

# Pricing Methodology

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**Q1: How will Target Prices be calculated by CMS?**

**A1:** Using claims based historical data and risk adjustment models to account for variation in the Clinical Episode's standardized amounts, the Centers for Medicare & Medicaid Services (CMS) will calculate a Benchmark Price. In BPCI Advanced, a 3 percent discount will be applied to the Benchmark Price to calculate the Target Price for each Clinical Episode category for each Episode Initiator (EI).

**Q2: How frequent will Target Prices be provided to Participants for Model Years 1 and 2?**

**A2:** The initial preliminary Target Prices will cover both Model Year 1 (October 1, 2018 – December 31, 2018) and Model Year 2 (January 1, 2019 – December 31, 2019), and CMS will rebase and provide new preliminary Target Prices beginning with Model Year 3 (January 1, 2020 – December 31, 2020). Twice annually when Medicare sets new payment rates for payment systems on the fiscal year and calendar years, the preliminary target process will be updated and revised workbooks will be provided. Specifically, the update in September of 2018 will be for Fiscal Year 2019 payment rates, the update in December 2018 will be for calendar year 2019 payment rates, and the update in September 2019 will be for Fiscal Year 2020 payment rates.

CMS will update the preliminary Target Prices provided for Model Years 1 and 2 to account for the changes but will not rebase these preliminary Target Prices with new baseline period data until Model Year 3. All of the Target Prices will be updated to reflect realized Performance Period beneficiary data during reconciliation cycles.

**Q3: When will Target Prices be provided to new Applicants and current Participants for Model Years 3 (MY3)?**

**A3:** The preliminary Target Prices for MY3 will be provided in September 2019, about 60 days before the new Applicants and current Participants have to make a decision on which Clinical Episode categories they will opt into.

Potential Applicants will not have access to Target Prices prior to the deadline for submitting an application. Target Prices cannot be created or distributed without the details of the potential EIs included on the BPCI Advanced application, or the submission of a Data Request and Attestation (DRA) form.

CMS will update the preliminary Target Prices two times to account for FY2020, CY2020 (combined), and FY2021 payment rates. These updated Target Prices will be provided in January 2020, and October 2021, respectively.

**Q4: How often will CMS make payments to BPCI Advanced Participants?**

**A4:** Every six months, CMS will do a retrospective reconciliation comparing the total of actual non-excluded Medicare FFS expenditures for each Clinical Episode to the final Target Price for that Clinical Episode. Clinical Episodes will be reconciled based on the Performance Period during which the Clinical Episode ends, which is determined by the last day of the Post-Discharge period.

**Q5: Why does BPCI Advanced set the level of risk exposure to 20 percent of the Target Price (stop-loss protection), inclusive of all spending during the episode, rather than limiting risk for Physician Group Practices (PGPs) to the 8 percent revenue-based nominal amount standard or the 3 percent expected expenditure standard?**

**A5:** BPCI Advanced maintains the same level of risk exposure as its predecessor the BPCI Initiative, because it appropriately balances expected gains given overall spending during the Clinical Episode. Due to the unintended incentives it may create, CMS did not opt to implement various levels of risk based on the type of participant. CMS believes that options exist for PGPs to mitigate risk while still allowing them to qualify for the Advanced Alternative Payment Model (APM) incentive payment: 1) Participation under a Convener Participant or 2) Participation as a Net Payment Reconciliation Amount (NPRA) Sharing Partner.

**Q6: When will the Model pricing methodology be available?**

**A6:** There are several resources and documents on the BPCI Advanced website that explains the pricing methodology for BPCI Advanced Model Years 1 and 2:

- [Target Price Specifications - Model Years 1 & 2 \(PDF\)](#)
- [Reconciliation Specification Model Years 1-2 \(PDF\)](#)
- Webcast: Pricing Methodology for Clinicians and Administrators (June 2018) – [Audio \(mp4\)](#) | [Slides \(PDF\)](#)
- Webinar: Pricing Methodology Technical Review (May 2018) – [Audio \(mp4\)](#) | [Slides \(PDF\)](#) | [Transcript \(PDF\)](#) | [Data Workbook Example \(XLS\)](#)

CMS will release the Target Price specifications for MY3 in September 2019, when the Applicant's workbooks with baseline data and preliminary Target Prices are scheduled to be distributed.

**Q7: How are the Target Prices assigned (e.g., regional, national or a comparison of an organization's own past performance)?**

**A7:** Target Prices for hospitals are constructed to account for multiple aspects of the Clinical Episode:

1. Historical Medicare fee-for-service (FFS) expenditures specific to the hospital's Baseline Period
2. Patient case-mix
3. The hospital's characteristics
4. Projected trends in spending among the hospital's peer group

CMS accounts for each component through a series of regression models for each Clinical Episode category based upon a national dataset of Clinical Episodes that were initiated during the baseline period and priced using the official CMS standardized spending amounts.

