The Mandatory Cardiac Bundled Payments Rule: What CV Leaders Need to Know

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Today’s Presentation

Part II of Our Coverage on CMS’ Final Rule

I. Understand CMS’s Final Rule Expanding Mandatory Bundled Payments

A comprehensive overview of CMS’s final rule expanding bundled payments. Includes a discussion of major program components and key differences between the proposed and final ruling.

II. The Final Mandatory Cardiac Bundling Rule: What CV Leaders Need to Know

An in-depth review of the mechanics of CMS’s cardiac bundled payment model, including how the bundles will be structured and what cardiovascular administrators can do to prepare for success under bundles.
1. The Rise of Bundled Payments

2. Key Components of the Cardiac EPMs

3. Next Steps and Q&A
How Did We Get Here?

Bundling Has Been Building Momentum for Years

Medicare Participating Heart Bypass Demo

1991-1996
• Seven hospitals
• Tested bundled Part A and B payments for two CABG DRGs

Bundled Payment for Care Improvement (BPCI)

2013 – September 30, 2018 end date
• 4 Models, includes medical and surgical cardiac episodes
• First year preliminary results available
• Closed to new participants

CMS Evolution to Cardiac Bundling

Acute Care Episode (ACE) Demo

2009-2012
• 3-years, 5 participants
• Bundled Part A and B payments for nine cardiac DRGs

Cardiovascular a Familiar Target for Quality Measures
• Readmissions Reduction Program includes AMI, HF, CABG
• Hospital-based VBP includes AMI, HF 30-day mortality rates
• AMI, HF 30-Day payment reporting
• AMI, HF excess days metric
The Rise of Mandatory Bundles

A “Tipping Point” in the Movement Away from FFS

CMS’s Aggressive Targets for Transition to Risk

Target Percentage of Medicare Payments Tied to Alternative Payment Models

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>30%</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

Examples of Qualifying Alternative Payment Models

- Medicare Shared Savings Program
- Bundled Payments for Care Improvement Initiative
- Patient-centered medical home models

Major Recent CMS Risk Model Initiatives Emphasis Bundles

- **April 2016**
  - CJR\(^1\) introduces mandatory bundling for THA/TKA\(^2\) in 67 markets across the country

- **June 2016**
  - OCM\(^3\), a physician-led episodic oncology care demo, begins

- **December 2016**
  - CMS finalizes three new EPMs\(^4\) for hip and cardiac episodes


1) Comprehensive Care for Joint Replacement Model.
2) Total hip/total knee arthroplasty.
3) Oncology Care Model.
4) Episodic payment model.

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Overview of the Final Rule

CMS Expands CJR and Launches Two New Models

Advancing Care Coordination Through Episode Payment Models Final Rule

1. Expansion of CJR to include hip/femur repair
   - The final rule adds financial responsibility for SHFFT episodes to hospitals in existing CJR markets

2. First mandatory bundles for cardiac episodes
   - Hospitals in 98 markets responsible for cost and quality outcomes for heart attack and bypass episodes

3. Cardiac rehab incentive payment system
   - CMS establishes a two-tiered incentive payment system to increase utilization of cardiac rehab services

1) Surgical hip/femur fracture treatment.

Source: CMS.gov; Cardiovascular Roundtable research and analysis.
An Uncertain Future for Mandatory Bundling?

Mandatory CMMI Payment Models in the Crosshairs of New Administration

Reviewing CMMI’s Role

- Test new payment and service delivery models
- Evaluate results and advance best practices
- Upon validation and proven cost savings, expand to broader Medicare program

Congress Seeking Control

“The broad powers vested in CMMI, and the agency’s interpretation of that authority, have the potential to further degrade Congress’s lawmaking authority by shifting decision-making away from elected officials into the hands of unelected bureaucrats.”

Representative Tom Price (R-GA)
Chairman of the House Budget Committee

Key CMMI Programs

- Pioneer ACO Model
- Next Generation ACO Model
- Comprehensive ESRD Care Model
- Nursing Home Value-Based Purchasing Demonstration

- Bundled Payments for Care Improvement Initiative
- Vermont All-Payer ACO Model
- CJR and EPM bundled payment models
- Comprehensive Primary Care Plus
- Oncology Care Model

Program Timeline Provides Shelter

Providers Likely to Gain More Clarity Before Key Decision Points

Cardiac EPM Performance Periods from Final Rule

- **2017**: Year 1 starts, July 1, 2017
- **2018**: Year 2 starts, Jan 1, 2018
- **2019**: Year 3 starts, Jan 1, 2019
  - Mandatory downside risk commences
- **2020**: Year 4 starts, Jan 1, 2020
- **2021**: Year 5 starts, Jan 1, 2021

Source: CMS.gov; Cardiovascular Roundtable research and analysis.
Episodic Cost Scrutiny Will Intensify Regardless

Mandate for Managing Long-Term Costs Extends Beyond EPM Rule

Regulators Continue to Push Hospitals from Acute to Episodic Mindset

Pay-for-performance/reporting programs adding episodic value measures
- AMI, HF **excess days in acute care** metrics added to IQR\(^1\) for 2018
- AMI, HF **30-day episodic payment** metrics added to VBP\(^2\) for 2021

Cost/resource use category in MIPS consists of Medicare spending per beneficiary, ten episode-based cost measures

The Time To Start Preparing Is Now
Even in markets that are not chosen for participation, CV leaders should consider this proposal to be a signal that future bundling or episodic payment reform is likely to occur

1) Hospital Inpatient Quality Reporting Program.
2) Hospital Value-Based Purchasing Program.

