Introductions

Steve Farmer, MD, FACC, FASE
- Senior Medical Officer
- CMS Innovation Center
- Practicing Cardiologist

Elizabeth Currier, MBA/MPH, LSSGB, FACMPE
- Physician Practice Administrator
- Senior Improvement Advisor
- CMS Innovation Center
Webcast Outline

- BPCI Advanced Model Concept Review
- Clinical Episodes
- Target Pricing Methodology: Acute Care Hospital (ACH)
- Target Pricing Methodology: Physician Group Practice (PGP)
- Reconciliation
- Summary
- Additional Resources
BPCI ADVANCED MODEL CONCEPT
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 Clinical Episode Bundles?

Promotes a patient-centered approach to care

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

Applies lessons learned from Bundled Payments for Care Improvement (BPCI)

Provides important Advanced Alternative Payment Model (Advanced APM) and Merit-Based Incentive Payment System (MIPS) APM opportunity for specialty physicians
How Does BPCI Advanced Work?

Clinical Episode triggered by either an inpatient (IP) hospital stay (Anchor Stay) or outpatient (OP) procedure (Anchor Procedure)

Clinical Episode attributed to PGP or ACH

Care provided under standard fee-for-service (FFS) payments.

At the end of each Performance Period, quality and cost performance are assessed.
CLINICAL EPISODES
Clinical Episode Length

IP Clinical Episode:
Anchor Stay
+ 90 days beginning the day of discharge

OP Clinical Episode:
Anchor Procedure
+ 90 days beginning on the day of completion of the outpatient procedure
Services Included in the Clinical Episode

- IP or OP hospital services that comprise the Anchor Stay or Anchor Procedure (respectively)
- Physicians’ services
- Other hospital OP services
- IP hospital readmission services
- Long-term care hospital (LTCH) services
- Hospice services
- Inpatient rehabilitation facility (IRF) services
- Skilled nursing facility (SNF) services
- Home health agency (HHA) services
- Clinical laboratory services
- Durable medical equipment (DME)
- Part B drugs
Single list of excluded MS-DRGs apply to Clinical Episodes, which will include 132 MS-DRGs:

- Transplant & Tracheostomy
- Trauma
- Cancer (when cancer is explicitly indicated by MS-DRG)
- Ventricular Shunts
Services Excluded from the Clinical Episode

**Blanket exclusions:**

- Blood clotting factors to control bleeding for hemophilia patients
- New technology add-on payments under the IPPS
- Payments for devices, status indicator H, with pass-through payment status under the OPPS

**Part B services:**

- Excluded only if incurred during an excluded ACH admission or readmission
- BPCI Advanced will not follow the clinically related criteria guiding Part B exclusions used in BPCI
Eligible ACHs

- Not all ACHs may participate in BPCI Advanced
  - Critical Access Hospitals
  - Selected Cancer Hospitals not participating in the Prospective Payment System
  - Inpatient Psychiatric Facilities
  - Hospitals in Maryland
  - Hospitals participating in the Rural Community Hospital demonstration
  - Rural Hospitals participating in the Pennsylvania Rural Health Model

- Hospital is CJR participant
  - CJR episodes take precedence over BPCI Advanced for Major Joint Replacement of the Lower Extremity (MJLRE) Clinical Episodes
  - No MJLRE Target Price will be provided at CJR hospitals
  - CJR hospitals may participate in non-MJLRE Clinical Episodes
Beneficiary Exclusion Criteria

Beneficiaries are excluded if:

• They are covered under United Mine Workers or managed care plans (e.g. Medicare Advantage, Health Care Prepayment Plans, or cost-based health maintenance organizations)

• They are eligible for Medicare on the basis of end-stage renal disease (ESRD)

• They die during the Anchor Stay or Anchor Procedure

• They are not eligible for Medicare Part A, enrolled in Part B for the entire Clinical Episode