The patient characteristics that are adjusted for include demographic data, the patient's comorbidities using the Hierarchical Condition Categories (HCCs), severity based upon Medicare Severity-Diagnosis Related Groups (MS-DRGs) for the inpatient Clinical Episodes, and Ambulatory Payment Classifications for outpatient Clinical Episodes, along with other variables described in the pricing specifications.

The peer group characteristics that CMS adjusts for as part of the Peer Adjusted Trend Factor (PAT Factor) include the US Census region, urban versus rural status, hospital size, and others. Detailed specifications, including information on the risk adjustment models and the covariates included in them, are available in the [Target Price Specifications - Model Years 1 & 2 \(PDF\)](#).

**Q8: What is the baseline period for Model Years 1 and 2?**

**A8:** The 4-year baseline period for Model Years 1 and 2 contains data from potential Clinical Episodes that would have been attributed from January 1, 2013 through December 31, 2016.

**Q9: What is the baseline period for MY3?**

**A9:** The 4-year baseline period for MY3 contains data from potential Clinical Episodes that would have been attributed from data is October 1, 2014 to September 30, 2018.

**Q10: How does the PGPs Target Price work with the hospital Target Price?**

**A10:** PGPs will receive Target Prices that are hospital-specific. In other words, a PGP will receive unique Target Prices for each Clinical Episode category based on the hospital at which the Anchor Stay or Anchor Procedure occurs. From the Hospital Benchmark Price, CMS first removes the effects of the hospital-wide Patient Case Mix Adjustment and replaces it with the Patient Case Mix Adjustment specific to the PGP's Clinical Episodes initiated by an Anchor Stay or Anchor Procedure at the hospital. In addition, the Hospital Benchmark Price will be adjusted based on the PGP's overall historical spending relative to the hospital's historical spending, both of which are standardized to remove the effects of the patient characteristics previously described. In other words, to form the PGP Benchmark Price for each Hospital at which the PGP practices, the Hospital Benchmark Price from that hospital is adjusted to account for the relative case mix and the relative standardized historical efficiency spending.

**Q11: Is there any stop loss for individual cases?**

**A11:** The 20 percent stop-loss and stop-gain policies are applied at the level of the EI. This differs from the BPCI Initiative, which sets stop loss and stop gain at the Awardee level. In other words, under BPCI Advanced, the results of all the Clinical Episodes during the Performance Period are aggregated to the EI level prior to applying the stop-loss or stop-gain cap. At the individual Clinical Episode level, the Clinical Episodes for which the Participant has committed to be accountable are Winsorized, or capped, at the 1<sup>st</sup> and 99<sup>th</sup> percentiles of the total standardized allowable amounts within the Clinical Episode category, based on the national dataset of Clinical Episodes.

**Q12: What is CMS's approach to reconciliation?**

**A12:** BPCI Advanced will have a semi-annual Reconciliation cycle for the immediately preceding Performance Period. The initial Reconciliation for each Performance Period will be performed using two months of claims run-out. In a given Model Year, there will be two (2) Performance Periods for Reconciliation. Performance Period #1 will cover Clinical Episodes that end during the period of January 1 - June 30. Performance Period #2 will cover Clinical Episodes that end during the period of July 1 - December 31. The exception is Model Year 1, which extends from October 1, 2018 - December 31, 2018. The small number of Clinical Episodes that end during Model Year 1 will be reconciled along with the Clinical Episodes from the first six months of 2019.

Additionally, each Performance Period will be subject to at least two (2) true-ups with additional claims run-out. For instance, for episodes ending between July 1, 2019 and December 31, 2019, the reconciliation will occur in the spring of 2020. Subsequent true-ups will occur in the fall of 2020 and spring of 2021, which will allow between 15 and 21 months of claims run-out, following the end of the Clinical Episode end dates.

**Q13: How will the advance payments work?**

**A13:** There are no payments made in advance of the start of the Clinical Episode in BPCI Advanced. Preliminary Target Prices for each Clinical Episode will be set and provided to Participants prospectively. However, providers and suppliers will continue to bill Medicare for Medicare-covered items and services furnished as part of a Clinical Episode under the applicable Medicare FFS payment system, and at the end of the Clinical Episode, during the reconciliation process (twice a year) Medicare FFS expenditures on non-excluded items and services are netted and reconciled against the Final Target Price to determine whether the Participant has earned a Net Payment Reconciliation Amount (NPRA) payment from CMS, or owes CMS a Repayment Amount.

**Q14: Will Target Prices have a Hierarchical Condition Categories (HCCs) adjustment?**

**A14:** CMS incorporates the Hierarchical Condition Categories (HCCs) as part of the Target Price calculation, specifically in the Patient Case Mix Adjustment (PCMA). They are represented in three different ways: the individual HCCs, relevant combinations of HCCs, and the HCC count (one to three, four to six, and more than seven) used to determine beneficiary complexity.

