



maryland
health services
cost review commission

Episode Quality Improvement Program (EQIP) Specifications

Program Year 4

Table of Contents

1. Background and Overview	1
1.1. Background	1
1.2. EQIP Overview	2
1.2.1. <i>Involved Parties</i>	2
1.2.2. <i>Clinical Episode Categories</i>	4
1.2.3. <i>Timeline for EQIP Milestones</i>	5
2. EQIP Care Partner Eligibility	5
2.1. CRISP's EQIP Entity Portal	6
2.2. EQIP Entity Care Partner Submission – Sep. 1 Deadline	6
2.3. Annual Episode and Intervention Elections - Dec. 31 Deadline	6
2.4. <i>Care Partner Arrangements and Payment Remission Recipient</i>	7
2.5. <i>Minimum Episode Volume Thresholds</i>	7
2.6. <i>QPP Eligibility Participation Requirements</i>	9
2.7. <i>EQIP Entity Continuity Policy</i>	9
2.8. <i>EQIP Entity Successor Policy</i>	10
3. PACES Episode Construction	11
3.1. Description of Data and Sources	11
3.1.1 <i>Payment Update Factors</i>	11
3.1.2 <i>Standardization of Regulated Payments</i>	12
3.2. Clinical Episode Construction Overview	12
3.2.1. <i>PACES Episode Identification</i>	12
3.2.2. <i>PACES Episode Construction</i>	13
3.2.3. <i>Assignment of Service and Drug Costs to PACES Episodes</i>	15
3.2.4. <i>Associating Procedure Episodes with Condition Episodes</i>	17
3.2.5. <i>Associating Sequelae with PACES Episodes</i>	17
3.3. Calculation of Total Episode Costs	19
3.3.1. <i>Filtering</i>	19
3.3.2. <i>Attribution of Episodes to Providers</i>	19
3.4. Episode Output	19
4. Target Price Methodology	20
4.1. Calculation of Target Prices	20
4.3 <i>Updating Target Prices over Program Years</i>	21
5. Reconciliation	22
5.1. Dissavings Policy	22
5.1.1. <i>Dissavings Policy for Successor Entities</i>	23
5.2. Minimum Savings Threshold	24
6. Tiered Shared Savings Rate	25
6.1. Statewide Ranking Methodology	25
7. Composite Quality Score Adjustment	27
7.1. Overview of Quality Measures	27
7.2. Composite Quality Score Performance Measurement	28
7.3. Statewide Scaling and Performance Thresholds	29
7.3.1. <i>Performance Thresholds</i>	29
7.3.2. <i>Program Year Scoring</i>	30
7.4.4. <i>Composite Quality Score Adjustment</i>	31
8. Incentive Payment Cap (Stop Gain Amount)	32
9. Final Incentive Payment Calculation and Distribution	33
10. Removal from the Program	33
Appendix A. Inflation Adjustments	34
Inflation Adjustments for Unregulated Payments	34

Inflation Adjustments for Regulated Payments	35
Appendix B. Calculate Total Episode Costs for Non-PACES Episodes	36
<i>Excluded Episode Costs</i>	36
<i>Calculate Episode Costs</i>	36
<i>Prorated Episode Costs</i>	37
<i>Disclaimer: Episode Costs Cannot Be Perfectly Replicated Using CCLF Data</i>	39
<i>Completion Factors</i>	39
<i>Inflation Adjustments</i>	40

1. Background and Overview

Maryland's Health Services Cost Review Commission (HSCRC) has set all-payer rates for the State's hospitals since 1977, through a waiver with the Centers for Medicare & Medicaid Services (CMS). In 2019, Maryland entered into an agreement with CMS to modernize its rate-setting authority via the Total Cost of Care (TCOC) Model, building on achievements made through the Maryland All-Payer Model (2014-2018). The TCOC Model contains three core programs: Hospital Payment Program, Care Redesign Program (CRP), and Maryland Primary Care Program (MDPCP). The Episode Quality Improvement Program (EQIP) is operated by the HSCRC as a track under the CRP. EQIP is a voluntary program that engages non-hospital Medicare providers and suppliers in care transformation and value-based payment through an episode-based approach.¹

This document contains technical specifications for EQIP Program Year 4 (PY 4),² running January 1, 2025, through December 31, 2025. It is intended to serve as a technical guide for those seeking to better understand how EQIP is implemented and should not be considered an official CMS document. The methodology for EQIP episode construction closely reflects the Patient Centered Episodes of Care System (PACES) episode grouper, which uses algorithms and clinical information to identify and group services related to a "clinical episode."³ (For more information on the PACES episode grouper visit "PACES Center – Episodes and Clinical Chapters" at <https://www.pacescenter.org/episodes-of-care>). Other aspects of EQIP are determined by CMS and HSCRC policy and the HSCRC's actuarial analysis of historical Medicare claims data.⁴ The overall methodology has been tailored to meet the goals of the TCOC Model; requirements of the CRP; and the State of Maryland's needs, unique payment structure, and technical capacity.

1.1. Background

Due to the global budgeting under the TCOC Model, CMS excludes Maryland providers from participating in certain Center for Medicare and Medicaid Innovation (CMMI) models. However, the TCOC Model permits the development of innovative payment models specific to Maryland under its CRP. The HSCRC developed

¹ For more information on the Episode Quality Improvement Program, please visit our website: <https://hscrc.maryland.gov/Pages/Episode-Quality-Improvement-Program.aspx>.

² Though this document briefly mentions future program years, these specifications apply only through EQIP PY4. Future details and program year updates will be published as updates to this document.

³ In this document, the term "clinical episode" refers to a single instance of a type of episode whereas "clinical episode category" refers to the type of episode. For example, a patient's hip replacement on January 4 is a clinical episode whereas Hip Replacement is a clinical episode category.

⁴ In addition to certain episode definitions, all other EQIP methodology derives from HSCRC/CMS policy, including target price methodology, incentive payment methodology, quality composite score methodology, monitoring and reporting to CMS, and participation specialty areas.

EQIP as an episodic incentive payment model for physicians and other practitioners to increase participation in Advanced Alternative Payment Models (APM) within the State and allow them to align with hospitals under the TCOC Model.

EQIP is designed to meet the following goals:

- **Financial Accountability:** Increase physicians' accountability for improving quality of care and reducing healthcare spending related to episodes of care.
- **Care Redesign:** Support and encourage physicians interested in continuously transforming care to align with value-based payment policies and Maryland hospital Global Budget Revenues (GBRs).
- **Clinical Data Analysis and Feedback:** Reduce episode costs by eliminating unnecessary or low-value care, shifting care to lower-cost settings when clinically appropriate, increasing care coordination, and fostering quality improvement.
- **Physician Engagement:** Shift towards physician-focused, value-based care reimbursement to create environments that stimulate rapid development and deployment of new evidence-based knowledge.
- **Patient and Caregiver Engagement:** Increase the likelihood of better health at lower cost through patient education and ongoing communication throughout the clinical episode.

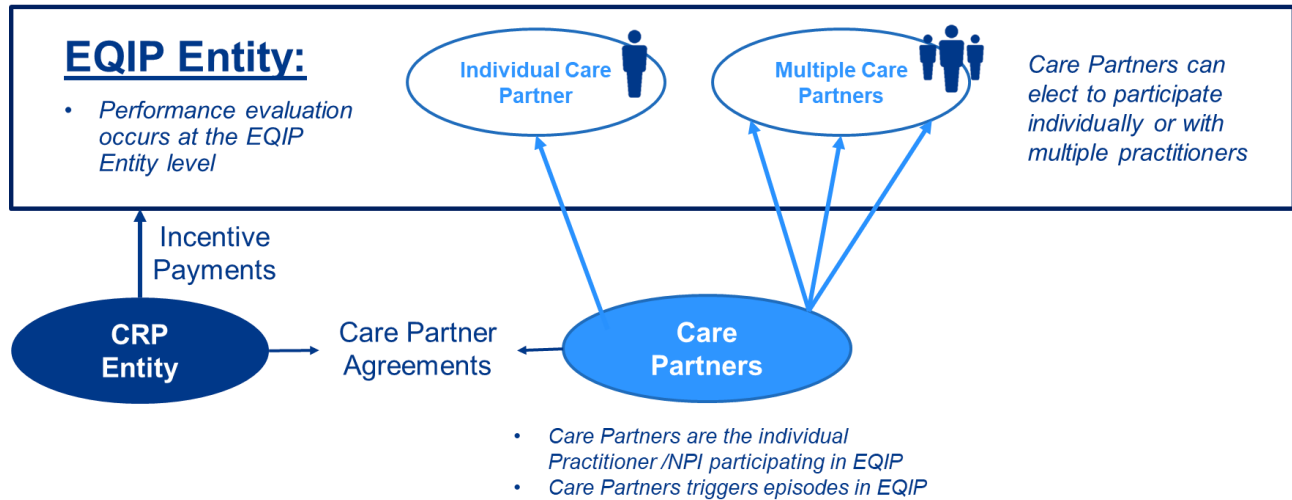
EQIP provides incentive payments to practitioners to help achieve these goals. These incentive payments are based on both the financial performance and quality performance of participating practitioners. EQIP episode costs include Medicare Parts A and B spending assigned to the specific type of clinical episode category (see [Section 3.2.3](#)).

1.2. EQIP Overview

1.2.1. Involved Parties

EQIP involves three parties (**Exhibit 1**): Care Partners (the individual physicians or other CMS-approved practitioners who trigger EQIP episodes), EQIP Entities (a Care Partner or group of Care Partners whose performance is assessed), and a CRP Entity (the hospital that administers the Care Partner Agreements and incentive payments).

Exhibit 1. EQIP Roles and Definitions



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.

- Care Partners:** General or specialist physicians and other approved practitioners licensed and enrolled in the Medicare Provider Enrollment, Chain, and Ownership System (PECOS) are eligible to be Care Partners. The State of Maryland will submit a list of potential Care Partners to CMS prior to the program year to verify providers are eligible to participate in Medicare. The State of Maryland subsequently sends CMS a final list of eligible providers who signed a Care Partner Arrangement Agreement with the CRP Entity to certify their participation and Qualifying APM Participant (QP) status (see [Section 2.6](#)).⁵
- EQIP Entities:** Care Partners can participate individually in EQIP as an EQIP Entity or can join with other Care Partners and participate together as one EQIP Entity. This is the case regardless of their professional affiliation with other organizations or legal entities (e.g., a physician group practice). EQIP Entities select the types of EQIP episodes for which they are to be held accountable through the EQIP Entity Portal (EEP; see [Section 2.1](#)). Incentive payments are based on the aggregate performance of an EQIP Entity's Care Partner(s). The EQIP Entity determines the distribution of earned incentive payments among its Care Partners.
- CRP Entities:** The CRP Entity is the hospital that aggregates Care Partner Arrangement Agreements and issues incentive payments to the payment remission source indicated by the EQIP Entity. The CRP Entity for EQIP is the University of Maryland Medical Center. Providers must sign an Agreement with the CRP Entity to participate.