Source: Cardiovascular Roundtable research and analysis.
1. The Rise of Bundled Payments

2. Key Components of the Cardiac EPMs

3. Next Steps and Q&A
An Overview of the Mandatory Cardiac Bundles

Two CV “Episodic Payment Models” Implemented in CMS Final Rule

Coronary Artery Bypass Graft (CABG)
• MS-DRGs 231-236

Acute Myocardial Infarction (AMI)
• AMI treated medically (MS-DRGs 280-282)
• AMI treated with PCI (MS-DRGs 246-251 with an AMI ICD-CM diagnosis code in the principal or secondary position on the claim)

Episode Timeframe
Index hospitalization to **90-days post-discharge**

Accountable Stakeholders
Hospitals selected for inclusion in the model **financially responsible for both cost and quality** of the entire episode

Implementation Timeline
• Performance Year 1 starts July 1, 2017 (6 months)—**no downside risk**
• Downside risk begins in Year 3, with optional downside risk in Year 2
• Will run for five years, ending Dec. 31, 2021

Source: CMS, innovation.cms.gov/initiatives/epm; Cardiovascular Roundtable research and analysis.
Participants Have Been Chosen

Hospitals in 98 Markets Randomly Selected for Mandatory Participation

Key Elements of Cardiac EPM Market Selection

- 98 markets chosen randomly from 284 eligible MSAs across the country
- Eligible MSAs had more than 75 AMIs per year, more than 75 non-BPCI AMIs per year, and at least 50% of non-BPCI AMIs per year
- MSAs where there is no CABG were still be eligible for inclusion
- AMI and CABG episodes are implemented together
- Hospitals participating in BPCI Models 2 or 4 for EPM CABG/AMI MS-DRGs are excluded from the EPM model for those DRGs for as long as they are participating in BPCI

1,120 hospitals included in selected MSAs for cardiac bundles

Even if your institution does not perform CABG or PCI, if your MSA is selected for inclusion you are still included in the model and are responsible for AMI care episodes

Complete list of selected institutions is available here

1) E.g., if in BPCI Model 2 for CABG but not AMI, will still have to participate in the AMI EPM.

Source: CMS, innovation.cms.gov/initiatives/epm; Cardiovascular Roundtable research and analysis.
Key Changes in the Final Ruling

Mechanics of the Rule Largely Consistent with Proposal

- **Delays Mandatory Downside Risk**
  Pushes back implementation of downside risk to performance year (PY) 3 (January 1, 2019) instead of PY 2; provides the option for downside risk in PY 2 (January 1, 2018) for programs that wish to qualify as an advanced Alternative Payment Model under MACRA

- **Revises the AMI Inpatient to Inpatient Transfer Policy**
  AMI episodes will now be cancelled and a new one established upon admission to the hospital accepting the transfer; there will no longer be ‘chained anchor hospitalizations’.

- **New Voluntary CABG Quality Metric**
  Programs may receive bonus points in the composite CABG quality score for submitting the STS Composite Score.

- **Greater Protections for Low-Volume Hospitals**
  “EPM Volume Protection Hospitals” (hospitals where the volume of EPM episodes from CY2013--CY2015 is at or below the 10th percentile for hospitals located in the MSAs eligible for selection into that specific EPM) will have lower stop-loss limits under the rule, meaning they will not have to pay back as much if they exceed the threshold.

- **More Flexibility for Beneficiary Engagement in the CR Incentive Payment Model**
  FFS programs (i.e., those not in the EPMs) in the Cardiac Rehab Incentive Payment Model can provide similar beneficiary engagement activities as EPMs.
Key Components of the Cardiac EPM Rule

- Services included in the cardiac EPM episodes
- Transfer rules
- Retrospective payment model mechanics
- Quality measures
- Gainsharing opportunities
- Regulatory waivers for EPM participants
- Qualification for Advanced Alternative Payment Model
- Cardiac rehab incentive payment system
Majority of Part A, Part B Payments Included

**INCLUDED IN BUNDLE**

All related services/items paid under Part A or B including acute admission through 90-days post-discharge

- Inpatient hospital services (paid under IPPS)
- Outlier payments
- Physicians’ services
- Related readmissions
- Inpatient psychiatric facility services
- Post-acute care (LTCH, IRF, SNF, HHA)
- Hospital outpatient services
- Independent outpatient therapy services
- Clinical lab services
- Durable medical equipment
- Part B drugs
- Hospice
- Chronic care management
- Cardiac rehab/ICR

*Patients who die at any point during the model are not cancelled, unlike in CJR*

**EXCLUDED FROM BUNDLE**

- Hospital readmissions for MS-DRGs in the following categories:
  - Oncology
  - Trauma
  - Surgery for unrelated chronic or acute conditions (e.g., TAVR)
- Part B payments for unrelated services
- OPPS transitional pass-through payments for medical devices
- IPPS new technology add-on payments
- Drugs paid outside EPM MS-DRGs (e.g., hemophilia clotting factors)

EPM model parameters including list of excluded DRGs available [here](#)
Transfers a Top Concern for Many Hospitals

Proposed Rule Left Many Questions

Key Questions Regarding Transfers

If my hospital starts caring for an AMI patient, who then is sent elsewhere for care, who is financially responsible?

If the DRG assigned at the initial hospital is different than the DRG assigned at the hospital to which the patient was transferred (for example, if the AMI patient had a CABG), how is the episode target price set?