**Q15: If a hospital was established at the end of the baseline period (i.e. January 2016), and therefore has a low volume of Clinical Episodes during the baseline period, will CMS adjust the Target Price for this new and low volume hospital?**

**A15:** Information on the low volume threshold for hospitals is included in the [Target Price Specifications - Model Years 1 & 2 \(PDF\)](#).

**Q16: How will CMS measure historic Medicare FFS expenditure efficiency in resource use during the baseline period and how will this be applied in calculating the Target Price?**

**A16:** Efficiency refers to Clinical Episode spending, relative to other EIs, for Clinical Episodes with the same patient and peer group characteristics. For hospitals, a value less than one indicates that the hospital's baseline period Clinical Episode spending was lower than the average hospital, controlling for patient and peer group influences on spending. In other words, the hospitals with a lower efficiency measure values have historically treated the same Clinical Episode with lower spending than hospitals with higher efficiency measure values.

The historical efficiency incorporated into the Target Price by scaling up (for historically low cost hospitals) or scaling down (for historically high cost hospitals) the amount of spending that the patient and peer group adjusters indicate is appropriate for the specific Clinical Episode. Note that historical efficiency was the primary determinant of Target Price in the BPCI Initiative, whereas historical spending is but one component of the Target Price in BPCI Advanced.

**Q17: To calculate an Acute Care Hospital (ACH's) benchmark price, CMS will account for the hospital's spending patterns relative to the ACH's peer group over time. How is a peer group defined – by the region, the nation, Metropolitan Statistical Area (MSA), or number of beds?**

**A17:** Peer groups are based on relevant hospital's characteristics, such as region, size, Academic Medical Center status, safety net status, and urban versus rural status.

**Q18: On what basis will CMS attribute a Clinical Episode to an EI? Which fields on the claim are key?**

**A18:** When determining Clinical Episodes attribution to EIs, CMS will first look to the Attending National Provider Identification (NPI) number listed on the institutional claim (UB-40) that initiated the Clinical Episode, which will subsequently lead to a check for the Attending NPI's Part B claim during the Anchor Stay or Anchor Procedure for a participating Tax Identification Number (TIN). If the PGP TIN is listed as participating in BPCI Advanced, the Clinical Episode is attributed to that PGP. If that TIN is not a BPCI Advanced EI, CMS then starts over by looking at the institutional claim that initiated the episode to conduct the same check for the Operating NPI-TIN. If neither NPIs yield a Part B claim billed under a participating TIN, CMS then checks for whether the hospital CMS Certification Number (CCN) on the claim is a BPCI Advanced EI. Please see steps 24 and 29 of the [Episode Creation Specifications - Model Years 1 & 2 \(PDF\)](#) document and the [Episode Creation Specifications - Model Years 1 & 2 - Appendix A: MS-DRGs \(PDF\)](#) for more details.

More information regarding the precedence rules and the episode attribution methodology can also be found in the BPCI Advanced 2018 RFA on our website:

<https://innovation.cms.gov/Files/x/bpciadvanced-rfa.pdf>.

**Q19: In an outpatient Clinical Episode, how will an Anchor Procedure be assigned to a Healthcare Common Procedure Coding System (HCPCS) code when multiple triggering HCPCS codes are in the claim?**

**A19:** In case of multiple triggering HCPCS codes on the same outpatient claim, the following tie-breaking rules are applied:

- Select the outpatient line with the higher standardized line allowed amount.
- Select the outpatient line with the later processing date.
- Select the outpatient line with the higher charge amount.
- Select the outpatient line with the smaller claim identifier number.
- Select the outpatient line with the smaller line item number.

The first day of an Anchor Procedure initiates a Clinical Episode. HCPCS codes identify the claim as an Anchor Procedure for CMS. The Anchor Procedure will be assigned based on the Comprehensive Ambulatory Payment Classification (C-APC). This is analogous to the MS-DRG grouping that determines payment from the inpatient claim for an Anchor Stay.

**Q20: Are Indirect Medical Education (IME) and Disproportionate Share (DSH) payments excluded from Target Prices and Reconciliation calculations? Is capital from inpatient hospital claims also excluded?**

**A20:** Clinical Episode-level payments are created by summing official CMS standardized payments for all non-excluded services. These standardized payments reflect the cost of services after removing

variation in spending arising from geographical adjustment of reimbursement in CMS payment systems (e.g., hospital wage index and geographic pricing cost index (GPCI) and from policy-driven adjustments (e.g., IME adjustments). For more information on the official CMS standardization methodology, please visit the [www.qualitynet.org](http://www.qualitynet.org).  
[Quality Net webpage](#).

**Q21. What are the Clinical Episodes' volume thresholds for EIs that are ACHs and PGPs?**

**A21:** The minimum volume to participate in BPCI Advanced occurs at the level of the hospital for a specific Clinical Episode. In order for the hospital to receive a preliminary Target Price, the hospital must have at least 41-episode cases for a Clinical Episode category during the applicable baseline period from January 1, 2013 through December 31, 2016.

