

Bundled Payments
for Care Improvement
Advanced | **BPCI
Advanced**

Introduction to Quality Measures

July 2023



Welcome to the *“Introduction to Quality Measures”* webcast. This presentation provides an overview of the quality strategy and measures associated with the Bundled Payments for Care Improvement, or BPCI Advanced Model, and is intended as an introduction to Model concepts for Applicants, as well as a review for current Participants.

BPCI Advanced Webcast Outline



- **Model Highlights and Quality Strategy**
- **Quality Measures, Selection and Reporting**
- **Submitting Quality Measures**
- **Composite Quality Score (CQS) Calculation**
- **Key Takeaways**

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Let us take a moment to review the topics in this webcast. We will begin by discussing BPCI Advanced Model highlights and quality strategy.

We will then discuss the different types of quality measures used in the Model and the framework for selection and reporting.

We will also explain how to submit quality measures within the Model.

We will then provide a high-level review of the Composite Quality Score, often referred to as the CQS, and discuss how the Model uses this score to adjust payment.

Lastly, we will end with key takeaways and resources which new and current Model Participants may find beneficial.

Learning Objectives



At the conclusion of this webcast, Participants will be able to:



Explain the purpose and key elements of the BPCI Advanced Model, including the Model's quality strategy.



Describe BPCI Advanced quality measures and their relationship to the calculation of the Composite Quality Score (CQS).



Discuss the role of registry participation in BPCI Advanced quality measures reporting.

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Today's session has three overarching objectives. At the conclusion of this webcast, Participants will be able to:

- Explain the purpose and key elements of the BPCI Advanced Model, including the Model's quality strategy.
- Describe BPCI Advanced quality measures and their relationship to the calculation of the CQS.
- And finally, discuss the role of registry participation in BPCI Advanced quality measures reporting.

List of Common Acronyms Used in BPCI Advanced

ACC - American College of Cardiology	CEHRT - Certified Electronic Health Record Technology	MAC - Medicare Administrative Contractor
ACH - Acute Care Hospital	CESLG - Clinical Episode Service Line Group	MY - Model Year
ACP - Advance Care Plan	CPT - Current Procedural Terminology	NQF - National Quality Forum
ACS - American College of Surgeons	CQS - Composite Quality Score	OP - Outpatient Episode
AHA - American Heart Association	MS-DRG - Medicare Severity Diagnosis-Related Group	PGP - Physician Group Practice
AMI - Acute Myocardial Infarction	HCPCS - Healthcare Common Procedure Coding System	QDC - Quality Data Code
APM - Alternative Payment Model	IQR - Inpatient Quality Reporting	QM - Quality Measure
CEC - Clinical Episode Categories	IP - Inpatient Episode	STS - Society of Thoracic Surgeons

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This slide depicts the common acronyms used within this presentation and in BPCI Advanced. This list can be a helpful reference as you become more familiar with the Model and BPCI Advanced concepts.

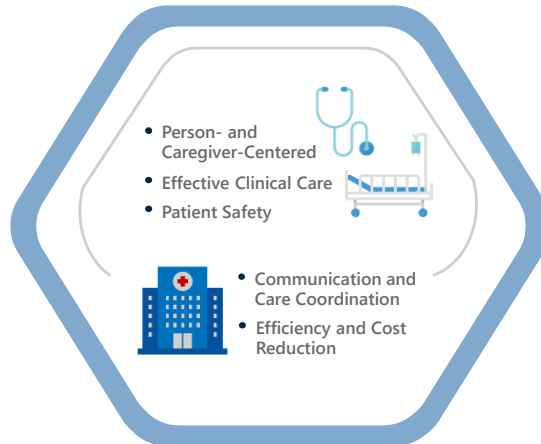


The quality strategy in BPCI Advanced provides the foundation for understanding the purpose of the Model, its key elements, and the goals related to improvement in care redesign, peer-to-peer collaboration, care coordination, and patient outcomes.

What is BPCI Advanced?

- 1 A voluntary bundled payment model with a 90-day Clinical Episode period.
- 2 An innovative model that supports practice improvement and facilitates ways to redesign care.
- 3 An Advanced Alternative Payment Model (APM).
- 4 A model that ties payment to performance on quality measures.

BPCI Advanced Model Goals



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So, what exactly is the purpose of the BPCI Advanced Model? To answer this question, let's explore the Model's key features a little more closely.

BPCI Advanced is a voluntary bundled payment model which spans a 90-day Clinical Episode period.

It is also an innovative model that supports practice improvement and facilitates ways to redesign care.

In addition, BPCI Advanced qualifies as an Advanced Alternative Payment Model (or APM) and the Model ties payment to a Participant's performance on quality measures.

The goals of the BPCI Advanced Model include a person- and caregiver-centered experience and outcomes, the provision of effective clinical care, patient safety, communication and care coordination, and efficiency and cost reduction.

Advanced Alternative Payment Model (APM) Requirements

To qualify as an Advanced APM, a model must meet three requirements:

- 1 Use of Certified Electronic Health Record Technology (CEHRT).
- 2 Assumption of more than nominal risk by model Participants.
- 3 Payment must be linked to quality.



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As previously noted, BPCI Advanced qualifies as an Advanced APM under Medicare's Quality Payment Program. To qualify as an Advanced APM, a Model must meet three requirements:

- The first is the use of Certified Electronic Health Record Technology, often referred to as CEHRT.
- Second, Model Participants must assume risk for monetary losses exceeding a nominal amount.
- And lastly, the Model must link payments to quality measures comparable to Merit-Based Incentive Payment System quality measures, called MIPS measures.