⁵ Quality Payment Program. Advanced Alternative Payment Models: <https://qpp.cms.gov/apms/advanced-apms>

1.2.2. Clinical Episode Categories

EQIP PY4 includes 37 PACES clinical episode categories (**Exhibit 2**) spanning 10 clinical specialty categories and 18 non-PACES clinical episode categories (**Exhibit 3**) spanning two clinical specialty categories. EQIP Entities can choose to participate in one or more clinical episode categories within one specialty area, or multiple clinical episode categories across more than one specialty area. However, EQIP Entities must meet a minimum clinical episode volume threshold to be eligible to participate in each type of EQIP episode (see [Section 2.5](#)).

Exhibit 2. PACES Clinical Episode Categories for Program Year 4

Allergy / ENT	Behavioral Health
Allergic Rhinitis / Chronic Sinusitis	Chronic Anxiety
Asthma	Recurrent Depression
Cardiology / Vascular	Dermatology
Acute Myocardial Infarction	Cellulitis, Skin Infection
CABG and/or Valve Procedures	Decubitus Ulcer
Heart Failure	Dermatitis, Urticaria
Pacemaker/Defibrillator	
Percutaneous Cardiac Intervention	Ophthalmology
	Cataract Surgery
	Glaucoma
Gastroenterology	Pulmonology / Critical Care
Cholecystectomy	COPD
Colectomy	Deep Vein Thrombosis./ Pulmonary Embolism
Colonoscopy	Pneumonia
Endoscopy	Sepsis
Orthopedics / Musculoskeletal	Rheumatology
Hip Replacement & Hip Revision	Rheumatoid Arthritis
Hip/Pelvic Fracture	
Knee Arthroscopy	Urology
Knee Replacement & Knee Revision	Genitourinary Device/Catheter Complications
Low Back Pain	Transurethral Resection Prostate
Lumbar Decompression	Urinary Tract Infection
Lumbar Fusion	Prostatectomy
Osteoarthritis	
Rotator Cuff Repair	
Shoulder Total Arthroplasty	

Exhibit 3. Non-PACES Clinical Episode Categories

Emergency Department	
Abdominal Pain & Gastrointestinal Symptoms	Hyperglycemia
Asthma/COPD	Hypertension
Atrial Fibrillation	Nephrolithiasis
Chest Pain	Pneumonia
Deep Vein Thrombosis	Shortness of Breath
Dehydration & Electrolyte Derangements	Skin & Soft Tissue Infection
Diverticulitis	Syncope
Fever, Fatigue or Weakness	Urinary Tract Infection

Musculoskeletal	
Musculoskeletal	Physical Therapy Evaluation

1.2.3. Timeline for EQIP Milestones

The following list contains important milestones for EQIP program year cycles:

June	Recruitment and EQIP outreach
July – August	EQIP Entity Portal (EEP) opens for enrollment
September 1	- EEP deadline for submission of Care Partners (NPIs) for CMS vetting - EQIP Entity Audit and Eligibility
October – November	- CMS vetting results available in the EEP - Care Partner Arrangement Agreement process (contracting) begins
December 31	- Care Partner Arrangement Agreement process (contracting) ends - EQIP Entity participation and rosters are final
January 1	- Episode elections are final - EQIP program year begins

Abbreviations: CMS, Centers for Medicare & Medicaid Services; NPI, national provider identifier.

2. EQIP Care Partner Eligibility

Each Care Partner in an EQIP Entity is required to:

- Sign a standard Arrangement Agreement indicating they will comply with the following:
 - Implement allowed interventions (e.g., care delivery enhancements such as standardized care pathways or reengineered care pathways using evidence-based medicine).
 - Use Certified Electronic Health Record Technology (CEHRT) where required by CMS.
 - Notify patients about EQIP.
- Pass CMS vetting for eligibility based on the following:
 - Medicare PECOS is up to date and correct.

- CMS program integrity verification.
- Law enforcement review.

EQIP participation involves upside-only risk for EQIP Entities. They can receive incentive payments based on improved financial performance and quality of care. They are not expected to repay CMS as the result of inadequate performance, though dissavings are netted against future years' savings. Participating Care Partners bill CMS and receive reimbursement for their services as normal. Financial performance is assessed approximately six months after the program year ends. The CRP Entity will then distribute any earned incentive payments to the EQIP Entity.

2.1. CRISP's EQIP Entity Portal

CRISP (Chesapeake Regional Information System for Our Patients), Maryland's state-designated health information exchange (HIE), serves as the program administrator for EQIP and developed the EQIP Entity Portal (EEP) for providers to enroll in EQIP, view data, and access resources available to EQIP Entities. EQIP Entities must enroll with CRISP to use the EEP and participate in EQIP. There is no cost to use the EEP. Ambulatory practices have free access to CRISP. CRISP data is accessible online, via CRISP Reporting Services.⁶

2.2. EQIP Entity Care Partner Submission – Sep. 1 Deadline

By September 1 of the year prior to each program year, the EQIP Entity must submit via the EEP the names, individual National Provider Identifiers (NPIs), and contact information for all Care Partners who intend to participate in the EQIP Entity. The State submits Care Partners to CMS for vetting after September 1. Care Partners should ensure they are enrolled in Medicare and up to date with their information in the Medicare PECOS. The EEP will post an update to Care Partner vetting status between October and December.

2.3. Annual Episode and Intervention Elections - Dec. 31 Deadline

During the enrollment period, the EQIP Entity will use the EEP to select clinical episode categories and indicate the interventions it will perform. This selection becomes final on December 31 at 11:59 PM and must meet minimum episode-volume thresholds discussed in [Section 2.5](#). The episode and intervention selection process will reopen for the following program year on July 1.

⁶ Contact EQIP@crisphealth.org for EQIP application assistance or refer to the CRISP Onboarding Instructions for EQIP and the EEP User Guide for technical assistance (<https://www.crisphealth.org/onboarding-training-materials>). The EEP User Guide also can be accessed by clicking the "Help" button in the EEP.

2.4. Care Partner Arrangements and Payment Remission Recipient

The CRP Entity will generate a standard Arrangement Agreement for each Care Partner for electronic signature. The Agreement will detail requirements for participation, standards established for the program, and details of the EQIP Entity. The EQIP Entity will provide contact information for each Care Partner. The EQIP Entity must indicate in the EEP the single Payment Remission Recipient to whom the EQIP Entity's applicable earned incentive payment will be distributed. The Agreement allows changes to the Payment Remission Recipient by the EQIP Entity.

Each Care Partner must sign an Agreement. Care Partners will be removed from the EQIP Entity if they do not (1) pass CMS vetting and (2) sign an Agreement. The EEP will generate the final list of Care Partners prior to the start of the program year.

2.5. Minimum Episode Volume Thresholds

A sufficient volume of clinical episodes is necessary to calculate stable target prices (i.e., the pre-determined payment level based on historical claims data that the participant hospital must provide services below to achieve episode savings). Stable target prices are necessary to reasonably assume that EQIP Entities reduced costs through efficiency, better care coordination, or quality improvement, rather than as the result of random year-over-year variation in episode experience. Therefore, the HSCRC requires each EQIP Entity to meet three minimum episode volume thresholds **during the baseline period** to be eligible to participate in the clinical episode categories they choose:

1. Of the NPIs that make up the EQIP Entity, 75% must have at least one claim with a non-excluded beneficiary who triggered a clinical episode in each clinical episode category chosen. *This claim threshold is 50% for EQIP Entities with 10 or fewer Care Partners.* This is to ensure that a sufficient proportion of Care Partners are likely to engage with the selected episodes of care during the program year.
 - a. Care Partners who do not have at least one claim during the baseline period will be in probationary status during the program year. Probationary Care Partners are required to have at least one claim during the first two calendar quarters of the program year to be eligible to continue participating in EQIP in the subsequent performance year.
2. The EQIP Entity must be attributed 11 or more clinical episodes within each selected clinical episode category (e.g., 11 or more hip replacements during 2019).

3. The EQIP Entity must be attributed 50 or more clinical episodes across all clinical episode categories chosen.⁷

If fewer than 75% of the NPIs that make up the EQIP Entity (50% for EQIP Entities with 10 or fewer Care Partners) have a claim that triggers an EQIP episode during the baseline period, then the EQIP Entity is required to remove NPIs until it meets the threshold. EQIP Entities that do not meet the 11 minimum episode-volume threshold for a clinical episode category will be excluded from any subsequent reporting for those types of episodes during the program year. EQIP Entities that do not meet the overall 50 minimum episode-volume threshold are excluded from participating in EQIP during the program year. Two scenarios for an EQIP Entity's threshold eligibility are presented in **Exhibit 4** and **Exhibit 5**.

Exhibit 4. EQIP Entity with Volume Thresholds Sufficient for Participation

Clinical Episode Category	Selected	Episode Volume during 2019	Eligible for Episode Category?	Total Clinical Episode Count
Knee Replacement	Yes	8	No	Insufficient episode volume: EQIP Entity is ineligible to participate in this category; Excluded from the total episode count
Hip Replacement	Yes	36	Yes	EQIP Entity is eligible to participate in these two clinical episode categories because it was attributed ≥50 episodes during 2019
Knee Arthroscopy	Yes	28	Yes	
Lumbar Fusion	No	10	No	Category not selected: Excluded from the EQIP Entity's total episode count

⁷ EQIP Entities can choose to participate in one or more clinical episode categories within one specialty category or multiple clinical episode categories across multiple specialty categories. They are not required to participate in every clinical episode category within a specialty category.

Exhibit 5. EQIP Entity with Volume Thresholds Insufficient for Participation

Clinical Episode Category	Selected	Episode Volume during 2019	Eligible for Episode Category?	Total Clinical Episode Count
Knee Replacement	Yes	10	No	Insufficient episode volume: Entity is ineligible to participate in this category; Excluded from the total episode count
Hip Replacement	Yes	40	Yes	Entity is eligible to participate in this category, but ineligible to participate in EQIP because it was not attributed ≥50 episodes during 2019
Knee Arthroscopy	No	15	Yes	Entity should consider adding this episode type to meet the total episode-volume threshold
Lumbar Fusion	Yes	8	No	Insufficient episode volume: Entity is ineligible to participate in this category; Excluded from the total episode count

2.6. QPP Eligibility Participation Requirements

CRP is an Advanced APM for purposes of the CMS Quality Payment Program (QPP).⁸ The CRP Entity acts as the participating Advanced APM entity on behalf of all EQIP Entity Care Partners. Care Partners participating in the CRP are listed on an Affiliated Practitioner List that identifies eligible clinicians to become Qualifying APM Participants (QPs). This means Care Partners engaged in EQIP can opt out of Merit-based Incentive Payment System (MIPS) in exchange for EQIP participation.

