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

2017 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

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 reported a minimum of once per performance period for patients seen during the performance period. 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.

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 reporting year.

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.

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>• Albuterol-ipratropium</td>
</tr>
<tr>
<td></td>
<td>• Budesonide-formoterol</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>• Budesonide</td>
</tr>
<tr>
<td></td>
<td>• Ciclesonide</td>
</tr>
<tr>
<td></td>
<td>• Flunisolide</td>
</tr>
<tr>
<td></td>
<td>• Fluticasone</td>
</tr>
<tr>
<td></td>
<td>• Fluticasone CFC free</td>
</tr>
<tr>
<td></td>
<td>• Mometasone</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 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, 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, I45.6, 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

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 measure 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 a 180-day course of treatment with beta-blockers post discharge

Table: Beta-Blocker Medications

<table>
<thead>
<tr>
<th>Description</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncardioselective beta-blockers</td>
<td><img src="description" alt="Noncardioselective beta-blockers" /></td>
</tr>
<tr>
<td>Carvedilol</td>
<td>Penbutol</td>
</tr>
<tr>
<td>Labetalol</td>
<td>Pindolol</td>
</tr>
<tr>
<td>Nadolol</td>
<td>Propranolol</td>
</tr>
<tr>
<td>Timolol</td>
<td>Sotalol</td>
</tr>
<tr>
<td>Acebutolol</td>
<td>Betaxolol</td>
</tr>
<tr>
<td>Atenolol</td>
<td>Bisoprolol</td>
</tr>
<tr>
<td>Metoprolol</td>
<td>Nebivolol</td>
</tr>
<tr>
<td>Atenolol-chlorthalidone</td>
<td>Hydrochlorothiazide-metoprolol</td>
</tr>
<tr>
<td>Bendroflumethiazide-nadolol</td>
<td>Hydrochlorothiazide-propranolol</td>
</tr>
<tr>
<td>Bisoprolol-hydrochlorothiazide</td>
<td></td>
</tr>
</tbody>
</table>

Numerator Options:
Performance Met: Patient prescribed a 180-day course of treatment with beta-blockers post discharge for AMI (G9803)

OR
Performance Not Met: Patient was not prescribed a 180-day course of treatment 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 contradictions 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 bosoprolol (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).

COPYRIGHT:
These performance measures were developed and are owned by the National Committee for Quality Assurance ("NCQA"). These performance measures are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures. NCQA holds a copyright in this measure and can rescind or alter this measure at any time. Users of the measure shall not have the right to alter, enhance, or otherwise modify the measure and shall not disassemble, recompile, or reverse engineer the source code or object code relating to the measure. Anyone desiring to use or reproduce the measure without modification for a noncommercial purpose may do so without obtaining any approval from NCQA. All commercial uses must be approved by NCQA and are subject to a license at the discretion of NCQA. A “commercial use” refers to any sale, license, or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed, or distributed for commercial gain, even if there is no actual charge for inclusion of the measure. ©2004-2016 National Committee for Quality Assurance, all rights reserved.

Performance measures developed by NCQA for CMS may look different from the measures solely created and owned by NCQA.

CPT® contained in the Measures specifications is copyright 2004-2016 American Medical Association.
2017 Registry Individual Measure Flow
#442 NQF #0071: Persistence of Beta-Blocker Treatment After a Heart Attack

Denominator

Start

Patients age at Date of Service ≥ 18 Years

No

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

Yes

Patients with a Medication Dispensing Event Indicator of a History of Asthma G9799 or equivalent

No

Not Included in Eligible Population/Denominator

Yes

Encounter as Listed in Denominator* (1/1/2017 thru 12/31/2017)

No

Hospitalizations in Which the Patient was Transferred Directly to a Non-Acute Care Facility For any Diagnosis G9801 or equivalent

No

Patients Who Use Hospice Services Any Time During the Measurement Period G9802 or equivalent

Yes

Include in Eligible Population/Denominator (8 patients)

Continue to Measure Flow

*See the posted Measure Specification for specific coding and instructions to report this measure.
NOTE: Reporting Frequency – Patient-process

CPT only copyright 2016 American Medical Association. All rights reserved.
The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.
2017 Registry Individual Measure Flow

#442 NQF #0071: Persistence of Beta-Blocker Treatment After a Heart Attack

- **Numerator**

  - **Patient Prescribed a 180-Day Course of Treatment With Beta-Blockers Post Discharge for AMI**
    - **Yes**
      - Data Completeness Met + Performance Met G9803 or equivalent (4 patients)
    - **No**

  - **Patient Was Not Prescribed a 180-Day Course of Treatment With Beta-Blockers Post Discharge for AMI**
    - **Yes**
      - Data Completeness Met + Performance Not Met G9804 or equivalent (3 patients)
    - **No**

**SAMPLE CALCULATIONS:**

- **Data Completeness**
  
  Performance Met ($a = 4$ patients) + Performance Not Met ($c = 3$ patients) = 7 patients = \( \frac{87.5\%}{8 \text{ patients}} \)

- **Performance Rate**
  
  Performance Met ($a = 4$ patients) = 4 patients = \( \frac{57.14\%}{7 \text{ patients}} \)

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

NOTE: Reporting Frequency: Patient-process
2017 Registry Individual Measure Flow

#442 NQF #0071: Persistence of Beta-Blocker Treatment After a Heart Attack

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

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

4. Check Encounter Performed:
   a. If Encounter Performed as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter Performed 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 Patient 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 Patient 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 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 Patient 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 Patient 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 the Eligible population.

   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient 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 8 patients in the sample calculation.

11. Start Numerator

12. Check Patient Prescribed a 180-day Course of Treatment with Beta-Blockers Post Discharge for AMI:

    a. If Patient Prescribed a 180-day Course of Treatment 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 4 patients in Sample Calculation.

    c. If Patient Prescribed a 180-day Course of Treatment with Beta-Blockers Post Discharge for AMI equals No, proceed to Patient Was Not Prescribed a 180-day Course of Treatment with Beta-Blockers Post Discharge for AMI.

13. Check Patient Was Not Prescribed a 180-day Course of Treatment with Beta-Blockers Post Discharge for AMI:

    a. If Patient Was Not Prescribed a 180-day Course of Treatment 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 3 patients in the Sample Calculation.

c. If Patient Was Not Prescribed a 180-day Course of Treatment with Beta-Blockers Post Discharge for AMI equals No, proceed to Data Completeness Not Met.

14. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the data completeness numerator in the sample calculation.

---

### SAMPLE CALCULATIONS:

**Data Completeness**

\[
\text{Performance Met (a = 4 patients) + Performance Not Met (c=3 patients) \over \text{Eligible Population / Denominator (d=8 patients)}} = \frac{7}{8} = 87.50\%
\]

**Performance Rate**

\[
\text{Performance Met (a = 4 patients)} = \frac{4}{7} = 57.14\%
\]

Data Completeness Numerator (7 patients) = 7 patients