Utilizing Quality Measures



Quality measures enable providers, institutions and CMS to:

- Track health care processes and resulting outcomes.
- Gain insight into the patient and family experience.
- Identify opportunities for quality improvement.

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Quality measures are tools that help us measure or quantify health care processes, outcomes, patient perceptions and organizational structures or systems that are associated with the ability to provide high-quality health care.

They enable providers, institutions, and CMS to:

- Track health care processes and resulting outcomes
- Gain insight into the patient and family experience, and
- Identify opportunities for quality improvement.

BPCI Advanced uses quality measures to promote the larger goals of the Department of Health and Human Services' National Quality Strategy, which are centered around better care, healthier people and communities, and smarter spending.

Promoting Quality in BPCI Advanced



- 1 Quality measures promote improvements in care redesign, peer-to-peer collaboration, care coordination and patient outcomes.
- 2 BPCI Advanced monitors quality through a select set of Clinical Episode Category-specific quality measures.

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The use of quality measures within the design of the BPCI Advanced Model promotes improvements in care redesign, peer-to-peer collaboration, care coordination and patient outcomes. The Model monitors quality through a select set of Clinical Episode Category-specific quality measures.

Quality Measures and Reconciliation Results

- 1 BPCI Advanced takes quality measure results and scales them into standardized scores.
- 2 Participants' Clinical Episode volumes are factored into volume-weight the Composite Quality Score (CQS).
- 3 A CQS quality adjustment is applied to Total Reconciliation Amounts (+/- 10%).



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As an Advanced APM, BPCI Advanced ties quality to payment through a series of steps. The Model takes Participants' quality measure results and scales them into standardized scores.

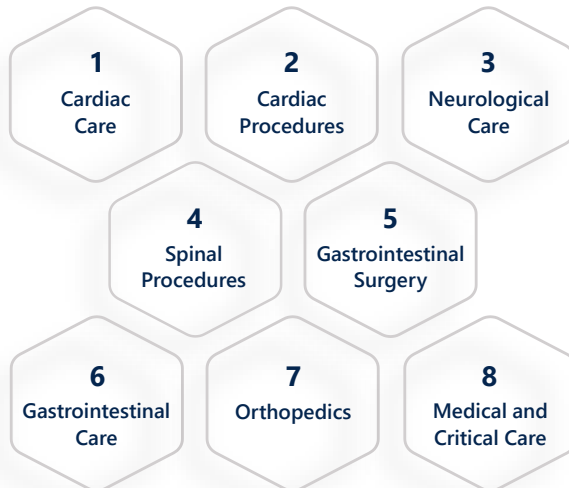
Next, the Participants' Clinical Episode volumes are factored into volume-weight the quality measures in the CQS calculations. This ultimately results in a quality adjustment to the Total Reconciliation Amount, of plus or minus 10%, depending on performance.



Next, we will discuss the relationship between Clinical Episodes and Quality Measures and review the Quality Measures Sets available to BPCI Advanced Participants.

Clinical Episode Service Line Groups

- 1** The BPCI Advanced Model has eight (8) Clinical Episode Service Line Groups (CESLGs).
- 2** A total of 34 Clinical Episode Categories (CECs) are aligned within these eight Service Line Groups.
- 3** There are 29 inpatient CECs, three (3) outpatient CECs and two (2) multi-setting CECs.



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The BPCI Advanced Model contains eight Clinical Episode Service Line Groups, or CESLGs, as depicted on this slide, and each Episode Initiator must select at least one.

A total of 34 Clinical Episode Categories are aligned within these eight Service Line Groups, which include 29 Inpatient, three Outpatient and two multi-setting Clinical Episode Categories.

Let's explore this design in a bit more detail.

CESLGs and Clinical Episode Categories

Cardiac Care	Neurological Care	Spinal Procedures	Gastrointestinal Surgery	Gastrointestinal Care	Orthopedics	Cardiac Procedures	Medical and Critical Care
<input type="checkbox"/> Acute Myocardial Infarction (AMI) <input type="checkbox"/> Cardiac Arrhythmia <input type="checkbox"/> Congestive Heart Failure	<input type="checkbox"/> Seizures <input type="checkbox"/> Stroke	<input type="checkbox"/> Back and Neck Except Spinal Fusion (Inpatient) <input type="checkbox"/> Back and Neck Except Spinal Fusion (Outpatient) <input type="checkbox"/> Spinal Fusion	<input type="checkbox"/> Bariatric Surgery <input type="checkbox"/> Major Bowel Procedure	<input type="checkbox"/> Gastrointestinal Hemorrhage <input type="checkbox"/> Gastrointestinal Obstruction <input type="checkbox"/> Inflammatory Bowel Disease <input type="checkbox"/> Disorders of The Liver Except Malignancy, Cirrhosis, or Alcoholic Hepatitis	<input type="checkbox"/> Double Joint Replacement of the Lower Extremity <input type="checkbox"/> Fractures of the Femur and Hip or Pelvis <input type="checkbox"/> Hip and Femur Procedures Except Major Joint <input type="checkbox"/> Lower Extremity/Humerus Procedure Except Hip, Foot, Femur <input type="checkbox"/> Major Joint Replacement of the Lower Extremity (MJRLE) (Multi-setting Inpatient/Outpatient) <input type="checkbox"/> Major Joint Replacement of the Upper Extremity (MJRLE) (Multi-setting Inpatient/Outpatient)	<input type="checkbox"/> Cardiac Defibrillator (Inpatient) <input type="checkbox"/> Cardiac Defibrillator (Outpatient) <input type="checkbox"/> Cardiac Valve <input type="checkbox"/> Coronary Artery Bypass Graft <input type="checkbox"/> Endovascular Cardiac Valve Replacement <input type="checkbox"/> Pacemaker <input type="checkbox"/> Percutaneous Coronary Intervention (PCI – Inpatient) <input type="checkbox"/> Percutaneous Coronary Intervention (PCI – Outpatient)	<input type="checkbox"/> Sepsis <input type="checkbox"/> Cellulitis <input type="checkbox"/> Renal Failure <input type="checkbox"/> Urinary Tract Infection <input type="checkbox"/> Simple Pneumonia and Respiratory Infections <input type="checkbox"/> Chronic Obstructive Pulmonary Disease, Bronchitis, Asthma

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This image displays the Model’s eight CESLG groupings and their related Clinical Episode Categories.

