Quality Methodology

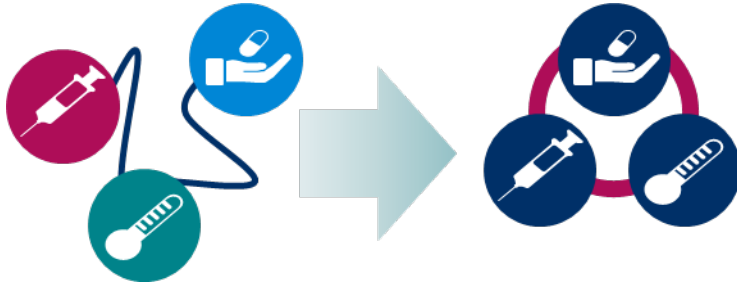*Center for Medicare and Medicaid Innovation (CMS Innovation Center)*

August 2018

Webcast Outline

- BPCI Advanced Overview

- Quality Measurement

- Application of Quality Measures
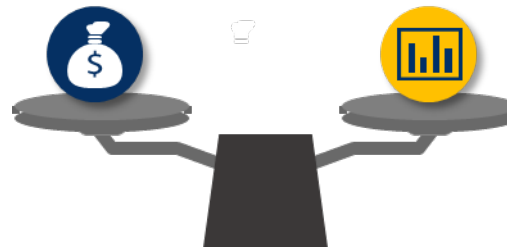
- Summary

BPCI Advanced Overview

BPCI Advanced Tests a Different Payment Approach

Shifts emphasis from **individual services** towards a coordinated **Clinical Episode**

Establishes an "**accountable party**"

Clinical Episodes are assessed on the **quality and cost** of care

Why Bundled Clinical Episodes?

Promotes a patient-centered approach to care by:

Employing Clinical Episodes that are clinically intuitive, concrete, and actionable

Applying lessons learned from Bundled Payments for Care Improvement (BPCI) initiative

Providing important Advanced Alternative Payment Model (Advanced APM) and Merit-Based Incentive Payment System (MIPS) APM opportunities for specialty physicians

How is BPCI Advanced Different Than BPCI?

- **Streamlined design**
  - One Model, all 90 day episodes
  - Single risk track
  - Payment is tied to performance on clinically relevant quality measures
  - Target Prices are largely set in advance

- Greater focus on **physician engagement and learning**

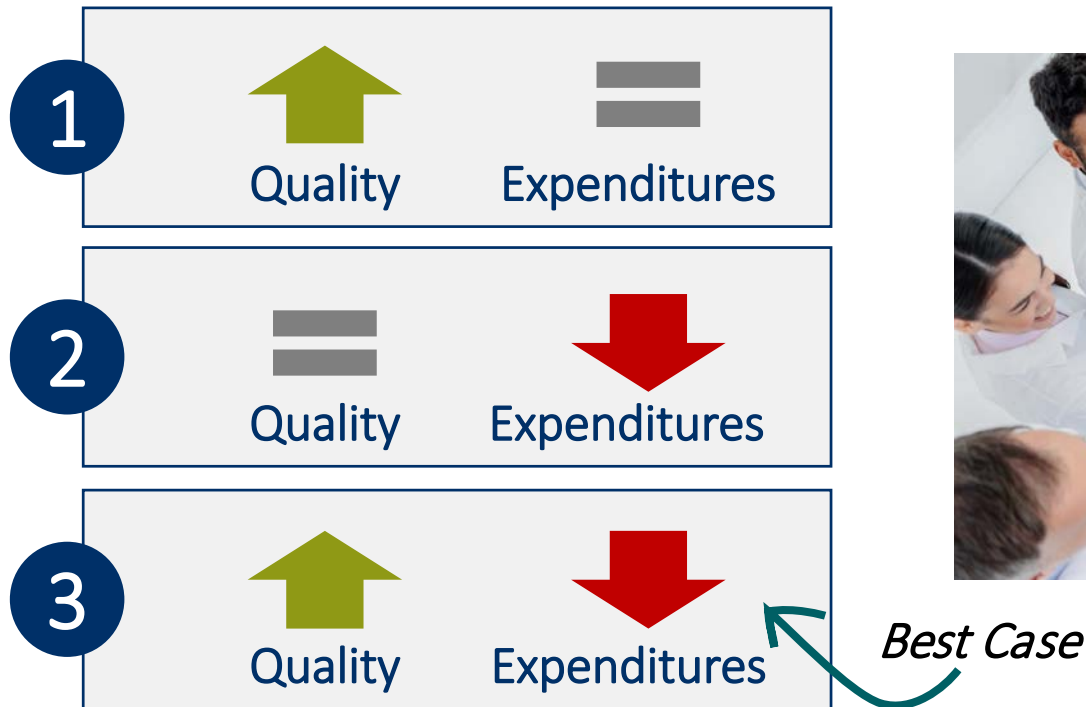- Designated as an **Advanced APM** under the Quality Payment Program

Quality Measurement

The CMS Innovation Center

The Innovation Center tests innovative payment and service delivery models that are intended to reduce expenditures while preserving or enhancing quality.

