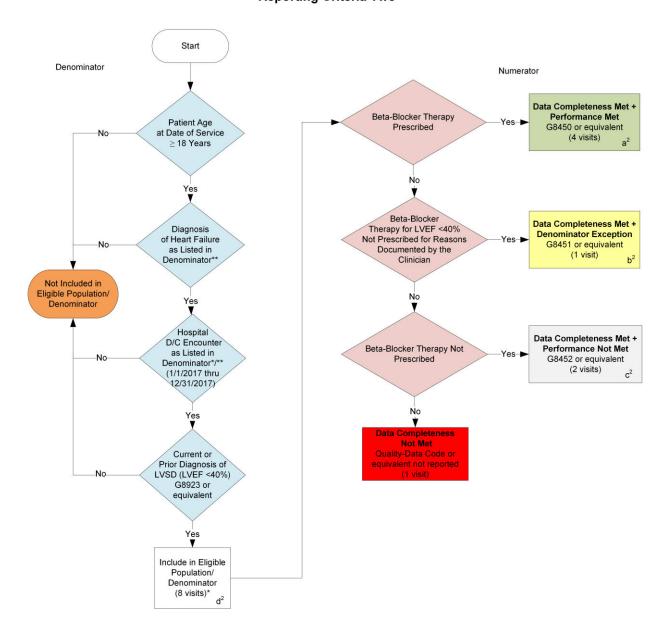
^{*}This measure is to be reported at two different frequencies, depending upon the clinical setting. This measure is to be reported for a minimum of once per performance period when seen in the outpatient setting AND reported at each hospital discharge (99238 and 99239) during the performance period. Please reference the Reporting Criteria Two for Hospital

NOTE: Reporting Frequency: Patient-process

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^{*}See the posted Measure Specification for specific coding and instructions to report this measure.

2017 Registry Individual Measure Flow #8 NQF #0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) Reporting Criteria Two



^{*}This measure is to be reported at two different frequencies, depending upon the clinical setting. This measure is to be reported for a minimum of <u>once per performance period</u> when seen in the outpatient setting <u>AND</u> reported at <u>each hospital discharge</u> (99238 and 99239) during the performance period. Please reference the Reporting Criteria One for Outpatient Setting Flow.

NOTE: Reporting Frequency: Visit

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Outpatient Setting Flow.
**See the posted Measure Specification for specific coding and instructions to report this measure.

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SAMPLE CALCULATIONS:				
Data Completeness=				
Performance Met (a ¹ +a ² =8 visits*) + Denominator Exception (b ¹ +b ² =2 visits*) + Performance Not Met (c ¹ +c ² =4 visits*) = 14 visits* = 87.50%				
Eligible Population / Denominator (d1+d2=16 visits*)	= 16 visits*			
Performance Rate=				
Performance Met (a ¹ +a ² =8 visits*)	= <u>8 visits*</u> = 66.67%			
Data Completeness Numerator (14 visits*) – Denominator Exception (b¹+b²=2 visits*)	= 12 visits*			

This measure contains 2 Reporting Criteria, although as the Sample Calculation indicates, there is **ONLY** one data completeness and one performance rate for this measure.

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^{*}This measure is to be reported at two different frequencies, depending upon the clinical setting. This measure is to be reported for a minimum of <u>once per performance period</u> when seen in the outpatient setting <u>AND</u> reported at <u>each hospital discharge</u> (99238 and 99239) during the performance period. In order to show an accurate calculation for Reporting Criteria One and Reporting Criteria Two, patients and visits were combined and shown as visits within the calculation.

for this measure.

**See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Reporting Criteria One: Patient-process; Reporting Criteria Two: Visit

