2020 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

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 submitted for all heart failure patients a minimum of once per performance period when seen in the outpatient setting AND submitted at each 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 Submission Criteria 1.

*NOTE: When submitting CPT code 99238 and 99239, it is recommended the measure be submitted 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 submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:
1) All patients with a diagnosis of HF seen in the outpatient setting

OR

2) All patients with a diagnosis of HF and discharged from hospital

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

DENOMINATOR (SUBMISSION 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 MIPS CQMs.

Denominator Criteria (Eligible Cases 1):
Patients aged ≥ 18 years on date of encounter
AND
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, 99333, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
WITHOUT
Telehealth Modifier: GQ, GT, 95, POS 02
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, 99333, 99334, 99335, 99336, 99337, 99338, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
WITHOUT
Telehealth Modifier: GQ, GT, 95, POS 02
AND
Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function: G8923

NUMERATOR (SUBMISSION 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. Denominator Exception(s) are determined on the date of the denominator eligible encounter.

Numerator Options:

Performance Met: Beta-blocker therapy prescribed (G8450)

OR

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 healthcare system) (G8451)

OR

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

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

DENOMINATOR (SUBMISSION 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
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 (SUBMISSION 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 each denominator eligible discharge. Denominator Exception(s) are determined on the date of the denominator eligible discharge.

Numerator Options:

**Performance Met:** Beta-blocker therapy prescribed (G8450)

**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 healthcare system) (G8451)

**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

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

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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2020 Clinical Quality Measure Flow for Quality ID #8 NQF #0083:
Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
Submission Criteria One

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.
Submission Criteria Two

Start

Denominator

- Patient Age on Date of Encounter ≥ 18 Years
  - Yes
  - No
- Diagnosis of Heart Failure as Listed in Denominator
  - Yes
  - No
- Not Included in Eligible Population/Denominator

Numerator

- Beta-Blocker Therapy Prescribed
  - Yes
  - No
- Data Completeness Met + Performance Met (80 visits)

- Data Completeness Met + Denominator Exception (10 visits)

- Beta-Blocker Therapy for LVEF Less Than 40% Net Prescribed for Reasons Documented by the Clinician
  - Yes
  - No
- Data Completeness Met + Performance Met (20 visits)

- Beta-Blocker Therapy Not Prescribed
  - Yes
  - No
- Data Completeness Met + Performance Not Met (10 visits)

Include in Eligible Population/Denominator (60 visits)

SAMPLE CALCULATION:

Data Completeness
- Performance Met (a^2 = 140 visits) + Denominator Exception (b^1 + b^2 = 20 visits) + Performance Not Met (c^1 + c^2 = 40 visits) = 140 visits = 87.50%
- Eligible Population / Denominator (d^1 + d^2 = 180 visits) = 180 visits

Performance Rate
- Performance Met (a^2 = 140 visits) / Eligible Population / Denominator (d^1 + d^2 = 180 visits) = 66.67%
- Data Completeness Numerator (140 visits) - Denominator Exception (b^1 + b^2 = 20 visits) = 120 visits

*See the posted measure specification for specific coding and instructions to submit this measure.
**The measure is to be submitted at two different frequencies, depending upon the clinical setting. This measure is to be submitted for a minimum of one per performance period when seen in the outpatient setting AND submitted at each hospital discharge (99236 and 99239) during the performance period. In order to show an accurate calculation for Submission Criteria One and Submission Criteria Two, patients and visits were combined and shown as visits within the calculation.
This measure contains two Submission Criteria, although as the Sample Calculation indicates, there is ONLY one data completeness and one performance rate for this measure.
NOTE: Submission Frequency: Submission Criteria One: Patient-Process; Submission Criteria Two: Visit.
2020 Clinical Quality Measure Flow Narrative for Quality ID #8 NQF #0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

Submission Criteria One:

1. Start with Denominator

2. Check Patient Age:
   a. If Patient Age on Date of Encounter is greater than or equal to 18 Years equals No during the measurement period, do not include in Eligible Population. Stop Processing.
   b. If Patient Age on Date of Encounter is greater than or equal to 18 Years equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. Check Patient Diagnosis:
   a. If Diagnosis of Heart Failure as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Heart Failure as Listed in Denominator equals Yes, proceed to check Outpatient Encounter-To Be Used for Numerator Evaluation.

