The Episode Quality Improvement Program

Value-Based Medicare Incentive Payment Opportunity for Maryland Physicians

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Introductions

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Agenda for Today

1. Overview of Maryland’s Episode Quality Improvement Program
2. Participation in Performance Year One (PY1), 2022
3. EQIP’s Policy and Methodology
4. Next Step and Contacts
The Purpose of Episode Quality Improvement Program (EQIP)

Under the Total Cost of Care Model, Maryland’s healthcare system has focused on reducing costs and improving quality of care for Marylanders who receive care in both hospital and non-hospital settings.

Maryland physicians largely remain on fee-for-service reimbursement incentives and, as a result of the TCOC Model, are left out of national, Medicare value-based payment programs.

Therefore, it is imperative that the State creates new value-based reimbursement opportunities to ensure cost containment and high quality in non-hospital settings.
There are three outcomes that drive better ‘value’ than traditional fee-for-service payment:

1. Quality $\uparrow$ Cost $\uparrow$
2. Quality $\downarrow$ Cost $\uparrow$
3. Quality $\uparrow$ Cost $\downarrow$

Best Case
The HSCRC plans to start a voluntary, episodic incentive payment program for specialist physicians in Medicare, EQIP, in 2022.

EQIP will utilize the Prometheus Episode Grouper approach. The first performance year will include episodes in the following specialty areas:

- Gastroenterology and General Surgery
- Orthopedics and Neurosurgery
- Cardiology

**The Episode Quality Improvement Program – EQIP**

- Physician ownership of performance
- Upside-only risk with dissavings accountability
- Alignment with CareFirst’s episode payment program
- AAPM/value-based payment participation opportunities for MD physicians

EQIP will utilize the Prometheus Episode Grouper approach. The first performance year will include episodes in the following specialty areas:
Episodic Value-Based Payment

- Bundled-payment programs are effective at controlling episodic care costs and improving quality outcome among physicians via a financial and quality assessment.

1. **Physicians Agree to Episodic Payment**
   - Signed Agreement with a CRP Entity
   - Enroll in clinical episodes that will **Trigger** when a specific Medicare beneficiary or procedure is performed

2. **Target Price is Set**
   - Costs from episodes triggered in the baseline year are aggregated
   - A per episode average cost or **Target Price** is set

3. **Performance Assessed**
   - Performance year episode costs are compared to the **Target Price**
   - Savings are aggregated to determine the **Incentive Payment** due to the physician

- Analyses of CMS bundled-payment programs have shown 4-6 percent reductions in gross Medicare spending

Multi-Payer Demonstration with CareFirst

- The HSCRC and CareFirst have aligned episode program definitions so that the Episodes of Care (EOC) Program and EQIP can provide parallel incentives to participating physicians.
  - **Prometheus Episode Definitions** will be utilized in both programs
  - Incentive Payment and other **policy decisions will remain separate** where appropriate
  - Opportunity for **rewards across both Medicare and CareFirst** increases program outcomes
- The HSCRC will encourage other payers to start programs similar to EQIP in Maryland
EQIP Participation
Performance Year One (PY1), 2022
EQIP Roles – Definitions and Responsibilities

“Care Partner” (a specialty physician)
- Triggers episodes and performs EQIP care interventions
- Signs a Care Partner Arrangement with the CRP Entity
- Receives normal fee-schedule payments from Medicare and a potential “Incentive Payment” with the EQIP Entity
- Eligible to achieve Quality Payment Program Status and bonuses

“EQIP Entity”
- Consists of an individual Care Partner or multiple Care Partners
- Performance evaluation occurs at the EQIP entity level
- Receives Incentive Payments

“CRP Entity”
- Signs a Care Partner Arrangement with all Care Partners
- Pays incentive payments or savings to EQIP entities

HSCRC and CRISP
- Will calculate episodes, monitor performance and determine Incentive Payments
- Maintains reporting and monitoring requirements per the Participation Agreement and to support CRP Entity
- Will facilitate EQIP Entity and Care Partner Enrollment, Reporting and Learning Systems