Since PGPs receive prices based on a hospital-based price, PGPs will only receive preliminary Target Prices for hospitals with at least 41 Clinical Episodes in specific episode types in the hospital's baseline period. If PGP volume is less than 41 Clinical Episodes overall, the PGP will receive a Physician Offset of 1.

If a PGP has no data in the baseline period, the PGP's preliminary Target Price will be based on hospital's data where the Anchor Stay or Anchor Procedure occurred. If a PGP has at least one episode for a given ACH-CE category, the PGP's preliminary and final Target Prices will be based upon the hospital's data where the Anchor Stay or Anchor Procedure occurred and PGP's relative case mix. More information on the volume thresholds, including low-volume thresholds for hospitals, are available in the [Target Price Specifications - Model Years 1 & 2 \(PDF\)](#).

**Q22: What happens when a Clinical Episode is triggered because of an admission/Anchor Stay for a MS-DRG included on the definitions list, but then following discharge (but still during the 90-day episode window), a second admission occurs for a different MS-DRG/episode on the definition list?**

**A22:** Clinical Episodes can overlap in the baseline period, so each time a BPCI Advanced trigger MS-DRG or HCPCS is observed, a new Clinical Episode is initiated, irrespective of if that claim was grouped to another Clinical Episode. The subsequent admissions would be accounted for through the prior hospitalization risk adjustment flag to ensure consistency between the baseline and performance period.

In the Performance Period, the Clinical Episodes cannot overlap. The initial Anchor Stay/ Anchor Procedure is kept and any readmissions that occur within the 90-day post-anchor period are grouped to the initial episode. One exception is that a BPCI Advanced Participant Clinical Episode takes precedence over a non-Participant Clinical Episode. For instance, if the original inpatient admission could not be attributed to a Participant, but a subsequent outpatient stay could be attributed to a Participant, then the Outpatient clinical episode would be initiated. Another exception, if a Major Joint Replacement of the Lower Extremity (MJRLE) Anchor Stay occurs within the 90-day Post-Anchor period of an initial MJRLE Anchor stay for the same beneficiary, the first Clinical Episode is canceled and the second one is retained.

A more detailed discussion of the precedence rules for the selecting Clinical Episodes can be found in the Episode Creation specifications documents:

- [Episode Creation Specifications - Model Years 1 & 2 \(PDF\)](#)
- [Episode Creation Specifications - Model Years 1 & 2 - Appendix A: MS-DRGs \(PDF\)](#)

**Q23: Would CMS please explain how the potential 10 percent quality adjustment is applied to negative or positive Net Payment Reconciliation Amounts (NPRA)?**

**A23:** The Composite Quality Score (CQS) Adjustment Amount is applied at the EI level to any Positive Total Reconciliation Amount or Negative Total Reconciliation Amount. The amount by which these reconciliation amounts may be adjusted is capped at 10 percent.

At the EI level, the CQS adjustment cannot make a Negative Total Reconciliation Amount more negative and cannot reduce the magnitude of a Positive or Negative Total Reconciliation Amount by more than 10 percent.

For more information, please review the document [Reconciliation Specification Model Years 1-2 \(PDF\)](#).

**Q24: Will all Clinical Episodes be included in the baseline period, regardless of precedence or overlap with other models, such as the Comprehensive Care for Joint Replacement (CJR) model?**

**A24:** The baseline period will include all Clinical Episodes, without consideration of the precedence rules used in the BPCI Advanced Model Performance Period. In addition, Clinical Episodes in the baseline period are allowed to overlap to maximize the number of baseline period Clinical Episodes to create robust Target Prices. For example, if a beneficiary is admitted to a hospital during an ongoing BPCI Advanced baseline period Clinical Episode for a BPCI Advanced MS-DRG or HCPCS trigger code, a new Clinical Episode will be initiated. Also, to address the concerns that Clinical Episodes that overlap may have different cost patterns from those that do not, a recent resource-use risk adjustment flag captures such cases in the data files. However, in the Performance Period, only one Clinical Episode can occur at a given time for a beneficiary.

**Q25: If multiple hospitals bill under the same Tax Identification Number (TIN), must they all participate in the Model and must they all select the same Clinical Episodes?**

**A25:** If multiple hospitals bill under the same TIN, they do not all have to participate in the Model. A hospital that is a Non-Convener Participant and hospitals that are Downstream EIs under a Convener Participant will be defined and priced at the CMS Certification Number (CCN) level. Each hospital with its own CCN can participate as a Non-Convener Participant but will need to apply separately.

**Q26: If a PGP EI begins to treat beneficiaries at a new hospital, will Clinical Episodes triggered at that hospital be included in the Model?**

**A26:** Yes, the PGP will be able to trigger Clinical Episodes at the new hospital, as long as the hospital, itself, is not new and has sufficient volume in the baseline period to establish a Hospital Target Price. However, the PGP will not receive a PGP specific preliminary Target Price for the hospital. The PGP will receive the preliminary Hospital Benchmark Price via the National Set of ACH Preliminary Target Prices (see below for details), and a final Target Price at Reconciliation.