2017 Registry Individual Measure Flow

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

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

Reporting Criteria 1: Outpatient Setting

- 1. Start with Denominator
- 2. Check Patient Age:
 - a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
- 3. Check Patient Diagnosis:
 - a. If Diagnosis of Heart Failure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Diagnosis of Heart Failure as Listed in the Denominator equals Yes, proceed to check Encounter
- 4. Check Outpatient Encounter Performed:
 - a. If Outpatient Encounter To be Used for Numerator Evaluation as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Outpatient Encounter To be Used for Numerator Evaluation as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier.
- 5. Check Telehealth Modifier:
 - a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
 - b. .If Telehealth Modifier equals No, proceed to check Encounter.
- 6. Check Encounter Performed:
 - a. If At Least One Additional Patient Encounter Performed as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If At Least One Additional Patient Encounter Performed as Listed in the Denominator equals Yes, proceed top check Telehealth Modifier.
- 7. Check Telehealth Modifier:
 - a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
 - b. ... If Telehealth Modifier equals No, proceed to check Current or Prior Diagnosis of LVSD (LVEF <40%).
- 8. Check Current or Prior Diagnosis of LVSD (LVEF <40%):

- a. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
- b. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals Yes, include in the Eligible Population.

9. Denominator Population:

a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d1 equals 8 visits in the sample calculation.

10. Start Numerator

11. Check Beta-Blocker Therapy Prescribed:

- a. If Beta-Blocker Therapy Prescribed equals Yes, include in Data Completeness Met and Performance Met.
- b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a1 equals 4 patients in Sample Calculation.
- c. If Beta-Blocker Therapy Prescribed equals No, proceed to check Beta Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician.
- 12. Check Beta Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician:
 - a. If Beta-Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician equals Yes, include in Data Completeness Met and Denominator Exception.
 - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 1 patient in the Sample Calculation.
 - c. If Beta-Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician equals No, proceed to check Beta-Blocker Therapy Not Prescribed.

13. Check Beta-Blocker Therapy Not Prescribed:

- a. If Beta-Blocker Therapy Not Prescribed equals Yes, include in Data Completeness Met and Performance Not Met.
- Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c1 equals 2 patients in the Sample Calculation.
- c. If Beta-Blocker Therapy Not Prescribed equals No, proceed to Data Completeness Not Met.

14. Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported. 1 patient has been subtracted from the data completeness numerator in sample calculation.

2017 Registry Individual Measure Flow

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

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

Reporting Criteria 2: Hospital Discharge Setting_

- 1. Start with Denominator
- 2. Check Patient Age:
 - a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
- 3. Check Patient Diagnosis:
 - a. If Diagnosis of Heart Failure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Diagnosis of Heart Failure as listed in the denominator equals Yes, proceed to check Encounter Performed
- 4. Check Hospital Discharge Encounter Performed:
 - a. If Hospital Discharge Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Hospital Discharge Encounter as Listed in the Denominator equals Yes, proceed to check Current of Prior Diagnosis of LVSD (LVEF <40%).
- Check Current of Prior Diagnosis of LVSD (LVEF <40%):
 - a. If Diagnosis of LVSD (LVEF <40) equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Diagnosis of LVSD (LVEF <40%) equals Yes, . include in the Eligible Population.
- 6. Denominator Population:
 - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d2 equals 8 visits in the sample calculation.
- 7. Start Numerator
- 8. Check Beta-Blocker Therapy Prescribed:
 - a. If Beta-Blocker Therapy Prescribed equals Yes, include in Data Completeness Met and Performance Met.
 - Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a2 equals 4 visits in Sample Calculation.

- c. If Beta-Blocker Therapy Prescribed equals No, proceed to Documentation of Beta-Blocker Not Prescribed for Reasons Documented by the Clinician.
- 9. Check Beta-Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician:
 - a. If Beta-Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician equals Yes, include in Data Completeness Met and Denominator Exception.
 - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 1 visit in the Sample Calculation.
 - c. If Beta-Blocker Therapy for LVEF <40% Not Prescribed for Reasons Documented by the Clinician equals No, proceed to Beta-Blocker Therapy Not Prescribed.
- 10. Check Beta-Blocker Therapy Not Prescribed:
 - If Beta-Blocker Therapy Not Prescribed equals Yes, include in Data Completeness Met and Performance Not Met.
 - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c2 equals 2 visits in the Sample Calculation.
 - c. If Beta-Blocker Therapy Not Prescribed equals No, proceed to Data Completeness Not Met.
- 11. Check Data Completeness Not Met:
 - a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported. 1 patient has been subtracted from the data completeness numerator in sample calculation.

This measure contains 2 Reporting Criteria, although as the Sample Calculation indicates, there is ONLY one data completeness and one performance rate for this measure.