Administrative Proxies (*)
EQIP Entities can delegate management of their program administration. This contractual arrangement, if any, will be determined between Administrative Proxy and Participant outside of Care Partner Arrangements.
Participation Requirements

Qualify as a Care Partner with CMS

• Must be licensed and enrolled in the Medicare Provider Enrollment, Chain, and Ownership System (PECOS)

• Must use CEHRT and CRISP, Maryland’s health information exchange

Enroll in EQIP

• Establish EQIP Entity with multiple Care Partners

• Select Episodes and Interventions and agree to quality metrics*

• Each Care Partner Signs a Care Partner Arrangement

• Determine Payment Remission Recipient*

Meet Episode Thresholds

• Provide care in Maryland

• For a single episode, threshold = 11 episodes in the baseline

• Across all episodes of participation, threshold = 50 episodes in the baseline

*All Care Partners in an EQIP Entity will share the same episodes, quality metrics and payment recipient.
**EQIP Interventions and Performance Improvement Opportunities**

*In addition to electing episodes, each EQIP Entity will need to indicate how they intend to produce savings in their episodes.*

<table>
<thead>
<tr>
<th>Intervention Category</th>
<th>Example Intervention</th>
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</thead>
<tbody>
<tr>
<td><strong>Clinical Care Redesign and Quality Improvement</strong></td>
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<tr>
<td></td>
<td>Standardized, evidence-based protocols are implemented, for example for discharge planning and follow-up care.</td>
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<td>Performance of medication reconciliation.</td>
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<td>Elimination of duplicative, potentially avoidable complications or low value services</td>
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<tr>
<td><strong>Beneficiary/Caregiver Engagement</strong></td>
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<td>Patient education/shared decision making is provided pre-admission and addresses post-discharge options.</td>
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<td>Implementation of &quot;health literacy&quot; practices for patient/family education</td>
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<tr>
<td><strong>Care Coordination and Care Transitions</strong></td>
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<tr>
<td></td>
<td>Assignment of a care manager and enhanced coordination to follow patient across care settings</td>
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<td></td>
<td>Interdisciplinary team meetings address patients’ needs and progress.</td>
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<td></td>
<td>Selection of most cost efficient, high-quality settings of care</td>
</tr>
</tbody>
</table>
EQIP’s CRP Entity is The University of Maryland Medical Center

- The State has partnered with UMMC to enable EQIP as an Advanced Alternative Payment Model with CMS
- Any qualifying physician in Maryland will be allowed to participate in EQIP, regardless of previous contracting, relationship and/or privileges at UMMC
- UMMC’s main roles will be:
  1. Signing an individual Care Partner Arrangement with each participating Care Partner in the EQIP Entity, and,
  2. Printing checks for earned Incentive Payments to the EQIP Entity.
- The HSCRC and CRISP will facilitate interactions between UMMC and Care Partners/EQIP Entities
  - Policy decisions and operations support will remain transparent and set at the State level
  - Any changes to the policy will be made at the CRP Committee and EQIP stakeholder level
The CRP Entity will receive a list of:

- Care Partners contacts who have been submitted for CMS vetting, used to generate Care Partner Arrangements (9/1-12/1/21),
- EQIP Entities who elect participation in EQIP for PY1 and their Payment Remission Recipient, used to generate Care Partner Arrangements (9/1-12/1/21), and,
- A final Incentive Payment list for EQIP Entity Payment (7/1/23).

The CRP Entity will not have:

- Protected Health Information
- Access to EQIP Entity or Care Partner performance analytics

All program data, inquiries and policy procedure will be managed by the State (HSCRC and CRISP), including CRP Entity operations.
Participation Timeline

- EQIP will have an annual opportunity to enroll in EQIP. The enrollment period will open **July through September** of each year prior to the performance year.
- The policy may be updated and participation opportunities increased year to year through HSCRC’s stakeholder engagement process.
## HSCRC Staff Proposed Episodes for PY1, Episode Type, Length