The National Set of ACH Target Prices is available only to BPCI Advanced Participants via the BPCI Advanced Participant Portal. Participants can access the BPCI Advanced Participant Portal to retrieve

the National ACH Preliminary Target Pricing Workbook from the Announcement section (January 22, 2019). The workbook contains all of the BPCI Advanced preliminary Target Prices for all eligible ACHs in the country (including Hospitals that are not currently participating in BPCI Advanced). The workbook summarizes preliminary Target Prices for a national set of ACHs with at least 41 Clinical Episodes in a given Clinical Episode category in the baseline period and contains a breakdown of relevant Target Price components. It also includes the parameter estimates from the Stage 1 and Stage 2 Risk Adjustment models. At this time, there is one workbook that will contain all prices as of October 1, 2018 and another workbook with the updated prices as of January 1, 2019.

**Q27: In BPCI Advanced, are Target Prices calculated at the Clinical Episode category level, rather than the MS-DRG level, like in the BPCI initiative?**

**A27:** Yes. In BPCI Advanced, the Target Prices will not be broken down at the MS-DRG level, but it will be adjusted based on the specific MS-DRG billed. This will account for severity and, in some cases, procedure type.

**Q28: When different cardiac-related Clinical Episodes occur or overlap in the same 90-day period, how is this handled?**

**A28:** Most inpatient cardiac-related readmissions within 90 days of the end date of the Anchor Stay or Anchor Procedure will be bundled into the initial Clinical Episode. If the readmission maps to an MS-DRG on the Exclusions List, the costs for the admission, including any Part B claims paid during the readmission, will not be included in the Clinical Episode spending amount.

**Q29: Is the PGP offset comparing the PGP's efficiency at one hospital or the overall PGP's efficiency at all hospitals?**

**A29:** The PGP offset is the ratio of overall PGP efficiency to overall hospital efficiency. The PGP's overall efficiency is based on Clinical Episodes initiated by the PGP at any hospital and the hospital's overall efficiency is based on all Clinical Episodes initiated at the hospital, regardless of the attributed EI. Thus, there is a separate PGP offset for every hospital at which a PGP's Clinical Episodes are initiated. Efficiency is defined as the ratio of Clinical Episode spending relative to all other EIs, after accounting for patient and peer group characteristics to render the amounts comparable.

**Q30: How is the Peer Adjusted Trend (PAT) Factor constructed using the coefficients from stage two regression?**

**A30:** To calculate the PAT Factor trended to quarter three of 2019, use the following steps:

- Update the quarter year counter to the middle of Model Year 2 (quarter three of 2019). Assuming that quarter one of 2013, the first quarter in the baseline period, is one, the new quarter value will be 27.
- Update the quarter trend by peer group interactions to reflect this new quarter value.
- Apply the stage two coefficients from the OLS regression to get the PAT Factor for each ACH and Clinical Episode category in quarter three of 2019.

**Q31: In calculating Target Prices, are Standardized Baseline Spending (SBS), Patient Case Mix Adjustment (PCMA), Peer Adjusted Trend (PAT) Factor, and PGP offset factors constant across all Clinical Episodes for providers or do they vary by Clinical Episode?**

**A31:** Each of these varies at the level at which Target Prices are calculated. That is, they vary at the Clinical Episode category at the hospital level; since hospitals only initiate Clinical Episodes at the single hospital, they receive a single Target Price within a Clinical Episode category. However, since PGPs can initiate Clinical Episodes at multiple hospitals within a single category, they will receive a separate Target Price for each hospital. The SBS, PCMA, PAT Factor, and the denominator of the PGP offset all vary at the hospital level and therefore will be different for each hospital of an Applicant's Target Prices.

**Q32: Can a hospital's peer group characteristics, such as hospital size, change quarter over quarter due to an addition to hospital beds in a given year after a capital investment? Or does CMS evaluate the peer group characteristics at a specific point in time, such as quarter 4 of 2016, and trend this group to quarter 3 of 2019?**

**A32:** Most of the peer group characteristics are constructed using the latest available data as of the processing date for the cut off that was used to construct Target Prices. However, the safety net characteristics is an exception, and this covariate is constructed for each calendar year and thus may vary across quarters in the baseline period. Take note that the peer groups do not change in preliminary Target Price updates and Final Target Price construction.

**Q33: Can CMS please clarify the statement from the Target Price specifications that states; "At the ACH-quarter level, calculate the average ratio of observed Clinical Episode spending to predicted Clinical Episode spending and regress the average."**

**A33:** CMS is accounting for the portion of Clinical Episode Spending that is not explained by Patient Case Mix. Taking the average of this ratio across a hospital's baseline period Clinical Episodes in a quarter represents the Dependent Variable for the Stage Two Regression. To build this, for each Clinical Episode, CMS calculates a ratio of observed spending to Patient Case Mix adjusted spending from Stage One Regression. As previously stated, this accounts for the portion of spending for this Clinical Episode that is not explained by Patient Case Mix Severity. CMS then calculates the average of this ratio at the hospital and quarter level. Once the average is built, we run the Stage Two Regression and project the trends in the Clinical Episode Spending to the Performance Period of interest. In other words, CMS estimates an ordinary least squares regression of this average ratio and Peer Group Characteristics interacted with a time trend to identify what portion of the Clinical Episode Spending is explained by Peer Group Characteristics and time.

