On January 9, 2018, the Centers for Medicare and Medicaid Services (CMS) announced a new voluntary bundled payment model, Bundled Payments for Care Improvement Advanced (BPCI Advanced). The model starts on October 1, 2018 and creates a replacement for the current BPCI initiative, which includes multiple models and is set to expire at the end of September 2018.

This document outlines the major provisions of the newly announced BPCI Advanced model, including the following:

- The overall model timeline
- Eligible model participants
- What episodes are included in the model, and how they are defined
- How target prices for the model will be set
- How the model will overlap with other alternative payment models
- How quality will be measured

Note that this summary is only current as of its listed date. CMS is continuing to release additional information on BPCI Advanced, which may clarify or adjust the assertions made in this document. A list of key data sources can be found at the end of the paper.

Milliman is not engaged in the practice of law and this summary should not be construed as providing legal interpretation. The reader should be aware that despite the information already provided by CMS, the BPCI Advanced model is still subject to change.

Model overview and timeline

OVERVIEW

BPCI Advanced is a voluntary bundled payment model intended to replace the current BPCI models. BPCI Advanced includes only acute plus post-acute care episodes (similar to BPCI Model 2). It is open to both Medicare providers (such as hospitals and physician group practices) and non-providers, who can participate as Convener Participants.

TIMELINE

The BPCI Advanced application period is 1/11/2018 through 3/12/2018. CMS’ stated timeline for activities between application submission and model start is as illustrated in Figure 1.

CMS is also planning one subsequent application period for enrollment in Model Year 2020. Initial model participants starting in 2018 cannot change either their episode selections or their list of Episode Initiators until the 2020 application cycle.

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**FIGURE 1: CMS’ 2018 STATED TIMELINE**

<table>
<thead>
<tr>
<th>March to June 2018</th>
<th>Clinical Episode selections and program deliverables are due to CMS (60 days prior to the model start date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>March to June 2018 CMS screens applicants</td>
</tr>
<tr>
<td>May</td>
<td>CMS distributes preliminary target prices to applicants. Applicants can also request the data used to calculate these target prices</td>
</tr>
<tr>
<td>June</td>
<td>CMS offers participant agreements to applicants</td>
</tr>
<tr>
<td>August</td>
<td>Signed participant agreements are due to CMS</td>
</tr>
<tr>
<td>October</td>
<td>October 1st 2018 The model begins</td>
</tr>
</tbody>
</table>
POTENTIAL PARTICIPANTS
In BPCI Advanced, CMS will allow both Convener Participants and Non-Convener Participants.

A Convener Participant is an organization that brings together multiple downstream entities (known as Episode Initiators) which are either acute care hospitals or physician group practices. The role of the Convener Participant is to coordinate amongst these Episode Initiators and bear and apportion the financial risk for all episodes initiated by these organizations (meaning that the Convener Participant would either owe CMS money back or get paid a reconciliation payment by CMS at each reconciliation, based on the financial results of their Episode Initiators).

Convener Participants can be any type of organization – they do not have to be a Medicare certified provider or supplier. Post-acute care providers who participated in the original BPCI program cannot be Episode Initiators themselves, but they can be Convener Participants in BPCI Advanced.

A Non-Convener Participant is a participant that bears financial risk for only the episodes initiated by that organization. Only the following types of organizations are eligible to be Non-Convener Participants:
- Acute Care Hospitals (ACH), which must be Medicare certified and have at least 40 Clinical Episodes in the 4 year baseline period for at least one episode type
- Physician Group Practices, which will be defined by their Tax Identification Number (TIN)

Episode definition

INITIATION
Clinical Episodes in BPCI Advanced are triggered by the submission of a claim for either an inpatient hospital stay or an outpatient procedure by a participating Episode Initiator. BPCI Advanced includes both inpatient and outpatient episodes, including the clinical episodes outlined in Figure 2.

All of the inpatient Clinical Episodes in Figure 2 were a part of BPCI Model 2, with the exception of Disorders of the liver excluding malignancy, cirrhosis, alcoholic hepatitis. Several of the BPCI Model 2 Inpatient Clinical Episodes are not included in BPCI Advanced. The outpatient episodes are all new to BPCI Advanced. CMS has indicated that additional Clinical Episodes may be included in future Model Years.