1 ⬆️ Quality   ═ Expenditures

2 ═ Quality   ⬇️ Expenditures

3 ⬆️ Quality   ⬇️ Expenditures   *Best Case*

Premise of Value
Value = Expenditures *and* Quality

- The Positive or Negative Total Reconciliation Amount will be adjusted based on **quality performance**

- The adjustment is limited to a maximum of 10% in 2018 and 2019

How Does the Quality Payment Program Benefit Clinicians and Patients?

Clinicians

- Streamlines reporting
- Standardizes measures (evidence-based)
- Eliminates duplicative reporting which allows clinicians to spend more time with patients
- Promotes industry alignment through multi-payer models
- Incentivizes care that focuses on improved quality outcomes

Patients

- Increases access to better care
- Enhances coordination through a patient-centered approach
- Improves results

Quality Measures Correlation to Clinical Episodes Model Years 1 & 2

Quality Measure	Guidance	Applicable Clinical Episode Categories
All-cause Hospital Readmission Measure	NQF #1789 QPP #0458	All Inpatient and Outpatient Clinical Episodes
Advance Care Plan*	NQF #0326 QPP #047	All Inpatient and Outpatient Clinical Episodes
Hospital-Level Risk-Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)	NQF #1550	• Double Joint Replacement of the Lower Extremity: MS-DRGs: 461, 462 • Major Joint Replacement of the Lower Extremity: MS-DRGs: 469, 470
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Coronary Artery Bypass Graft Surgery (CABG)	NQF #2558	CABG: MS-DRGs: 231, 232, 233, 234, 235, 236
Excess Days in Acute Care after Hospitalization for Acute Myocardial Infarction (AMI)	NQF #2881	AMI: MS-DRGs: 280, 281, 282
CMS Patient Safety Indicators	NQF #0531	• All Inpatient and Outpatient Clinical Episodes Clinical Episodes • The CMS PSI 90 will variably apply to individual clinical episodes. Performance on this measure is specific to the clinical episode. (Only included ones that are available)

*NQF-endorsed at Physician level; others lacking asterisk are endorsed at the Hospital level.

Quality Measures Correlation to Clinical Episodes Model Years 1 & 2

Quality Measure	Guidance	Applicable Clinical Episode Categories
Perioperative Care: Selection of Prophylactic Antibiotic: First or Second Generation Cephalosporin*	NQF #0268; QPP #021	Back and Neck Except Spinal Fusion (Inpatient and Outpatient)[2] MS-DRGs: 518, 519, 520; HCPCS: 62287, 63005, 63011, 63012, 63017, 63030, 63040, 63042, 63045, 63046, 63047, 63056, 63075
		Cervical Spinal Fusion: MS-DRGs: 471, 472, 473
		Combined Anterior Posterior Spinal Fusion: MS-DRGs: 453, 454, 455
		CABG: MS-DRGs: 231, 232, 233, 234, 235, 236
		Double Joint Replacement of the Lower Extremity: MS-DRGs: 461, 462
		Hip and Femur Procedures Except Major Joint: MS-DRGs: 480, 481, 482
		Lower Extremity and Humerus Procedure Except Hip, Foot, Femur: MS-DRGs: 492, 493, 494
		Major Bowel Procedure: MS-DRGs: 329, 330, 331
		Major Joint Replacement of the Lower Extremity: MS-DRGs: 469, 470
		Major Joint Replacement of the Upper Extremity: MS-DRG: 483
		Cardiac Valve: MS-DRGs: 216, 217, 218, 219, 220, 221, 266, 267

*NQF-endorsed at Physician level; others lacking asterisk are endorsed at the Hospital level.

Quality Measures Submission

- The Five Inpatient Quality Reporting Measures will be calculated by CMS from Administrative Claims (#1789; #1550; #2558; #2881; #0531).

- The Perioperative Care (#0268) measure will be calculated from MIPS QCDR submission.

- The Advance Care Plan (#0326) will be calculated based on submitted claims, from ANY Physician or Advanced Practice Provider (regardless of BPCI Advanced participation) for the episode time period and nine months prior.

- Performance data is calculated based on Calendar Year data beginning with CY 2019.
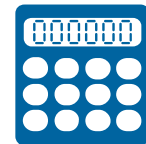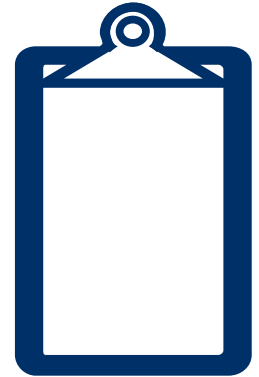
Quality Data Timeline

- The first two Performance Periods are a staggered approach where quality performance is accrued but not initially applied

| Performance Period 1 (10/1/18 - 6/30/19) | Performance Period 2 (7/1/19 - 12/31/19) |

| Model Year 1 Oct. 1, 2018 - Dec. 31, 2018 | Model Year 2 Jan. 1, 2019 - Dec. 31, 2019 | Model Year 3 Jan. 1, 2020 - Dec. 31, 2020 |

