Quality ID #442 (NQF 0071): Persistence of Beta-Blocker Treatment After a Heart Attack
– National Quality Strategy Domain: Effective Clinical Care
– Meaningful Measure Area: Management of Chronic Conditions

2019 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Process

DESCRIPTION:
The percentage of patients 18 years of age and older during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who were prescribed persistent beta-blocker treatment for six months after discharge

INSTRUCTIONS:
This measure is to be submitted a minimum of once per performance period for patients seen during the performance period. 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.

NOTE: Include only patients that are discharged through June 30 of the performance period. This will allow the evaluation of at least 180 days after discharge within the performance year.

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.

DENOMINATOR:
Patients 18 years of age and older as of December 31 of the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with diagnosis of AMI

Table PBH-D: Medications to Identify Exclusions (History of Asthma)

<table>
<thead>
<tr>
<th>Description</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronchodilator combinations</td>
<td>Budesonide-formoterol</td>
</tr>
<tr>
<td></td>
<td>Fluticasone-vilanterol</td>
</tr>
<tr>
<td></td>
<td>Fluticasone-salmeterol</td>
</tr>
<tr>
<td></td>
<td>Mometasone-formoterol</td>
</tr>
<tr>
<td>Inhaled corticosteroids</td>
<td>Beclomethasone</td>
</tr>
<tr>
<td></td>
<td>Flunisolide</td>
</tr>
<tr>
<td></td>
<td>Mometasone</td>
</tr>
<tr>
<td></td>
<td>Budesonide</td>
</tr>
<tr>
<td></td>
<td>Fluticasone</td>
</tr>
<tr>
<td></td>
<td>Ciclesonide</td>
</tr>
<tr>
<td></td>
<td>Fluticasone CFC free</td>
</tr>
</tbody>
</table>

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years within measurement year
AND
Discharge(s) for AMI between July 1 of the year prior to the measurement year to June 30 of the measurement period: G9798

AND

Patient encounter(s) during performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 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

AND NOT

DENOMINATOR EXCLUSIONS:

Patients with a diagnosis of Asthma, COPD, Obstructive chronic bronchitis, Chronic respiratory conditions due to fumes and vapors, Hypotension, heart block >1 or sinus bradycardia any time during the patient’s history through the end of the measurement period: J45.20, J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998, I44.1, I44.2, I44.4, I44.5, I44.60, I44.69, I44.7, I45.0, I45.10, I45.19, I45.2, I45.3, I45.6, I49.5, I95.0, I95.1, I95.2, I95.3, I95.81, I95.89, I95.9, R00.1, J68.4, J44.0, J44.1, J44.9, T44.7X5A, T44.7X5D, T44.7X5S

OR

Patients with a medication dispensing event indicator of a history of asthma any time during the patient’s history through the end of the measurement period: G9799

OR

Patients who are identified as having an intolerance or allergy to beta-blocker therapy: G9800

OR

Hospitalizations in which the patient was transferred directly to a non-acute care facility for any diagnosis: G9801

OR

Patients who use hospice services any time during the measurement period: G9802

NUMERATOR:

Patients who had at least 135 days of treatment with beta-blockers post-discharge during the 180-day measurement interval

NUMERATOR NOTE: Performance for the measure is based on at least 135 days of beta-blocker treatment during the 180-day measurement interval post discharge for AMI. This allows gaps in medication treatment of up to a total of 45 days during the 180-day measurement interval.

Assess for active prescriptions and include days supply that fall within the 180-day measurement interval. For patients who were on beta-blockers prior to admission and those who were dispensed an ambulatory prescription during their inpatient stay, factor those prescriptions into adherence rates if the actual treatment days fall within the 180-day measurement interval.