Here we see the Clinical Episode Service Line Groups identified by their clinical topic heading in the blue row. The related Clinical Episode Categories for each CESLG are aligned respectively in each column.

For example, let’s look at the Cardiac Care CESLG (in the first column). We note that there are three Clinical Episode Categories: acute myocardial infarction, cardiac arrhythmia, and congestive heart failure.

Participants must select at least one CESLG to participate in. The Model will then hold them accountable for every Clinical Episode Category under the CESLG, using quality measures to evaluate care.

Defining a Clinical Episode



- 1 An inpatient episode (IP) begins with a hospitalization – called the Anchor Stay – and lasts for an additional 90 days, beginning on the day of discharge.
- 2 An outpatient episode (OP) begins with an outpatient procedure – called an Anchor Procedure – and lasts for 90 days beginning on the day of completion of the procedure.
- 3 CMS will use Medicare Severity Diagnosis-Related Group (MS-DRG) codes to identify the inpatient stay and Healthcare Common Procedure Coding System (HCPCS) codes to identify the outpatient procedure.

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Now that we have seen the CESLG groupings and their related Clinical Episode Categories, let's review the basic definition of a Clinical Episode. Clinical Episodes occur in either the inpatient or outpatient setting.

An Inpatient Clinical Episode begins with a hospitalization called the anchor stay, and the length includes the day of discharge plus 90 days.

An Outpatient Clinical Episode begins with an outpatient procedure called the anchor procedure, and the length includes the day the procedure is completed plus 90 days.

A Participant triggers each Clinical Episode by including certain codes on a Medicare Claim. Medicare Severity Diagnosis Related Group or MS-DRG codes, identify inpatient stays, and Healthcare Common Procedure Coding System, or HCPCS codes, identify outpatient procedures.

The construction of Clinical Episodes includes all services that overlap with the Clinical Episode window, with some exclusions.

Applying Quality Measures to a Clinical Episode Category

Example:

Acute Myocardial Infarction (AMI) Clinical Episode Category

CESLG	Clinical Episode Category	Administrative Quality Measures	Alternate Quality Measures
Cardiac Care	AMI MS-DRGs: 280, 281 and 282	Advance Care Plan (NQF #0326) (<i>Quality Data Code (QDC)</i>)	Advance Care Plan (NQF #0326) (<i>QDC</i>)
		Hospital-Wide All-Cause Unplanned Readmission Measure (NQF #1789) (<i>Inpatient Quality Reporting Program (IQR)</i>)	Hospital-Wide All-Cause Unplanned Readmission Measure (NQF #1789) (<i>IQR</i>)
		CMS Patient Safety Indicators 90 (NQF #0531) (<i>IQR</i>)	3-Item Care Transition Measure (NQF #0228) (<i>IQR</i>)
		Excess Days in Acute Care after Hospitalization for AMI (NQF #2881) (<i>IQR</i>)	Defect Free Care for AMI (NQF #2377) (<i>Registry: ACC NCDR Chest Pain – MI Registry or AHA GWTG Coronary Artery Disease</i>)

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Quality measures factor in at the Clinical Episode Category-level, where each Clinical Episode Category will have several quality measures aligned to them. This table demonstrates the relationship between a CESLG, Clinical Episode Category and corresponding quality measures.

The Acute Myocardial Infarction (or AMI) Clinical Episode Category is part of the Cardiac Care CESLG. The third and fourth columns in the table show the different quality measures associated with this Clinical Episode Category - four Administrative Quality Measures and four Alternate Quality Measures.

The Administrative Quality Measures and Alternate Quality Measures represent **two options** that Participants can select. In the upcoming slides, we will talk more about these two sets of measures.

Option 1: Administrative Quality Measures Set

Six Administrative Quality Measures

Advance Care Plan (NQF #0326)	Hospital-Wide All-Cause Unplanned Readmission Measure (NQF #1789)
Excess Days in Acute Care after Hospitalization for Acute Myocardial Infarction (AMI) (NQF #2881)	CMS Patient Safety Indicators PSI 90 (NQF #0531)
Hospital-Level Risk-Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) (NQF #1550)	Risk-Standardized Mortality Rate Following Coronary Artery Bypass Graft (CABG) Surgery (NQF #2558)

- The Administrative Quality Measures Set contains six exclusively claims-based measures directly collected by CMS.

- Two measures, All-Cause Hospital Readmissions and Advance Care Plan, are required for all Clinical Episode Categories.
- Up to two additional measures may apply to each Clinical Episode Category.

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The Administrative Quality Measures Set is the first option. Introduced at the start of the Model, this set contains six exclusively claims-based measures that CMS collects directly. BPCI Advanced requires two measures, All-cause Hospital Readmission and Advance Care Plan, for **all** Clinical Episode Categories and up to two additional measures may apply to each Clinical Episode Category. Here we see a table depicting the six quality measures contained within the Administrative Quality Measures Set.