| 2018 | Jan. 1, 2019 | July 1, 2019 | Jan. 1, 2020 | July 1, 2020 |

Benchmark data based on CY 2017

Performance Period

Adjustments for PP1 & PP2
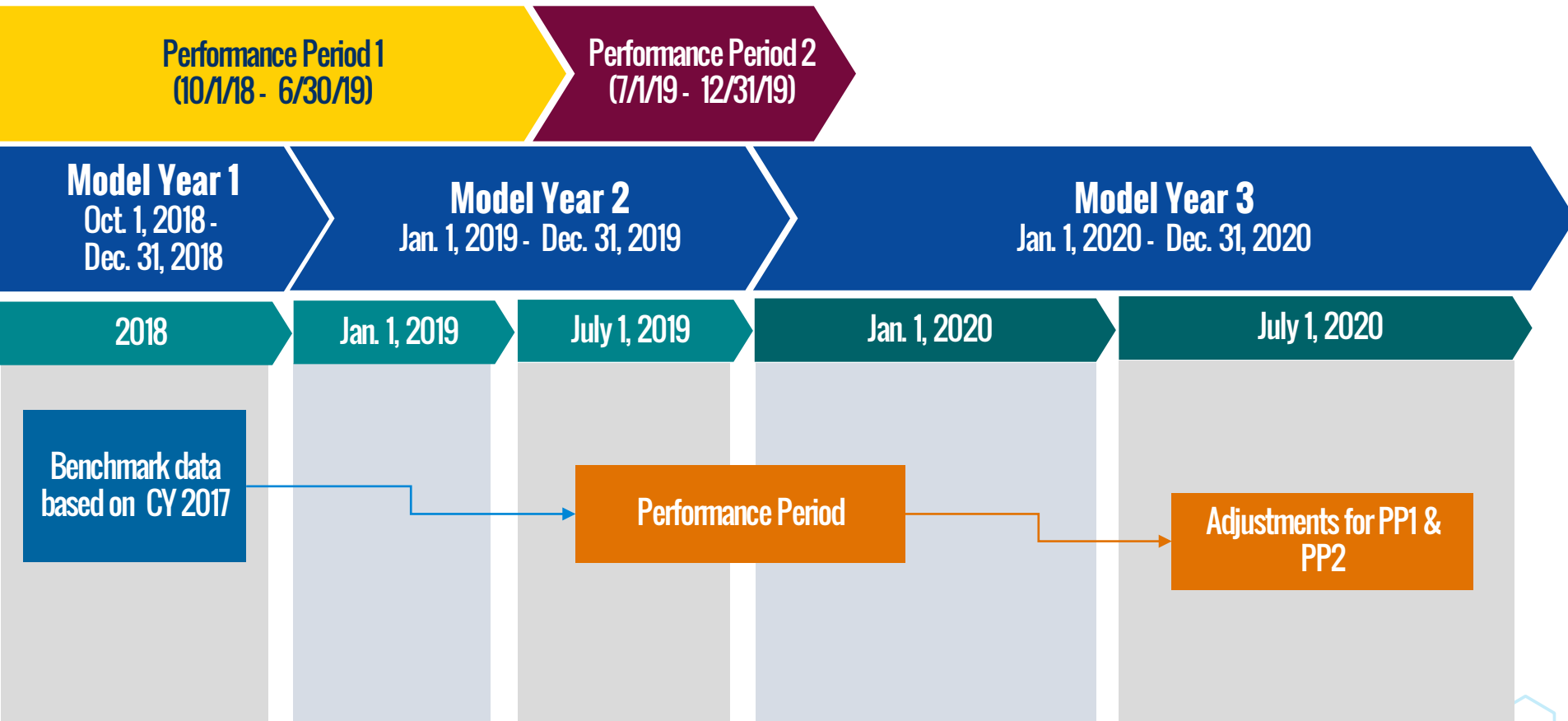
Quality Measures: Model Years 3 – 6

Will include **claims-based measures through 2020**

Additional measures with varying reporting mechanisms may be added thereafter

CMS Plans to Refine Measures for Model Year 3 (2020)

The Innovation Center is working with clinicians to refine the quality measures aligned with the model.

Aspirational Goals:
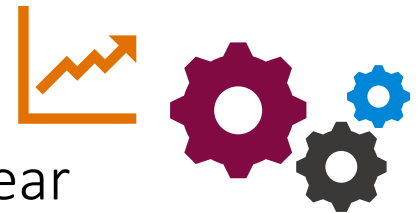
- Measures should be evidence based and have a clear relationship to quality;

- Measure sets should be timely, actionable, and should reflect care delivered within the model;

- Measure selection should minimize participant burden;

- Data are readily available for incorporation into the model.