Before Going Further, Define Your Terms

- **Participant**: Hospital in selected MSA for EPMs, participating in program
- **Nonparticipant**: Hospital not in selected MSA for EPMs, not participating in program
- **Inpatient to inpatient transfer**: Patient admitted at initial hospital, then transferred to different hospital
- **Outpatient to inpatient transfer**: Patient not admitted at initial hospital (e.g., seen in ER and immediately transferred), then transferred to different hospital

Source: CMS; Cardiovascular Roundtable research and analysis.
**Final Rule Updates Transfer Policy From Proposal**

AMI Episodes Will Now Be Cancelled Due to Inpatient Transfer

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Initiation, Attribution</th>
<th>Takeaway</th>
</tr>
</thead>
</table>
| **1** Inpatient to Inpatient Transfer: Nonparticipant to Participant | Initiate episode based on MS-DRG at the transfer (i.e., receiving) hospital  
Attribute episode to transfer hospital | Transfer hospital determines DRG  
Transfer hospital financially responsible for episode |
| **2** Inpatient to Inpatient Transfer: Participant to Nonparticipant | Cancel AMI episode; no other AMI episode originated | Updated in final rule due to comments |
| **3** Inpatient to Inpatient Transfer: Participant to Participant | Cancel AMI episode at initial treating hospital  
Initiate an AMI or CABG episode at the transfer hospital  
Attribute episode to the transfer hospital | Updated in final rule due to comments  
Initial hospital not responsible for episode  
Transfer hospital not responsible for care prior to transfer |

Source: CMS; Cardiovascular Roundtable research and analysis.
## Outpatient to Inpatient Transfers

<table>
<thead>
<tr>
<th>Situation</th>
<th>Initiation, Attribution</th>
<th>Takeaway</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4  Outpatient to Inpatient Transfer: Nonparticipant or Participant to Participant</strong></td>
<td>Initiate AMI or CABG episode based on DRG at transfer (i.e., receiving) hospital Attribute episode to transfer hospital</td>
<td>Transfer hospital determines DRG Transfer hospital financially responsible for episode</td>
</tr>
<tr>
<td><strong>5  Outpatient to Inpatient Transfer: Participant to Nonparticipant</strong></td>
<td>No AMI or CABG model initiated</td>
<td>No episode initiated</td>
</tr>
</tbody>
</table>

Source: CMS; Cardiovascular Roundtable research and analysis.
Breaking Down Retrospective Bundling Mechanics

CMS Using Retrospective Reconciliation to Adjust Hospital Payments

Hospital Payment Process Under Cardiac EPMs

1. **Fee-for-Service Billing**
   - Providers (e.g., acute hospital, physicians, PACs) receive FFS payment as usual; CMS tracks claims

2. **Comparison to Target**
   - Total costs compared to quality-adjusted target price based on historic claims

3. **Payment Reconciliation**
   - If over target, hospital repays CMS; if under, receives reconciliation

**Target Price a Blend of Regional and Facility Historic Claims Data**

- Target price based on 3 years of historic claims, updated bi-annually (e.g., CY 2013-15 for Year 1)
- Target price a blend of hospital and regional claims
- For 2020 and 2021, only regional data will be used
- Each MS-DRG included in the EPMs will have its own target price

**Phases in Upside and Downside Financial Risk**

- Final rule delays downside risk to year 3, with option for risk in Year 2
- Downside risk phases in to 20% of target price by Year 5
- Partial upside risk in Year 1, phased to 20% of target price by Year 5

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1. For those programs looking to qualify for the APM track under MACRA.
Reconciliation to be Based on Payment and Quality

Two Factors Would Determine Whether You Pay CMS, or CMS Pays You

1. Medicare Payment Below Quality-Adjusted Target Threshold
   - EPM episode payments must be below CMS’ target

2. Meet Quality Standards
   - Hospital performance on EPM quality composite measure determines discount target and reconciliation payment eligibility

Source: CMS; Cardiovascular Roundtable research and analysis.
Target Price Based on Hospital, Regional Blend

Three-Year Historical Episodic Costs Inform EPM Thresholds

- **PYs 1-2 (2017-2018)**
  - 2/3 Individual CY2013-2015
  - 1/3 Regional CY2013-2015

- **PY 3 (2019)**
  - 1/3 Individual CY2015-2017
  - 2/3 Regional CY2015-2017

- **PY 4 (2020)**
  - All Regional CY2015-2017

- **PY 5 (2021)**
  - All Regional CY2017-2019

1) Performance Year.

Note: Hospitals will receive updated target prices twice per year (January and October) to account for rate updates across various payment systems.

Source: CMS; Cardiovascular Roundtable research and analysis.
# Scenarios for Setting Price

Higher Threshold for AMI with CABG Readmission; CABG with AMI, MCC

<table>
<thead>
<tr>
<th>Pricing Scenario</th>
<th>Episode Benchmark Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMI</strong></td>
<td></td>
</tr>
<tr>
<td>Single hospital AMI EPM MS-DRG</td>
<td>Standard episode benchmark price, based on anchor AMI MS-DRG</td>
</tr>
<tr>
<td><strong>AMI EPM with a CABG readmission</strong></td>
<td>Sum of the standard episode benchmark price for the anchor AMI MS-DRG, plus the CABG anchor hospitalization benchmark price corresponding to the CABG readmission MS-DRG</td>
</tr>
<tr>
<td><strong>CABG</strong></td>
<td></td>
</tr>
<tr>
<td>Single hospital CABG MS-DRG without AMI diagnosis</td>
<td>Sum of the anchor CABG MS-DRG and the CABG post-hospitalization benchmark price based on 1) the lack of an AMI ICD-CM diagnosis code, and 2) whether the anchor MS-DRG is w/ MCC or w/o MCC</td>
</tr>
<tr>
<td>Single hospital CABG MS-DRG with AMI diagnosis</td>
<td>Sum of the anchor CABG MS-DRG and the CABG post-hospitalization benchmark price based on 1) the presence of an AMI ICD-CM diagnosis code, and 2) whether the anchor MS-DRG is w/ MCC or w/o MCC</td>
</tr>
</tbody>
</table>