• Medicare is not the primary payer
TARGET PRICING METHODOLOGY
ACUTE CARE HOSPITALS (ACHs)
BPCI Advanced Essential Features

1. Encourage both high and low cost providers to participate
2. Reward Participants’ improvement over time
3. Adjust for patient case mix that is outside of providers’ control
4. Allow for trends in Clinical Episode spending by hospital peers
5. Promote Medicare savings while maintaining high quality care
The Hospital’s Benchmark Price accounts for three central factors:

- Patient case-mix
- Historic Medicare FFS expenditures during the ACH’s Baseline Period
- Patterns of spending relative to the ACHs peer group
Patient Case Mix is Accounted for In Multiple Ways

Medicare Severity - Diagnosis Related Group (MS-DRG) and Comprehensive - Ambulatory Procedure Code (C-APC) assignment
• Hospital DRG triggers are stratified by medical severity [e.g., with complication or comorbidity (CC) or with major complication or comorbidity (MCC)]
• Outpatient C-APC triggers are designed to group Clinical Episodes by similar resource use

Patient characteristics
• Demographic characteristics (e.g., age, gender)
• Long-Term Institutional Status
• Dual Eligibility for Medicare and Medicaid
• Hierarchical Condition Categories, Interactions, and counts
• Recent Resource Use
Hierarchical Condition Category (HCC) Coding

Hierarchical Condition Categories (HCC):

- The CMS-HCC model groups individual diagnoses by similar diagnoses and illness severity. Individual HCC categories are used to account for clinical conditions in the BPCI Advanced model.

Clinician Tips

- Code all pertinent HCCs for conditions actively treating
  - Example: An orthopedist need not code for CHF if it is not actively managed during the clinical episode

- All HCC diagnoses recorded in the calendar year are included, regardless of who codes them or where they are coded
  - Example: If another clinician indicates active treatment of CHF within the same 90 days, it will also apply to risk adjustment for the orthopedic episode
Bundled Clinical Episodes Compare Peers on the Basis of the Type and Quantity of Services Provided

Hospital A: Excellent Outcomes

- Patient
- Testing
- Inpatient Days
- Post-acute Care Days
- Readmissions

Low Unit Volumes

Hospital B: Excellent Outcomes

- Patient
- Testing
- Inpatient Days
- Post-acute Care Days
- Readmissions

High Unit Volumes
CMS Standardization Methodology*

- CMS adjustments are **removed** when calculating historical Clinical Episode costs and making comparisons to other ACHs
  - Compares the intensity of services provided, independent of context

- These adjustments are **reapplied** in the final step of setting ACH benchmarks
  - Accounts for context when setting the final target price

The Cost of Providing the Same Service Differs by Context

A Picture of Two Hospitals

<table>
<thead>
<tr>
<th>Suburban Hospital</th>
<th>Urban Academic Medical Center (AMC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ Rent</td>
<td>$$$$ Rent</td>
</tr>
<tr>
<td>$ Labor</td>
<td>$$$$ Labor</td>
</tr>
<tr>
<td>$ Teaching</td>
<td>$$$$ Teaching Costs</td>
</tr>
<tr>
<td>Proportion of Uninsured</td>
<td>Disproportionate Share</td>
</tr>
</tbody>
</table>

CMS adjusts payments for:

- Regional labor costs and practice expenses (i.e., hospital wage indexes and geographic practice cost indexes)
- Graduate Medical Education (GME) and Indirect Medical Education (IME)
- Serving a large population of poor and uninsured [i.e., disproportionate share payments (DSH)]
Cost Alone Does Not Reflect Efficiency

**TOTAL HIP BUNDLE**

Average Cost = $25,000

Suburban Hospital

- **Cost**
- **Efficiency**

Urban AMC

- **Cost**
- **Efficiency**
Patterns of Spending Relative to the ACHs Peer Group

• The Target Price benchmarks ACHs against peer facilities

• Factors considered in identifying ACH peers include:
  • Bed Size
  • Rural / Urban
  • Academic Medical Center Status
  • Safety-net Status
  • Census Division

AMC
Model definition intends to identify tertiary academic medical centers with major teaching and research roles.