Application of Quality Measures

Quality Measure Performance

Positive or Negative Reconciliation Amount

EI #1 — CABG — Quality — Clinical Episode Performance

Compared to

EI #2 — CABG — Quality — Clinical Episode Performance
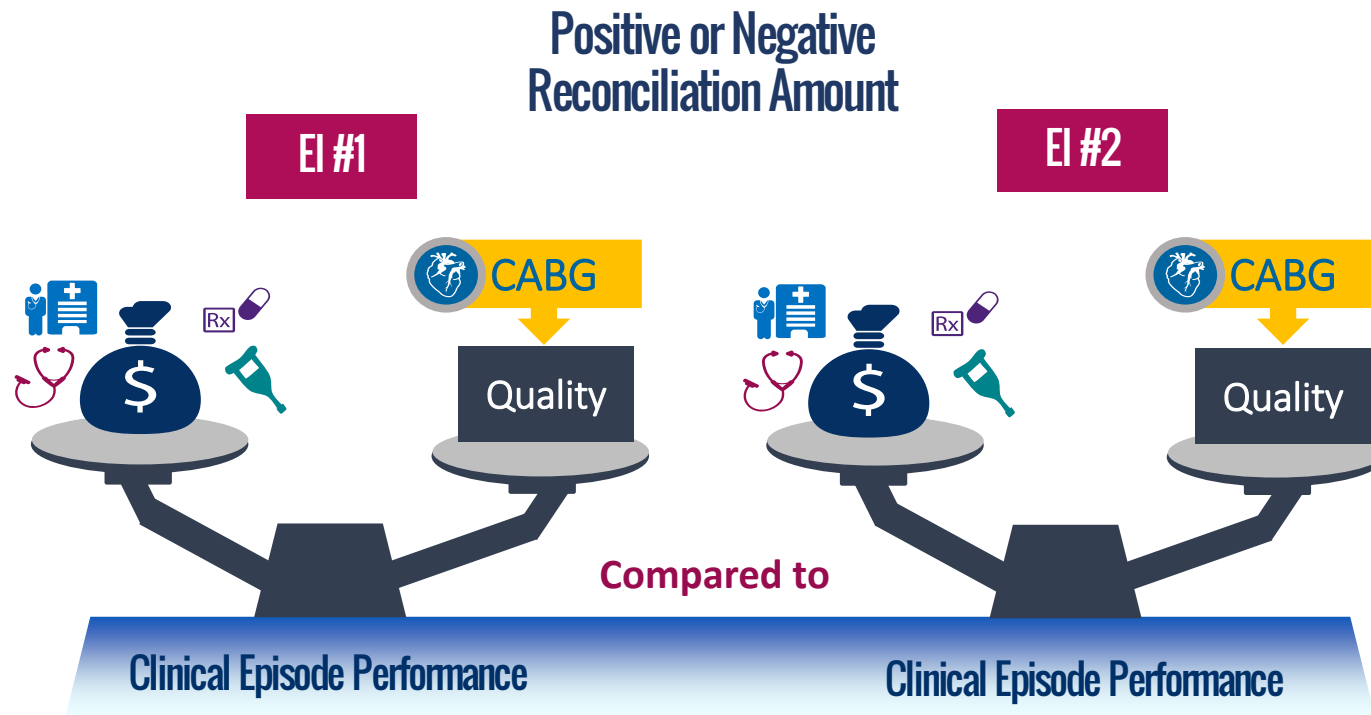
Clinician Tip

- Not all of the measures apply to all of the Clinical Episodes.
- Quality measure performance is only compared across the same clinical episodes.

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Quality Measures Assessed by Clinical Episode

- Performance is relative to peers
- For each Quality Measure, raw data is converted into scaled scores using deciles
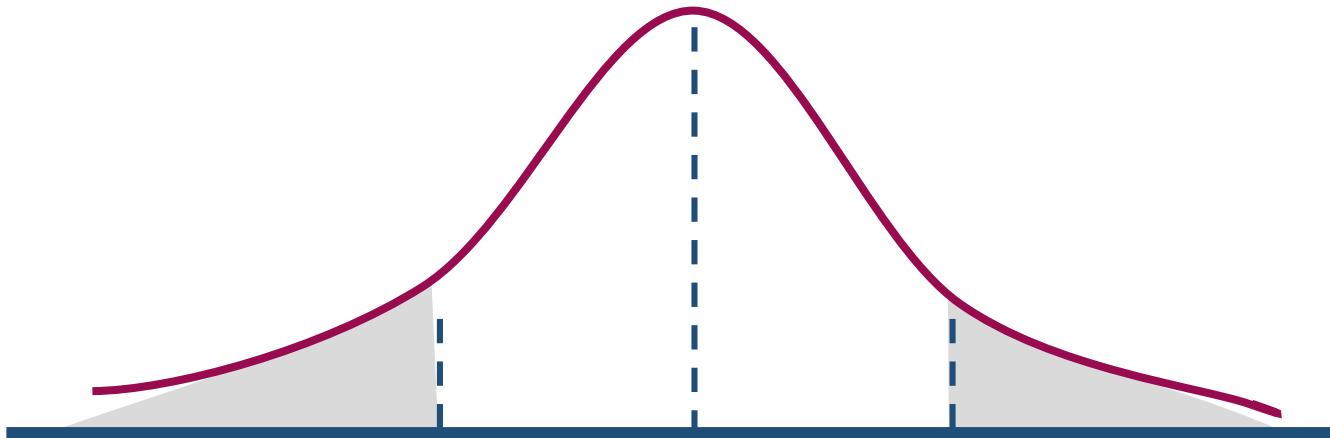
Clinical Episode Quality Scores are Combined into a Composite Quality Score (CQS)

Composite Quality Score is Calculated at the Episode Initiator Level

Episode Initiator (PGP/ACH)