Care Partners who qualify for EQIP participation and maintain all participation requirements throughout the year are certified as QPs. As episode opportunities increase, the HSCRC will update methodologies to ensure alignment with the QP thresholds policy in the Advanced APM track of QPP. The Advanced APM payment date is typically scheduled two years after the program year.

2.7. EQIP Entity Continuity Policy

Following the enrollment period, the HSCRC will review the consistency (or “Continuity”) of an Entity’s Care Partner (CP) composite compared to the prior performance year. If an entity meets one of the following conditions, it will be considered a new entity for the performance year and assigned a new EQIP ID and name:

⁸ CMS Quality Payment Program: <https://qpp.cms.gov/>

1. **Care Partner Overlap:** Less than 60% of CPs in the current performance year were enrolled in the Entity during the previous performance year, or
2. **New Care Partners:** More than 40% of CPs in the current performance year are new CPs to the Entity.

Exhibit 6. Continuity Policy Examples

Entity	CPs in PY3	CPs in PY4	CPs in PY3 and PY4	CPs in PY4 but not PY3	Percent Overlap	Percent New	Continuity Rule
1	7	8	5	3	71.4%	37.5%	Entity maintains continuity
2	16	4	3	1	18.8%	25.0%	New Entity, Overlap < 60%
3	55	80	46	34	83.6%	42.5%	New Entity, New CPs > 40%
4	56	17	7	10	12.5%	58.8%	New Entity, both conditions met

Abbreviations: CP, Care Partner.

2.8. EQIP Entity Successor Policy

EQIP Entities make many changes during EQIP enrollment which includes splitting, merging and creating new entities. Following the enrollment period, the HSCRC will review the overlap of an Entity's Care Partner (CP) composite compared to other Entities from the prior performance year. If an entity meets the below condition, it will be considered a successor entity:

1. Greater than 60% of Care Partners in the current performance year overlap with a single entity from the prior performance year.

The original entity will be referred to as the "Primary Entity" and the new entity the "Successor Entity." The dissavings policy differs for Successor Entities (see [Section 5.1](#))

Exhibit 7. Successor Policy Examples

Entity	CPs in PY3	CPs in PY4	CPs from Singular PY3 Entity	% Overlap from Singular PY3 Entity	Primary Entity	Continuity Rule
10	0	244	145	59.4%	n/a	CPs from singular PY3 Entity < 60%
11	0	11	9	81.8%	4	CPs from singular PY3 Entity > 60% #11 Successor Entity #4 Primary Entity
12	0	27	21	77.8%	4	CPs from singular PY3 Entity > 60% #12 Successor Entity #4 Primary Entity

Abbreviations: CP, Care Partner.

3. PACES Episode Construction

3.1. Description of Data and Sources

EQIP episodes are constructed from the Claim and Claim Line Feed (CCLF) data provided by CMS to the State of Maryland. This data file contains Medicare final action claims for all Part A and Part B services received by beneficiaries who reside in Maryland, regardless of where services were rendered. The file also contains claims information on all Medicare-covered services furnished within Maryland to non-residents; however, non-residents are excluded from EQIP episode construction. The data do not include certain substance abuse claims excluded from the dataset under rules promulgated by the Substance Abuse and Mental Health Services Administration (i.e., SAMHSA claims).

Medicare beneficiaries excluded from clinical episodes:

- Non-Maryland residents
- Managed care enrollees
- End-stage renal disease patients

Medicare Parts A and B claims excluded from episode triggers and total episode costs:

- Non-final action
- Unpaid/Denied
- SAMHSA

Episode triggers and episode-relevant costs are derived from Medicare fee-for-service claims. Beneficiaries who are enrolled in Medicare Advantage or other group health arrangements are not eligible for EQIP, and capitation or other payments related to these beneficiaries are not part of the Model. In addition, exclusions are made for beneficiaries eligible for Medicare because of end-stage renal disease or for whom Medicare is not the primary payer.

Final paid claim amounts, adjusted to a program year basis as described below, are used to calculate episode expenditures. Paid claim amounts are based on services provided and are subject to CMS adjustments for geography, quality incentives, and other factors.

3.1.1 Payment Update Factors

All payments are trended forward to program-year dollars prior to input in the PACES episode grouper to ensure that baseline and performance period costs are comparable and reflect an accurate rate for service payments made during the period. All dollar amounts shown in EQIP reports and used for target price determination ([Section 4](#)) reflect these trended amounts. These update factors account for inflation and year-over-year changes in Medicare payment rates for each of the prospective payment system fee schedules and for changes in the Maryland hospital rates as regulated by the HSCRC. EQIP uses the CMS prospective payment system market basket update factors and HSCRC hospital rate data to accomplish this. A description of the logic used to trend payments forward is described in the [Appendix](#).

3.1.2 Standardization of Regulated Payments

The Global Budget Revenue (GBR) system used to pay for regulated (inpatient and outpatient hospital) services differs from the prospective payment systems used for all other Medicare services. To ensure that providers are not rewarded or held accountable for fluctuations due to GBR adjustments, all regulated payments are calculated at the facility level using the CMS Standardization Methodology for Allowed Amount, adjusted to account for individual providers' baseline GBR rates and adjusted to a paid basis. For consistency and comparability, these amounts are used in the calculation of all episode payment amounts during the baseline and performance periods, as well as in target price determination. These regulated payments also use a Maryland-specific update factor ([Appendix](#)) rather than the CMS update factors used for all other settings of care.

3.2. Clinical Episode Construction Overview

CRISP provides an [EQIP Episode Playbook](#)⁹ with an overview of each episode and its construction codes. The majority of the EQIP episodes are constructed based on PACES methodology,¹⁰ but there are additional episodes created by the HSCRC in partnership with clinical subject matter experts. Services and costs associated with the diagnoses or procedures that trigger PACES clinical episodes (see [Exhibit 2](#)) are grouped together using the PACES episode grouper. TCOC are calculated for non-PACES clinical episodes following the same approach to calculated total episode costs for Maryland Care Transformation Initiatives (CTIs). Appendix B describes this approach.

Each episode will consist of the following periods:

- 1) **Trigger**, such as an index hospital stay or procedure during which the initial care was performed – defined by a Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding System (HCPCS) code for procedural episodes or International Classification of Diseases-Tenth Revision-Clinical Modification (ICD-10-CM) diagnosis code for acute episodes.
- 2) Specified “**lookback period**” during which to count all costs related to the trigger.
- 3) The period following the triggering event, during which to count all costs related to the trigger (“**close period**”).

3.2.1. PACES Episode Identification

PACES clinical episodes are identified based on definitions from the PACES episode grouper. Non-PACES clinical episodes are identified based on HSCRC definitions described in the [EQIP Episode Playbook](#).

⁹ <https://www.crisphealth.org/wp-content/uploads/2025/01/PY4-EQIP-Episode-Playbook-1.2.2025.pdf>

¹⁰ PACES Center – Episodes and Clinical Chapters: <https://www.pacescenter.org/episodes-of-care>

Triggers initiate episodes based on the procedure and/or diagnosis codes found on Medicare Part A or B claims, dependent on the definition of the clinical episode category. Triggers are defined using qualifying primary ICD-10-CM codes, CPT codes, or HCPCS codes.

A trigger code determines the start and end dates of each clinical episode (the length depends on the definition of the clinical episode category, usually 14 to 180 days). Once a trigger is identified, the episode window is created using the clinical episode category's specified "lookback" and "close" period durations. The overall episode window is the combination of the lookback and close periods. The [EQIP Episode Playbook](#) outlines the window specifications for each of the clinical episode categories.

3.2.2. PACES Episode Construction

(**Note:** The content in this section summarizes the information provided in *PACES CR 4.0 Business Rules – Revised September 30, 2024* which can be found in the EQIP enrollment portal.)

PACES defines two types of episodes: Procedure Episodes and Condition Episodes.

- **Procedure Episodes** include events such as surgeries and diagnostic procedures.
- **Condition Episodes** are divided into two categories: *Acute* Conditions and *Chronic* Conditions.

There are specific Episode Identification Rules used to trigger or identify services that initiate a Procedure or a Condition episode. The process typically follows these steps:

1. Identify claims with a procedure or a condition trigger code and for a certain type of service.
 - Trigger criteria for Procedure Episodes include HCPCS/CPT codes in any position on Outpatient Facility or Part B Service claims.
 - Trigger criteria for Condition Episodes include (1) ICD-10-CM codes in any position on a claim with CPT codes for evaluation and management (E&M) services, or (2) ICD-10-CM codes in the principal position on an Inpatient Facility claim. Criteria (1) also requires confirmation based on either a second claim for an E&M service with the same ICD-10-CM code in any position or a related pharmacy claim.
 - The [EQIP Episode Playbook](#) contains lists of trigger codes for all clinical episode types.
2. Create episodes based on the identified services.
 - A Procedure Episode will have a trigger date equal to the date of the earliest triggering service on the claim.

- A Condition Episode is created with a trigger date equal to the earliest service (e.g., E&M or Inpatient) among the claims that met the trigger criteria.

Subsequent triggers for a given Procedure or Condition Episode are consolidated if they fall within a prior episode trigger window (plus, for certain types of clinical episodes, a specified number of days within which subsequent triggers will be ignored).

3. Assign the episode start date according to the applicable start rules for the given clinical episode type. The start dates for Condition Episodes equal the trigger date minus a specified number of look-back days for the given clinical episode type.
 - The [EQIP Episode Playbook](#) describes the lookback and close periods (i.e., episode windows) for all clinical episode types.
4. Assign the episode end date according to the specified number of days in the episode window for the given clinical episode type or, if death occurs during the specified episode window, the date the beneficiary died. (All episode types will also terminate at the end of the analytic window, i.e., performance year).
5. Identify and combine related procedure and condition episodes.
 - Episodes are combined based on clinical relevance and overlapping time periods. When either Procedure Episodes or Condition Episodes are combined, respectively, there is only one episode that remains, and the services assigned to that surviving episode comprise the combination of services related to each episode. For example, the following table (taken from the *PACES CR 4.0 Business Rules*) describes **three types of procedure combinations**:

Combination Type	Example
One of the two Procedures is primary. This is an A(B) type of combination.	Cystoscopy in conjunction with prostatectomy: The cystoscopy is absorbed, and prostatectomy remains.
One is primary, but the combination is considered to be "x with y"	Cardiac catheterization with percutaneous coronary angioplasty: In this case, PACES creates a single percutaneous coronary angioplasty episode but notes the presence of cardiac catheterization.
They are equal, and the result is designated as "x and y together"	Cardiac catheterization and coronary artery bypass graft (CABG): These two major procedures are combined to form a new, joint episode.

