



*Optimizing Health by Advancing the Quality of Medication Use*

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# 2021 PQA MEASURE MANUAL

## JULY 2021

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## Proportion of Days Covered: Beta-Blockers (PDC-BB)

### Description

The percentage of individuals  $\geq 18$  years of age who met the Proportion of Days Covered (PDC) threshold of 80% for beta-blockers during the measurement year.

A higher rate indicates better performance.

PQA Endorsed 2008.

### Intended Use

**Intended Use** Performance measurement for health plans.

### Definitions

|   |   |
|---|---|
| <b>Beta-Blocker Medications</b>             | Beta-blocker or beta-blocker combination products. See Medication Table BB: Beta-Blockers.  |
| <b>Proportion of Days Covered (PDC)</b>     | The proportion of days in the treatment period “covered” by prescription claims for the same medication or another in its therapeutic category.   |
| <b>PDC Threshold</b>                        | The level of PDC above which the medication has a reasonable likelihood of achieving most of the potential clinical benefit (80% for diabetes and cardiovascular drugs, and many chronic conditions).   |
| <b>Index Prescription Start Date (IPSD)</b> | The earliest date of service for a target medication during the measurement year.   |
| <b>Treatment Period</b>                     | The individual's treatment period begins on the IPSD and extends through whichever comes first: the last day of enrollment during the measurement year, death, or the end of the measurement year. The treatment period should be at least 91 days.   |
| <b>Prescription Claims</b>                  | Only paid, non-reversed prescription claims are included in the data set to calculate the measure.  |
| <b>Hospice Exclusion</b>                    | Any individual in hospice care at any time during the measurement year. <ul style="list-style-type: none"> <li>• Hospice indicator from the enrollment database, if available (e.g. Medicare); or</li> <li>• <math>\geq 1</math> claim, encounter, or medical record during the measurement year. See Hospice Encounter Value Set and Hospice Intervention Value Set (e.g., Medicaid, commercial).</li> </ul> |

### Eligible Population

|                              |   |
|------------------------------|---|
| <b>Ages</b>                  | $\geq 18$ years of age as of the first day of the measurement year.   |
| <b>Continuous Enrollment</b> | <p>The treatment period.</p> <p>Exclude individuals with more than one 1-day gap in enrollment during the treatment period. Note: This allows for a 1-day gap to compensate for discrepancies in the enrollment data. For example, if an individual was eligible from 1/1-4/1 and 4/3-12/31, he/she would still be continuously enrolled despite the one-day gap in eligibility on 4/2.</p> |

|                        |   |
|------------------------|---|
| <b>Benefit</b>         | Pharmacy.   |
| <b>Event/Diagnosis</b> | <p>Individuals with at least two prescription claims for any beta-blocker (see Medication Table BB) on different dates of service in the treatment period. The prescription claims can be for the same or different medications.</p> <p>Use the steps below to determine the eligible population.</p> <p><b>Step 1</b> Identify individuals <math>\geq 18</math> years of age as of the first day of the measurement year.</p> <p><b>Step 2</b> Identify individuals meeting the continuous enrollment criteria.</p> <p><b>Step 3</b> Identify individuals with <math>\geq 2</math> prescription claims on different dates of service for any beta-blocker (see Medication Table BB) during the measurement year.</p> <p><b>Step 4</b> Exclude individuals in hospice care at any time during the measurement year.</p> |

### Administrative Specification

|                            |  |
|----------------------------|--|
| <b>Data Sources</b>        | Prescription claims, medical claims.   |
| <b>Denominator</b>         | The eligible population.   |
| <b>Numerator</b>           | The number of individuals who met the PDC threshold during the measurement year. Follow the steps below for each individual to determine whether the individual meets the PDC threshold.   |
| <b>Measure Calculation</b> | <p><b>Step 1</b> Determine the individual's treatment period, defined as the IPSD to the end of the measurement year, disenrollment, or death.</p> <p><b>Step 2</b> Within the treatment period, count the days the individual was covered by at least one drug in the class based on the date of service and days' supply on prescription claims. If the days' supply for prescription claims with the same target drug (generic ingredient) overlap, then adjust the prescription claim's start date to be the day after the last days' supply for the previous prescription claim.</p> <p>Note: Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the target drugs is common.</p> <p><b>Step 3</b> Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each individual. Then, round the PDC to the nearest hundredth (e.g. 79.996% is rounded to 80.00%, 79.992% is rounded to 79.99%).</p> <p><b>Step 4</b> Count the number of individuals who had a PDC of 80% or greater and then divide by the total number of eligible individuals.</p> <p>An example of SAS code for steps 1-3 is available from PQA upon request, and is also available at the URL: <a href="http://www2.sas.com/proceedings/forum2007/043-2007.pdf">http://www2.sas.com/proceedings/forum2007/043-2007.pdf</a></p> |
| <b>Rate</b>                | Divide the numerator by the denominator and multiply by 100.   |
| <b>Stratification</b>      | Commercial, Medicaid, Medicare (report each product line separately). For Medicare, report rates for low-income subsidy (LIS) and non-LIS populations separately.  |

## Medication Table

**Table BB: Beta-Blockers<sup>a,b,c</sup>**

| Beta-Blocker Medications and Combinations   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• acebutolol</li> <li>• atenolol (+/- chorthalidone)</li> <li>• betaxolol</li> <li>• bisoprolol (+/- hydrochlorothiazide)</li> <li>• carvedilol</li> </ul> | <ul style="list-style-type: none"> <li>• labetalol</li> <li>• metoprolol (+/- hydrochlorothiazide)</li> <li>• metoprolol tartrate</li> <li>• nadolol (+/- bendroflumethiazide)</li> <li>• nebivolol (+/- valsartan)</li> </ul> | <ul style="list-style-type: none"> <li>• penbutolol sulfate<sup>c</sup></li> <li>• pindolol</li> <li>• propranolol (+/- hydrochlorothiazide)</li> <li>• timolol maleate</li> </ul> |

<sup>a</sup> Active ingredients are limited to oral formulations only.

<sup>b</sup> Excludes sotalol because it is indicated for the treatment of ventricular arrhythmias (and not for hypertension). Excludes nutritional supplement/dietary management combination products.

<sup>c</sup> There are no active NDCs for penbutolol sulfate.