

## Quality Measures Fact Sheet

### **Risk-Standardized Mortality Rate Following Coronary Artery Bypass Graft (CABG) Surgery (NQF #2558)**

*National Quality Strategy Domain: Making Care Safer*

*Quality Measures Set: Administrative    Data Source: Hospital Inpatient Quality Reporting Program*

### **BPCI Advanced and Quality**

The Center for Medicare & Medicaid Innovation's (the CMS Innovation Center's) BPCI Advanced Model rewards health care providers for delivering services more efficiently, supports enhanced care coordination, and recognizes high quality care. Hospitals and clinicians should work collaboratively to achieve these goals, which have the potential to improve the BPCI Advanced Beneficiary experience and align to the CMS Quality Strategy goals of promoting effective communication and care coordination, highlighting best practices, and making care safer and more affordable. A goal of the BPCI Advanced Model is to promote seamless, patient-centered care throughout each Clinical Episode, regardless of who is responsible for a specific element of that care.

### **Background on Coronary Artery Bypass Graft**

Coronary artery bypass graft (CABG) surgeries are the most common major cardiac surgery and mortality following this procedure should be very rare. Goals for pursuing CABG surgery include enhancing quality of life, reducing angina and other coronary heart disease (CHD) symptoms, preserving or restoring cardiac function, and improving survival.

### **CMS Innovation Center Rationale for Including the Risk-Standardized Mortality Rate Following CABG Surgery Measure in BPCI Advanced**

Hospitals and their associated care teams should collaborate to ensure that they provide appropriate care coordination to Medicare beneficiaries undergoing CABG procedures to reduce the risk of serious complications, including death. The CMS Innovation Center selected the Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate following CABG Surgery measure because it provides a broad, hospital-level view of quality that encompasses complex aspects of care including communication between providers, prevention of and/or response to complications, patient safety, and coordination of outpatient transitions. CMS has used or is currently using this measure in the following Federal programs: Hospital Compare, Hospital Value-Based Purchasing, and the Hospital Inpatient Quality Reporting (IQR) Program.

## Applicable Clinical Episodes

The Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate following CABG Surgery measure is in the Administrative Quality Measures Set and applies to the following inpatient Clinical Episode<sup>1</sup>:

- CABG: Medicare Severity–Diagnosis-Related Groups (MS-DRGs) 231, 232, 233, 234, 235, and 236

## Measure Specifications

The Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate following CABG Surgery measure selected for BPCI Advanced follows National Quality Forum (NQF) #2558 measure specifications. The measure estimates a risk-stratified hospital-level mortality rate for Medicare beneficiaries aged 65 and older discharged from the hospital following a qualifying isolated CABG procedure. The measure defines mortality as death from any cause within 30 days of the procedure date of an index CABG admission. An index CABG admission is the hospitalization for a qualifying isolated CABG procedure considered for the mortality outcome. The CMS Innovation Center will calculate Acute Care Hospital (ACH) performance at the hospital level for all Medicare beneficiaries included in the denominator. For Physician Group Practices (PGPs), the CMS Innovation Center will calculate the measure as specified at the hospital level, then weight the measure based on PGP Clinical Episode volume for each ACH where a PGP triggers an episode.

## Denominator

The denominator for the Risk-Standardized Mortality Rate following CABG measure includes all Medicare fee-for-service (FFS) beneficiaries aged 65 and older who receive a qualifying isolated CABG procedure at the hospital and who have 12 months of continuous Medicare Part A and B enrollment prior to the index CABG admission. If a Medicare beneficiary has more than one qualifying isolated CABG admission in a year, the CMS Innovation Center will select the first CABG admission for inclusion in the measure and exclude the subsequent CABG admission(s) from the cohort.

The exclusions for this measure include patients:

- with inconsistent or unknown vital status or other unreliable (age and gender) data
- discharged against medical advice because providers did not have the opportunity to deliver full care and prepare the patient for discharge

## Numerator

The numerator includes individuals in the previously defined denominator who are discharged from the hospital and then die for any reason within 30 days of undergoing an isolated CABG Surgery.

## Measure Submission

The CMS Innovation Center will calculate this measure using Medicare claims data and does not require action or reporting by Model Participants beyond what is currently involved in the Hospital IQR Program. To better align with the performance years of the BPCI Advanced Model, the Model uses January 1 through December 31 for measure calculation. The date of discharge on the index admission will determine the calendar year in which the claim belongs.

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<sup>1</sup> MS-DRGs are up to date as of Model Year 3 (2020) and will be updated for Model Year 4 as needed.

## Revisions to the Published Specifications

The BPCI Advanced version of this measure is calculated using data from a one-year calendar period rather than any 12-month period. In Model Year 4, the data will be collected from January 1, 2021 to December 31, 2021.

## Composite Quality Score

The Risk-Standardized Mortality Rate following CABG Surgery measure is one component of the BPCI Advanced Composite Quality Score (CQS) calculation. The CMS Innovation Center uses the CQS to adjust a portion of any Positive Total Reconciliation Amount and any Negative Total Reconciliation Amount. The CQS adjustment will not adjust the Positive Total Reconciliation Amount downward by more than 10 percent, nor will it adjust the Negative Total Reconciliation Amount upward by more than 10 percent. More information is available at the BPCI Advanced website provided below.

## Other Resources

Organization/Resource	Website Address
NQF #2558 specifications	<a href="http://qualityforum.org/QPS/2558">http://qualityforum.org/QPS/2558</a>
BPCI Advanced	<a href="https://innovation.cms.gov/initiatives/bpci-advanced">https://innovation.cms.gov/initiatives/bpci-advanced</a>