Each clinical episode type has a specified "trigger window" such that only episodes that are both related and have overlapping trigger windows qualify to be combined. For most

procedure episodes, the trigger window is set to the trigger date plus 1 day. The start date of the combined episode equals the earliest of the two start dates while the end date equals the latest of the two end dates.

3.2.3. Assignment of Service and Drug Costs to PACES Episodes

PACES assigns (or links) the costs of services or drugs to each clinical episode if those services or drugs are relevant to the clinical episode and the service occurred (or drug was dispensed) between the start and end dates of the episode. The rules for linking services to episodes vary by the type of service, as shown in **Exhibit 8**. (Note that Part D drug costs are not currently included in EQIP.)

The service assignment rules are applied to the highest-ranking episode types based on the following order: 1) Procedure, 2) Acute Condition, and 3) Chronic Condition. Once a service is assigned to an episode of one type it is removed from consideration for assignment to lower priority types. In other words, a service assigned to a procedure will never be assigned to an Acute Condition, nor will services assigned to an Acute Condition be assigned to a Chronic Condition. Within an episode type, however, a service can be assigned to more than one episode if it meets the assignment criteria for each.

Reconciling Multiple Service Assignments

If a service is assigned to more than one episode (within an episode type), the service will be assigned to one of those episodes according to a sequential hierarchy described in Section 7.3.1 of *the PACES business rules document* (located in the EQIP enrollment portal). Although rare, it is still possible for a service to be assigned to multiple episodes after the hierarchy is applied. In these cases, the costs of that service are split evenly between the episodes to which the service was assigned.

Exhibit 8. Methods of Service Assignment to Episodes

Service Type	Procedure Episodes	Condition Episodes
Inpatient Facility	- The <i>principal</i> diagnosis code on the inpatient claim is defined as relevant to the episode. - The <i>principal</i> diagnosis code on the inpatient claim is trigger code for a Condition Episode that is defined as an indication for the Procedure Episode.	The <i>principal</i> diagnosis code on the inpatient claim is either a trigger code for the Condition Episode or defined as relevant to the Condition Episode.
	Inpatient stays are assigned to episodes before other types of claims. If the episode is triggered by a professional claim and the trigger date occurs between hospital admission and discharge (“Inpatient Bubble”), then all other claims occurring during the inpatient stay are also assigned to the episode. Also, the episode begin and end dates are adjusted based on the admission and discharge dates of the inpatient claim.	
E&M	- The <i>principal</i> or <i>secondary</i> diagnosis code on the E&M claim is defined as relevant to the episode. - A diagnosis code in <i>any</i> position on the E&M claim is a trigger for a Condition Episode that is defined as an indication for the Procedure Episode.	The <i>principal</i> or <i>secondary</i> diagnosis code on the E&M, outpatient, or professional claim is either a trigger code for the Condition Episode or defined as relevant to the Condition Episode.
Outpatient	- The procedure code on the outpatient claim is a trigger code for the episode. - The <i>principal</i> or <i>secondary</i> diagnosis code on the outpatient claim is defined as relevant to the episode. - A diagnosis code in <i>any</i> position on the outpatient claim is a trigger for a Condition Episode that is defined as an indication for the Procedure Episode.	
Professional	- The procedure code on the professional claim is a trigger code for the episode. - The <i>principal</i> or <i>secondary</i> diagnosis code on the professional claim is defined as relevant to the episode. - A diagnosis code in <i>any</i> position on the professional claim is a trigger for a Condition Episode that is defined as an indication for the Procedure Episode.	
Pharmacy	- Drugs are linked to the episode if the drug code on the pharmacy claim is indicated for the condition.* - The drug code on the Pharmacy claim is part of a global package for the Procedure Episode.	
Ambulance	- Any ambulance service that occurs during the episode window is assigned to the episode. - If a claim for any other service includes an ambulance service code, that ambulance service will be assigned to the same episode as that other service.	

* The order of precedence for relevant Rx assignment is 1) Chronic conditions., 2) Acute conditions, and 3) Procedures. As with all other services, “Inpatient Bubble” logic will be applied.

3.2.4. Associating Procedure Episodes with Condition Episodes

Associations are made for episodes that are clinically related. The services assigned to associated (i.e., linked or combined) episodes are ultimately assigned to the primary episode.

A Procedure Episode is associated with a Condition Episode if the trigger date of the Procedure Episode falls between the Condition Episode's start and end dates and the Condition Episode is specified as an association for the Procedure Episode based on the "procedure to condition relationships" specified by the PACES grouper. A condition can be a consequence of the procedure (for example, sepsis after a joint replacement), or it can be the indication for a procedure (for example, a CABG because of an AMI).

A procedure episode cannot be associated with both a Chronic Condition Episode and an Acute Condition Episode if that Acute Condition Episode is open at the same time as the Chronic Condition Episode. Acute Condition Episodes are given precedence over Chronic Condition Episode.

If a Condition Episode is associated with more than one Procedure Episode, then one of those Procedure Episodes is designated as the "primary assignment" according to the following sequential criteria.

1. The principal diagnosis on the trigger claim for the Procedure Episode is a trigger code for the Condition Episode being considered.
2. A secondary diagnosis code on the trigger claim for the Procedure Episode is a trigger code for the Condition Episode being considered.
3. A diagnosis code of the trigger claim of the Procedure Episode is relevant to the Condition Episode being considered.
4. The Condition Episode being considered has the fewest days between its trigger date and the trigger date of the Procedure Episode.

At each step above, PACES determines whether only one Procedure Episode is identified as being associated with the Condition Episode and, if so, designates that Procedure Episode as the "primary assignment." Otherwise, it proceeds to the next step, considering only the subset of Procedure Episodes that have met the preceding criterion.

3.2.5. Associating Sequelae with PACES Episodes

Some Condition Episodes are sequelae of either a) care that is delivered as part of a Procedure Episode or b) care delivered for a different Condition Episode. There can also be instances in which certain services have a diagnosis code that is indicative of a sequela and that should be associated with an underlying condition.

The PACES grouper pre-specifies which Condition Episodes are sequelae of Procedure Episodes or other Condition Episodes (e.g., acute exacerbations of another condition). A sequela episode is associated with a Procedure or other Condition Episode if the trigger date of the sequela episode, or the date of an earlier service linked to the sequela episode, falls between the start and end dates of the Procedure or other Condition Episode (note: PACES adds a day to the interval between the start and end dates for some types of episodes).

If an Acute (exacerbation) Condition Episode is a sequela episode associated with a Chronic Condition Episode, and the Chronic Condition Episode is a sequela episode associated with a Procedure or other Condition Episode, then only the Acute Condition Episode would be assigned as a sequela to the Procedure or other Condition Episode – both the Acute and Chronic Condition Episodes cannot be linked as sequelae to a given Procedure or other Condition Episode.

If a Condition Episode is a sequela episode associated with more than one Procedure or other Condition Episode, then one of those Procedure or Condition Episodes is designated as the “primary assignment” for the sequela episode according to the following sequential criteria.

1. The episode being considered is a Procedure Episode.
2. The episode being considered is a Condition Episode and the date of the earliest service linked to that Condition Episode is no more than 30 days before the trigger date of the sequela episode.
3. The episode being considered has the fewest days between its episode trigger date and the date of the earliest service linked to the sequela episode.
4. The episode being considered is the highest-ranking PACES episode after applying PACES-specific hierarchical criteria for associations between episodes.

At each step above, PACES determines whether only one Procedure or Condition Episode is identified as being associated with the sequela episode and, if so, designates that Episode as the “primary assignment” for the sequela episode. Otherwise, it proceeds to the next step, considering only the subset of Procedure or Condition Episodes that have met the preceding criterion.

3.2.6. Non-PACES Episode Construction

HSCRC constructs Non-PACES clinical episodes based on HSCRC definitions described in the [EQIP Episode Playbook](#). **TCOC during the episode window is calculated for non-PACES clinical episodes following the methodology described in Appendix B.**

3.3. Calculation of Total Episode Costs

After all PACES and non-PACES episodes are created, total episode costs are derived as follows:

1. Total episode costs for a single episode include all Medicare Parts A and B claim payments for services linked to episode, according to the methods described in [Section 3.2.3](#)). Denied claims are excluded. Medicare Part D expenditures are also excluded.
2. Total payments for included service types are summed to calculate the total episode costs.

3.3.1. Filtering

After individual episodes are created, HSCRC applies filters to exclude certain episodes and ensure data integrity. Episodes are dropped if they meet one of the following criteria:

- **Low Cost** – Episode cost is below the 5th percentile in that clinical episode category.
- **High Cost** – Episode cost is above the 95th percentile in that clinical episode category.
- **Incomplete** – Not enough data, claims, or accompanying information to fully construct the episode and calculate total episode costs.

3.3.2. Attribution of Episodes to Providers

EQIP attributes episodes to professionals within the PACES episode grouper using the rendering NPI field. It attributes episodes to an individual Care Partner's NPI based on eligible, non-denied, professional Medicare claims that (a) have the required trigger diagnosis or procedure codes and (b) are within the trigger window, defined as +/- two days from the beginning date of service on the trigger claim. If more than one Care Partner/NPI could have triggered the episode, the NPI with the highest allowed amount is attributed the episode.

EQIP episodes must be assigned to individual eligible clinicians. If a group NPI is used to populate the rendering provider field on a claim and an individual NPI is available in the referring NPI field, the episode is assigned using the individual NPI.

3.4. Episode Output

Episodes are included in the period of interest if they end during the target year (e.g., the episode end date occurs on or between the first and last dates of the baseline year). For example, the 2019 baseline period includes clinical episodes with episode windows ending during 2019, including clinical episodes that might have been triggered prior to 2019 or contain a lookback period prior to 2019.