Table: Beta-Blocker Medications

<table>
<thead>
<tr>
<th>Description</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncardioselective beta-blockers</td>
<td>Carvedilol, Penbutolol, Timolol</td>
</tr>
<tr>
<td></td>
<td>Labetalol, Pindolol, Sotalol</td>
</tr>
<tr>
<td></td>
<td>Nadolol, Propranolol, Sotalol</td>
</tr>
<tr>
<td>Cardioselective beta-blockers</td>
<td>Acebutolol, Betaxolol, Metoprolol</td>
</tr>
<tr>
<td></td>
<td>Atenolol, Bisoprolol, Nebivolol</td>
</tr>
<tr>
<td>Antihypertensive combinations</td>
<td>Atenolol-chlorthalidone, Hydrochlorothiazide-metoprolol</td>
</tr>
<tr>
<td></td>
<td>Bendroflumethiazide-nadolol, Hydrochlorothiazide-propranolol</td>
</tr>
<tr>
<td></td>
<td>Bisoprolol-hydrochlorothiazide</td>
</tr>
</tbody>
</table>

Numerator Options:
**Performance Met:**
Patient prescribed at least a 135 day treatment within the 180-day measurement interval with beta-blockers post-discharge for AMI (G9803)

**OR**

**Performance Not Met:**
Patient was not prescribed at least a 135 day treatment within the 180-day measurement interval with beta-blockers post-discharge for AMI (G9804)

**RATIONALE:**
This measure addresses the appropriate clinical management of a person who has experienced an AMI. Persistent beta-blocker treatment after a heart attack reduces the risk of mortality, reduces the risk and severity of reinfarction, and improves the preservation of the left ventricular function.

**CLINICAL RECOMMENDATION STATEMENTS:**


Beta blockers should be continued during and after hospitalization for all patients with STEMI and with no contraindications to their use (Level B, Class I).


In patients with concomitant NSTE-ACS [non-ST-elevation acute coronary syndrome], stabilized HF [heart failure], and reduced systolic function, it is recommended to continue beta blocker therapy with 1 of the 3 drugs proven to reduce mortality in patients with HF: sustained-release metoprolol succinate, carvedilol, or bisoprolol (Level C, Class I).

It is reasonable to continue beta blocker therapy in patients with normal LV [left ventricular] function with NSTE-ACS (Level C, Class IIa).

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Denominator Exclusions
- Patients with a Diagnosis of Asthma, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes and Vapors, Hypotension, Heart Block >1 or Sinus Bradycardia

Not Included in Eligible Population/Denominator
- Not Included in Eligible Population/Denominator
- Discharged(s) for AMI Between July 1 of the Year Prior to the Performance Year to June 30 of the Performance Period (G9798) or Equivalent
- Encounter as Listed in Denominator* (1/1/2019 thru 12/31/2019)

Patients with a Medication Dispensing Event Indicator of a History of Asthma G9799 or Equivalent
- Yes
- No

Patients Who are Identified as Having an Intolerance or Allergy to Beta-Blocker Therapy G9800 or Equivalent
- Yes
- No

Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility For any Diagnosis G9801 or Equivalent
- Yes
- No

Patients Who Use Hospice Services Any Time During the Measurement Period G9802 or Equivalent
- Yes
- No

Include in Eligible Population/Denominator (88 Patients)

Continue to Measure Flow

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

NOTE: Submission Frequency – Patients processed.
2019 Clinical Quality Measure Flow for Quality ID #442 NQF #0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Numerator

Continue to Measure Flow.

Yes

Patient Prescribed At Least 135 Day Treatment within the 180 Day Measurement Interval with Beta-Blockers Post-Discharge for AMI

Data Completeness Met + Performance Met GS903 or Equivalent (40 Patients)

No

Patient Not Prescribed At Least 135 Day Treatment within the 180 Day Measurement Interval with Beta-Blockers Post-Discharge for AMI

Data Completeness Met + Performance Not Met GS904 or Equivalent (30 Patients)

No

Data Completeness Not Met Quality Data Code or Equivalent Not Submitted (10 Patients)

SAMPLE CALCULATIONS:

Data Completeness=
Performance Met (a = 40 patients) + Performance Not Met (c=30 patients) = 70 patients = 87.50%
Eligible Population / Denominator (d=80 patients) = 80 patients