62

Quality Score is Calculated at the Clinical Episode Level

COPD	CHF	TKA	Sepsis
60	40	80	70

20
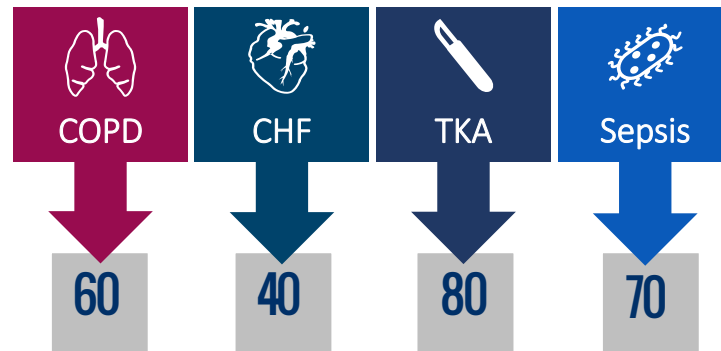
Composite Quality Score (CQS) Converted to CQS Adjustment Percentage

Composite Quality Score
0.67

→ Adjustment Percentage
3%
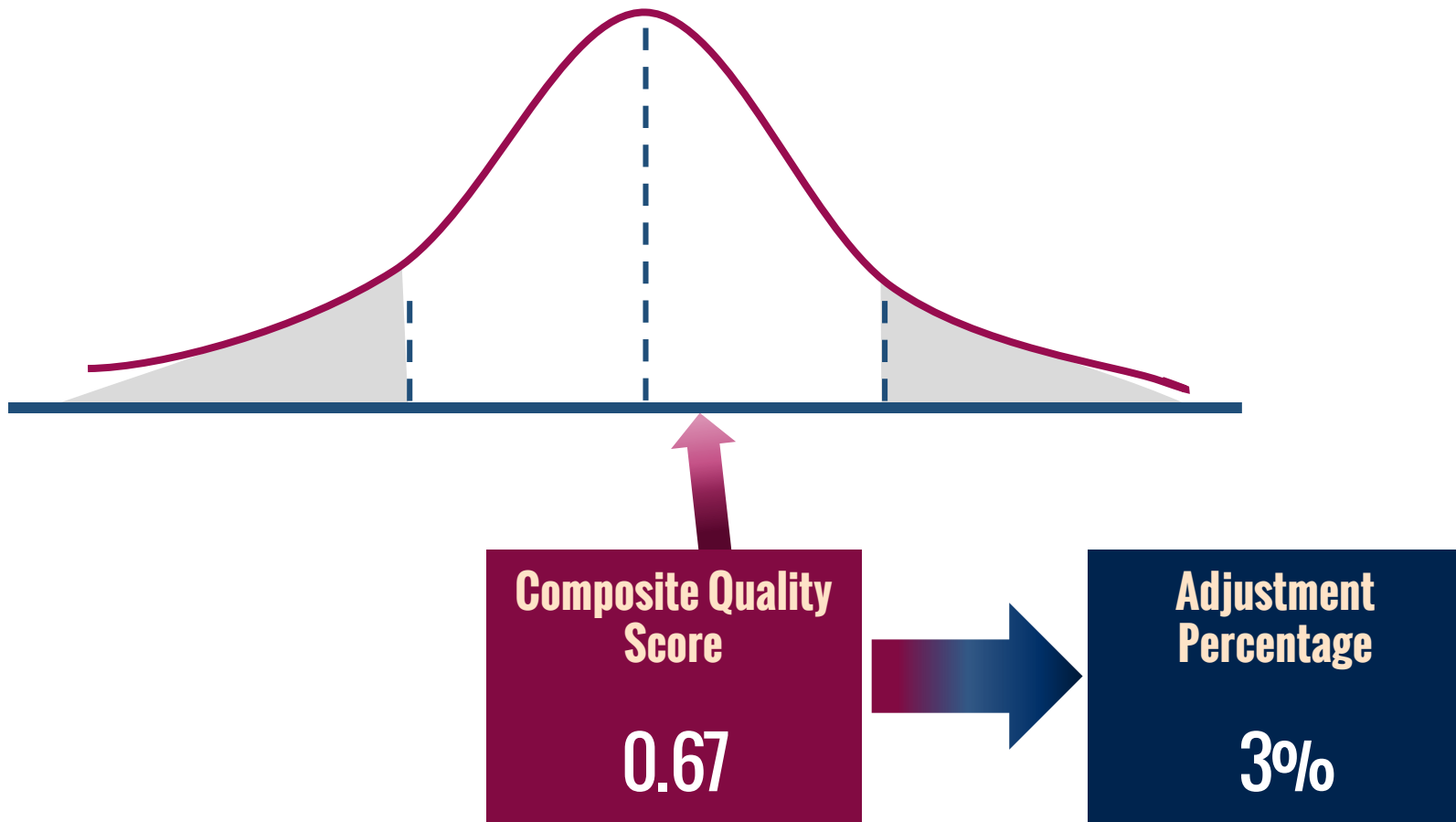
Application of Quality Measures

Payment Adjustment for Quality

Step 1

For each Quality Measure, convert raw data into scaled scores based on national cohort comparison by decile. Apply minimum observation rule to each measure for each Episode Initiator, replacing missing values with 50th percentile values

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Step 2
Roll up scaled quality points into a quality score at the Clinical Episode level

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Roll up scaled quality points into a quality score at the Clinical Episode level

Step 3
Roll up quality scores from individual Clinical Episodes into a Composite Quality Score at the Episode Initiator level

Payment Adjustment for Quality

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Step 2
Roll up scaled quality points into a quality score at the Clinical Episode level

Step 3
Roll up quality scores from individual Clinical Episodes into a Composite Quality Score at the Episode Initiator level

Step 4
Assign each Episode Initiator a CQS Adjustment Amount

Payment Adjustment for Quality (Continued)

Step 5 For each Episode Initiator, multiply the Total Positive/Negative Reconciliation Amount by the corresponding CQS Adjustment Amount to find the Net Payment Reconciliation Amount or Repayment Amount for Non-Convener Participants.