Once the output from the PACES episode grouper is complete, the episodes are governed by HSCRC methodologies and calculations.¹¹

4. Target Price Methodology

HSCRC determines an EQIP Entity's incentive payments by comparing the total relevant episode costs across each clinical episode category in which the Entity participates against an aggregate target price for that clinical episode category. HSCRC establishes a single target price for each EQIP Entity and clinical episode category. Preliminary target prices are available at the start of the program year. However, the final target prices used for reconciliation are not made available until the end of the program year.

Characteristics of EQIP target prices:

- **Inflation:** To be comparable to current program year costs, target prices are set using total relevant episode costs during the baseline period, trended forward for inflation (see [Appendix](#)).
- **Standardization and Re-normalization:** All regulated payments (hospital inpatient and hospital outpatient Prospective Payment System [PPS] for Maryland regulated hospitals) are standardized using the CMS methodology for standardized allowed amounts,¹² to avoid feedback effects from the Global Budget Revenue. After standardization and inflation adjustments, regulated payments are converted back to paid dollars specific to the EQIP Entity and program year using the ratio of actual to standardized payments. The ratio is based on total regulated payments for each hospital over full program years (see [Appendix](#)).
- **Patient Mix:** Target prices are *not* adjusted for changes to the Care Partners' patient mix between the baseline period and the program year.
- **Setting:** Target prices do *not* vary across care settings (e.g., hospital inpatient, outpatient, post-acute care, physician office). They are setting neutral to allow for the creation of savings by shifting low-acuity services to lower-cost settings.

4.1. Calculation of Target Prices

A target price is calculated for each EQIP Entity at the level of the clinical episode category. The target price is based on the combined total relevant episode costs for each clinical episode attributed to the EQIP

¹¹ In addition to non-PACES episode definitions, all non-PACES EQIP methodology derives from HSCRC/CMS policy, including target price methodology, incentive payment methodology, quality composite score methodology, monitoring and reporting to CMS, and participation specialty areas.

¹² CMS Standardization Methodology for Allowed Amount, Version 12:
<https://resdac.org/sites/datadocumentation.resdac.org/files/CMS%20Part%20A%20and%20Part%20B%20Price%20%28Payment%29%20Standardization%20-%20Detailed%20Methods%20%28updated%20May%202022%29.pdf>

Entity's Care Partners during the baseline period. An EQIP Entity's target price for a given clinical episode category equals the average total relevant episode costs among all clinical episodes attributed to its Care Partners during the baseline period. HSCRC calculates target prices as follows:

1. For each EQIP Entity and clinical episode category, sum up the total relevant episode costs for all participating Care Partners. This produces a single **Entity Aggregate Episode Cost** for each clinical episode category.
2. Divide the **Entity Aggregate Episode Cost** by the total baseline volume of participating Care Partners in that clinical episode category to arrive at the **Entity Average Episode Cost**. This is simply a weighted average of episode-level costs across all episodes initiated by the EQIP Entity's Care Partners for the given clinical episode category.
3. Set the Target Price for that EQIP Entity and clinical episode category equal to the **Entity Average Episode Cost**.

4.2 Preliminary Target Prices and Finalizing Target Prices

The **Preliminary Target Price** is equal to the EQIP Entity's average episode costs during the baseline period, without risk-adjustment, standardized and inflated using data on CMS and HSCRC update factors for each setting of care available at the time of enrollment ([Section 3.1.1](#)). Preliminary target prices are calculated for each EQIP Entity in each clinical episode category it elects. Preliminary target prices are available in the EEP performance dashboard once the program year begins.

The **Final Target Price** for the program year is equal to the unadjusted baseline target price, without risk-adjustment, standardized and adjusted for inflation based on the *final* CMS and HSCRC update factors for each setting of care. For instance, if the Physician Fee Schedule grew by 5% between the baseline and performance periods, then each physician claim will be increased by 5%.

As necessary, the HSCRC will also make adjustment to the target price to account for CMS or HSCRC policy changes, such as sequestration adjustments or changes in the skilled nursing facility and home health agency fee schedules. Final target prices are not adjusted for changes in the case mix of patients, geographic variation, or peer comparison. Final target prices are calculated at reconciliation and are generated only for clinical episode categories in which an EQIP Entity is participating.

4.3 Updating Target Prices over Program Years

The target prices for EQIP PY4 (2025) will continue to use 2019 as the baseline period. Any updates to the baseline period will be discussed with stakeholders before developing future program years.

5. Reconciliation

An EQIP Entity's incentive payment is based on its total savings across all clinical episodes attributed to its Care Partners during the program year. Performance period episodes are constructed and attributed to Care Partners in the same manner as they are for the baseline period. An EQIP Entity generates savings in a clinical episode category if total relevant costs are less than that Entity's aggregate target price for that clinical episode category (i.e., the EQIP Entity's target price for the given clinical episode category multiplied by the number of clinical episodes attributed to all its Care Partners during the performance period). A clinical episode category generates dissavings if the total relevant episode costs exceed the aggregate target price for that clinical episode category.

EQIP Entities receive an incentive payment if the sum of the following three amounts is positive:

- Positive amounts by which the aggregate performance period costs for each clinical episode category are below the final target price, across all clinical episode categories.
- Negative amounts by which aggregate performance period costs for each clinical episode category are above the final target prices, across all clinical episode categories.
- Dissavings from the prior program year; that is, an aggregate negative sum from the prior year's reconciliation.

An EQIP Entity's incentive payment is calculated as the positive sum of the above amounts, after applying the Minimum Savings Threshold (see [Section 5.3](#)), a Shared Savings Rate (see [Section 6](#)), and adjusting for the EQIP Entity's Quality Score Adjustment (see [Section 7](#)). Incentive payments are calculated in accordance with Maryland's agreement with CMS.

5.1. Dissavings Policy

The HSCRC will not incorporate downside risk in EQIP because it does not have the ability to directly adjust physician fee-for-service payments. However, it is important for the HSCRC to ensure that EQIP drives meaningful improvements in cost efficiency and quality and maintains fidelity to national QPP standards. EQIP Entities are held accountable for dissavings, year over year, to incentivize efficiency and quality improvement.

There are two components of the EQIP dissavings policy for Primary Entities:

1. **Annual Accountability:** Prior to earning an incentive payment, EQIP Entities are required to offset any cumulative dissavings from prior performance years.
2. **Removal Accountability:** An EQIP Entity is removed from EQIP if it generates dissavings in two consecutive program years *and* its baseline-period performance across all clinical episode

categories in which it participates ranks in the lower two terciles of the tiered Shared Savings Rate ([Section 6](#)). Care Partners participating with the Entity in both consecutive years of dissavings will not be eligible to participate in EQIP the following year.

5.1.1. Dissavings Policy for Successor Entities

Successor Entities (defined in [Section 2.7](#)) will have the following dissavings policy applied:¹³

1. **Annual Accountability:** Dissavings accrued by the Primary Entity during the previous year will be distributed to successor entities based on the following equation:

$$\frac{\text{Previous Year Spending for Carryover NPIs in Successor Entity}}{\text{Previous Year Spending for Carryover NPIs in Primary Entity}} \times \text{Total Dissavings Primary Entity}$$

2. **Removal Accountability:** Successor Entities will remain accountable for the Primary Entity's prior year of dissavings (if applicable). A Successor Entity is removed from EQIP if the Annual Accountability from the Primary Entity generated dissavings and the Successor Entity generates dissavings in the next consecutive program year. Additionally, the Successor Entity's baseline-period performance across all clinical episode categories in which it participates must rank in the lower two terciles of the tiered Shared Savings Rate ([Section 6](#)).

Exhibit 9. Successor Entity Removal Accountability – At Risk for Removal

Performance Year (PY)	EQIP ID	Tercile	Savings/Dissavings
PY2 – Primary Entity	2	2	(\$400,025) Annual Accountability
PY3 – Successor Entity	25	1	(\$160,073)
PY4 – Successor Entity	25	Final Performance TBD	
PY5 – Successor Entity	25	At Risk for Removal in PY5 (CY26): Successor Entity is in the lower 2 terciles with dissavings in PY2 (CY23–Primary Entity) and PY3 (CY24–Successor Entity).	

¹³ All removals of Entities from EQIP are subject to HSCRC review.

Exhibit 10. Successor Entity Removal Accountability – Not at Risk for Removal

Performance Year (PY)	EQIP ID	Tercile	Savings/Dissavings
PY2 – Primary Entity	2	2	(\$400,025) Annual Accountability
PY3 – Successor Entity	25	1	\$250,347
PY4 – Successor Entity	25	Final Performance TBD	
PY5 – Successor Entity	25	Not at Risk for Removal in PY5 (CY26): Successor Entity does not have two consecutive years of dissavings.	

5.2. Minimum Savings Threshold

The Minimum Savings Threshold helps ensure that the State awards incentive payments based on actual care transformation, rather than on normal, random fluctuations in costs and clinical experience over time. The Minimum Savings Threshold for EQIP establishes the percentage of savings that an EQIP Entity must first achieve before that EQIP Entity is eligible to receive incentive payments. Once the Minimum Savings Threshold is met, the EQIP Entity is eligible to receive first-dollar savings, subject to the Shared Savings Rate described in [Section 6](#). In other words, if the Minimum Savings Threshold is met, then the total amount that the EQIP Entity saved during the program year is counted when calculating its incentive payment. The HSCRC may adjust the Minimum Savings Threshold as needed to maintain program integrity and increase savings achieved with EQIP.

The Minimum Savings Threshold for EQIP is 3%. An EQIP Entity's total episode costs during the program year (across all clinical episodes and categories) are compared to the EQIP Entity's Aggregated Target Price, which is calculated as follows:

1. **Calculate the Aggregated Target Price.** For each clinical episode category, multiply the EQIP Entity's final target price by the number of clinical episodes attributed to the EQIP Entity's Care Partners during the program year.
2. **Determine Program Year Costs.** Sum the program year costs for all clinical episodes calculated across all clinical episode categories in which the EQIP Entity participates.
3. **Determine Program Year Savings.** Subtract program year costs (2) from the Aggregated Target Price (1)
4. **Compare the Aggregated Target Price to the Program Year Costs.** The EQIP Entity's program year savings (3) must meet or exceed 3% of its Aggregated Target Price before it is eligible to

receive incentive payments. (In other words, an EQIP Entity's program year costs must be less than or equal to 97% of its Aggregated Target Price.)

6. Tiered Shared Savings Rate

EQIP Entities and Medicare share the savings generated during the program year. The incentive payment to an EQIP Entity is a tiered portion of its total savings, based on the EQIP Entity's efficiency compared to baseline data on the same type of clinical episodes triggered statewide. The tiered shared savings provides low-cost, high-efficiency EQIP Entities with an opportunity to keep more savings when episodes have already been optimized, while providing high-cost, low-efficiency EQIP Entities with an incentive to improve relative to the efficiency of its peers.