For our current Model Participants, it may be helpful to note that starting in Model Year 6 (MY6) (2023), the Model removed reporting for the Administrative Quality Measure *Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin* (NQF #0268). This was due to the discontinuation of codes used for its reporting.

Option 2: Alternate Quality Measures Set

- A set of tailored quality measures that align with each of the specialty-specific Clinical Episode Categories in the Model. These include:
 - The two global measures (Advance Care Plan and All-cause Hospital Readmissions) that apply to all Clinical Episode Categories.
 - Up to three additional measures that may apply to each Clinical Episode Category.
- Developed with various stakeholders and registries.
- Provides greater choice and flexibility for Episode Initiators and lowers administrative burden.



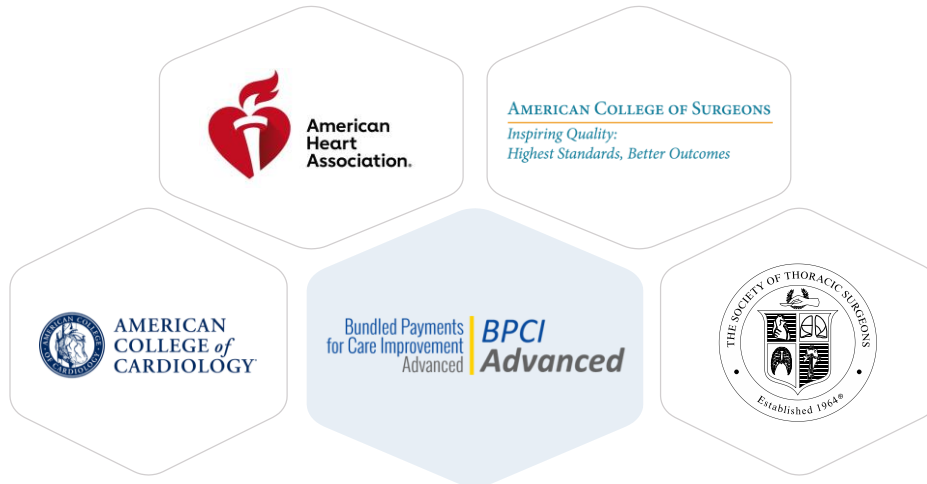
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The second option is the Alternate Quality Measures Set. This set, introduced in MY4, includes a combination of up to five measures for each Clinical Episode Category. Two global measures (All-cause Hospital Readmission and Advance Care Plan) once again apply to all Clinical Episode Categories, and up to three additional measures may apply to each Clinical Episode Category.

BPCI Advanced developed the Alternate Quality Measures Set after gathering information from various stakeholders and registries to identify a set of tailored quality measures that align with each of the specialty-specific Clinical Episode Categories in the Model. This provides greater choice and flexibility for Episode Initiators and also allowed CMS to test a new method of data collection for quality measurement via registries.

There are several advantages of reporting Alternate Quality Measures via registry submissions. First, these quality measures are customized to each Clinical Episode Category, and are more clinically relevant. Secondly, as many health care providers already use registries for quality reporting, selecting the Alternate Quality Measures can help avoid additional administrative burden of quality measure data capture. Additionally, registries provide data-driven quality improvement education to help health care providers improve on these quality measures.

Alternate Quality Measures and Registry Partnerships



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Currently, BPCI Advanced has four registry partnerships that support the reporting of select Alternate Quality Measures. These are:

- The American Heart Association (or AHA)
- The American College of Surgeons (or ACS)
- The American College of Cardiology (or ACC)
- The Society of Thoracic Surgeons (or STS)

Next, we will identify the quality measures that these registries report on.

Alternate Quality Measures Reported by AHA and ACS

Registry Name	Name of Quality Measure
American Heart Association (AHA)	Defect Free Care for AMI (NQF #2377)
	Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy (NQF #1525)
	Heart Failure (HF): Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) or Angiotensin Receptor-Nepriylsin Inhibitor (ARNI) Therapy for Left Ventricular Systolic Dysfunction (LVSD) (NQF #0081)
	Heart Failure: Beta Blocker Therapy for LVSD (NQF #0083)
	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention (NQF #0028)
	STK-06: Discharged on Statin Medication (NQF #0439)
	Time to Intravenous Thrombolytic Therapy (NQF #1952)
American College of Surgeons (ACS)	Bariatric Surgery Standards for Successful Programs Measure
	Patient-Centered Surgical Risk Assessment and Communication (QPP #358)
	Substance Use Screening and Intervention Composite (NQF #2597)

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This table provides an overview of the Alternate Quality Measures currently reported by the American Heart Association (AHA) and the American College of Surgeons (ACS).

