Hospital Inpatient Quality Reporting (IQR) Program

Support Contractor

Fiscal Year 2019 Clinical Episode-Based Payment Measures Overview

Questions and Answers

Speaker

Cynthia Khan, PhD
Data Scientist
Econometrica, Inc.

Moderator

Bethany Wheeler-Bunch, MSHA
Hospital Value-Based Purchasing (VBP) Program Support Contract Lead
Hospital Inpatient Value, Incentives, and Quality Reporting
Outreach and Education Support Contractor

June 7, 2018

2 p.m. ET

DISCLAIMER: This presentation question-and-answer transcript was current at the time of publication and/or upload onto the *Quality Reporting Center* and *QualityNet* websites. Medicare policy changes frequently. Any links to Medicare online source documents are for reference use only. In the case that Medicare policy, requirements, or guidance related to these questions and answers change following the date of posting, these questions and answers will not necessarily reflect those changes; given that they will remain as an archived copy, they will not be updated.

The written responses to the questions asked during the presentation were prepared as a service to the public and are not intended to grant rights or impose obligations. Any references or links to statutes, regulations, and/or other policy materials included are provided as summary information. No material contained therein is intended to take the place of either written laws or regulations. In the event of any conflict between the information provided by the question-and-answer session and any information included in any Medicare rules and/or regulations, the rules and regulations shall govern. The specific statutes, regulations, and other interpretive materials should be reviewed independently for a full and accurate statement of their contents.

Webinar attendees asked the following questions and subject-matter experts provided the responses. Questions and answers may have been edited for grammar.

Question 1: **Which reporting program is the clinical episode-based payment (CEBP) under?**

The CEBP measures become part of the Hospital IQR Program measure set, starting fiscal year 2019.

Question 2: **Do hospitals that are currently in the Hospital IQR Program have to submit these measures?**

No. Hospitals do not submit CEBP measures because these measures are based on Medicare claims data.

Question 3: **Do we want our CEBP measure scores to be as close to one as possible or is it better to be well below one?**

Each CEBP measure is expressed as a risk-adjusted ratio. The numerator for a provider's measure is the Episode Amount, calculated as the average of the ratios of each episode's standardized episode payments to its expected episode payment (as predicted in risk adjustment), multiplied by the average observed episode payment level across all providers nationally. The denominator for a provider's measure is the episode-weighted national median of Episode Amounts across all providers.

A CEBP measure of greater than one indicates that your hospital's CEBP amount for a given condition or procedure is more expensive than the United States (US) national episode-weighted median CEBP amount for that condition or procedure. A CEBP measure of less than one indicates that your hospital's CEBP amount is less expensive than the US national episode-weighted median CEBP amount. Please note that resource use measures, such as CEBP measures, are most meaningful when presented in the context of other quality measures to provide a more comprehensive assessment of hospital performance.

Question 4: **In the CEBP spending breakdown under the "clinically related post-discharge services," what does the inpatient category cover?**

This category covers any inpatient claims that occur in the post-discharge period. These could be inpatient readmissions that are clinically related according to the grouping process detailed in the CEBP measure specifications. The clinically related determination could be made based on just the diagnosis-related group (DRG); or, in cases where clinical experts felt that the DRG by itself wasn't sufficient, the DRG in combination with particular diagnoses.

The inpatient admissions could be a wide array of possibilities, depending on the grouping rules for the specific clinical episode. More information about the CEBP measure grouping rules can be found on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447. And, more information on inpatient services can be found at https://www.resdac.org/cms-data/files/ip-rif.

Question 5: **Which claims are included in the carrier category?**

The Carrier file, also known as the Physician/Supplier Part B claims file, contains final action fee-for-service claims submitted on a CMS-1500 claim form. Most of the claims are from non-institutional providers, such as physicians, physician assistants, clinical social workers, and nurse practitioners. Claims for other providers, such as freestanding facilities, are also found in the Carrier file. Examples include independent clinical laboratories, ambulance providers, and freestanding ambulatory surgical centers. More information on the carrier category can be found at https://www.resdac.org/cms-data/files/carrier-rif.

Question 6: **Since claims are based on a DRG, how do the measure developers determine what care during the inpatient admission is considered "unrelated" to a condition?**

At a high level, services are categorized depending on when they occur, that is, as part of treatment services or as part of clinically related post-discharge services. Treatment services are for the initial treatment of the condition. Treatment services include the services during an inpatient stay, as well as pre-trigger services, such as diagnostics related to the inpatient stay. Clinically related post-discharge services are services that could include routine follow-

up care after discharge. Clinically related post-discharge services could also include complications, such as those manifested through readmissions to inpatient facilities.