Payment Adjustment for Quality (Continued)

Step 5

For each Episode Initiator, multiply the Total Positive/Negative Reconciliation Amount by the corresponding CQS Adjustment Amount to find the Net Payment Reconciliation Amount or Repayment Amount for Non-Convener Participants.

Step 6

For Convener Participants: Combine Net Payment Reconciliation Amounts or Repayment Amounts for Episode Initiators.

Payment Adjustment for Quality (Continued)

Step 5 For each Episode Initiator, multiply the Total Positive/Negative Reconciliation Amount by the corresponding CQS Adjustment Amount to find the Net Payment Reconciliation Amount or Repayment Amount for Non-Convener Participants.

Step 6 For Convener Participants: Combine Net Payment Reconciliation Amounts or Repayment Amounts for Episode Initiators.

Step 7 Finalize Net Payment Reconciliation Amount or Repayment Amount, notify Participant

Step 1: Scale Quality Scores by Decile

- For each Quality Measure, convert raw data into scaled scores based on national cohort comparison by decile.

CABG

Quality Measure	Actual Score	Percentile	Scaled Score
All Cause Readmission	20	48	50
Advanced Care plan	89	61	60
CMS Patient Safety Indicators	78	40	40
RSMR CABG	1.5	72	70
Perioperative Antibiotic	50	50	50

Step 2: Combine Scaled Quality Measure Scores into a Quality Score by Clinical Episode

CABG

Quality Measure	Scaled Score
All Cause Readmission	50
Advanced Care Plan	60
CMS Patient Safety Indicators	40
RSMR CABG	70
Perioperative Antibiotic	50

Quality Score
54

Scaled Quality Measure scores are combined for each Clinical Episode into a Quality Score

- Measures are weighted equally
- Quality Score is the mean of individual Quality Measure scores

31

Step 3: Individual Clinical Episode Quality Scores calculated as a Composite Quality Score

CORE Quality Measures

1. All Cause Readmission
2. Advanced Care Plan
3. CMS Patient Safety Indicators

CE Specific Quality Measures

1. RSMR CABG
2. Perioperative Antibiotic

EI #1: ACH

CHF

1. All Cause Readmission
2. Advanced Care Plan
3. CMS Patient Safety Indicators

CABG

1. All Cause Readmission
2. Advanced Care Plan
3. CMS Patient Safety Indicators
4. RSMR CABG
5. Perioperative Antibiotic

Step 3, Continued: Clinical Episode Quality Scores calculated as a Composite Quality Score

CHF (n = 30)

Quality Measure	Scaled Score
All Cause Readmission	40
Advanced Care plan	90
CMS Patient Safety Indicators	70

CABG (n = 20)

Quality Measure	Scaled Score
All Cause Readmission	50
Advanced Care plan	60
CMS Patient Safety Indicators	40
RSMR CABG	70
Perioperative Antibiotic	50

EI #1: ACH
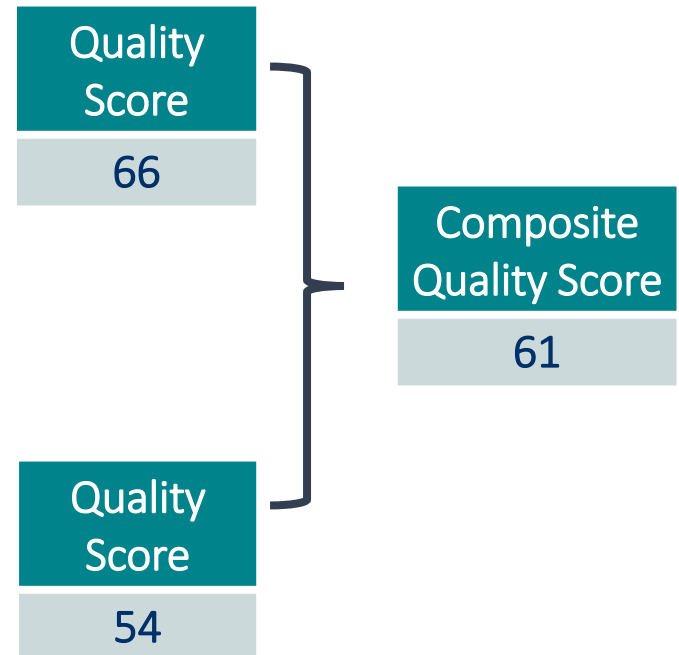
Quality Score
66

Quality Score
54

Composite Quality Score
61

Step 3, Continued : Clinical Episode Quality Scores calculated as a Composite Quality Score

CHF (n = 50)

ACH #1 (n=12)	ACH #2 (n= 19)	ACH #3 (n=19)	Weighted Hospital
Quality Score	Quality Score	Quality Score	Quality Score
61	50	70	61

CABG (n = 70)

ACH #1 (n=20)	ACH #2 (n=35)	ACH #3 (n=15)	Weighted Hospital
Quality Score	Quality Score	Quality Score	Quality Score
20	70	66	55