BPCI Advanced participants beginning on 10/1/2018 (the first day of the model) must commit to be financially responsible for one or more Clinical Episodes until at least 1/1/2020. After the model starts, participants cannot add episodes until 1/1/2020.

FIGURE 2: CLINICAL EPISODES IN BPCI ADVANCED
29 Inpatient Clinical Episodes (to be triggered based on CMS’ Episode Definitions MS-DRG list)
- Acute myocardial infarction
- Back & neck except spinal fusion
- Cardiac arrhythmia
- Cardiac defibrillator
- Cardiac valve
- Cellulitis
- Cervical spinal fusion
- COPD, bronchitis, asthma
- Combined anterior posterior spinal fusion
- Congestive heart failure
- Coronary artery bypass graft
- Disorders of the liver excluding malignancy, cirrhosis, alcoholic hepatitis
- Double joint replacement of the lower extremity
- Fractures of the femur and hip or pelvis
- Gastrointestinal hemorrhage
- Gastrointestinal obstruction
- Hip & femur procedures except major joint
- Lower extremity/humerus procedure except hip, foot, femur
- Major bowel procedure
- Major joint replacement of the lower extremity
- Major joint replacement of the upper extremity
- Pacemaker
- Percutaneous coronary intervention
- Renal failure
- Sepsis
- Simple pneumonia and respiratory infections
- Spinal fusion (non-cervical)
- Stroke
- Urinary tract infection

3 Outpatient Clinical Episodes (to be triggered based on CMS’ Episode Definitions HCPCS code list)
- Percutaneous coronary intervention (PCI)
- Cardiac defibrillator
- Back & neck except spinal fusion

LENGTH
BPCI Advanced episodes begin with the anchor inpatient hospitalization or outpatient procedure and end 90 days after either anchor discharge (for inpatient episodes) or completion of the outpatient procedure (for outpatient episodes). The first day of the 90-day post-acute care period is the date of discharge or completion of the procedure.
SERVICE LEVEL INCLUSION AND EXCLUSION CRITERIA
In general, the episode will include Medicare FFS expenditures for all Part A and Part B non-excluded items and services furnished during the Anchor Stay or Anchor Procedure and in the 90-day period following the Anchor Stay or Anchor Procedure. This includes items that are currently included in CMS’ 3-day payment window for inpatient payment (testing and certain therapeutic services furnished by the admitting hospital or entities it either wholly owns or wholly operates) as well as charges for emergency department (ED) visits at other facilities, if the ED stay occurred either the day of or the day before admission for the anchor stay. Transfers are treated as one continuous hospitalization, so the episode starts at the initial admission and is assigned to the initial provider.

Four categories of spending are excluded from BPCI Advanced episodes:

- Part A and Part B services provided to a BPCI Advanced beneficiary during specified excluded readmissions
- New technology add-on payments
- Payments for items and services with pass-through status under the outpatient prospective payment system
- Payment for blood clotting factors to control bleeding for hemophilia patients

Note that this differs from the original BPCI models. Part B services do not have their own set of exclusions in the BPCI Advanced model; rather, Part B services can only be excluded if they occur during an excluded readmission. Additionally, hospice care was excluded from the original BPCI models, but is now included in BPCI Advanced episodes.

BENEFICIARY INCLUSION CRITERIA
Only beneficiaries who are entitled to benefits under Part A and enrolled in Part B for the entirety of the Clinical Episode will be included in BPCI Advanced. The following criteria will cause a beneficiary to be excluded from BPCI Advanced episode initiation:

- Coverage under a managed care plan or United Mine Workers
- Eligibility for Medicare is on the basis of end-stage renal disease (ESRD)
- Medicare is not the primary payer
- Death during the anchor stay or anchor procedure

EPISODE ATTRIBUTION
Because CMS allows both physician groups and hospitals to initiate episodes, there will be cases where an episode could be attributed to multiple Episode Initiators. For example, if the operating physician on a given case is part of a participating PGP, but they perform the surgery for that case at a hospital that is also participating in BPCI Advanced for the same episode. In these cases of conflict, CMS will attribute the episode in the following hierarchy:

- Operating physician’s PGP (based on the NPI of the operating physician on the institutional claim)
- Hospital at which the service was furnished

BPCI Advanced participants will not be given precedence over other participants due to the timing of when they start in the model. This was a feature of the original BPCI models.