Safety Net Status
Designation assigned to ACHs with greater than 60% of patients in dual Medicare – Medicaid status.
Peer Adjusted Trend (PAT) Factor

- The Peer Adjusted Trend (PAT) factor adjusts for persistent differences across ACH peer groups:
  - Trends are projected forward from the baseline period
  - The PAT offers mutual protection to CMS and Participants against systematic changes in treatment costs

Clinician Tip

If all of your peers achieve more efficient care, over time you’ll be held to that same standard
- Example: More efficient use of post-acute care in orthopedic bundles

Conversely if all of your peers start using a new treatment that changes costs and outcomes it will adjust your target price
- Example: New expensive curative treatment
Minimum Volume Requirements

- Hospitals must have more than 40 Clinical Episodes in the baseline period (10 per year, on average), which:
  - Stabilizes Clinical Episode target prices
  - Protects ACHs against outlier cases

Key Point: Hospitals can only participate in Clinical Episodes for which they meet the minimum volume requirement.

Clinician Tip
- Success in the model requires infrastructure investments and practice changes
- At hospitals with low but sufficient volume, participation in multiple Clinical Episodes improves performance stability and cost-effectiveness of infrastructure investments
Extreme Outlier Values are Trimmed to Stabilize Pricing

• Individual Clinical Episodes will have spending capped at the 1st and 99th percentile of national episode spending by MS-DRG or C-APC; called risk cap
  • Limits impact of extremely costly clinical episodes
  • Stabilizes target prices

• The risk cap is applied to Clinical Episodes in both the Baseline Period and the Performance Period
Target Price Definition

The model has multiple aims:

• Improve efficiency, quality, and outcomes

• Preserve the trust fund for current and future generations

CMS Discount is 3% for Model Years 1 & 2
While the concept is simple, the math is complex

- Compound lognormal economic model with multiple calculation stages
- Please see the "BPCI Advanced Pricing Methodology Technical Review Webinar" held on May 17, 2018 for the math. (Available in the BPCI Advanced website)
TARGET PRICING METHODOLOGY
PHYSICIAN GROUP PRACTICES (PGP)
• Physicians may have distinctive practice profiles, informed by:
  • Care philosophy
  • Training / experience
  • Context

• Limited feedback on how quality and cost profiles compare to peers

• PGP benchmark prices are anchored on the ACH where episodes occur, but are adjusted for each PGPs historical experience
  • Adjustment applied for a limited time
  • Allows more physicians to participate
  • Establishes a pathway for practice refinement over time
PGPs and ACHs have different CE Target Prices

**KEY POINTS**
- Limited time PGP adjustment, based on ACH where the episode is triggered
- PGPs will receive unique target prices for each clinical episode at each hospital where they practice.
PGP Risk and Peer Standardized Historical Cost

PGP Weighted Average Cost

\[
\text{PGP Weighted Average Cost} = \frac{(\text{Rural} \times \text{Volume} = 12 \times \text{PGP: } \$20,000)}{12} + \frac{(\text{Urban} \times \text{Volume} = 40 \times \text{PGP: } \$22,000)}{40} + \frac{(\text{AMC} \times \text{Volume} = 20 \times \text{PGP: } \$27,000)}{20}
\]

\[
= \frac{240,000}{72} + \frac{880,000}{400} + \frac{540,000}{400} = \$23,000
\]

PGP Historic Cost: $23k

KEY POINTS
PGP risk and peer standardized historical costs calculated as a weighted average of clinical episode costs for all of the ACHs at which the PGP initiates clinical episodes.
Physician Group Practice (PGP) Offset

- PGP offset measures the PGPs historical costs relative to each ACH at which it initiates Clinical Episodes