**Q34: Given that Target Prices are calculated at the Clinical Episode category level, can CMS explain how to calculate the correct spending at the individual Clinical Episode level in order to compare it to the Target Price?**

**A34:** To identify what to include in the Performance Period Clinical Episodes, follow the steps in the [Episode Creation Specifications - Model Years 1 & 2 \(PDF\)](#) document and the [Episode Creation Specifications - Model Years 1 & 2 - Appendix A: MS-DRGs \(PDF\)](#) document, Sections 6 and 9, in particular.

This will help determine the sum of spending for Clinical Episodes initiated at the same hospital for which the Target Price is applicable. After the Clinical Episodes are built, the step-by-step details to aggregate the performance period spending are provided in Section 4 of the [Reconciliation Specification Model Years 1-2 \(PDF\)](#) document.

**Q35: How does the Target Price incentivize historically low-cost providers? The hospital efficiency adjustment seems to effectively cancel out the peer adjustment. In other words, it seems that a hospital with low cost relative to peers would have an efficiency adjustment that effectively canceled out any increase in target that may have been given from the peer adjustment.**

**A35:** The Efficiency Measure ensures that a Participant's Target Price is adjusted off of his/her historical spending. Therefore, after accounting for Patient Case Mix, group levels, and trends, the Participant with historically efficient Clinical Episode Spending will have a lower Efficiency Measure relative to a Participant with high episode spending.

This incentive is even greater for historically efficient PGP EIs, since PGPs that were historically efficient relative to the hospital at which they practice (i.e., PGP offset is less than one) will have their offset increased by half its distance from one.

See Step 14b of the [Target Price Specifications – Model Years 1 & 2 \(PDF\)](#) document.

**Q36: For Performance Period Hospital Benchmark Price (HBP), will only the PCMA change? Will the Standardized Baseline Spending (SBS) and the Peer Adjusted Trend (PAT) Factor be the same as what will be in the baseline prices?**

**A36:** Yes, only the Patient Case Mix Adjustment (PCMA) and the raw-to-standardized ratio will be updated for the Performance Period Hospital Benchmark Price (HBP). The final PCMA is constructed using the realized case mix from an EI's attributed Clinical Episodes in the applicable Model Year. Additionally, final Target Prices will be updated to real dollars using the realized real-to-standardized ratio. However, CMS notes that SBS and the PAT Factor will be adjusted at the beginning of each fiscal and calendar year to account for CMS payment setting price changes from the finalized rules.

**Q37: Is the 1st and 99th percentile Winsorization applied to all observed Clinical Episode spending?**

**A37:** Clinical Episode spending amounts that are input to the risk adjustment model are winsorized to the 1<sup>st</sup> and 99<sup>th</sup> percentile for each MS-DRG or Comprehensive Ambulatory Payment Classification (C-APC) pooled for each calendar year. Also note that winsorization is applied at MS-DRG/APC and Performance Period level for Performance Period episodes. No further Winsorization is applied to Target Prices after risk adjustment. This method ensures that baseline and Performance Period Clinical Episodes are comparably truncated to remove extreme outliers.

**Q38: Why would a PGP Participant receive a preliminary Target Price, but not receive raw baseline claims data?**

**A38:** PGPs, whether Participants or Downstream EIs, do not receive raw claims if they did not initiate any Clinical Episodes in the baseline period. However, they are still eligible to receive preliminary Target Prices based upon the hospital prices for the CCNs listed in their Participating Organization's attachment or EI Addition Template. CMS will make available a National Set of ACH Preliminary Target Prices.

The National Set of ACH Target Prices is available only to BPCI Advanced Participants via the BPCI Advanced Participant Portal. Participants can access the BPCI Advanced Participant Portal to retrieve the National ACH Preliminary Target Pricing Workbook from the Announcement section (January 22, 2019). The workbook contains all of the BPCI Advanced preliminary Target Prices for all eligible ACHs in the country (including Hospitals that are not currently participating in BPCI Advanced). The workbook summarizes preliminary Target Prices for a national set of ACHs with at least 41 Clinical Episodes in a given Clinical Episode category in the baseline period and contains a breakdown of relevant Target Price components. It also includes the parameter estimates from the Stage 1 and Stage 2 Risk Adjustment models. At this time, there is one workbook that will contain all prices as of October 1st, 2018 and another workbook with the updated prices as of January 1, 2019.