Financial methodology

MODEL YEARS
BPCI Advanced will begin on 10/1/2018 and end on 12/31/2023, unless sooner terminated in accordance with the BPCI Advanced Participation Agreement.

PAYMENT METHODOLOGY
BPCI Advanced is a retrospective bundled payment model, meaning that all claims will be processed and paid as normal during the episode. CMS will perform semi-annual reconciliations to retroactively compare actual Medicare FFS expenditures to a prospectively determined Clinical Episode-specific target price. The target prices will be adjusted for changes in Medicare payment rates and the participant's patient case mix in the performance period. CMS has indicated they intend to provide target prices to participants in advance of the start of each Model Year.

Any positive or negative reconciliation amounts will be summed across all episodes and will be adjusted based on quality performance for a given Episode Initiator. In the case of Convener Participants, the total adjusted reconciliation amounts will be summed across all Episode Initiators.

FINANCIAL RISK
Unlike in BPCI and CJR, participants will take on full financial risk for episodes in the first Model Year. There is a 20 percent stop-gain / stop-loss provision in all Model Years at the Episode Initiator level that is applied to the quality adjusted reconciliation amounts. A subtle change here is that the stop-gain / stop-loss provision was applied at the awardee level for Convener Participants in the original BPCI models.

There is only one risk track in BPCI Advanced, which involves a risk cap applied to Clinical Episodes at the 1st and 99th percentile of spending by MS-DRG (for inpatient episodes) or Ambulatory Payment Classification (APC, for outpatient episodes) in both the performance period and the baseline period.

POST-EpisODE SPENDING CALCULATION
In addition to financial liability for BPCI Advanced episode expenditures, CMS will also measure the cost of care in the 30 days after the end of the episode (the 30-day Post-Episode Monitoring Period) to look for cost shifting. All non-excluded Medicare FFS expenditures in this time period for each BPCI Advanced beneficiary will be compared to the 99.5% confidence interval of predicted spending for those dates, based on the
statistical model that will be used for setting target prices. If the expenditures exceed that threshold, the Participant will have to pay CMS the difference.

Target price setting methodology

Unlike previous episode-based payment models, BPCI Advanced will utilize a two-stage risk adjustment model and a combination of regional and participant-specific historical data to set target prices. The goal of this new methodology is to encourage both efficient and less efficient providers to participate in the model, and to adjust for patient case mix, geographical pricing differences, and other relevant provider characteristics.

The calculation is different for Acute Care Hospitals (ACHs) and Physician Group Practices (PGPs), since PGPs can initiate episodes at multiple ACHs. As such, the Hospital Benchmark Price (HBP) is calculated first, and then used to calculate each PGP-ACH Benchmark Price combination.

**HOSPITAL BENCHMARK PRICE**

Benchmark prices are calculated for each hospital and for each Clinical Episode where they have the minimum required number of historical episodes in the baseline period (>40). The HBP calculation is:

\[
HBP_{ht} = SBS_h \times PCMA_{ht} \times PAT Factor_{ht}
\]

- **Standardized Baseline Spending (SBS):** Standardizes a hospital's spending in the baseline period to account for historical efficiency.
- **Patient Case Mix Adjustment (PCMA):** Adjusts the benchmark price for the relative severity level of patients at a given hospital.
- **Peer Adjusted Trend (PAT) Factor:** Adjusts for persistent differences in episode spending levels across hospital peer groups and trends spending to the Model Year based on trends in spending during the baseline period within a hospital peer group.

**PHYSICIAN GROUP PRACTICE EPISODE INITIATORS**

Benchmark prices are calculated for each Clinical Episode and for each hospital where the PGP initiated episodes. Note that PGPs will not receive benchmark prices for hospitals that did not meet the minimum required episode count (more than 40). The PGP-ACH Benchmark Price calculation is:

\[
PGP\text{-ACH Benchmark Price}_{p,ht} = HBP_{ht} \times PGP\text{ Offset}_{p,h} \times Relative\ Case\ Mix_{p,ht}
\]

- **HBP:** The hospital specific benchmark price (as described above) for each hospital where the PGP initiated episodes in the baseline period.
- **PGP Offset:** Adjusts the benchmark price for the historical level of efficiency for PGP cases relative to the historical level of efficiency across all cases at the ACH. If a PGP has less than 40 Clinical Episodes in the baseline period, then no PGP offset is applied.
- **Relative Case Mix:** Adjusts the benchmark price for the difference in the case mix of the PGP’s Clinical Episodes at an ACH relative to the overall case mix at that ACH.