<table>
<thead>
<tr>
<th>Cardiology</th>
<th>Gastroenterology and General Surgery</th>
<th>Orthopedics and Neurosurgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacemaker / Defibrillator – Procedure, 30</td>
<td>Colonoscopy – Procedure, 14</td>
<td>Hip Replacement &amp; Hip Revision – Procedure, 90</td>
</tr>
<tr>
<td>Acute Myocardial Infarction – Acute, 30</td>
<td>Colorectal Resection – Procedure, 90</td>
<td>Hip/Pelvic Fracture – Acute, 30</td>
</tr>
<tr>
<td>CABG &amp;/or Valve Procedures – Procedure, 90</td>
<td>Gall Bladder Surgery – Procedure, 90</td>
<td>Knee Arthroscopy – Procedure, 90</td>
</tr>
<tr>
<td>Coronary Angioplasty – Procedure, 90</td>
<td>Upper GI Endoscopy – Procedure, 14</td>
<td>Knee Replacement &amp; Knee Revision – Procedure, 90</td>
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<tr>
<td></td>
<td></td>
<td>Lumbar Laminectomy – Procedure, 90</td>
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<tr>
<td></td>
<td></td>
<td>Lumbar Spine Fusion – Procedure, 180</td>
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<tr>
<td></td>
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<td>Shoulder Replacement – Procedure, 90</td>
</tr>
</tbody>
</table>
EQIP Policy and Methodology
EQIP Policy: Where is each methodology determined?

**Prometheus Episode Definition**
- Episode Definitions and Triggers
- Relevant Cost Methodology

**HSCRC/CMS Policy**
- Target Price Methodology
- Shared Savings/Incentive Payment Methodology
- Quality Measures
- Reporting and Monitoring (via CRISP)
- Participation Specialty Areas
- CMS Policy (including QP status)
Iterative development since 2006, maintained by HCI3/Altarum and recently acquired by Change Healthcare

Promotes coordination and collaboration across the continuum of care at the specialist level

97 episodes grouped into clinically relevant areas: Procedural, Acute, Chronic and Other

Pre-Trigger Period
- Usually 30 days
- Pre-surgical Care
- E.g. labs, x-rays

Triggering Event
- Procedure/Surgery
- Acute Event

Post-Trigger Period
- 14-180 days (select PY1 eps)
- Services relevant to episode
- E.g. SNF, post-acute care, PT

Relevant Episode Costs
PROMETHEUS Relevant Cost Analysis

Total Cost of Care

All Costs Relevant to Episodes
- Relevant diagnoses
- Relevant services

Costs Not Assigned to Episodes

Costs of all Typical Care (Provider Practice Patterns)
- Core Services
- Other Relevant Services

Costs of all Potentially Avoidable Complications

Opportunities for cost and quality improvement
- Routine Services
- Overused Services and Setting Selection
Target Price Methodology

• 2019 will serve as a **Baseline** for the first three performance years for EQIP Entities joining in Y1
  • Each EQIP Entity will have their own **unique Target Price** per episode
  • The baseline will be trended forward in order to compare to current performance costs
  • Target Prices are not final until the end of the Performance Year as final inflation will need to be applied
  • The baseline for entities that join in subsequent performance years will be the year prior to them joining

• Each episode will have a **singular Target Price**, regardless of the setting of care (Hospital, Outpatient Facility, ASC)
  • The price gap between ASC and Hospital is significantly larger under the Medicare fee schedule than under commercial, particularly in Maryland where hospital rates are regulated.
  • This will **create incentive to shift lower acuity procedures** to lower cost settings, aligning with GBR incentives.
Incentive Payment Methodology

**Incentive Payments** will be direct checks made from the CRP Entity to the EQIP Entity for aggregate positive performance after a minimum savings threshold, shared savings split, and quality adjustment are applied.