**Q39: If the performance information, conveyed in the hospital baseline and the monthly files, is expressed as standardized dollars, why is there then a need to convert the performance information to real dollars? Shouldn't the actual targets be standardized as well?**

**A39:** CMS constructs Clinical Episodes using standardized allowed amounts that reflect the cost of services after removing variation in spending arising from geographical adjustment of reimbursement and CMS payments systems, such as:

- Hospital Wage Index and Geographic Practice Cost Index (GPCI), and
- Indirect medical education (IME) and Disproportionate Share Hospital (DSH) payment adjustments.

The complete description of the official CMS Standardization Methodology by setting can be found on the [QualityNet website](#). Real dollars represent the true amount the providers are reimbursed for their provision of Medicare covered care. Since reconciliations amounts are calculated in real dollars, Target Prices are converted into real dollars to allow comparison of Target Prices and actual spending in a consistent manner.

**Q40: Is there a floor for the Efficiency Measure?**

**A40:** There is not a formal floor for the Efficiency Measure. However, since the PGP offsets less than one will be adjusted (e.g. the distance to one is reduced by 50 percent) in practice, no PGP offset will be less than 0.5 percent.

**Q41: In the overall process of setting Target Prices, will the Patient Case Mix coefficients be re-estimated?**

**A41:** The Risk Adjustment Coefficients will not be re-estimated in the Performance Period. Rather, the Risk Adjustment parameters will be re-applied to the realized case mix that occurs in the performance period. However, twice annually, when Medicare sets new payment rates for payment systems on the fiscal year and in calendar years, new setting specific update factors will be applied to the baseline period Clinical Episodes to make their spending comparable to the new prices. At these times, Risk Adjustment will be rerun on newly updated baseline Clinical Episodes and coefficients may change. Please note these changes will only reflect in Medicare pricing updates and, because prices increase on average, it is expected that these changes will on average lead to increases in Target Prices.

**Q42: What is the duration of the Anchor Procedure for outpatient episodes? Additionally, if the Anchor Procedure overlaps with an Anchor Stay, how are the Clinical Episodes treated?**

**A42:** Clinical Episodes initiated by an Anchor Procedure begin on the first day of the BPCI Advanced Beneficiary's Anchor Procedure and end 90 Days after completion of the Anchor Procedure. If an Anchor Procedure overlaps with an admission that is eligible to start an Inpatient Clinical Episode, then the Clinical Episodes are attributed differently, depending on whether they occur in the baseline period or the Performance Period. In the baseline period, both the Anchor Procedure and Anchor Stay will trigger and will follow normal attribution rules. However, in the Performance Period, if the Anchor Procedure and Anchor Stay occur on the same day, only the inpatient Clinical Episode is attributed. The only exception to this is, if outpatient is Participant episode and inpatient is non-Participant.

Please refer to Tables 12 and 13 in the [Episode Creation Specifications - Model Years 1 & 2 \(PDF\)](#) document and the [Episode Creation Specifications - Model Years 1 & 2 - Appendix A: MS-DRGs \(PDF\)](#) document for more details on the Clinical Episode selection logic.

**Q43: What does CMS consider short-term hospitals and which claim types or facilities would be included?**

**A43:** The following hospitals are considered short-term hospitals for purposes of BPCI Advanced, and they would fall under the definition of acute-to-acute transfers in the specifications:

- Short term hospitals can be identified by a CCN with the last four digits between 0001-0879;
- Critical Access Hospitals (CAH) can be identified by a CCN that ends between 1300-1399;
- Emergency hospitals can be identified by a CCN that has either an E or F as the sixth digit; and
- Veterans' hospitals can be identified by a CCN that has a V as the fifth digit.

However, if such combined stays involve CAH or Cancer hospitals in any leg of the transfer, the stay will not trigger a Clinical Episode as those hospitals are excluded from BPCI Advanced. For additional information please refer to the [Research Data Assistant Center \(or RESDAC\)](#) website for the provider number table to provide more information.

**Q44: Is a PGP allowed to select one or all of the three hospitals, in which they practiced during the baseline period, for its respective Clinical Episodes during the performance years? Furthermore, will the PGP be held responsible for all Clinical Episodes selected, no matter which hospitals those Clinical Episodes are performed at during the performance years?**

**A44:** The PGP will be held responsible for all selected Clinical Episodes billed under that PGP's TIN at any eligible hospital. This applies to all hospitals at which the PGP initiates Clinical Episodes in the Performance Period, even if the PGP did not receive preliminary Target Prices for that specific hospital.

**Q45: Can CMS differentiate between Node One and Node Two?**

**A45:** The expected cost of a Clinical Episode is the weighted average of the expected costs in the two nodes with the weights given by the estimated probability that a case is in Node One and that a case is in Node Two. CMS allowed for the two nodes in order to provide more flexible statistical

specifications than simple linear or log linear regression models. Slides 80 and 81 of the “[Pricing Methodology Technical Review Webinar](#)” ([audio available here](#)) posted on the BPCI Advanced website (Participant’s Resources page - <https://innovation.cms.gov/initiatives/bpci-advanced/participant-resources.html>) provide more technical details, including the log likelihood function used in statistical estimation and the equation for calculating Patient Case Mix adjusted spending, respectively.