The Hospital Benchmark Price or PGP-ACH Benchmark Price is then converted to a preliminary target price by applying a 3% discount factor. That calculation will generate the target price that will be provided to each applicant before they finalized their participation agreement with CMS and prior to selection of Clinical Episodes. Updated target prices will also be provided to each participant at the beginning of each Model Year to account for updates to Medicare payment rates.

The final target price will be set retrospectively at reconciliation by replacing the historic patient case mix adjustment (used to calculate the benchmark price) with the realized patient case mix in the performance period. CMS reserves the right to adjust this methodology in future Model Years.

Overlap with other models

CMS recognizes that there may be overlap between the BPCI Advanced and other ongoing CMS payment models. Participants may simultaneously participate in BPCI Advanced and the Medicare Shared Savings Program, the Next Generation ACO model, and other shared savings initiatives. However, CMS reserves the right to potentially enforce additional requirements, revise incentive parameters, or ultimately prohibit such dual participation if it is impossible to avoid double counting savings based on overlap.

While organizations can overlap across these models, beneficiaries can not necessarily do so. CMS states that BPCI Advanced will exclude beneficiaries that are already aligned to one of the following organizations:

- **Next Generation ACO**
- **Vermont All-Payer ACO**
- **ESRD Seamless Care Organization**
- **Shared Savings Program Track 3 ACO**

Organizations participating in CJR will not be permitted to participate in BPCI Advanced for the Lower Extremity Joint Replacement (LEJR) episodes included in that model. They can, however, participate for other Clinical Episodes. CJR episodes will take precedence over BPCI Advanced episodes.

Current participants in the Oncology Care Model (OCM) will be allowed to participate in BPCI Advanced and BPCI Advanced will
run concurrently with OCM. Neither model will take precedence, but CMS will adjust OCM performance-based payments based on the proportion of overlap between model episodes.
Additionally, Monthly Enhanced Oncology Services (MEOS) payments received by OCM participants will be excluded from BPCI Advanced target prices and reconciliation amounts.

Quality measures
Payment will be linked to quality using a pay-for-performance methodology based on performance on specific quality measures. A quality score will be calculated for each quality measure at the Clinical Episode level and then volume-weighted and scaled across all Clinical Episodes triggered by a given Episode Initiator (EI) to calculate an EI specific Composite Quality Score (and related CQS Adjustment Amount). The adjustment amount will be applied to calculated reconciliation amounts to scale them based on quality. Specifics of how quality performance will be translated into this Adjustment Amount have not been provided. The CQS Adjustment Amount will be capped at 10 percent for at least the first two Model Years. This adjustment will happen before the stop-loss / stop-gain provision is applied.
While CMS has not specified how the calculation of quality measures will work, they have released a list of required quality measures that will apply in the first two Model Years (2018 and 2019) illustrated in Figure 3.
This required quality measures list may change over BPCI Advanced Model Years.

Other considerations

**BENEFICIARY PROTECTIONS**
Beneficiaries cannot opt out of the BPCI Advanced model. The model will not affect beneficiary freedom of choice. Participants must inform beneficiaries about the initiative prior to, or as soon as possible following, the submission of a claim for the Anchor Stay or Anchor Procedure that triggers a Clinical Episode, as applicable, by sending the beneficiary a copy of the template notification letter provided by CMS.

**GAINSHARING**
The total reconciliation payment received by a BPCI Advanced Participant can be distributed to certain sharing partners pursuant to financial arrangements consistent with the terms of the BPCI Advanced Model Participation Agreement (which has not yet been released) and applicable law. These payments cannot exceed 50 percent of the total Medicare FFS expenditures included in Clinical Episodes attributed to the participant for which the payment reconciliation amount was calculated. The same is true of losses, which can be distributed amongst Sharing Partners up to 50% of the total Medicare FFS expenditures included in Clinical Episodes attributed to the Participant for which the Repayment Amount was calculated or adjusted.