Performance Rate=
Performance Met (a = 40 patients) = 40 patients = 57.14%
Data Completeness Numerator (70 patients) = 70 patients

*See the posted Measure Specification for specific coding and instructions to submit this measure.
NOTE: Submission Frequency: Patient-process
2019 Clinical Quality Measure Flow Narrative for Quality ID#442 NQF #0071:
Persistence of Beta-Blocker Treatment After a Heart Attack

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

1. Start with Denominator

2. Check Patient Age:
   a. If Patient Age is greater than or equal to 18 Years equals No, do not include in Eligible Population. Stop Processing.
   b. If Patient Age is greater than or equal to 18 Years equals Yes, proceed to check Discharge.

3. Check Discharge:
   a. If Discharge(s) for AMI between July 1 of the year prior to the performance year to June 30 of the performance period equals No, do not include in Eligible Population. Stop Processing.
   b. If Discharge(s) for AMI between July 1 of the year prior to the performance year to June 30 of the performance period equals Yes, proceed to check Encounter Performed.

4. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Patients with a Diagnosis of Asthma, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes and Vapors, Hypotension, Heart Block >1 or Sinus Bradycardia.

5. Check Patients with a Diagnosis of Asthma, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes and Vapors, Hypotension, Heart Block >1 or Sinus Bradycardia:
   a. If Patients with a Diagnosis of Asthma, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes and Vapors, Hypotension, Heart Block >1 or Sinus Bradycardia equals No, proceed to check Patients with a Medication Dispensing Event Indicator of a History of Asthma.
   b. If Patients with a Diagnosis of Asthma, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes and Vapors, Hypotension, Heart Block >1 or Sinus Bradycardia equals Yes, do not include in Eligible Population. Stop Processing.

6. Check Patients with a Medication Dispensing Event Indicator of a History of Asthma:
   a. If Patients with a Medication Dispensing Event Indicator of a History of Asthma equals No, proceed to check Patients Who are Identified as Having an Intolerance or Allergy to Beta-Blocker Therapy.
   b. If Patients with a Medication Dispensing Event Indicator of a History of Asthma equals Yes, do not include in Eligible Population. Stop Processing.

7. Check Patients Who are Identified as Having an Intolerance or Allergy to Beta-Blocker Therapy:
a. If Patients Who are Identified as Having an Intolerance or Allergy to Beta-Blocker Therapy equals No, proceed to check Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility for Any Diagnosis.

b. If Patients Who are Identified as Having an Intolerance or Allergy to Beta-Blocker Therapy equals Yes, do not include in Eligible Population. Stop Processing.

8. Check Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility for Any Diagnosis:

   a. If Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility for Any Diagnosis equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.

   b. If Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility for Any Diagnosis equals Yes, do not include in Eligible Population. Stop Processing.

9. Check Patients Who Use Hospice Services Any Time During the Measurement Period:

   a. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible Population.

   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Population. Stop Processing.

10. 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 equals 80 patients in the Sample Calculation.

11. Start Numerator

12. Check Patient Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI:

    a. If Patient Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI equals Yes, include in Data Completeness Met and Performance Met.

    b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 patients in the Sample Calculation.

    c. If Patient Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI equals No, proceed to check Patient was Not Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI.

13. Check Patient was Not Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI:

    a. If Patient was Not Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI equals Yes, include in Data Completeness Met and Performance Not Met.
b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 30 patients in the Sample Calculation.

c. If Patient was Not Prescribed At Least a 135 Day Treatment within the 180-Day Measurement Interval with Beta-Blockers Post-Discharge for AMI 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.

<table>
<thead>
<tr>
<th>SAMPLE CALCULATIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Completeness</strong></td>
</tr>
<tr>
<td>Performance Met (a = 40 patients) + Performance Not Met (c = 30 patients) = 70 patients = 87.50%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d = 80 patients) = 80 patients</td>
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<table>
<thead>
<tr>
<th>Performance Rate=</th>
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<tr>
<td>Performance Met (a = 40 patients) = 40 patients = 57.14%</td>
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