Source: CMS; Cardiovascular Roundtable research and analysis.
Episodic Target Price a Discount of Historical Average

CMS Will Get Their Cut No Matter What

Reconciliation or Repayment Calculated Based on Actual Cost Compared to Target Price

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To receive reconciliation payment</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>To not have to repay CMS</td>
<td>No Repayment</td>
<td>2% (Optional Risk)</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

1) Actual discount factor applied to each hospital determined by finalized composite quality score

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Source: CMS, innovation.cms.gov/initiatives/epm; Cardiovascular Roundtable research and analysis.
## CMS Capping Gains and Losses

**Easing in Amount of Risk and Reward Over Performance Years**

### Stop-Gain and Stop-Loss Thresholds by Performance Year

<table>
<thead>
<tr>
<th></th>
<th>Year 1 (July 1, 2017)</th>
<th>Year 2 (January 1, 2018)</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stop Gain Threshold on Reconciliation</strong> (payment from CMS)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Stop Loss Threshold on Repayment</strong> (payment to CMS)</td>
<td>No Repayment</td>
<td>5% (Voluntary Downside Risk)</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Stop losses/gains determined as a **percentage of the quality-adjusted target price**

Source: CMS; Cardiovascular Roundtable research and analysis.
The Reconciliation Process

Episodes Evaluated Individually, Stop-Loss/Gain Applied in Aggregate

Evaluating EPM Episodes to Quality-Adjusted Target Price

Episode 1
- Actual Cost: $60K
- Quality-Adjusted Target Price: $50K
- Over: $10K

Episode 2
- Actual Cost: $45K
- Savings: $5K

1) A participant may have multiple quality-adjusted target prices for EPM episodes in a given year, based on the anchor MS-DRG for the EPM episode, whether it included a chained anchor hospitalization, a readmission for a CABG MS-DRG, and whether it included an AMI ICD-DM diagnoses code, the performance year and the discount factor.
The Reconciliation Process (Cont.)

Stop-Loss/Gain Applied in Aggregate at End of Performance Year

Sample Repayment Calculation Using Stop Loss Limit in Performance Year 5

Aggregate Target Price: Sum of all quality-adjusted target prices for each EPM episode across the performance year

Aggregate Actual Payment: Amount of observed episodic payments for each EPM episode across the performance year

NPRA: Net payment reconciliation amount (difference between actual payment and target price), before application of stop loss/stop gain

Aggregate Actual Payment: $3.25M

Aggregate Target Price: $2.5M

Raw NPRA: $750K

Stop-Loss Limit: $500K (20% of Aggregate Target Price in PY 5)

Hospital Only Repays CMS $500K Due to Stop-Loss

Source: CMS; Cardiovascular Roundtable research and analysis.

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Meeting Target Price Just the First Step

Discount Adjustment Dependent on Quality Performance

Quality Measures Per EPM

CABG:
- 30-day mortality rates
- Voluntary reporting of the STS\(^1\) CABG score
- HCAHPS patient experience score\(^2\)

AMI:
- 30-day mortality
- Excess days
- Voluntary submission of the Hybrid AMI Mortality Measure
- HCAHPS patient experience score\(^2\)

Calculation of Composite Score
- Calculated at the end of each performance year
- Hospital given points for each metric based on relative performance against the national distribution\(^3\)
- Calculates separate CABG and AMI composite scores
- Composite score assigned to one of four categories

Excellent
- Eligible for reconciliation
- 1.5% adjustment to discount factor

Good
- Eligible for reconciliation
- 1% adjustment to discount factor

Acceptable
- Eligible for reconciliation
- No adjustment to discount factor

Below Acceptable
- Not eligible for reconciliation
- No adjustment to discount factor

1) Society of Thoracic Surgeons.
2) Hospital-wide, not specific to DRG.
3) All subsection (d) hospitals eligible for payment under the IPPS reporting the measure for a minimum number of patients.

Source: CMS; Cardiovascular Roundtable research and analysis.
# AMI Quality Measures in Composite Quality Score

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>Definition</th>
<th>Weight in Composite Quality Score</th>
<th>Quality Domain/Weight</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Day Mortality</td>
<td>30-day, all cause, risk-standardized mortality rate following a hospitalization for AMI</td>
<td>50%</td>
<td></td>
<td>Claims-based per IQR (NQF #0230)</td>
</tr>
<tr>
<td>AMI Excess Days</td>
<td>Excess days in acute care, including emergency department, observation, and inpatient readmission days following a hospitalization for AMI for 30 days</td>
<td>20%</td>
<td>Outcomes/80%</td>
<td>Claims-based per IQR</td>
</tr>
<tr>
<td>Hybrid AMI Mortality Voluntary Data</td>
<td>30-day, risk-standardized AMI mortality rate, using a combination of claims data and EHR data submitted by hospitals (age, heart rate, systolic blood pressure, troponin, creatinine)(^1)</td>
<td>10%</td>
<td></td>
<td>Voluntary submission (NQF #2473)</td>
</tr>
<tr>
<td>HCAHPS Survey</td>
<td>Patient experience composite measure not specific to DRGs</td>
<td>20%</td>
<td>Patient Experience/20%</td>
<td>Patient Survey (NQF #0166)</td>
</tr>
</tbody>
</table>

\(^1\) CMS will also require submitting six linking variables: CCN, HIC number, date of birth, sex, admission date, and discharge date.