Alternate Quality Measures Reported by ACC and STS

Registry Name	Name of Quality Measure	
American College of Cardiology (ACC)	Defect Free Care for AMI (NQF #2377)	Hospital Risk-Standardized Complication Rate following Implantation of Implantable Cardioverter-Defibrillator
	Discharge Medications (ACE/ARB and Beta Blockers) in Eligible Implantable Cardiac Defibrillator (ICD) /Cardiac Resynchronization Therapy Defibrillators (CRT-D) Implant Patients (Composite Measure) (NQF #0965)	Cardiac Rehabilitation Patient Referral from an Inpatient Setting (NQF #0642)
	Hospital Risk-Standardized Complication Rate following Implantation of Implantable Cardioverter-Defibrillator	Risk Standardized Bleeding for Patients Undergoing Percutaneous Coronary Intervention (PCI) (NQF #2459)
	Discharge Medications: Angiotensin-Converting Enzyme Inhibitor or Angiotensin Receptor Blocker and Beta-Blockers in Eligible ICD Implant Patients (Composite Measure) (NQF #0965)	Therapy with Aspirin, P2Y12 Inhibitor, and Statin at Discharge following PCI in Eligible Patients (NQF #0964)
The Society of Thoracic Surgeons (STS)	Substance Use Screening and Intervention Composite (NQF #2597)	Cardiac Rehabilitation Patient Referral from an Inpatient Setting (NQF #0642)
	Volume Weighted Aortic Valve Replacement + Aortic Valve Replacement / CABG (NQF #2561, 2563)	Society of Thoracic Surgeons CABG Composite Score (NQF #0696)
	Volume Weighted Mitral Valve Replacement + Mitral Valve Replacement / CABG (NQF #3031, 3032)	Substance Use Screening and Intervention Composite (NQF #2597)

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Continuing our discussion with the next two registries, this table provides a list of the Alternate Quality Measures currently reported by the American College of Cardiology (ACC) and the Society of Thoracic Surgeons (STS).

For additional information, please see the BPCI Advanced Clinical Episodes to Quality Measures Correlation Table. It can assist you in determining registry-reported quality measures.



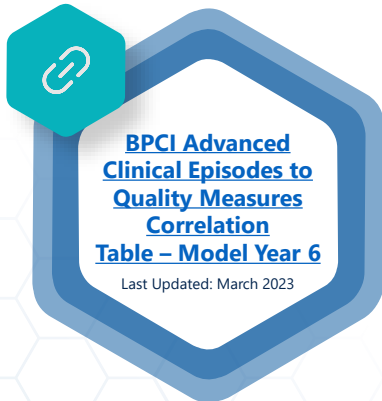
Quality Measures Selection and Reporting

Participant Profile Quality Measures Set Selection

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Now that we have covered the different Quality Measures Sets, let's focus on how Participants can select and report on these quality measures.

Quality Measures Set Selection



- Participants have the flexibility to report quality measure performance through either the Administrative Quality Measures Set or the Alternate Quality Measures Set.
- Each Episode Initiator will be required to commit to either quality measures set for each Clinical Episode Category, within the CESLGs they selected to be accountable for, before the start of each Model Year.
- The established CQS calculation methodology will apply to both measures sets.
- Participants can use the Clinical Episodes to Quality Measures Correlation Table to assist in making selections.

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As noted, Participants have the flexibility to report quality measure performance using two options, through either the Administrative or the Alternate Quality Measures Sets.

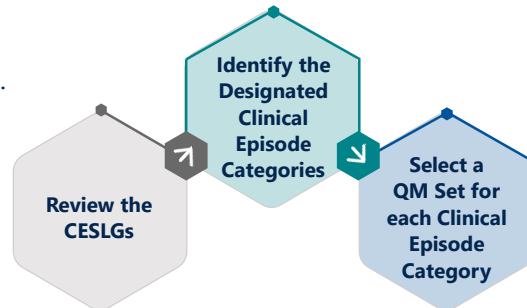
BPCI Advanced requires each Episode Initiator to commit to either the Administrative Quality Measures Set or the Alternate Quality Measures Set for each Clinical Episode Category, within the CESLGs they selected to be accountable for **before the start** of each Model Year.

The established CQS calculation methodology will apply to both the Administrative and Alternate Quality Measures Sets.

Participants can use the Clinical Episodes to Quality Measures Correlation Table to assist in making selections. Model Year 7 Clinical Episode to Quality Measures Correlation Table, along with Model Year 7 Quality Measure Fact Sheets, will be available on the BPCI Advanced webpage in the coming months.

How to Select Quality Measures in the Participant Profile

- The Participant Profile is an Excel document used by Participants to select their Episode Initiators, Clinical Episode Service Line Groups and Quality Measures Sets.
 - Participants are required to select either the Administrative or Alternate Quality Measures Set for each Episode Initiator and Clinical Episode Category in which they participate.
- CMS will populate the Model Year 7 (MY7) Participant Profile template with the Participating Organizations submitted in the application and all CESLGs.
- Participants will download the template from the BPCI Advanced Participant Portal, make their selections and then upload their Participant Profile back to the Participant Portal.
- Information on how to access and navigate the BPCI Advanced Participant Portal will be provided to Applicants in late summer 2023.



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When Applicants and Participants are ready to make their selections, they will fill out the Participant Profile, which is an Excel document used by Participants to select their Episode Initiators, CESLGs and Quality Measures Sets. As a reminder, BPCI Advanced requires Participants to select either the Administrative or Alternate Quality Measures set for each Episode Initiator and Clinical Episode Category in which they participate.

CMS will populate the Model Year 7 Participant Profile template with the Participating Organizations submitted in the application and all CESLGs.

Participants will download the template from the BPCI Advanced Participant Portal, make their selections, and then upload their Participant Profile back to the Participant Portal.

Information on how to access and navigate the BPCI Advanced Participant Portal will be provided to Applicants in late summer 2023.

Considerations For Physician Group Practices



- **Physician Group Practices (PGPs) can select any combination of the Alternate or Administrative Quality Measures within a CESLG. Please note:**
 - ✓ The selection can be all Alternate, all Administrative, or a mix of both.
 - ✓ The selection must be made at the Clinical Episode Category level.
- **For PGPs who trigger Clinical Episodes at multiple Acute Care Hospitals (ACHs):**
 - CMS will calculate the hospital-level quality measure scores for each hospital at which the PGP triggered Clinical Episodes, and volume-weight the scores based on the PGP's Clinical Episode attribution among the ACHs.