**Q46: Will CMS define what Part B charges will appear in the Anchor versus Post-Anchor summaries, and can CMS share the rules for allocating changes to the Anchor and Post-Anchor?**

**A46:** First, the rules for assigning the standardized allowed amount to Anchor versus Post-Anchor period by claim setting do not affect Clinical Episode costs that are used in Target Price and Reconciliation calculations. That being said, costs for Skilled Nursing Facilities (SNF), Home Health Agencies (HHA), and Hospice claims that do not require proration and occur during the Anchor Stay/Anchor Procedure, excluding the last day of the Anchor stay, are in the Anchor spending. The remaining SNF, HHA, and Hospice claims that do not require proration are in the Post-Anchor spending. All three types of claims that overlap the Anchor Period/Post-Anchor Period and Post-Episode period are prorated, and the relevant proportion of costs are assigned to each period. For the exact proration methodology for all settings, refer to the [Episode Creation Specifications - Model Years 1 & 2 \(PDF\)](#) document and the [Episode Creation Specifications - Model Years 1 & 2 - Appendix A: MS-DRGs \(PDF\)](#) document.

**Q47: Is there any reason that organizations might not receive Target Prices for all Clinical Episodes provided that we accurately and timely completed an Applicant Data Request and Attestation form?**

**A47:** Yes, there are a three (3) possible scenarios where an Applicant might not receive Target Prices for all Clinical Episodes:

1. If an ACH does not have at least 41 Clinical Episodes for a given Clinical Episode category within the BPCI Advanced baseline period, then it will not receive a preliminary Target Price.
2. If a PGP does not have at least 41 Clinical Episodes for a given Clinical Episode category within the BPCI Advanced baseline period, then it will not receive a PGP offset. Instead, it will be provided an associated ACH price, if available. In these cases, the columns for Steps 13 through 16 in the Target Price workbooks will be blank.
3. If a PGP does not have any episode at a BPCI Advanced eligible ACH for a given CE category, it will not receive TP for that CE category.

Likewise, PGPs that solely practice at low-volume ACHs will not receive any Target Prices, since PGP Target Prices are based on the hospital in which the Clinical Episode initiates.

**Q48: What is the measurement period for HCCs? Is it based upon diagnoses coded during the episode or prior to the episode? Does CMS only take into account one diagnosis per outpatient and physician claim, or all diagnoses?**

**A48:** For HCC determinations, CMS use the inpatient, outpatient, and carrier/physician claims in the 90-day look-back period from the start of the Clinical Episode. Construction of HCCs does not take into account claims data from the Clinical Episode period. CMS takes into account all the diagnosis codes on the outpatient, inpatient, and carrier/physician claims.

**Q49: For the Target Price Calculation, one of the Risk Adjuster Categories is "Recent Resource Use." It defines this as, "Indicates whether a Clinical Episode was preceded by a relevant utilization of health care services." What constitutes a relevant utilization of health care services? Over what time period does this look? Is it a fixed time period before the claim that initiates an episode?**

**A49:** The Recent Resource Use variable is a binary variable. A Clinical Episode will have this flag turned on if there is any inpatient stay with discharge date in the 90-day window preceding its Anchor start date. All inpatient admissions in the 90-day look back window, regardless of the participation status or MS-DRG, are considered for resource use.

**Q50: Does a PGP need to have a specific case mix or number of cases in the Clinical Episodes categories in order to participate?**

**A50:** BPCI Advanced accounts for an extensive range of patient characteristics and there are no specific case mix requirements to participate. PGPs will not have minimum volume thresholds. However, since PGP preliminary Target Prices are based on the hospital in which a Clinical Episode initiates, a hospital preliminary Target Price must be available for the Clinical Episode category for the PGP to trigger these Clinical Episodes at the hospital. To generate a preliminary Target Price, hospitals must meet a minimum volume threshold of at least 41 Clinical Episodes in the category during the applicable baseline period. Consequently, PGPs will only initiate Clinical Episodes for each category at those hospitals with sufficient volume.

**Q51: Why did Participants receive only three years of historical data as opposed to the four years of baseline data used to calculate the Target Prices?**

**A51:** CMS is only able to provide data that contains beneficiary-identifiable claims for healthcare operations purposes as defined under HIPAA. This data must also be the "minimum necessary" to carry out that intended purpose. CMS has determined that three years of raw claims data meets that legal requirement.

For Model Years 1 and 2, the 4-year baseline period is January 1, 2013 – December 31, 2016. However, Participants received baseline claims data in raw and/or summary formats, for the period of January 1, 2014 – December 31, 2016.

For Model Year 3, the 4-year baseline period is October 1, 2014 to September 30, 2018. However, Applicants and Participants will receive baseline claims data in raw and/or summary formats, from October 1, 2015 to September 30, 2018.