Source: CMS; Cardiovascular Roundtable research and analysis.
# AMI Quality Point Assignments

<table>
<thead>
<tr>
<th>Percentile</th>
<th>30-Day Mortality (+1 for improvement)</th>
<th>AMI Excess Days (+0.4 for improvement)</th>
<th>HCAHPS Survey (+0.4 for improvement)</th>
<th>Hybrid AMI Mortality (Voluntary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥90&lt;sup&gt;th&lt;/sup&gt;</td>
<td>10.00</td>
<td>4.00</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>≥80&lt;sup&gt;th&lt;/sup&gt; and &lt;90&lt;sup&gt;th&lt;/sup&gt;</td>
<td>9.25</td>
<td>3.70</td>
<td>3.70</td>
<td></td>
</tr>
<tr>
<td>≥70&lt;sup&gt;th&lt;/sup&gt; and &lt;80&lt;sup&gt;th&lt;/sup&gt;</td>
<td>8.50</td>
<td>3.40</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td>≥60&lt;sup&gt;th&lt;/sup&gt; and &lt;70&lt;sup&gt;th&lt;/sup&gt;</td>
<td>7.75</td>
<td>3.10</td>
<td>3.10</td>
<td></td>
</tr>
<tr>
<td>≥50&lt;sup&gt;th&lt;/sup&gt; and &lt;60&lt;sup&gt;th&lt;/sup&gt;</td>
<td>7.00</td>
<td>2.80</td>
<td>2.80</td>
<td></td>
</tr>
<tr>
<td>≥40&lt;sup&gt;th&lt;/sup&gt; and &lt;50&lt;sup&gt;th&lt;/sup&gt;</td>
<td>6.25</td>
<td>2.50</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>&lt;30&lt;sup&gt;th&lt;/sup&gt; and &lt;40&lt;sup&gt;th&lt;/sup&gt;</td>
<td>5.50</td>
<td>2.20</td>
<td>2.20</td>
<td></td>
</tr>
<tr>
<td>&lt;30&lt;sup&gt;th&lt;/sup&gt;</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

20 Max score available

Source: CMS; Cardiovascular Roundtable research and analysis.
Process for Determining AMI Quality Rating

Summary of Calculation Methodology to Determine Hospital Quality Rating for AMI

1. Assign points for 30-day mortality, excess days and HCAHPS based on national performance percentile

2. Assign 2 points for successful submission of hybrid AMI mortality data

3. Sum the points

4. Determine if improvement applies (1 point for 30-day mortality, 0.4 excess days, 0.4 HCAHPS), then add them

5. Assign one of four hospital ratings based on scoring thresholds

Source: CMS; Cardiovascular Roundtable research and analysis.
## AMI Quality Composite Scoring

### Programs with Better Quality Have Higher Payment Thresholds

<table>
<thead>
<tr>
<th>Year</th>
<th>Effective Discount on Historical Payment Required to Avoid Repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Programs with better quality scores receive episodic payment thresholds with a lower discount on historical payment.</td>
</tr>
<tr>
<td>1-2(^1)</td>
<td>NA</td>
</tr>
<tr>
<td>3-4</td>
<td>2.0%</td>
</tr>
<tr>
<td>5</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

1) Unless taking on voluntary risk in Y2, in which case look to 3-4 row.

### CABG Model Composite Quality Score Range

<table>
<thead>
<tr>
<th>Year</th>
<th>Effective Discount on Historical Payment Required to Receive Reconciliation Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: CMS; Cardiovascular Roundtable research and analysis.
## CABG Quality Measures in Composite Quality Score

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>Definition</th>
<th>Weight in Composite Quality Score</th>
<th>Quality Domain/Weight</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Day Mortality</td>
<td>30-day, all cause, risk-standardized mortality rate following a hospitalization for CABG</td>
<td>70%</td>
<td></td>
<td>Claims-based per IQR (NQF #2558)</td>
</tr>
<tr>
<td>STS Composite CABG Voluntary Data Submission</td>
<td>Combination of 11 quality measures in four domains: risk-adjusted mortality, risk-adjusted major morbidity, percentage of procedures that using at least one of the arteries from the underside of the chest wall for bypass grafting; prescription of four key medications.</td>
<td>10%</td>
<td>Outcomes/80%</td>
<td>Voluntary submission (NQF #0696)</td>
</tr>
<tr>
<td>HCAHPS Survey</td>
<td>Patient experience composite measure not specific to DRGs</td>
<td>20%</td>
<td>Patient Experience/20%</td>
<td>Patient Survey (NQF #0166)</td>
</tr>
</tbody>
</table>

Source: CMS; Cardiovascular Roundtable research and analysis.
CABG Quality Point Assignments

<table>
<thead>
<tr>
<th>Percentile</th>
<th>30-Day Mortality (+1.4 for improvement)</th>
<th>HCAHPS Survey (+0.4 for improvement)</th>
<th>STS Composite CABG Score (Voluntary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥90&lt;sup&gt;th&lt;/sup&gt;</td>
<td>14.00</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>≥80&lt;sup&gt;th&lt;/sup&gt; and &lt;90&lt;sup&gt;th&lt;/sup&gt;</td>
<td>12.95</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>≥70&lt;sup&gt;th&lt;/sup&gt; and &lt;80&lt;sup&gt;th&lt;/sup&gt;</td>
<td>11.90</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>≥60&lt;sup&gt;th&lt;/sup&gt; and &lt;70&lt;sup&gt;th&lt;/sup&gt;</td>
<td>10.85</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>≥50&lt;sup&gt;th&lt;/sup&gt; and &lt;60&lt;sup&gt;th&lt;/sup&gt;</td>
<td>9.80</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>≥40&lt;sup&gt;th&lt;/sup&gt; and &lt;50&lt;sup&gt;th&lt;/sup&gt;</td>
<td>8.75</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>&lt;30&lt;sup&gt;th&lt;/sup&gt; and &lt;40&lt;sup&gt;th&lt;/sup&gt;</td>
<td>7.70</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>&lt;30&lt;sup&gt;th&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Max score available: 20