1. **Performance Period Results**
   - The Performance Period Episode costs are less than the Target Price in the aggregate across all episodes in which the EQIP Entity participates.
   - At least three percent of savings are achieved (stat. significant)
   - Dissavings from prior year (if any) are offset

2. **Shared Savings**
   - Each Care Partner’s Target Price** will be compared to the statewide experience and annually ranked based on relative efficiency. Lower cost providers will be in a higher tier and vice versa.
   - The Shared Savings split with Medicare will be based on the Care Partner’s Target Price rank

3. **Clinical Quality Score**
   - 5% of the incentive payment achieved will be withheld for quality assessment
   - The EQIP Entity’s quality performance will indicate the portion of this withholding that is ‘earned back’

4. **Incentive Payment Cap**
   - The result is no more than 25 percent of the EQIP Participant’s prior year Part B payments

5. **Final Incentive Payment**
   - Paid directly to the payment remission source indicated by the EQIP Entity*
   - Paid in full, six months after the end of the performance year
   - In addition to incentive payments, if QPP thresholds are met, Medicare will pay a bonus to physicians and increase rate updates in future years.

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*The EQIP entity can direct the payment remission source to distribute payments to individual Care Partners however it desires.

**In Year 1 the Target Price will be used to determine the tercile, in subsequent years, prior year performance will be used.
# Example: Incentive Payment Calculation

**EQIP Entity Participating in two EQIP episodes**

<table>
<thead>
<tr>
<th></th>
<th>Calculation</th>
<th>Episode A</th>
<th>Episode B</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Baseline period EQIP Entity episode payment benchmarks</td>
<td>$15,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>B</td>
<td>Episode Target Price</td>
<td>$15,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>C</td>
<td>Episode Volume, Performance Year</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>D</td>
<td>Performance Year episode cost</td>
<td>$14,300</td>
<td>$9,500</td>
</tr>
<tr>
<td>E</td>
<td>Aggregate actual performance year episode costs</td>
<td>$357,500</td>
<td>$475,000</td>
</tr>
<tr>
<td>F</td>
<td>Aggregate Savings/Dissavings Achieved</td>
<td>$17,500</td>
<td>$25,000</td>
</tr>
<tr>
<td>G</td>
<td>At least 3% savings achieved?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>H</td>
<td>Tiered shared savings rate</td>
<td>73rd percentile rank = 80% Shared savings due to EQIP Entity</td>
<td>HSCRC Methodology</td>
</tr>
<tr>
<td>I</td>
<td>Total Incentive Payment Due**</td>
<td>$34,000</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- **Less dissavings from prior year (if any) and Adjusted for Quality Performance Score**
- **Inflation set to zero for the purpose of this example**
Dissavings Accountability

• Direct collection of downside risk is not possible without the ability to directly adjust physician FFS payments.

• However, it is important to ensure the program drives meaningful improvements in cost efficiency and quality.

• EQIP’s Dissavings Policy will help to ensure outcomes in lieu of downside risk:
  1. Participants who create dissavings in a performance year will be required to offset those dissavings in the following performance year, prior to earning a reward.
  2. An EQIP Entity will be removed from EQIP if its Target Price is in the lower two terciles of the Tiered Shared Savings Rate (0-66th percentile) and there have been two consecutive years of dissavings.
    • HSCRC staff will monitor the effects of this policy to ensure there are no unintended consequences
EQIP will be an Advanced Alternative Payment Model (AAPM)

- AAPM status means EQIP will allow participating Care Partners to qualify into the Quality Payment Program (QPP). QPP status benefits participants in several ways, including:
  - A potential 5 percent incentive payment (in addition to EQIP incentives),
  - Exclusion from the MIPS reporting requirements, and,
  - Exclusion from MIPS payment adjustments.

- Care Partners who participate in 2022 will receive a lump-sum payment from CMS in 2024, based on their 2023 Part B services
  - In initial performance years, all beneficiaries ‘touched’ by a Care Partner participating in an EQIP Entity will be attributed to the AAPM.
EQIP Quality Measure Selection for PY1

Measure Characteristics
- Measures within the PY2021 MIPS Set
- Applicable at physician-level
- Part B claims measurable

CMS Quality Payment Program (QPP) Standards
- High Priority or Outcomes Measure
- 3-6 measures available

HSCRC Priorities
- Alignment with CareFirst
- Agnostic to episode-type
- Maryland’s Statewide Integrated Health Improvement Strategy