For each clinical episode category, the EQIP Entity's total episode costs during the baseline period will be ranked among all other practitioners in the State that triggered the same types of episodes. The EQIP Entity will receive a single "blended" ranking based on its total costs across all clinical episode categories in which it participates, during the baseline period. Higher costs will result in a lower percentile ranking, and lower costs will result in a higher percentile ranking.

The Shared Savings Rates in **Exhibit 11** will be applied based on the tercile in which an EQIP Entity's blended performance falls (percentiles will be rounded to two decimal points to determine percentile rank).

Exhibit 11. Shared Savings Rates, by EQIP Entity Rank Percentile

	EQIP Entity Rank Percentile	Savings Paid to EQIP Entity	Savings Retained by Medicare
Tier 1	1 st – 33 rd percentiles	50%	50%
Tier 2	34 th – 66 th percentiles	65%	35%
Tier 3	67 th – 100 th percentiles	80%	20%

6.1. Statewide Ranking Methodology

Statewide ranking of an EQIP Entity's blended performance will be determined prior to the start of the program year, based on baseline (2019) data on EQIP episodes. The steps are as follows:

Step 1. Within each clinical episode category, determine each individual Care Partner's statewide ranking with respect to average episode cost:

- Using statewide data (i.e., all individual NPIs in the State) from the baseline year, remove NPIs with fewer than 11 episodes, to ensure estimates are based on providers with sufficient volume for a stable distribution.

- b. Calculate each NPI's average episode cost during the baseline year (i.e., total episode costs divided by the NPI's episode volume).
- c. Create a distribution of average episode costs across NPIs by setting the bottom of the distribution (0th percentile) equal to the *highest* average episode cost and the top of the distribution (100th percentile) equal to the *lowest* average episode cost.
- d. Establish each Care Partner's percentile rank between the highest and lowest cost providers.

Step 2. For all NPIs (including those with fewer than 11 episodes), define their **NPI Rank Clinical Category** as their percentile rank in the distribution created in Step 1:

- a. If an NPI's average episode cost is higher than the 0th percentile of average episode costs, set their percentile to 0. If an NPI's average episode cost is lower than the 100th percentile of average episode costs, set their percentile to 100.
- b. If the NPI had fewer than 11 episodes and their average episode cost falls between two percentile values in the established distribution, use linear interpolation between the two values to determine their exact NPI Rank Clinical Category.

Step 3. Within each clinical episode category, define an **EQIP Entity Rank Clinical Category** as the weighted average of its Care Partners' NPI Rank Clinical Categories:

- a. Multiply each Care Partner's episode volume by their NPI Rank Clinical Category, then sum the values.
- b. Sum the total volume of episodes in the clinical episode category attributed to all the EQIP Entity's Care Partners.
- c. Divide 3(a) by 3(b) to determine the EQIP Entity Rank Clinical Category.

Example: EQIP Entity Rank Clinical Category

If an EQIP Entity consists of three Care Partners, $NPI_A^{50th\ pctl}$, $NPI_B^{75th\ pctl}$, and $NPI_C^{45th\ pctl}$ with 100, 200, and 300 episodes, respectively, then the EQIP Entity Rank Clinical Category is 56:

$$[(50 * 100) + (75 * 200) + (45 * 300)] / 600 = 55.8$$

Step 4: Calculate the **EQIP Entity Rank Percentile** across all clinical episode categories in which an EQIP Entity participates, weighted by episode volume:

- a. For each clinical episode category, multiply the EQIP Entity Rank Clinical Category by the total episode volume determined in Step 3(b).

- b. Sum the result from 4(a) across all clinical episode categories in which the EQIP Entity participates.
- c. Sum the result from Step 3(b) across all clinical episode categories in which the EQIP Entity participates.
- d. Divide the result from 4(b) by the result from 4(c) to obtain the final EQIP Entity Rank Percentile.

EQIP Entities will be re-ranked each program year based on baseline year data but adjusted to their current list of Care Partners.

7. Composite Quality Score Adjustment

After the Shared Savings Rates are determined for each EQIP Entity, the resulting savings paid to the EQIP Entities is subject to the Composite Quality Score adjustment. Quality adjustment is required as a part of EQIP's Advanced APM status. By tying payment to performance on quality measures, EQIP incentivizes providers to improve quality of care while also improving efficiency.

EQIP includes a 5% "earn-back" adjustment on incentive payments. The final Shared Savings Amount is reduced 5%, and 0 to 100% of that 5% withholding is returned to the EQIP Entity based on its quality performance (which is measured as a percentage). For each clinical episode category in which the EQIP Entity participates, three quality measures are weighted to calculate a Composite Quality Score, which determines the amount of the incentive payment (i.e., shared savings) earned back for quality performance.

7.1. Overview of Quality Measures

All EQIP episodes are subject to three quality measures, regardless of clinical episode category or clinical specialty area. The EQIP quality measures are:

- Up to date in MIPS and applicable at the individual physician level.
- Measurable using claims (i.e., no submission requirements for EQIP Entities).
- High-priority and outcomes-based (endorsed by MIPS or the National Quality Forum).
- Agnostic to clinical episode category or specialty area.

Attention:

Advanced Care Plan Quality Measure

Services provided under CPT codes 99497 and 99498 typically satisfy the requirement of Advanced Care Planning. However, if a patient received these types of services, the providers should submit CPT code 1123F or 1124F, as described in the specifications linked in footnote [a] of Exhibit 12.

In PY4, HSCRC will continue to record claims with 99497 or 99498 as satisfying the numerator requirement.

However, in PY5 (the next performance year) the HSCRC will only count claims with code 1123F or 1124F as satisfying the numerator requirement.

- Aligned with the Maryland Statewide Integrated Health Improvement Strategy.¹⁴

For each attributed episode, the HSCRC will assess whether the three measures defined in **Exhibit 12** were performed, **by any physician**, within 364 days preceding the end of the episode.

Exhibit 12. Quality Measures Applied to All EQIP Episodes

Measure Name	Description
Advance Care Plan^[a] *	Percentage of patients, 65 years and older, who have an advance care plan (ACP) or surrogate decision maker documented in the medical record. or Documentation in the medical record that an ACP was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an ACP.
Documentation of Current Medications in the Medical Record^[b]	Percentage of visits for patients 18 years and older for which a clinician attests to documenting a list of current medications using all immediate resources available on the date of the encounter.
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan^[c] **	Percentage of patients, 18 years and older, with a documented BMI during the encounter or during the previous 12 months. and When the BMI is outside of normal parameters, a follow-up plan was documented during the encounter or during the 12 months preceding the encounter.

* Services provided under CPT codes 99497 and 99498 typically satisfy the requirement of Advanced Care Planning. However, if a patient received these types of services, the provider should submit CPT code 1123F or 1124F, as described in the specifications linked below in [a]. In PY4, HSCRC will continue to record claims with 99497 or 99498 as satisfying the numerator requirement, however in PY5 (the next performance year) the HSCRC will only count claims with code 1123F or 1124F as satisfying the numerator requirement.

** The denominator of the BMI measure is adjusted downward to account for documented exceptions (i.e., CPT Code G8438). The numerator will also exclude these instances.

Sources:

[a] CMS QPP Quality Measures Specification, Claims Registry Measures, Quality ID #47, *Advance Care Plan*,

https://qpp.cms.gov/docs/QPP_quality_measure_specifications/Claims-Registry-Measures/2024_Measure_047_MedicarePartBClaims.pdf

[b] CMS QPP Quality Measures Specification, CQM Measures, Quality ID #130, *Documentation of Current Medications in the Medical Record*,

https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2024_Measure_130_MIPSCQM.pdf

[c] CMS QPP Quality Measures Specification, CQM Measures, Quality ID #128, *Preventive Care and Screening, Body Mass Index (BMI)*

Screening and Follow-Up Plan, https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2024_Measure_128_MIPSCQM.pdf

7.2. Composite Quality Score Performance Measurement

The Composite Quality Score is based on the three quality measures shown in **Exhibit 12** above.¹⁵ The Composite Quality Score adjustment is calculated as follows:

1. **Score by Quality Measure.** Each quality measure is scored at the EQIP Entity level and is worth up to 10 points.

¹⁴ HSCRC. (December 2020). *Statewide Integrated Health Improvement Strategy Proposal*. Accessed June 28, 2021. <https://hscrc.maryland.gov/Documents/Modernization/SIHIS%20Proposal%20-%20CMMI%20Submission%2012142020.pdf>

¹⁵ The HSCRC may revise the quality measures in future years and welcomes suggestions from EQIP Entities on episode-specific quality measures that could be included in EQIP.

2. **Determine Aggregate Measure Score.** An EQIP Entity can receive up to 30 points (three measures, 10 points each).
3. **Convert Aggregate Score to Percentile.** The Composite Quality Score is equal the sum of the points earned on all applicable quality measures for the program year, divided by the maximum number of points available for the program year. The Composite Quality Score is calculated at the EQIP Entity level and expressed as a percentage ranging from 0 to 100.

7.3. Statewide Scaling and Performance Thresholds

The process of assigning quality points to each quality measure, called “scoring,” is based on the EQIP Entity’s quality performance during the program year, relative to set thresholds.

7.3.1. Performance Thresholds

Performance thresholds are determined based on EQIP episodes identified using statewide data (i.e., episodes attributed to all individual NPIs in the State) from the most recent year with complete data (i.e., Performance Year 4 would use CY 2022). The following steps describe the HSCRC’s methodology for setting an EQIP Entity’s performance thresholds:

Step 1: Determine the baseline performance of all NPIs in the state:

- a. Limit the data to episodes that were attributed to NPIs who were attributed at least 10 EQIP episodes of at least episode type during the baseline year.
- b. For every clinical episode, use the beneficiary’s carrier and outpatient claims with service dates on or between the episode end date and 364 days prior to the episode end date to flag CPT/HCPCS codes associated with each quality measure shown in **Exhibit 12**.
- c. For each clinical episode and quality measure, set the Quality Measure Flag equal to 1 if one or more quality measure–specific CPT/HCPCS codes were flagged, 0 otherwise. (Beneficiaries may initiate more than one episode during the baseline period, and their episode windows could overlap. A Quality Measure Flag is created for each episode, and each episode is included in the performance rate calculation.)
- d. For each quality measure, calculate each NPI’s baseline performance rate, as the total count of Quality Measure Flags, across all clinical episode categories in which the NPI was attributed at least 10 episodes, divided by the total count of episodes across all clinical episode categories:

$$Performance\ Rate_{NPI} = \left(\frac{Total\ Count\ of\ Quality\ Measure\ Flags}{Total\ Count\ of\ Episodes} \right) \times 100$$

Step 2: Use the distribution of baseline performance rates for all Care Partners to determine the performance thresholds *specific to each quality measure*:

- EQIP Entities that receive program year scores below the 20th percentile will be on probation. Two consecutive years of probation will result in automatic exclusion from EQIP.
- Program year scores equal to or greater than the 20th percentile and lower than the 35th percentile will receive zero points, but they will *not* constitute grounds for probation.
- Program year scores equal to or greater than the 35th percentile will receive up to 10 points, as prescribed in **Exhibit 13**.