Source: CMS; Cardiovascular Roundtable research and analysis.
Process for Determining CABG Quality Rating

Summary of Calculation Methodology to Determine Hospital Rating for CABG

1. Assign points for 30-day mortality and HCAHPS based on national performance percentile
2. Assign 2 points for successful submission of hybrid AMI mortality data
3. Sum the points
4. Determine if improvement applies (1.5 points for 30-day mortality, 0.5 HCAHPS), then add them
5. Assign one of four hospital ratings based on scoring thresholds

Source: CMS; Cardiovascular Roundtable research and analysis.
## CABG Quality Composite Scoring

Programs with Better Quality Have Higher Payment Thresholds

### CABG Model Composite Quality Score Range

<table>
<thead>
<tr>
<th>Year</th>
<th>“Below Acceptable”</th>
<th>“Acceptable”</th>
<th>“Good”</th>
<th>“Excellent”</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY 1-2</td>
<td>0.0</td>
<td>2.2</td>
<td>3.4</td>
<td>16.2</td>
</tr>
<tr>
<td>PY 3-5</td>
<td>0.0</td>
<td>2.5</td>
<td>3.5</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.0</td>
</tr>
</tbody>
</table>

### Effective Discount on Historical Payment Required to Avoid Repayment

Programs with better quality scores receive episodic payment thresholds with a lower discount on historical payment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1-2</th>
<th>Year 3-4</th>
<th>Year 5</th>
<th>Year 5+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>3-4</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>5</td>
<td>3.0%</td>
<td>3.0%</td>
<td>2.0%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

1) And PY 2 for those who take on early downside risk.
2) Unless taking on voluntary risk in Y2, in which case look to 3-4 row.

Source: CMS; Cardiovascular Roundtable research and analysis.
## Quality Measure Performance Periods

### Outcomes Measures Based on Three Year Performance Periods Prior to EPM Performance Year

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>PY1</th>
<th>PY2</th>
<th>PY3</th>
<th>PY4</th>
<th>PY5</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI Excess Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MORT-30-CABG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submission of STS CABG Composite Measure Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Improvement points** calculated based on current performance year, although only a small percentage of composite score.
Quality Performance Can Go a Long Way

Scenarios Show Impact of Quality Discount Factor

<table>
<thead>
<tr>
<th>SCENARIO 1: “EXCELLENT”</th>
<th>SCENARIO 2: “ACCEPTABLE”</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABG COMPOSITE SCORE</td>
<td>CABG COMPOSITE SCORE</td>
</tr>
<tr>
<td>1.5% Discount</td>
<td>3% Discount</td>
</tr>
</tbody>
</table>

*Historic Average for Episode: $50K*

**Target Price:** $49,250

**Actual Payment for Episode:** $49K

$250 Repayment from CMS

**Target Price:** $48,500

$500 Reconciliation to CMS

Source: CMS; Cardiovascular Roundtable research and analysis.
CMS Provides Options to Partner and Gainshare

Ability to Develop Preferred Partnerships with PAC Providers

CMS allows EPM hospitals to enter into financial arrangements with other providers (e.g., PACs, physician groups, ACOs)

Providers must have directly furnished a billable item or service to a hospital’s EPM beneficiary¹

To share financial risk, must have established a sharing arrangement before services are rendered

Hospital may only share funds from internal savings or portions of final reconciliation/repayment within limits specified by CMS

Gainsharing payments cannot be based on referrals/patient volumes; must be partly based on quality metrics set by the hospital

¹ Under the EPM, some ACOs are permitted to be formal partners and do not have to directly furnish billable services.

Rule Maintains Protections on Patient Choice of Post-Acute Provider

Hospitals May:

• Include objective data (e.g., Nursing Home Compare) on facility list distributed at discharge
• Point out a facility’s high quality performance without making an explicit recommendation
• List providers with shared financial interests/partnerships, so long as patients are made aware of ties

Hospitals May Not:

• Explicitly recommend a facility
• Omit facilities from the list that are within the patient’s chosen geographic area
• Not charge fees from PAC partner to be on a preferred list, nor accept these payments

Source: CMS, innovation.cms.gov/initiatives/epm; Cardiovascular Roundtable research and analysis.
Gainsharing Mechanics

Restrictions on How to Share in Risk and Reward

Eligible Funds to Use for Alignment Payments Under EPMs

1. Reconciliation Payments
   - Performance-based payment from reconciliation earned through reduction in episodic spend to CMS

2. Internal Cost Savings
   - Savings achieved as a result of care redesign activities for services delivered to beneficiaries during an episode of care

Risk Sharing Restrictions

- **50%** Percent of repayment risk hospital must retain in sharing arrangements
- **25%** Maximum percent of repayment amount one collaborator can be required to pay

Gain Sharing Restrictions

- **100%** Percent of reconciliation payment that can be shared with collaborators
- **50%** Percent of physician fee schedule for services to your beneficiaries that can be paid to a physician in reconciliation (same restriction as in BPCI and CJR)

Incentives from the Cardiac Rehab Incentive Payment Model are not eligible for gainsharing.

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1) An ACO collaborator can pay up to 50%.