<table>
<thead>
<tr>
<th>Measure Name</th>
<th>Orthopedics</th>
<th>Gastroenterology</th>
<th>Cardiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Care Plan (NQF #326)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Documentation of Current Medications in the Medical Record (NQF #419)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan (MIPS #128)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Will be a Care Partner-specific quality adjustment to the final Incentive Payment after shared savings as a 5% ‘earn back’
- For each triggered episode, the HSCRC will assess if the three measures were performed 365 days prior to the end of the episode, by any physician
The State has developed a one-stop shop, or EQIP Entity Portal to support participation with:

- Enrollment and opportunity analysis,
- CMS vetting and required activities (including reporting),
- CRP Entity Contracting and operations support, and,
- Performance analytics, learning system and program communications.

Access to EEP is a requirement for participation

- Organizations will need access to the CRISP Reporting Services (CRS) Portal Login Page (separate from ULP and ENS)
- For organizations new to CRS, you must sign a CRISP Participation Agreement (PA) and update their Notice of Privacy Practices documents (this can be done NOW, Contact: EQIP@CRISPhealth.org)
- CRISP will hold webinars for training later in June and early July

**EQIP Entity Enrollment**

- Individual or Group Participation
- Provider Information
- Administrative Proxy Election
- Status Tracker

**Participation Management**

- Episode Selection
- Intervention Selection
- Baseline Data

**Program Data**

- Incentive Payments and Savings Summaries
- Monthly Performance Analytics
The Benefits of EQIP

- Value-based payment opportunity tailored to Maryland physicians
- No downside risk collection
- System alignment, regardless of care setting
- Episodes tailored to provider practice patterns and scope of impact
- Opportunity to improve patient outcomes and contribute to health system improvement
## EQIP Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
</table>
| May-June, 2021  | • EQIP Recruitment and information sessions  
                        • CRISP Credentialing and Enrollment for EEP                                    |
| July 9th, 2021  | • EEP opens for enrollment  
                        • Technical Policy and Portal User Guides available  
                        • Baseline Episode experience available in EEP                                |
| Sept. 1st, 2021 | • Deadline to submit National Provider Identification (NPI) and other enrollment initiation information into EEP  
                        • Providers submitted to CMS for vetting                                   |
| Dec. 1, 2021    | • Care Partner Arrangements and Payment Operations Finalized  
                        • CMS Vetting Status Available, Enrollment Finalized                           |
| Jan. 1, 2022    | • Care Partner participation opportunity will be annual  
                        • Preliminary Target Prices available in EEP                                |
| PY1 Start       | • Performance analytics available, updated                                         |
| Mar. 1, 2022    | • PY2 (2023) Enrollment Opens                                                     |
| July 1, 2023    | • Incentive Payments distributed                                                  |
Learning More about EQIP and Enrollment

- Please reach out if you would like to schedule a one-on-one demo or meeting about EQIP with your organization. Staff will be available to:
  - Walk through opportunity analysis, specific to your organization
  - Discuss any episode definitions
  - Answer specific questions

- EQIP Subgroup Schedule
  - Monthly every third Friday, 9-11am
  - Next meeting: June 18th, 2021, To be added to distribution list, email: bfitzgerald@medchi.org

- Enrollment Inquiries: EQIP@crisphealth.org
- Website: https://hscrc.maryland.gov/Pages/Episode-Quality-Improvement-Program.aspx