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When it comes to selecting Quality Measures Set options for Physician Group Practices (or PGPs), PGPs can select any combination of the Alternate or Administrative Quality Measures within a CESLG: all Alternate, all Administrative, or a mix of both. However, please note that this selection must be made at the Clinical Episode Category level.

For PGPs who trigger Clinical Episodes at multiple Acute Care Hospitals, or ACHs, CMS will calculate the hospital-level quality measure scores for each hospital at which the PGP triggered Clinical Episodes, and volume-weight the scores based on the PGP's Clinical Episode attribution among the hospitals.

Submitting Quality Measures

Medicare Claims and Registry Data Submission

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In the next section, we will review some of the key factors associated with submitting BPCI Advanced quality measures.

Quality Measure Reporting and Data Sources

- The Administrative Quality Measures are collected from various CMS hospital reporting programs and from Medicare claims.
- The Alternate Quality Measures Set are derived from a combination of quality data codes (QDCs), hospital reporting programs, Medicare claims and registry data sources.
- Data sources for each quality measure can be found in the BPCI Advanced Clinical Episodes to Quality Measures Correlation Table.



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As noted earlier, quality measures are tools that measure or quantify health care processes, outcomes, patient perceptions and organizational structures or systems. Various sources provide data for the quality measures used for reporting the BPCI Advanced Administrative and Alternate Quality Measures.

- The Administrative Quality Measures are collected from various CMS hospital reporting programs and from Medicare claims.
- The Alternate Quality Measures Set are derived from a combination of quality data codes, known as QDCs, hospital reporting programs, Medicare claims, and registry data sources.

For more information, the MY6 BPCI Advanced Clinical Episodes to Quality Measures Correlation Table contains data sources for each quality measure.

Reporting Via Registries



- Participants must be a registry member to select and report registry-reported quality measures.
- Registries will collect and report quality measure data to CMS annually.
- PGPs who select registry-based quality measures will need to ensure the hospitals at which they practice are able to submit data to the registries.

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For quality measures that are reported via registries, registries will automatically submit quality measure results to the Model annually, as long as the Participant is a registry member and has been submitting data. Physician Group Practices, who select registry-based quality measures, would need to ensure that the hospitals at which they practice are able to submit data to the registries.

Advance Care Plan Data Transmission Example

- **There is no further provider action required for this quality measure, beyond the standard claim submission process.**
 - Advance Care Plans (ACPs) can be extracted from claims if providers include the Current Procedural Terminology (CPT) I or CPT II codes in the claims.
- **Only physicians and clinicians can submit this claim.**
 - Hospitals cannot bill for this.



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To understand how a Participant would submit claims-based quality measures, let's explore an example with the Advance Care Plan, or ACP, quality measure, which applies to all Clinical Episodes.

Since this is a claims-based quality measure, the Participant would include the relevant CPT I or CPT II codes on a claim, and no further provider action is needed beyond the standard claim submission process. CPT refers to Current Procedural Terminology. The BPCI Advanced Model would then extract the code to validate that the Advance Care Plan conversation took place.

It is important to note that only physicians and qualified clinicians can submit an ACP claim. Hospitals cannot bill for this.

In terms of resources to guide Participants through this process, the BPCI Advanced webpage has questions and answers on how to submit these codes.

Medicare Claims Data

BPCI Advanced claims-based quality measure data are collected via claims, either through payable CPT codes or non-payable QDCs.

Data Source

Episode Initiators submit the data through the CMS claims process using:

- Payable CPT level I codes
- Non-payable QDCs (CPT/HCPCS level II)

How to Submit

Episode Initiators report the relevant codes on their CMS-1500 claim forms.

Submission Tips

- When submitting CPTs on the claim(s), please include the denominator billing code(s).
- Check to ensure non-payable QDCs are accurately included in the claims before submission, as Medicare Administrative Contractors (MACs) typically will not allow Episode Initiators to append non-payable QDCs to claims after submission.

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For more tips on submitting Medicare Claims with the appropriate codes, this image provides an overview of several important points about the claims data source, submission process and submission tips.

First, in terms of the data source, Episode Initiators submit claims-based quality measure data in the BPCI Advanced Model via codes on claims – either Payable CPT level I codes or Non-payable QDCs (CPT level II).

When submitting a claim, Episode Initiators need to report relevant codes on their CMS-1500 claim forms.

In terms of helpful tips, please include the denominator billing code(s) when submitting CPTs on the claims. In addition, ensure non-payable QDCs are accurately included in the claims before submission, as Medicare Administrative Contractors, also known as MACs, will typically not allow Episode Initiators to append non-payable QDCs to claims after submission.



Composite Quality Score (CQS) Calculation

Baseline Population, Scaled Scores, and Volume-Weighting

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And now let's spend a few moments discussing the calculation of the Composite Quality Score, also known as the CQS.

Comparing Quality Measure Performance



- CMS developed the CQS to allow comparative assessment across Clinical Episode Categories and Episode Initiators.
- Not all quality measures apply to all Clinical Episode Categories. Quality measures that apply to more Clinical Episodes will be weighted more heavily in the CQS (volume-weighted).
- The Model collects quality performance data for the Model Year and calculates and applies the CQS during the following year's Reconciliation (e.g., Calendar Year (CY) 2024 or MY7 quality performance will be used to calculate CQS, and Participants can see the quality adjustments during the Fall 2025 Reconciliation.)