Source: CMS; Cardiovascular Roundtable research and analysis.
Final Rule Confirms Cardiac EPM Program Waivers

Skilled Nursing Facility Three-Day Rule

- Only applies to the AMI EPM, not CABG
- Under waiver, patients can receive Medicare coverage of SNF care even if discharged <3 days
- SNF must have at least a three star quality rating in 7 of last 12 months (on Nursing Home Compare)
- For episodes beginning October 4, 2018 (to align with first risk-bearing year 3)
- Waiver not available early for those who opt in to Year 2 risk

Telehealth Services Geographic and Location Restrictions

- CMS will waive the geographic site requirement for telehealth
- Allows EPM patients to receive telehealth services no matter where they are located, even if they are not considered rural status
- Also would allow patients to receive telehealth from home
- Has to be on the list of qualified telehealth services

“Incident to” Direct Supervision Requirements for Home Visits

- Non-physician staff permitted to provide home visits under general supervision (physician doesn’t have to be present) for EPM-related discharges
- Only for EPM beneficiaries that don’t qualify for home health services
- Up to 13 visits may be billed for AMI EPM, and up to 9 visits may be billed for CABG EPM beneficiaries.
- Did not waive homebound requirement for home health, but gives options for home visits for non-homebound patients

Source: CMS; Cardiovascular Roundtable research and analysis.
EPM Beneficiary Engagement Incentives

EPM Hospitals May Provide Services/Items to Improve Quality, Cost

EPM Beneficiary Engagement Opportunities

- Must be during the 90-day episode
- Paid for by hospital, not reimbursed by CMS
- Only the EPM hospital can provide these
- Must be preventive or advance a clinical goal:
  - Adherence to drug regime
  - Adherence to care plan
  - Reduction of related readmissions
  - Management of conditions and chronic disease that may be affected by treatment for AMI/CABG
- Example: remote cardiac monitoring equipment post-CABG or AMI

Beneficiary Incentives Cannot:

- Be more than reasonably necessary (e.g., a smartphone)
- Steer patients to one provider
- Encourage more services than necessary
- Be advertised broadly
- Shift costs to another federal health care program

Technology Limitations

- Cannot exceed $1,000 for any one beneficiary
- If >$100, must remain the property of the hospital and retrieved at the end of the 90 day episode

Documentation Requirements:

- Date provided
- Beneficiary identity
- Technology over $100 and retrieval attempts at end of episode

1) CMS indicated they will not provide additional interpretation or guidance on beneficiary engagement incentives at this time, but encourage EPM participants to ensure items/services meet all the requirements.
CMS Creates New Paths for APM Qualification

Final Rule Introduces Two-Track Approach Within Mandatory Bundles

How CJR Currently Stacks Up Against Advanced APM Criteria

- Threshold to trigger losses no greater than 4%
- Loss sharing at least 30%
- Maximum possible loss at least 4% of spending target
- Quality requirements comparable to MIPS
- Certified EHR use

CMS Provides Changes to Enable EPMs to Satisfy Criteria

Beginning in 2018, hospitals participating in mandatory bundled payments would be able to choose one of two tracks:

1. **Track 1** would require use of certified EHR → Eligible advanced APM
2. **Track 2** would not require use of certified EHR → Not eligible advanced APM

Only physicians affiliated with Track 1 EPM participants who take on voluntary downside risk in year 2 will be potentially eligible for Advanced APM qualification through EPMs in 2018; all others will be eligible in Performance Year 3 (2019)

CMS Recognizing the Value of Cardiac Rehab

Providing Incentives to Discharging Hospital for Encouraging Attendance

Cardiac Rehab Incentive Payment Model
Introduced Alongside Bundling Rule

Model Background

- CMS will pilot a two-tiered incentive payment system to increase utilization of cardiac rehab
- Participant hospitals will receive incentive payment for CABG, AMI beneficiaries who participate in outpatient cardiac rehab or ICR

Participants

CMS selected 90 markets:
- 45 MSAs selected from the 98 CABG and AMI model MSAs (EPM-CR participants)
- 45 MSAs from the MSAs eligible for inclusion in the EPM model that were not selected (FFS-CR participants)

Incentive Payment

- Participants receive retrospective payments at end of PY for every session beneficiaries attend across 90 days
- CR/ICR does not need to be provided by CR participant for them to receive the incentive
- This is in addition to the standard FFS payment paid to the CR/ICR provider

Source: CMS; Cardiovascular Roundtable research and analysis.

Notes:

1) Intensive cardiac rehab.
2) Market service areas.
A Two-Tiered Incentive for Cardiac Rehab

CMS Will Reward Significant Cardiac Rehab Utilization

Cardiac Rehab Incentive Payment System

1) Cardiac rehab HCPCS codes for inclusion: G0422, 93797, 93798 and G0423.

2) While the incentive payment system does not limit the number of payments, existing regulations limit the number of covered cardiac sessions to two, one-hour sessions per day for a total of 36 sessions over 36 weeks, with an option to extend to an additional 36.

12-Session Threshold for Higher Incentive Payment

Chosen by CMS based on evidence that beneficiaries have lower mortality rates with 12-23 cardiac rehab sessions completed.