Exhibit 13. Quality Performance Thresholds and Scoring

Quality Performance Rate (PR)	Program Year Points Assigned	Quality Probation
PR < 20 th Percentile	0	YES
20 th Percentile ≤ PR < 35 th Percentile	0	NO
35 th Percentile ≤ PR < 40 th Percentile	1	NO
40 th Percentile ≤ PR < 45 th Percentile	2	NO
45 th Percentile ≤ PR < 50 th Percentile	3	NO
50 th Percentile ≤ PR < 55 th Percentile	4	NO
55 th Percentile ≤ PR < 60 th Percentile	5	NO
60 th Percentile ≤ PR < 65 th Percentile	6	NO
65 th Percentile ≤ PR < 70 th Percentile	7	NO
70 th Percentile ≤ PR < 75 th Percentile	8	NO
75 th Percentile ≤ PR < 80 th Percentile	9	NO
80 th Percentile ≤ PR	10	NO

7.3.2. Program Year Scoring

To determine the points earned for each quality measure during the program year, use the CCLF episode data from the program year and follow the same steps above, to calculate an EQIP Entity's performance rate:

Step 1: Determine the program year performance of each Care Partner aligned with the EQIP Entity:

- Limit the data to episodes attributed to the EQIP Entity's Care Partners (NPIs) and ending during the program year.

- b. For every clinical episode, use the beneficiary's carrier and outpatient claims with service dates on or between the episode end date and 364 days prior to the episode end date to flag CPT/HCPCS codes associated with each quality measure shown in **Exhibit 12**.
- c. For each clinical episode and quality measure, set the Quality Measure Flag equal to 1 if one or more quality measure-specific CPT/HCPCS codes were flagged, 0 otherwise.
- d. For each quality measure, calculate each Care Partner's program year rate (i.e., ACP Performance Rate, Medicine Performance Rate, and BMI Performance Rate) as the total count of Quality Measure Flags, across all clinical episode categories in which the EQIP Entity participates, divided by the total count of episodes across all clinical episode categories:

$$Performance\ Rate_{EQIP\ Entity} = \left(\frac{\sum_{Care\ Partners} Total\ Count\ of\ Quality\ Measure\ Flags}{\sum_{Care\ Partners} Total\ Count\ of\ Episodes} \right) \times 100$$

Step 2: Compare each quality measure performance rate (ACP Performance Rate, Medicine Performance Rate, and BMI Performance Rate) with the performance thresholds shown in **Exhibit 13** to derive Total Points ACP Performance, Total Points Medicine Performance, and Total Points BMI Performance.

Step 3: An EQIP Entity's Composite Quality Score will equal the total performance points earned across the three quality measures divided by the maximum (30 points) possible points for the program year.

The Composite Quality Score (CQS) is calculated as:

$$CQS_{EQIP\ Entity} = \frac{Total\ Points\ ACP + Total\ Points\ Medication + Total\ Points\ BMI}{30}$$

7.4.4. Composite Quality Score Adjustment

The EQIP Entity's incentive payment will equal 95% to 100% of its calculated Shared Savings Amount (see [Section 6](#)), depending on its Composite Quality Score ($CQS_{EQIP\ Entity}$):

$$Incentive\ Payment = (Shared\ Savings * .95) + (Shared\ Savings * .05 * CQS_{EQIP\ Entity})$$

8. Incentive Payment Cap (Stop Gain Amount)

Summary of Steps from Reconciliation to Incentive Payments

1. Reconcile total program year savings.
 - **Dissavings policy** ([Section 5.2](#)) applies if dissavings are generated.
2. Subtract total dissavings during the previous program year from the total program year savings, if applicable.
3. Check if the **Minimum Savings Threshold** ([Section 5.3](#)) was met.
4. Determine the **Shared Savings Amount** ([Section 6](#)).
5. Apply the **Composite Quality Score Adjustment** ([Section 7](#)) to the Shared Savings Amount.

The Incentive Payment after the Composite Quality Score adjustment is assessed for a stop-gain amount, or Incentive Payment Cap. The cap for a Care Partner's incentive payments is calculated by CMS for a given program year based on the average Physician Fee Schedule (PFS) payments made to the Care Partner in the prior year. Per the Participation Agreement, the **Care Partner Incentive Payment Cap is 25% of the Average Care Partner PFS Expenditures for the preceding calendar year.**

CMS calculates the Average Care Partner PFS Expenditures as follows:

Step 1: Sum all Medicare PFS payments made during the previous calendar year for Part B covered services provided by all Care Partners in the EQIP Entity during the preceding calendar year.

Step 2: Divide the amount in Step 1 by the total number of Care Partners in the EQIP Entity.

The EQIP Entity's Incentive Payment Cap is equal to the Average Care Partner PFS Expenditures multiplied by 0.25, then multiplied by the number of Care Partners in the EQIP Entity. If the EQIP Entity's incentive payment due exceeds its Incentive Payment Cap, the EQIP Entity will receive only the capped amount for the program year.

Example: Incentive Payment Cap

If an EQIP Entity consists of three Care Partners whose PFS Expenditures during the previous calendar year totaled \$100, \$200, and \$300, respectively, then the maximum incentive payment for each Care Partner is \$50, because $[(\$100 + \$200 + \$300)/3] * 0.25 = \50 . Thus, the EQIP Entity's maximum incentive payment is $\$50 * 3 = \150 .

CMS will notify the HSCRC of the physician Incentive Payment Cap for each EQIP Entity for the performance period by the deadline specified in the CRP Calendar.

9. Final Incentive Payment Calculation and Distribution

After reconciliation of total savings ([Section 5](#)), application of the tiered Shared Savings Rate ([Section 6](#)), Composite Quality Score adjustment ([Section 7](#)), and comparison of the incentive payment amount to the Incentive Payment Cap ([Section 8](#)), the final incentive payment due to the EQIP Entity is determined.

- The Incentive Payment will be paid in total to the EQIP Entity no later than six months after the end of the program year.
- The incentive payment will be paid to the payment remission recipient indicated by the EQIP Entity in the EEP.

10. Removal from the Program

EQIP is a voluntary program that requires an initial Agreement and annual consent to participate thereafter. EQIP Entities are expected to maintain updated Care Partner documentation in the EEP. Should a Care Partner wish to be removed from an EQIP Entity, or an EQIP Entity no longer wishes to participate in EQIP altogether, it will be required to update the HSCRC via the EEP within the annual enrollment window, from July 1 through December 31. EQIP Entities cannot be removed from the program during a program year.

There are several circumstances where a Care Partner or an EQIP Entity will be involuntarily removed from the program:

- Failure to maintain vetting and certification from CMS ([Section 1.2.1](#)).
- Failure to provide care or compliance in conjunction with the Agreement ([Section 1.2.1](#)).
- The EQIP Entity's Rank Percentile ([Section 6](#)) is in the lower two terciles of the tiered Shared Savings Rate (i.e., 0-65th percentile of statewide target prices) *and* the EQIP Entity experienced two consecutive years of dissavings ([Section 5.1](#)).
- **Catastrophic Quality Performance:** If the program year performance for the EQIP Entity is below the 20th percentile benchmark threshold of a single quality measure ([Section 7](#)), the EQIP Entity will receive zero points for that measure *and* will be on probation for the program year. Two consecutive program years on probation results in automatic exclusion from EQIP. The second consecutive year will be evaluated using quality performance during the first two calendar quarters of that year.

Appendix A. Inflation Adjustments

All claims are inflated to performance period dollars prior to calculating episode costs, revised target prices, and reconciliation amounts. All payments for a given period presented in the Care Transformation Profiler are displayed in 2019 (baseline) dollars for comparability. Non-regulated payments are inflated based on the Centers for Medicare & Medicaid Services (CMS)' Prospective Payment System (PPS)—specific market basket update factors. Regulated payments are inflated based on HSCRC update factors. Additional adjustments account for unique policy scenarios (e.g., suspension of sequestration during the COVID-19 public health emergency) or changes in policy during the program year.

Inflation Adjustments for Unregulated Payments

Actual regulation market basket update data used by CMS for PPS values are used to inflate the unregulated Medicare fee-for-service payments used for assessing Care Transformation Initiative episodes. Data files and methodology are available from the CMS.gov research, statistics, data, and systems site (<https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/medicareprogramratesstats/marketbasketdata>). Only the general CMS inflation update policy is applied. The inflation process is not intended to replicate any program-specific inflation policies from other CMS initiatives (e.g., Merit-based Incentive Payment System), as these can vary from program to program.

For each PPS claim type, the full market basket updates for every intervening period between the baseline and performance periods, less the productivity adjustment, are used to calculate the cumulative amount of inflation between the baseline and performance period. Then, every claim payment variable (e.g., CLM_PYMT_AMT) is adjusted by the cumulative inflation amount. **Exhibit A.1** provides a simplified example of inflation adjustments for an episode with only two claims with unregulated payments contributing to the total episode costs.