- Key Dates
  - July 9, 2021: Enrollment Opens
  - September 1, 2021: Deadline for Care Partner submission into EEP for 1/1/22 start (CMS Vetting)
  - October-December, 2021: Contracting, Episode and Intervention Selection
  - January 2022: Program Start
Thank you!
<table>
<thead>
<tr>
<th>Gastroenterology Episode</th>
<th>Triggering Procedures (CPT)</th>
</tr>
</thead>
</table>
| Colonoscopy Procedure, 14 | Colonoscopy  
Sigmoidoscopy w biopsy, polypectomy  
Colonoscopy thru stoma w biopsy, polypectomy  
Colonoscopy w biopsy, polypectomy  
Sigmoidoscopy  
Flexible Sigmoidoscopy /Colonoscopy  
Colonoscopy/Sigmoidoscopy ColorectalCa Screen  
Colonoscopy through Stoma  
Other therapeutic Sigmoidoscopy |
| Colorectal Resection Procedure, 90 | Colectomy with proctectomy  
Laparoscopic colectomy with proctectomy  
Laparoscopic partial colectomy  
Laparoscopic total intra-abd colectomy  
Partial Colectomy  
Total intra-Abdominal colectomy  
Abdominoperineal Resection  
Abdominoperineal Resection  
Rectal Resection  
Pelvic Exenteration  
Procedure - colorectal resection – other  
Procedure - other anal / rectal procedures |
| Gall Bladder Surgery Procedure, 90 | Laparoscopic Cholecystectomy  
Open Cholecystectomy w/wout CBD expl |
| Upper GI Endoscopy Procedure, 14 | Flexible Esophagoscopy  
Esophagoscopy w additional procedures  
Upper GI endoscopy w additional procedures  
Esophagoscopy w treatment of varices  
Upper GI endoscopy  
Esophagoscopy w Dilatation  
Flexible Esophagoscopy w biopsy  
EGD w biopsy  
EGD w Dilation  
Barrett's ablation |
## Statewide Estimates, 2019

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Statewide Episodes</th>
<th>Unique NPIs</th>
<th>Average Cost per Episode</th>
<th>Total Cost Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colonoscopy</td>
<td>15,995</td>
<td>873</td>
<td>$1,629</td>
<td>$28,922,505</td>
</tr>
<tr>
<td>Colorectal Resection</td>
<td>1,322</td>
<td>287</td>
<td>$37,824</td>
<td>$47,004,774</td>
</tr>
<tr>
<td>Gall Bladder Surgery</td>
<td>2,254</td>
<td>388</td>
<td>$13,547</td>
<td>$28,557,776</td>
</tr>
<tr>
<td>Upper GI Endoscopy</td>
<td>15,084</td>
<td>889</td>
<td>$2,325</td>
<td>$35,254,531</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>34,655</strong></td>
<td><strong>2,437</strong></td>
<td><strong>$8,043</strong></td>
<td><strong>$139,739,585</strong></td>
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<tr>
<td>Ortho/Neuro Episode</td>
<td>Triggering Procedures (CPT)</td>
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<td>--------------------------------------------------------</td>
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<tr>
<td>Hip Replacement &amp; Hip Revision Procedure, 90</td>
<td>Partial and Total Hip Replacement</td>
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<tr>
<td></td>
<td>Partial and Total Hip Revision</td>
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<td></td>
<td>Total Hip Resurfacing</td>
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<td><strong>Triggered on diagnosis (ICD-10)</strong></td>
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<td>Closed and open Fracture Neck of Femur, Pelvis</td>
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<td>Stress Fracture Femur, Pelvis</td>
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<tr>
<td></td>
<td>Other Closed Fracture Femur, Pelvis</td>
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<tr>
<td></td>
<td>Completion of Joint Prosthesis, orthopedic procedure</td>
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<tr>
<td></td>
<td>*may also include above episodes</td>
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<tr>
<td>Hip/Pelvic Fracture Acute, 30</td>
<td><strong>Posterior Cruciate Ligament Repair Knee</strong></td>
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<td></td>
<td>Arthroscopy Knee Meniscal Transplant / Graft</td>
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<td></td>
<td>Knee Arthroscopy without ligament repair</td>
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<td></td>
<td>ACL Repair Knee</td>
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<tr>
<td>Knee Arthroscopy Procedure, 90</td>
<td><strong>Partial and Total Knee Replacement (primary)</strong></td>
<td></td>
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<tr>
<td></td>
<td>Partial and Total Knee Revision</td>
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<tr>
<td>Lumbar Laminectomy Procedure, 90</td>
<td><strong>Decompression / Discectomy</strong></td>
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<tr>
<td></td>
<td>Laminectomy</td>
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<tr>
<td>Lumbar Spine Fusion Procedure, 180</td>
<td><strong>Spinal Fusion</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Shoulder Replacement Procedure, 90</td>
<td><strong>Partial and Total Shoulder Replacement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revision of Shoulder Replacement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Statewide Estimates, 2019