Source: CMS; Cardiovascular Roundtable research and analysis.
CMS Aiming to Increase Beneficiary Access to CR

Model Eases Physician Supervision, Allows Beneficiary Engagement

Easing CR/ICR Physician Supervision Requirements

- Rule waives the requirement of a physician to supervise CR
- Non-physician providers (PA, NP, or clinical nurse specialist) can perform role of supervising physician, prescribe exercise, establish and sign an individualized care plan every 30 days
- Goal is to increase availability of CR/ICR services to beneficiaries
- Only for beneficiaries covered by the CR incentive payment model and during the episode

Beneficiary Engagement Incentives to Support CR Participation

- EPM-CR and FFS-CR participants can provide transportation to CR beneficiaries
  - Cannot be tied to services other than CR/ICR
  - Cannot advertise broadly
  - Must offer regardless of CR/ICR provider
- Must document transportation >$25 (date and beneficiaries)
- Final rule also enables FFS-CR participants to also provide beneficiary engagement support aligned with what EPM participants can provide, beyond just transportation

Hospital cannot pay for or subsidize patient co-pay for cardiac rehab

Source: CMS; Cardiovascular Roundtable research and analysis.
The Rise of Bundled Payments

Understanding Key Components of the Cardiac EPMs

Next Steps and Q&A
CMS Providing Guidance on Where to Begin

Final Rule Recommends Eight Care Redesign Tactics to Improve Quality and Reduce Cost Within EPM Episodes

1. Increase post-discharge follow-up and medication management
2. Coordinate across inpatient and post-acute care
3. Conduct appropriate discharge planning
4. Improve adherence to treatment or drug regimens
5. Reduce readmissions and post-discharge complications
6. Manage chronic diseases and conditions that may be related to the EPMs’ episodes
7. Choose the most appropriate post-acute care setting
8. Coordinate between providers and suppliers such as hospitals, physicians, and post-acute care providers

CMS will make data available to EPM participants upon request prior to the model’s start date, including beneficiaries’ use of health care services during baseline and performance periods, and comparable aggregate regional data; CR model participants can request a more limited data set on CR utilization.

Source: CMS; Cardiovascular Roundtable research and analysis.
Immediate Opportunities to Succeed Under Bundling

Episodic Cost Management Requires a Comprehensive Strategy

Percentage of Total Costs Attributed to Each Setting Across 90-Day Episode
National Average, Medicare, 2015

- **CABG**
  - Index Admission: 4%
  - Physician: 6%
  - Readmission: 11%
  - PAC: 3%
  - Outpatient: 7%
  - Total: 76%

- **AMI with PCI**
  - Index Admission: 7%
  - Physician: 14%
  - Readmission: 10%
  - PAC: 7%
  - Outpatient: 35%
  - Total: 62%

- **AMI Treated Medically**
  - Index Admission: 10%
  - Physician: 27%
  - Readmission: 22%
  - Outpatient: 6%

Immediate Opportunities for CV Leaders

- Maximize Post-Acute Care Collaboration
- Improve Performance Against Quality Metrics
- Optimize Inpatient Operational Efficiency to Sustain Margins

Access the Care Coordination Episode Profiler for average episodic costs specific to your institution

Source: Cardiovascular Roundtable research and analysis.

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1) Post-acute care.
The Care Coordination Episode Profiler

Insight Into Your Episodic Costs Across the Care Continuum

Tool includes each mandatory bundle (three new EPMs and CJR); can drill down by DRG

Adjust the spending time range of the episode from 5 to 90 days post-anchor discharge.

View payment over time by site of service or total episodic payment.

Select your region to see regional average performance

Hospitals can also access their own facility-specific episodic spending

View your facility's performance across relevant quality metrics

To access the Care Coordination Episode Profiler, visit advisory.com

Source: Cardiovascular Roundtable research and analysis.
Action Items for CV Leaders

Cardiovascular Roundtable Support Resources for Each Stage

1. Determine the sources of cost in CV episodes at your institution.
   - Use the Care Coordination Episode Profiler to assess your institution’s episodic spending up to 90 days after index hospitalization for AMI, AMI with PCI, and CABG.

2. Identify key opportunities to reduce internal and episodic costs to minimize spending within a bundle as well as safeguard margins.
   - Read the Playbook for CV Episodic Cost Management to learn strategies for CV leaders to manage cross-continuum costs in preparation for risk-based payment models.
   - Read the Highly-Productive CV Enterprise for lessons on enhancing operational efficiency.
   - Access our CV Readmissions Reduction Toolkits for best practice strategies and implementation support for reducing costly readmissions.

3. Strengthen partnerships across the continuum to improve costs and quality.
   - Read Integrating the Service Line and Affiliated Groups for strategies to coordinate strategic goals between the CV service line and practices.
   - Read Maximizing Post-Acute Care Collaboration for tactics for CV leaders to create collaborative relationships with PAC providers to enhance care value in these settings.

4. Engage your team in understanding the final ruling and preparing for implementation.
   - Watch our archived webinar unpacking the cardiac bundling final rule with your team.
   - Read The Mandatory Cardiac Bundling Final Rule--Your Questions Answered.
   - Sign up for our weekly CV Insights mailing to get up-to-date analyses of the final rule and the latest best practice strategies for managing episodic costs.

Source: Cardiovascular Roundtable research and analysis.
How Can We Help You Prepare?

Key Advisory Board Support for Success Under Cardiac Bundled Data and Analytics

Best Practices and Education
Access webinars, best practice publications, and implementation support resources for episodic cost management

Data and Analytics
Request a tailored discussion with our team, where we can use our analytics to identify opportunities

Consulting Services
We have decades of experience in managing costs and utilization to help you win under EPMs

Technologies
Our Dedicated Advisors will help you harness and optimize the value of your current technologies

SPOTLIGHT: Cardiovascular Roundtable
Research program dedicated to supporting your CV strategic and operational priorities, including succeeding under episodic payment models

To set up time with our experts or for more information, please complete the survey question at the end of this section, or email cardiovascular@advisory.com