**MEDICARE PAYMENT POLICY WAIVERS**
CMS intends to offer several Medicare payment policy waivers to participants in BPCI Advanced, including the following:

- **Telehealth waiver:** For BPCI Advanced beneficiaries, CMS will waive the otherwise applicable geographic area requirements, so long as services are furnished in accordance with the remaining payment criteria.
- **Post-discharge home visit waiver:** CMS will waive the direct supervision requirement for post-discharge home visits, meaning BPCI Advanced beneficiaries who are not homebound can receive services in their homes by auxiliary personnel (such as nurses) without a physician present.
- **3-day stay waiver:** Normally, Medicare FFS beneficiaries must have a prior inpatient hospital stay of at least three consecutive days to qualify for coverage of skilled nursing facility services. Under this waiver, CMS proposes to cover the SNF stay of beneficiaries in the BPCI Advanced model who are discharged to a SNF without a preceding hospital stay of at least three days if the beneficiary and the receiving SNF meet various conditions related to quality and model participation and all other requirements for coverage of such services are met.

### FIGURE 3: REQUIRED QUALITY MEASURES LIST – MODEL YEARS 1 AND 2

**All Clinical Episodes**
- All-cause Hospital Readmission Measure (National Quality Forum [NQF] #1789)
- Advanced Care Plan (NQF #0326)

**Specific Clinical Episodes Only**
- Perioperative Care: Selection of Prophylactic Antibiotic: First or Second Generation Cephalosporin (NQF #0268)
- Hospital-Level Risk-Standardized Complication Rate (RSCR)
- Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) (NQF #1550)
- Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR)
- Following Coronary Artery Bypass Graft Surgery (NQF #2558)
- Excess Days in Acute Care after Hospitalization for Acute Myocardial Infarction (NQF #2881)
- AHRQ Patient Safety Indicators (PSI)
MACRA CONSIDERATIONS
Under the Quality Payment Program (QPP), BPCI Advanced will meet the criteria as an Advanced Alternative Payment Model (Advanced APM) as of the date the model starts (10/1/2018). However, participation will not be tracked for purposes of Qualifying APM Participant (QP) determination until the performance period beginning on 1/1/2019.

Additionally, BPCI Advanced will meet the criteria to be a Merit-Based Incentive Payment System (MIPS) APM beginning 1/1/2019. This means that for MIPS performance periods beginning in 2019, MIPS eligible physicians not achieving QP status will be subject to the APM scoring standard under the QPP if they have reassigned their rights to receive Medicare payments to a PGP participant (or a Convener Participant with at least one PGP Episode Initiator) and are included on the Participation List.

DATA SHARING
As a part of the BPCI Advanced application process, CMS has committed to providing participants with the data used to calculate their preliminary target prices. This will include up to 3 years of historical Medicare claims data for Medicare FFS beneficiaries who would have been included in a Clinical Episode during the baseline period attributed to the applicant. Those accepted into the model will be able to request similar data during their participation.

Note that applicants to the BPCI Advanced model will be required to submit a Data Request and Attestation (DRA) form with their completed application.

EVALUATION APPROACH
CMS will contract with an independent evaluator to conduct evaluation of the model, and participants will be required to cooperate with this evaluator.

Implications of BPCI Advanced
With the recent cancellation of the Episode Payment Models (EPMs) and scaling back of the Comprehensive Care for Joint Replacement (CJR) model, BPCI Advanced represents the best opportunity for most providers seeking to participate in bundled payment models through CMS. BPCI Advanced offers the potential for both financial gain as well as benefits under MACRA, but these opportunities must be carefully quantified and weighed against the potential participation costs.

KEY DATA SOURCES
1. The BPCI Advanced Request for Applications (RFA)
2. The BPCI Advanced website
3. The BPCI Advanced model timeline
4. The BPCI Advanced fact sheet
5. The BPCI Advanced FAQ document
6. The BPCI Advanced model overview webinar
7. The BPCI Episode Definition, Model Year 1
8. The BPCI Advanced target price specifications for Model Years 1 and 2

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