Example PGP Offsets

<table>
<thead>
<tr>
<th>Historical Costs Equivalent to ACH</th>
<th>Less Historical Costs than ACH</th>
<th>More Historical Costs than ACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0.9</td>
<td>1.1</td>
</tr>
</tbody>
</table>

KEY POINTS

- Offset requires a minimum of 40 Clinical Episodes during the baseline period
- If baseline volume is insufficient, the ACH Target Price will apply
- If PGP target price is lower than the ACH target price, the PGP Target Price is increased by half its distance from the ACH
MODEL COST PERFORMANCE
Performance Will be Assessed Semi-Annually

• Clinical Episodes will be reconciled based on the Performance Period **in which the episode ends**
• Semi-annual Reconciliation will include two (2) “True-Ups” to allow for claims run-out
Reconciliation Process

Positive or Negative Reconciliation Amount

Determined for each Clinical Episode

All non-excluded Medicare FFS expenditures will be compared against the final Target Price

The resulting dollar amount may be positive or negative

Continued on Next Slide...
Example: Single Episode
Non-Convener Participant (PGP or ACH)

Episode Initiator (PGP/ACH)

Compared to

Actual Expenditures

Target Price

Positive or Negative Reconciliation Amount

TKA

OR

TKA

+ $

- $
All Positive and Negative Reconciliation Amounts will be netted across all Clinical Episodes attributed to an Episode Initiator (EI)

The result is a TOTAL Reconciliation Amount

The TOTAL Reconciliation dollar amount may be Positive or Negative
Example: Multiple Episodes
Non-Convener Participant (PGP or ACH)

Positive or Negative Reconciliation Amount(s)

**Episode Initiator (PGP/ACH) #1**

- **Positive Total Reconciliation Amount**
  - COPD + $ 
  - CHF + $ 
  - TKA + $ 
  - Sepsis - $

**Episode Initiator (PGP/ACH) #2**

- **Negative Total Reconciliation Amount**
  - COPD + $ 
  - CHF + $ 
  - TKA - $ 
  - Sepsis - $
The Positive or Negative Total Reconciliation Amount for an EI is then adjusted based on quality performance, resulting in the Adjusted Positive or Negative Total Reconciliation Amount.

The adjustment is limited to a maximum of 10% in Model Years 1 & 2 (i.e., 2018 & 2019).

A stop loss/stop gain of 20% will apply to the Reconciliation Amount at the EI level.

Continued on Next Slide...
Example: Reconciliation Adjustment
Non-Convener Participant (PGP or ACH)

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

Adjusted Positive Total Reconciliation Amount

\[ \text{NPRA or Repayment} \rightarrow \frac{+ \text{COPD} + \text{CHF} + \text{TKA} - \text{Sepsis}}{.95} = \text{Adjusted Positive Total Reconciliation Amount} \]

Episode Initiator (PGP/ACH) #2
Repayment Amount

Adjusted Negative Total Reconciliation Amount

\[ \text{CE Positive and Negative Reconciliation Amount} \rightarrow \frac{- \text{COPD} + \text{CHF} - \text{TKA} - \text{Sepsis}}{.95} = \text{Adjusted Negative Total Reconciliation Amount} \]
Example: Convener Participant (Multiple PGPs or ACHs)
SUMMARY
Summary

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

• Establishes responsibility for Clinical Episodes

• Successful Participants (quality, cost) may receive additional payments in the form of NPRA

• This simplified presentation of the target pricing methodology highlights core concepts in BPCI Advanced for clinicians and administrators.
Additional Resources - Website

**Document**
- BPCI Advanced Target Price Specifications – Model Years 1 & 2

**Webinar**
- “Pricing Methodology for Model Years 1 & 2 – Technical Review”

More resources related to the BPCI Advanced Model are also available at the website:

https://innovation.cms.gov/initiatives/bpci-advanced