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Statewide Episodes</th>
<th>Unique NPIs</th>
<th>Average Cost per Episode</th>
<th>Total Cost Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip Replacement &amp; Hip Revision</td>
<td>3,402</td>
<td>277</td>
<td>$22,028</td>
<td>$71,653,679</td>
</tr>
<tr>
<td>Hip/Pelvic Fracture</td>
<td>4,357</td>
<td>n/a</td>
<td>$31,396</td>
<td>$136,794,460</td>
</tr>
<tr>
<td>Knee Arthroscopy</td>
<td>919</td>
<td>226</td>
<td>$4,587</td>
<td>$4,167,320</td>
</tr>
<tr>
<td>Knee Replacement &amp; Knee Revision</td>
<td>6,791</td>
<td>442</td>
<td>$19,140</td>
<td>$133,288,453</td>
</tr>
<tr>
<td>Lumbar Laminectomy</td>
<td>1,255</td>
<td>173</td>
<td>$11,731</td>
<td>$14,052,763</td>
</tr>
<tr>
<td>Lumbar Spine Fusion</td>
<td>1,861</td>
<td>180</td>
<td>$46,329</td>
<td>$86,758,488</td>
</tr>
<tr>
<td>Shoulder Replacement</td>
<td>1,124</td>
<td>139</td>
<td>$22,657</td>
<td>$27,743,028</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>19,709</strong></td>
<td><strong>1,438</strong></td>
<td><strong>$20,269</strong></td>
<td><strong>$474,458,189</strong></td>
</tr>
</tbody>
</table>
## HSCRC Staff Proposed Episodes for PY1, Episode Type, Length

<table>
<thead>
<tr>
<th>Cardiology Episode</th>
<th>Triggering Procedures (CPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacemaker / Defibrillator Procedure, 30</td>
<td>Insertion of Pacemaker&lt;br&gt;Insertion of Generator Alone&lt;br&gt;Insertion of Leads&lt;br&gt;Insertion of Defibrillator</td>
</tr>
<tr>
<td>CABG &amp;/or Valve Procedures Procedure, 90</td>
<td>Heart Valve Repair, Outflow Reconstruction&lt;br&gt;Heart Valve Replacement&lt;br&gt;Coronary Artery Bypass Graft (CABG)&lt;br&gt;Re-Do Coronary Artery Bypass Graft (CABG)</td>
</tr>
<tr>
<td>Coronary Angioplasty Procedure, 90</td>
<td>PCI with stents, atherectomy&lt;br&gt;Procedure - coronary - ptca – angioplasty&lt;br&gt;Procedure - coronary - thrombectomy</td>
</tr>
<tr>
<td>Acute Myocardial Infarction (AMI) Acute, 30</td>
<td><strong>Triggered on diagnosis (ICD-10)</strong>&lt;br&gt;STEMI&lt;br&gt;NSTEMI&lt;br&gt;<em>may also include above episodes</em>*</td>
</tr>
</tbody>
</table>
## Statewide Cardiology Estimates, 2019

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Statewide Episodes</th>
<th>Unique NPIs</th>
<th>Average Cost per Episode</th>
<th>Total Cost Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Myocardial Infarction</td>
<td>3,116</td>
<td>TBD</td>
<td>$24,925</td>
<td>$77,666,845</td>
</tr>
<tr>
<td>CABG &amp;/or Valve Procedures</td>
<td>1,707</td>
<td>123</td>
<td>$64,220</td>
<td>$109,563,635</td>
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<tr>
<td>Coronary Angioplasty</td>
<td>3,853</td>
<td>305</td>
<td>$18,581</td>
<td>$71,637,404</td>
</tr>
<tr>
<td>Pacemaker / Defibrillator</td>
<td>3,908</td>
<td>240</td>
<td>$22,634</td>
<td>$92,028,833</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12584</td>
<td>669</td>
<td><strong>$28,435</strong></td>
<td><strong>$350,896,717</strong></td>
</tr>
</tbody>
</table>