For treatment services, all costs of Part A claims during the inpatient stay are included in the measure. Treatment services also include the standardized allowed amounts of physician/supplier Part B claims during the inpatient stay. For pre-trigger services and clinically related post-discharge services, our clinicians and externally contracted clinicians have done an extensive review of services occurring in these time periods in order to determine clinical relatedness and unrelatedness.

To complete the review, the measure developers gathered clinicians with expertise in the given areas. For example, measure developers consulted with gastroenterology and colorectal experts for the gastrointestinal hemorrhage episode. For the kidney/urinary tract infection episode, developers had general medical and surgical practitioners and nephrologists. For cellulitis, they had general practitioners in medical and surgical specialties.

The measure developers constructed these episodes and brought up the services occurring during the episodes, along with a diagnosis, in front of the clinical experts. The clinical experts reviewed the services and made determinations per a series of rules as to whether services are likely to be clinically related and influenced by the hospital determined the trigger admission and attributed the measure. The clinicians counted only the standardized allowed amounts associated with the related admissions that are represented in clinically related post-discharge services and pre-trigger services in the total spending amount.

More information about measure methodology can be found in the measure specification document, as well as in the Excel files that detail grouping rules. located on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 7: **For acute-to-acute transfers, are the patients excluded from the receiving hospital, as well as from the sending hospital?**

Yes. If there is an acute-to-acute transfer, the episode would not trigger an episode for the purposes of the CEBP measures. Neither the receiving hospital nor the sending hospital is assigned an episode for the CEBP measures in that case.

Question 8: **Are CEBPs defined by MS-DRGs?**

CEBP episodes may be defined by the following claim codes: MS (Medicare Severity)-DRGs, International Classification of Diseases (ICD-10), and/or Current Procedure Terminology (CPT). For more information about specific codes for condition and procedural measures, please refer to the measure specification documentation at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 9: **Why are Medicare Advantage patients excluded?**

The exclusion of Medicare Advantage patients from the measures is due to a data limitation. The measure excludes beneficiaries enrolled in Medicare Advantage during an episode to ensure that a complete picture of resources can be accounted for through the duration of an episode. The system of validating encounter data differs between services under the Medicare Advantage and services under the Fee-for-Service system. Such differences make it difficult to compare claims data across patients who are not enrolled in Medicare Advantage.

Question 10: **Why is the hospital CEBP amount for each condition or procedural measure divided by the national median CEBP for that condition or procedure and not the national average CEBP for that condition or procedure?**

The median score presents the score that falls in the middle of the distribution scores, going from the lowest to the highest score. The median is less influenced by scores in the low or high ends of the distribution than is the average.

Question 11: **Can you explain what is meant by price-standardized payments?**

Price standardization accounts for payment differences in geographic locations and special Medicare payments or programs unrelated to care (e.g., graduate medical education) while retaining other aspects of the Medicare payments. For more information about price standardization, please refer to the CEBP Measure Information Form located in the Measure Methodology Reports Section of the Episode-Based Payment Measures

Section in *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447. This web page also provides the actual documentation described in payment standardization.

Question 12: Can you explain what is meant by risk adjustment?

The risk-adjustment model includes independent variables for age, severity of illness, and enrollment status. Specifically, the methodology includes age categorical variables, Hierarchical Condition Category (HCC) variables derived from the beneficiary's claim during the period 90 days prior to the start of that episode, as well as MS-DRG of the index hospitalization. The risk-adjustment methodology also includes the HCC interaction variables, status indicator, variables whether the beneficiary qualifies for Medicare through disability or end-stage renal disease (ESRD), and whether a beneficiary resides in a long-term care facility.

The risk-adjustment approach estimates the model separately for episodes within each clinical subtype. This allows the impact of the risk-adjusted variables on predicted spending to differ for the various subtypes.

Risk adjustment is a critical element of a valid measure because it removes sources of variation in episode payments that are out of the control of the hospital that was attributed the episode.

More information about the risk-adjustment model for a CEBP measure can be found in the CEBP Measure Information Form, which is located in the *QualityNet* Measure Methodology Reports web page for the episode-based payment measures at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 13: Does the methodology for calculating the CEBP measures consider all conditions clinically related to any diagnosis present on admission or only the primary diagnosis?