4. Check Outpatient Encounter – To Be Used for Numerator Evaluation:
   a. If Outpatient Encounter – To Be Used for Numerator Evaluation as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Outpatient Encounter – To Be Used for Numerator Evaluation as Listed in Denominator equals Yes, proceed to check Telehealth Modifier.

5. Check Telehealth Modifier:
   a. If Telehealth Modifier equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Telehealth Modifier equals No, proceed to check At Least One Additional Patient Encounter During Performance Period.

6. Check At Least One Additional Patient Encounter During Performance Period:
   a. If At Least One Additional Patient Encounter During Performance Period as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If At Least One Additional Patient Encounter During Performance Period as Listed in Denominator equals Yes, proceed to Telehealth Modifier.

7. With or Without Telehealth Modifier
8. Check Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function:
   a. If Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function equals No, do not include in Eligible Population. Stop Processing.
   b. If Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function equals Yes, include in 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 d\(^1\) equals 80 patients 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 a\(^1\) equals 40 patients in the Sample Calculation.
   c. If Beta-Blocker Therapy Prescribed equals No, proceed to check Beta-Blocker Therapy for LVEF Less Than 40 percent Not Prescribed for Reasons Documented by the Clinician.

12. Check Beta Blocker Therapy for LVEF Less Than 40 percent Not Prescribed for Reasons Documented by the Clinician:
   a. If Beta-Blocker Therapy for LVEF Less Than 40 percent 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 b\(^1\) equals 10 patients in the Sample Calculation.
   c. If Beta-Blocker Therapy for LVEF Less Than 40 percent 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.
   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 c\(^1\) equals 20 patients in the Sample Calculation.
   c. If Beta-Blocker Therapy Not Prescribed equals No, proceed to check Data Completeness Not Met.

14. Check Data Completeness Not Met:
a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**Submission Criteria Two:**

1. Start with Denominator

2. Check Patient Age:
   a. If Patient Age on Date of Encounter is greater than or equal to 18 Years equals No during the measurement period, do not include in Eligible Population. Stop Processing.
   b. If Patient Age on Date of Encounter is greater than or equal to 18 Years equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. Check Patient Diagnosis:
   a. If Diagnosis of Heart Failure as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Heart Failure as Listed in Denominator equals Yes, proceed to check Hospital Discharge Encounter.

4. Check Hospital Discharge Encounter:
   a. If Hospital Discharge Encounter as Listed in Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Hospital Discharge Encounter as Listed in Denominator equals Yes, proceed to check Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function.

5. Check Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function:
   a. If Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function equals No, do not include in Eligible Population. Stop Processing.
   b. If Left Ventricular Ejection Fraction (LVEF) Less Than 40 percent or Documentation of Moderately or Severely Depressed Left Ventricular Systolic Function equals Yes, include in the Eligible Population.

6. Denominator Population:
   a. Denominator Population is all Eligible Visits in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d² equals 80 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.

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 a² equals 40 visits in the Sample Calculation.

c. If Beta-Blocker Therapy Prescribed equals No, proceed to check Beta-Blocker Therapy for LVEF Less Than 40 percent Not Prescribed for Reasons Documented by the Clinician.

9. Check Beta-Blocker Therapy for LVEF Less Than 40 percent Not Prescribed for Reasons Documented by the Clinician:

a. If Beta-Blocker Therapy for LVEF Less Than 40 percent 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 10 visits in the Sample Calculation.

c. If Beta-Blocker Therapy for LVEF Less Than 40 percent Not Prescribed for Reasons Documented by the Clinician equals No, proceed to check Beta-Blocker Therapy Not Prescribed.

10. Check Beta-Blocker Therapy Not Prescribed:

a. 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 20 visits in the Sample Calculation.

c. If Beta-Blocker Therapy Not Prescribed equals No, proceed to check Data Completeness Not Met.

11. Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 visits have been subtracted from the Data Completeness Numerator in the Sample Calculation.

### SAMPLE CALCULATION:###

<table>
<thead>
<tr>
<th>Data Completeness=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a²+a²=80 visits) + Denominator Exception (b²+b²=10 visits) + Performance Not Met (c²+c²=40 visits)</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d²+d²=160 visits**)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Rate=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a²+a²=80 visits)</td>
</tr>
<tr>
<td>Data Completeness Numerator (140 visits) - Denominator Exception (b²+b²=20 visits)</td>
</tr>
</tbody>
</table>