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The CQS is one component of the payment Reconciliation process, and the Model calculates it from the quality measures. One of the primary purposes of the CQS is to create a comparative assessment for performance across Clinical Episode Categories and Episode Initiators.

This is because BPCI Advanced includes many conditions, and not all quality measures apply to all Clinical Episode Categories. Quality measures that apply to more Clinical Episodes will be volume-weighted more heavily in the CQS.

The Model calculates and applies the CQS during Reconciliation, a year after the Model Year ends.

When we describe how CMS aggregates the quality measures data to calculate the CQS, it is important to note that there is one process for ACHs and one process for PGPs. We will explore this difference in a moment. But first, let's talk a bit about the concept of "baselining measures."

Baselining Measures

- When calculating quality performance and improvement, the Model takes the comparison population (cohort) from the baseline year and calculates percentile ranges for each measure.
- These percentile ranges form the basis of the scaled scores.
- For example, if an Episode Initiator's score of 71% in MY7 is equivalent to the 80th percentile in their cohort during the baseline period, their scaled score for that measure will be 80.

Measure baseline* population includes the following cohorts:

Cohort	Baseline Population
National-level (for most hospital-level quality measures)	All BPCI Advanced-eligible ACHs nationwide where this quality measure applies
Model-level (for Episode Initiator-level quality measures)	All BPCI Advanced Episode Initiators who are using this quality measure
Registry-level (for registry-submitted quality measures)	All ACHs in the registry database who report this quality measure

*For Applicants joining the Model in MY7, the baseline period will be CY 2023 for all quality measures, except for Episode Initiator-level quality measures, for which the baseline period will be CY 2024.

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When calculating quality performance and improvement, the BPCI Advanced Model first identifies the comparison population, otherwise known as the cohort, and the baseline year for reference. The Model then calculates percentile ranges for each quality measure.

These percentile ranges form the basis of the scaled scores that underlie the CQS.

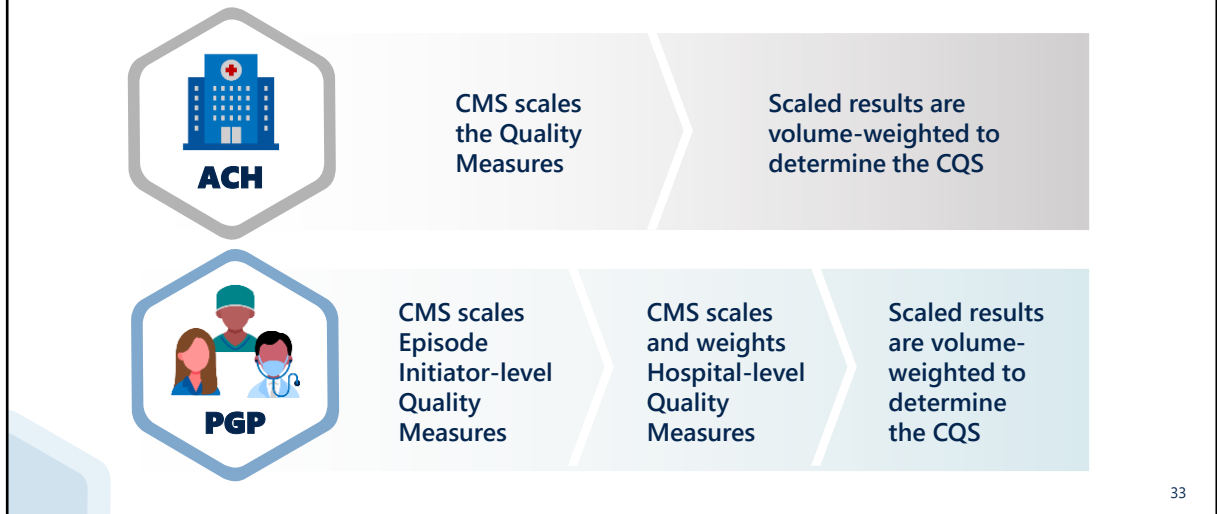
For example, if an Episode Initiator's score of 71% in Model Year 7 is equivalent to the 80th percentile in their cohort during the baseline period, their scaled score for that measure will be 80.

On the right, you can see there are three types of baseline populations:

- There are national-level measures, which include all BPCI Advanced-eligible hospitals nationwide where the quality measure applies.
- There are Model-level measures that are limited to just the Episode Initiators using the quality measure.
- And there are registry-level measures, which include all hospitals in the registry (which can be close to a nation-wide comparison).

For Applicants joining the Model in Model Year 7, the baseline period will be CY 2023 for all quality measures, except for Episode Initiator-level quality measures, for which the baseline period will be CY 2024.

Generating the CQS



For ACHs, there are two steps involved. First, CMS scales the ACH's quality measures. Then, those scaled results are volume-weighted based on the Clinical Episodes a Participant triggered, to determine the CQS.

For PGPs, there are three steps involved. First, CMS scales the Episode Initiator-level quality measures. Then, CMS scales and weights the Hospital-level quality measures based on the Clinical Episodes a Participant triggered. Finally, those scaled results are volume-weighted to determine the CQS.

Notice that, while the number of steps differs, both ACHs and PGPs follow the same concept, where CMS first scales the results, then volume weights them. The difference is that CMS breaks out the scaling for PGPs into two parts.

The Model incorporates the CQS score into the Reconciliation process to determine payment. Reconciliation is based on comparing all non-excluded Medicare Fee-for-Service expenditures against the final Target Price. The resulting dollar amount may be positive or negative. The Net Payment Reconciliation Amount (or NPRA) is the payment by CMS to the Participant. The Repayment Amount is the payment by the Participant to CMS. The Model adjusts NPRAs and Repayment Amounts based on quality performance.