EI #2: PGP

Composite Quality Score
57

Step 4: Assign a CQS Adjustment Amount

CQS

100 ►
80 ► ← **Participant A = 80**
60 ► ← **Participant B = 57**
40 ►
20 ►
0 ►

Percent Adj. to NPRA

100% ► ← **Participant A = 98% of NPRA**
← **Participant B = 95.7% of NPRA**
90% ►
80% ►
70% ►
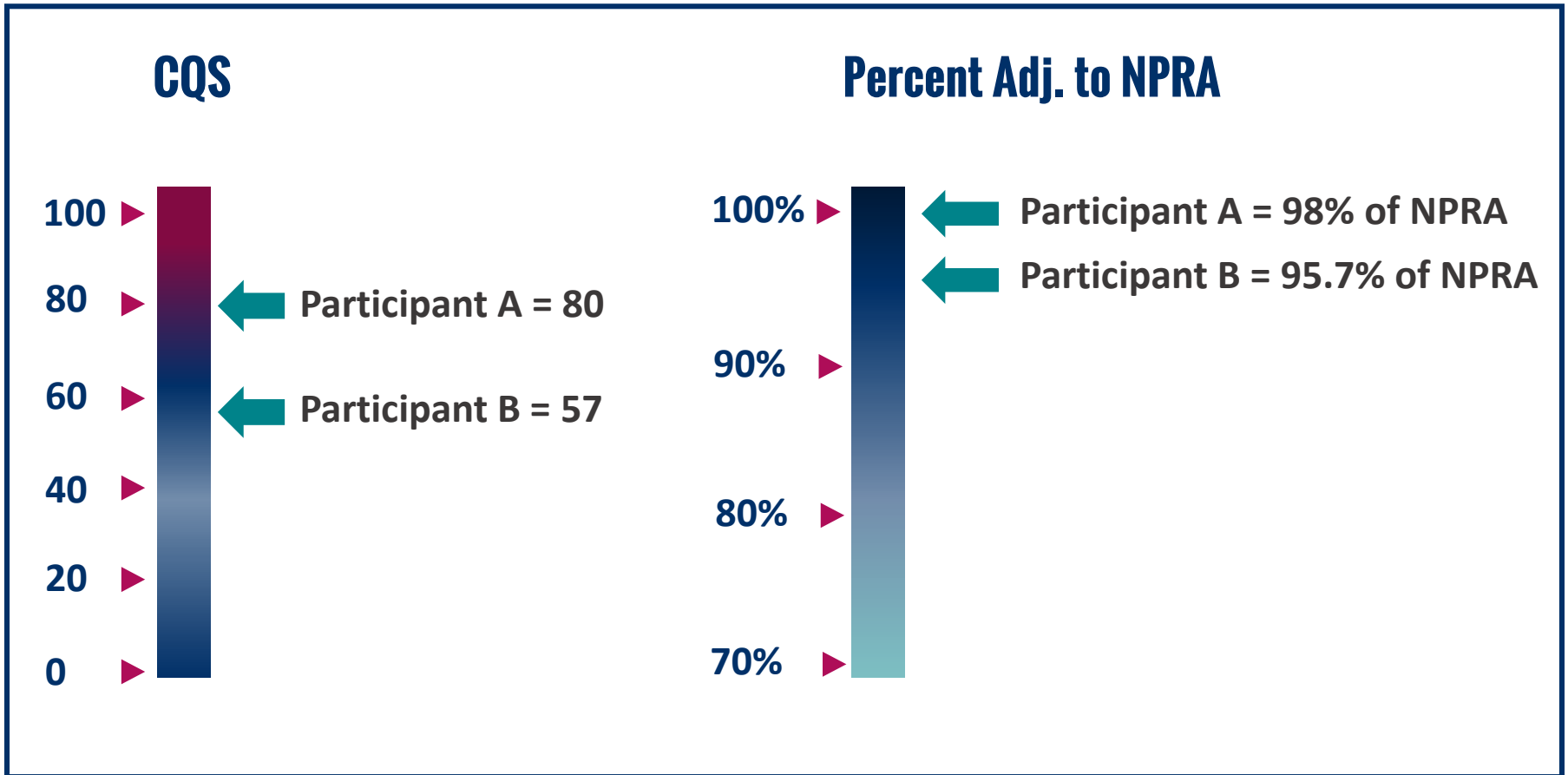
Step 4 Continued: Assign a CQS Adjustment Amount

CQS

100 ►
80 ► ◄ **Participant A = 80**
60 ► ◄ **Participant B = 57**
40 ►
20 ►
0 ►

Percent Adj. to NNRA

70% ►
80% ►
90% ►
100% ► ◄ **Participant A = 92% of NNRA**
◄ **Participant B = 94.3% of NNRA**