Exhibit A.1. Example of an Episode That Includes Two Claims with Unregulated Payments

Skilled Nursing Facility (SNF) PPS	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Actual Regulation Market Basket Update	2.0	2.0	2.4	2.2	2.0
Actual baseline 2017 claim payment total: \$100 Cumulated SNF Inflation Factor = $1.02 * 1.02 * 1.024 * 1.022 * 1.02 = 1.11058$ Inflated claim payment total = $\$100 * 1.11058 = \111.05					

Home Health Agency (HHA) PPS	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Actual Regulation Market Basket Update	1.9	2.2	2.6	2.0	2.6
Actual baseline 2017 claim payment total: \$50 Cumulated HHA Inflation Factor = $1.019 * 1.022 * 1.026 * 1.02 * 1.026 = 1.1182$ Inflated claim payment total = $\$50 * 1.1182 = \55.91					
Uninflated episode total = \$150 (\$100.00 + \$50.00) Inflated episode total = \$166.97 (\$111.05 + \$55.91)					

Inflation Adjustments for Regulated Payments

All regulated setting payments (hospital inpatient PPS and hospital outpatient PPS for Maryland regulated hospitals) are standardized, inflated, and re-normalized to derive an inflation-adjusted amount that eliminates any Global Budget Revenue fluctuations or payment policy from influencing or penalizing payment evaluation:

- 1) All regulated payments are first standardized using the CMS standardization methodology for allowed amounts at the claim level.
- 2) A hospital-specific Standardization Ratio is then calculated as the ratio of actual paid to standardized paid over the entire program baseline period (i.e., actual paid amount / standardized payment amount). For example, if the actual Maryland charges are \$100 in the program baseline period and standardized payments are \$60, then the Standardization Ratio is 1.66 ($= 100 / 60$).
- 3) For each period, a cumulative HSCRC inflation factor is calculated as the cumulative HSCRC inflation for the prior year multiplied by $(1 + \text{the current year update factor})$. The program baseline period cumulative HSCRC inflation factor is equal to 1. The HSCRC provides update factors for each period based on the actual Maryland policy for that time window. This process is otherwise similar to the inflation factor cumulation example shown in **Exhibit A.1**.
- 4) The standardized amounts are multiplied by the cumulated inflation factor for the given performance period to arrive at a standardized, inflated amount.
- 5) The standardized, inflated amount is then converted to an inflation-adjusted actual amount by multiplying by the Standardization Ratio for that hospital:

$$\text{Final Inflated Regulated Claim Payment Amount} = \text{Standardized Payment} * \text{Inflation}_{\text{period}} * \text{Standardization Ratio}_{\text{participant}}$$

Appendix B. Calculate Total Episode Costs for Non-PACES Episodes

Total cost of each episode equals the TCOC accrued by the beneficiary during the episode window. TCOC equals the cumulative Medicare Parts A and B expenditures accrued by the beneficiary during the episode window, after excluding certain types of Medicare payments.

Excluded Episode Costs

Exhibit B.1 lists the specific types of payments the HSCRC excludes before calculating TCOC. If the level of payment is at the claim-line level, then only the claim-line should be removed from the dataset before calculating TCOC (i.e., all other payments made on the given claim contribute to the total costs of care). If the level of payment is at the claim level, then the entire claim can be removed from the dataset before calculating TCOC.

Exhibit B.1. Medicare Payments Excluded from Calculations of Total Episode Costs

Description	Level of Payment
Claims with negative standardized amounts	Claim
Payments on outpatient, carrier, and durable medical equipment claims for blood clotting factor (CLM_LINE_HCPCS_CD = J7199)	Claim-Line
Payments on inpatient claims for new technology add-ons (CLM_VAL_CD = 77)	Claim-Line
Medical device pass-through payments on outpatient claims (REVSTIND = H)	Claim-Line
Per-beneficiary-per-month payments on carrier and hospice claims (CLM_LINE_HCPCS_CD = G9678)	Claim-Line
Per-beneficiary-per-month payments on hospice claims made under the Medicare Care Choices Model (DEMO_ID_NUM = 73 and CLM_BILL_FAC_TYPE_CD = 8 and CLM_BILL_CLSFCTN_CD = 1 or 2)	Claim

Calculate Episode Costs

Exhibit B.2 provides specifications for how the HSCRC uses all Medicare fee-for-service claims to calculate total episode costs.

Exhibit B.2. Calculate Total Episode Costs for a Given Episode Definition

Objective	Calculate total episode costs as the cumulative Medicare Parts A and B expenditures accrued by each beneficiary during their episode window, after excluding certain types of expenditures
Required File Types	All Fee-For-Service Claims

Required Variables	Medicare Beneficiary Identification Number (MBI_NUM), User-generated Episode ID, Episode Begin Date, and Episode End Date, Claim service dates (CLM_FROM_DT – CLM_THRU_DT), Claim Payment Amount (CLM_PYMT_AMT)
Logic	1) Exclude claim or claim-line payments for the services listed in Exhibit B.1 2) For each episode, retain all fee-for-service claims that meet the following criteria: ✓ MBI_NUM = MBI_NUM associated with the attributed patient ✓ Episode begin date ≤ CLM_THRU_DT ✓ CLM_FROM_DT ≤ Episode end date 3) Prorate claim payments (see proration methodology in Exhibits B.3 and B.4) that span beyond the episode window to allocate the appropriate portion of those payments to the episode 4) Sum the total or prorated paid amounts (CLM_PYMT_AMT) on all claims meeting the criteria in Steps 1 and 2 to obtain the total episode costs

Prorated Episode Costs

The HSCRC prorates claims and payments that span beyond the episode window to appropriately allocate a portion of those payments to the episode. HSCRC uses two methods to prorate claims, depending on the claim type:

- The **per diem method** prorates payments based on the number of days in the claim that occur during the clinical episode.
- The **length of stay (LOS) method** prorates *non-outlier* payments by comparing the number of days of an inpatient stay that overlap the episode window with the mean length of stay for the same Diagnosis Related Group (DRG) during the same fiscal year.

Exhibit B.3 lists the proration method used for each claim type. **Exhibit B.4** describes the steps used by the HSCRC to prorate all claims that overlap with a beneficiary's episode window.

Exhibit B.3. Proration Method by Claim Type

Claim Type	Proration Method
Carrier (i.e., professional)	Never prorate
Critical access hospitals	Per diem
Durable medical equipment	Never prorate
Home health agency	Per diem
Hospice	Per diem
Inpatient psychiatric facility	Per diem
Hospital Inpatient (non-outlier payments)	Length of stay
Hospital Inpatient (outlier payments)	Per diem

Claim Type	Proration Method
Long-term care hospital (non-outlier payments)	Length of stay
Long-term care hospital (outlier payments)	Per diem
Hospital Outpatient	Never prorate
Skilled nursing facility	Per diem

Exhibit B.4. Prorate Claims and Payments That Span beyond the Episode Window

Objective	Identify all claims that overlap with the clinical episode but end after the clinical episode; and retain the subset of payments that should be assigned to the clinical episode
Required File Types	All Fee-For-Service Claims (after excluding payment types in Exhibit B.1)
Required Variables	Claim type code (CLM_TYPE_CD), Episode Begin Date and Episode End Date, Claim service dates (CLM_FROM_DT – CLM_THRU_DT), Claim Payment Amount (CLM_PYMT_AMT)
Logic	1) Identify claims to prorate: Identify all claims that overlap with the clinical episode but end after the clinical episode to determine whether all or a subset of payments are assignable to the clinical episode. Never prorate outpatient, carrier, and durable medical equipment claims. Assign them to the clinical episode 2) Identify and prorate the following types of claims based upon a per-diem rate: Assign payments to the clinical episode proportionate to the total number of days on the claim that occur during the clinical episode ✓ Critical access hospitals ✓ Home health agency ✓ Hospice ✓ Inpatient psychiatric facility ✓ Skilled nursing facility 3) Distinguish outlier payment amounts from and non-outlier payment amounts on the remaining claim types to be prorated (Inpatient rehabilitation facility, Long-term care hospital, and Hospital Inpatient): • Outlier payment amounts: https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/outlier 4) Prorate outlier payments on a per-diem basis, as described in Step 2 5) For non-outlier payments, calculate the number of days of the inpatient stay (on the claim that needs to be prorated) that overlap with the episode window <i>and</i> the average length of stay for inpatient stays with the same diagnosis-related group during the same fiscal/target year: • If the number of days that overlap the episode window is greater than the average length of stay, then assign the full non-outlier payment amount to the episode • Otherwise, prorate on a per-diem basis, giving double weight to the first day of the overlap

Disclaimer: Episode Costs Cannot Be Perfectly Replicated Using CCLF Data

All regulated payments are standardized using the CMS methodology for standardized allowed amounts to avoid feedback effects from the Global Budget Revenue. After standardization, regulated payments are converted back to real dollars using the ratio of actual to standardized payments. The ratio is based on total regulated payments for each hospital over full performance years. (The same ratio is used to calculate target prices and determine reconciliation.) The episode costs calculated by the HSCRC cannot be perfectly replicated using the CCLF data files because the CCLF data does not include standardized amounts.

Completion Factors

The claims processing, adjudication, and finalization process can take up to a year to complete, which introduces considerable delays into reporting for most claims-based program evaluation. Until this process works its course, claims are considered *incomplete*, making comparative assessments of payments on these claims difficult. The proportion of claim payments reflected by final action claims in the CCLF at any given point in time relative to the final, total paid amount is called the “claims completion factor.”

To facilitate faster turnaround on hospital participants’ performance data while ensuring a consistent and accurate evaluation of program payments, the HSCRC developed a method of extrapolating the amounts on nearly complete claims, called the “claims completion process”: HSCRC freezes each claim after three months of runout from the date of service, as opposed to delaying claim reporting until all claims are totally complete. Then it applies a claims completion factor to this amount to inflate it to the expected final amount. This period was determined via actuarial analysis of claims throughout the history of the TCOC model, which found that at three months, claims payments – in aggregate – are about 93% complete.

Each type of claim has a different completion curve, which varies over time. HSCRC calculates a separate completion factor for each claim type and period, then applies them to the claim paid amounts for matching claims, before calculating the final paid amount. It does this for both baseline and performance period calculations. **Exhibit B.5** shows a *hypothetical* example of how completion factors are applied. The completed amount is then used as the input for all downstream payment calculations.

Exhibit B.5. Example of How Three-Month Completion Factors Are Applied to Claim Payments

Type of Service	3-Month Completion Factor	3-Month Paid Amount	Completed 12-Month Paid Amount
10 – Home Health	.9280	\$100	\$107.76
20 – Non-Swing Bed SNF	.9431	\$100	\$106.03
30 – Swing Bed SNF	.9152	\$100	\$109.27
40 – Outpatient	.9540	\$100	\$104.82
50 – Hospice	.9427	\$100	\$106.08

60 - Inpatient	.9800	\$100	\$102.04
71 – Carrier Non-DMEPOS	.9515	\$100	\$105.10
72 – Carrier DMEPOS	.8764	\$100	\$114.11
81 – DMERC non-DMEPOS	.9169	\$100	\$109.06
82 – DMERC DMEPOS	.8962	\$100	\$111.58

Abbreviations: DMEPOS, Durable Medical Equipment, Prosthetics, Orthotics and Supplies; DMERC, Durable Medical Equipment Regional Carrier; SNF, skilled nursing facility.

Inflation Adjustments

HSCRC inflates all claims to performance period dollars prior to calculating episode costs, revised target prices, and reconciliation amounts. The methodology for inflation adjustments is described in Appendix A.