Sample Participant in the Cardiac Care CESLG

- Reporting for the Acute Myocardial Infarction CEC uses the Alternate Quality Measures Set.
- Reporting for the Cardiac Arrhythmia and Congestive Heart Failure CECs uses the Administrative Quality Measures Set.

Clinical Episode (# triggered)	Quality Measure	Administrative Quality Measures Set	Alternate Quality Measures Set
Acute Myocardial Infarction (300)	Advance Care Plan		X
	All-Cause Readmissions		X
	3-Item Care Transition Measure		X
	Defect Free Care for AMI		X
Cardiac Arrhythmia (400)	Advance Care Plan	X	
	All-Cause Readmissions	X	
	CMS Patient Safety Indicators- CMS PSI 90	X	
Congestive Heart Failure (100)	Advance Care Plan	X	
	All-Cause Readmissions	X	
	CMS Patient Safety Indicators- CMS PSI 90	X	

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To understand the CQS concept more clearly, let's look at a sample Participant in the Cardiac Care CESLG. Here we see the three Clinical Episode Categories associated with the Cardiac Care CESLG. In this example, the Acute Myocardial Infarction Clinical Episode Category uses the Alternate Quality Measures Set, while the Cardiac Arrhythmia and Congestive Heart Failure Clinical Episode Categories use the Administrative Quality Measures Set.

Sample Participant in the Cardiac Care CESLG (cont.)

Quality Measure	Applicable Clinical Episodes	Normalized Weight
Advance Care Plan	800	~0.27
All-Cause Readmissions	800	~0.27
3-Item Care Transition Measure	300	~0.1
Defect Free Care for AMI	300	~0.1
CMS Patient Safety Indicators- 90	800	~0.27
TOTAL:	3,000	1.00
Advance Care Plan:	800/3,000	=~0.27

- **Applicable quality measures:**
 - Advance Care Plan
 - Hospital-Wide All-Cause Unplanned Readmissions
 - 3-Item Care Transition
 - Defect Free Care for AMI
 - CMS Patient Safety Indicators – CMS PSI 90
- **CMS calculates a normalized weight for each quality measure, based upon the volume of triggered Clinical Episodes.**
- **In this example, Advance Care Plan counts for 27% of the CQS.**

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The applicable Quality Measures for this sample Participant are noted in the table. They include Advance Care Plan, the Hospital-Wide All-Cause Unplanned Readmission Measure, 3-Item Care Transition Measure, Defect Free Care for AMI, and the CMS Patient Safety Indicators – CMS PSI 90.

Let's say the Participant triggered 300 AMI episodes, 400 cardiac arrhythmia episodes, and 100 heart failure episodes. The ACP, readmissions, and CMS PSI 90 quality measures apply to all of them, so 300 plus 400 plus 100 equals 800. Meanwhile, the 3-Item Care Transition and Defect Free Care for AMI quality measures only apply to the 300 AMI episodes.

CMS calculates a normalized weight for each quality measure, based upon the volume of triggered Clinical Episodes. You can see how ACP, with 800 episodes, divided by a total of 3,000 episodes, results in a weight of 27% in the CQS.



Now, just a few closing thoughts as we end the presentation.

Key Takeaways

- Quality measures in BPCI Advanced promote improvements in care redesign and adjusts Reconciliation Amounts based on performance.
- Quality measures are specific to Clinical Episode Categories, and the Model provides two options to Participants: the Administrative Quality Measures Set and the Alternate Quality Measures Set.
- Participants make the selection of quality measures at the Episode Initiator level, in the Participant Profile before the start of each Model Year.
- Participants submit data through a mix of claim codes, registry reporting, or both.
- The Composite Quality Score (CQS) aggregates performance and takes Clinical Episode volumes into account.
- The Model calculates and applies the CQS during the Fall Reconciliation cycle after the Model Year ends.

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In summary:

- Quality measures in BPCI Advanced promote improvements in care redesign and adjusts Reconciliation Amounts based on performance.
- Quality measures are specific to Clinical Episode Categories, and the Model provides two Quality Measures Set options to Participants: the Administrative Quality Measures Set and the Alternate Quality Measures Set.
- Participants make the selection of quality measures at the Episode Initiator level, in the Participant Profile before the start of each Model Year.
- Participants submit data through a mix of claim codes, registry reporting, or both.
- The Composite Quality Score aggregates performance and takes Clinical Episode volumes into account.
- And lastly, the Model calculates and applies the CQS during the Fall Reconciliation cycle after the Model Year ends.

Additional Resources



The BPCI Advanced webpage contains a wealth of documents to support Model Participants

<https://innovation.cms.gov/innovation-models/bpci-advanced>

1
[Model
Overview Fact
Sheet MY6](#)

2
[MY6
Administrative
QM Fact Sheet
Package](#)

3
[MY6
Alternate QM
Fact Sheet
Package](#)

4
[MY6 BPCI
Advanced Clinical
Episodes to
Quality Measures
Correlation
Table](#)

MY7 quality measure documents will be made available in Fall 2023, prior to the deadline for making selections for MY7

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The BPCI Advanced webpage contains a wealth of supplemental materials to support Model Participants.

This slide provides links to several of these resources, which include the Model Year 6 Overview Fact Sheet, Administrative and Alternate Quality Measures Sets, and the BPCI Advanced Clinical Episodes to Quality Measures Correlation Table for Model Year 6 to name just a few.

We invite you to visit the BPCI Advanced webpage for more information: [BPCI Advanced | CMS Innovation Center](#).