KEY

If an EI exceeds the target price for a clinical episode, it may owe a Net Negative Reconciliation Amount (NNRA).
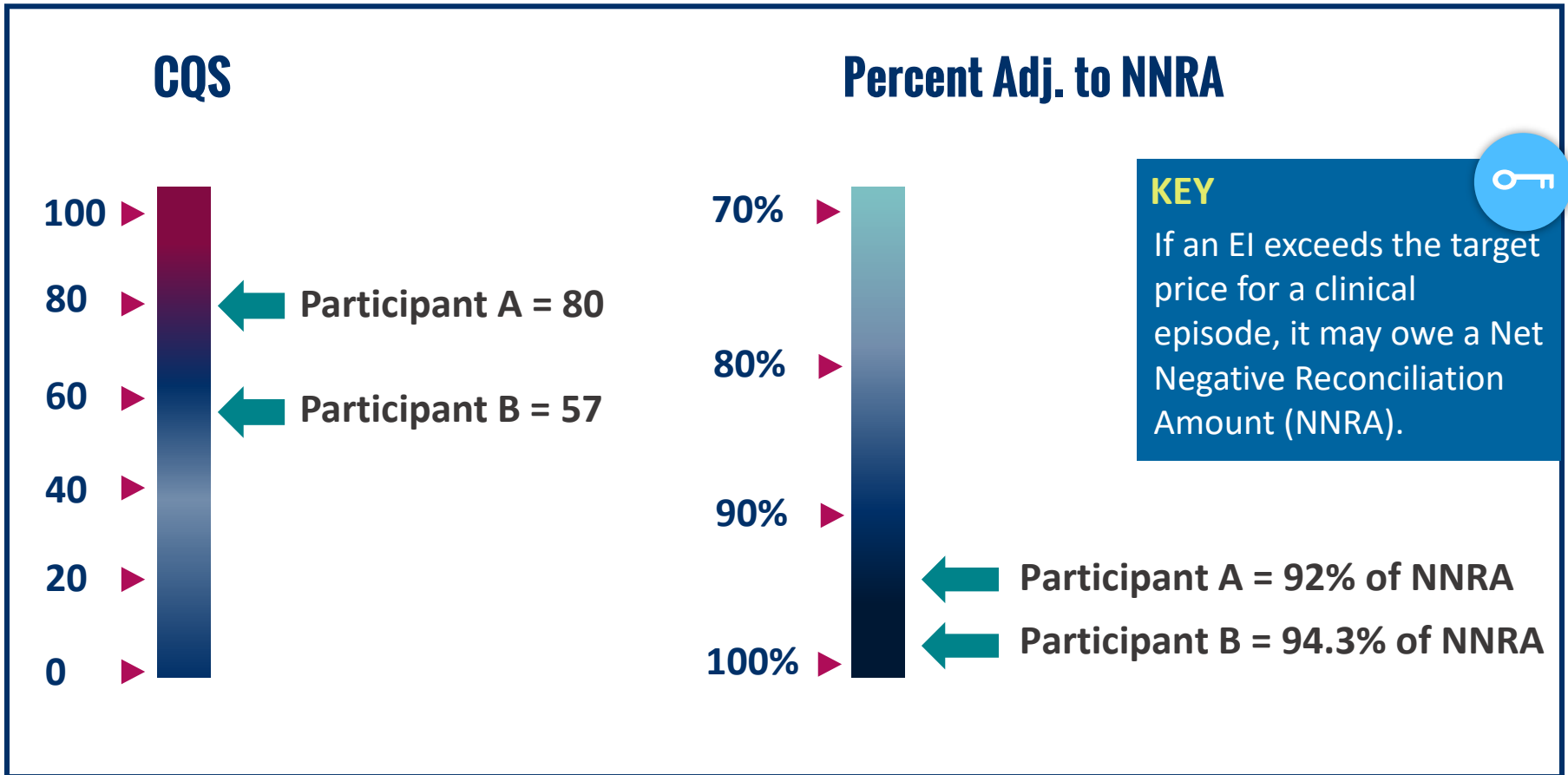
Step 5: Quality Performance Adjustments for Non-Convener Participant (PGP or ACH)

NPRA or Repayment

Episode Initiator (PGP/ACH) #1
Net Payment Reconciliation Amount (NPRA)

Episode Initiator (PGP/ACH) #2
Repayment Amount

Adjust for Composite Quality Score for Positive Reconciliation Amounts

$+ \times .95 =$ Adjusted Positive Total Reconciliation Amount

$- \times .95 =$ Adjusted Negative Total Reconciliation Amount

Composite Quality Score is Calculated for all EIs Clinical Episodes

Quality Score is Calculated at the Clinical Episode level

COPD	CHF	TKA	Sepsis
+$	+$	+$	-$

COPD	CHF	TKA	Sepsis
+$	+$	-$	-$

Step 6: For Convener Participant, Combine Multiple Episode Initiators

CONVENER PARTICIPANT

$30K Net Payment Reconciliation Amount (NPRA)

NPRA or Repayment

Adjust for Composite Quality Score for Positive Reconciliation Amounts

Composite Quality Score is Calculated for all Clinical Episodes

Quality Score is Calculated at the Clinical Episode level

Adjusted Positive Total Reconciliation Amount

+ $52K

Adjusted Negative Total Reconciliation Amount

− $22K

Episode Initiator (PGP/ACH) #1

Episode Initiator (PGP/ACH) #2

COPD CHF TKA Sepsis

COPD CHF TKA Sepsis

Summary

Summary

- BPCI Advanced is a new voluntary Advanced APM and MIPS APM (beginning in 2019)

- Successful Participants (quality, expenditures) may receive additional payments in the form of NPRA

- All measures are derived from administrative claims for Model Years 1 & 2 (2018 & 2019)

- Future Model Years may include different measures drawn from multiple sources

Thank You