In assigning clinically related services, the clinical experts are examining the attributed hospital's inpatient stay and trying to determine what services are reasonably under the influence or affected by the attributed hospital's treatment during the inpatient stay. If there are conditions that have comorbidities present on admission, and those conditions are not directly a

part of the inpatient stay and are not necessarily under the influence of the hospital, they would not be used to assign clinically related services in the pre-trigger or post-discharge period.

This is to ensure that the episode spending does not include services that are a part of comorbidities that the hospital is not accountable for in providing treatment for the specific DRG, but focuses on grouping services to episodes that are clinically related to the specific DRG and episode type being looked at in the measure. At the same time, the comorbidities will be accounted for in the risk adjustment to the extent that they are present in the patient during the 90-day lookback period from the start of the CEBP episode. If these comorbidities are present in the 90-day lookback period, they are included in the risk-adjustment model to ensure that hospitals are not penalized for complex patients.

Question 14: **If my hospital-specific report (HSR) for cellulitis diabetes has no data, does that mean that we had no cellulitis patients with a diabetes code?**

That is partially correct. Your hospital may not have had any episodes at that subtype. However, it is important to keep in mind that the exclusion criteria discussed in the presentation have been applied. For instance, if you had one Medicare Advantage patient with cellulitis with a diabetes code, that patient and the patient's episode would not be included in the measure. As such, that HSR for cellulitis as a complication of diabetes would not have any data reported. More information about the measure exclusion criteria can be found in the methodology document on the Measure Methodology web page under Episode-Based Payment Measures on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 15: **To clarify, if a case has the subtype ICD-10 code but not a DRG for cellulitis, is this considered a trigger event? If so, is this a primary or secondary ICD-10 diagnosis code?**

No. The subtype ICD-10 codes would not be sufficient to trigger a CEBP episode for cellulitis. These codes would need to occur with a trigger MS-DRG listed in the methodological documentation. All CEBP episodes are triggered by an MS-DRG found on an inpatient claim.

In addition, there is identification of clinical subtypes that can happen through the presence of ICD-10 diagnosis codes or through the presence of CPT procedure codes. And it is also possible for the procedural episodes to have complementary trigger rules that depend on the CPT codes on Part B claims.

Question 16: Why don't some hospitals receive HSRs for CEBP measures?

Hospitals that Medicare does not reimburse through the inpatient prospective payment system (IPPS), such as cancer hospitals, critical access hospitals (CAHs), and hospitals in Maryland, are not eligible to begin CEBP episodes and therefore do not receive HSRs. Moreover, an eligible provider must have at least one eligible CEBP episode for any of the CEBP measures to be provided a CEBP HSR. For more information about inclusion and exclusions from CEBP measures, please refer to the measure specification document on the Measure Methodology web page under Episode-Based Payment Measures on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 17: How are overlapping episodes treated?

Overlapping episodes are permitted in the CEBP measure. An inpatient stay occurring in the post-discharge period of another preceding episode may 1) initialize its own episode, given that the proper triggering DRG code is present, and 2) have its inpatient cost included in the preceding episode's spending if the appropriate codes are found on this inpatient stay to satisfy the preceding episode's grouping rules. This is intended to promote care coordination and joint responsibility between providers.

Question 18: Are CAHs included in these measures?

No. CEBP measures evaluate hospitals paid under the IPPS. Because CAHs are not acute hospitals paid under IPPS, CEBP measure scores and HSRs are not created for CAHs. For more details about the CEBP measures, please refer to the FAQ and measure specification document on the Measure Methodology web page under Episode-Based Payment Measures on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 19: **Can CEBP amount be treated as the cost of care? Can CEBP amount be compared among hospitals or across different years?**

CEBP measures use clinically coherent groupings of healthcare services to assess provider resource use for treating conditions and procedures. The CEBP amount is designed to evaluate the cost of care (in the context of provider-, state-, and national-level performance), but taken by itself may not be an accurate representation of actual cost of care.

Yes, CEBP amount is designed to be compared among hospitals. Each year, providers can use their CEBP amount to evaluate their performance relative to other providers. Combined with other clinical quality measures, the CEBP measures contribute to the overall picture of provider clinical effectiveness and efficiency.

Question 20: **Can you supply a list of the ICD-10 codes used to extract this data by condition or procedure measure? Or DRG? However they are extracted.**

The relevant ICD-10 codes can be found in the appendix tables within the measure specification document (in Appendix A, starting on page 17) on the Measure Methodology web page under Episode-Based Payment Measures on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 21: **Does this chart include the amount charged for medications? Medicare D claims?**

CEBP measures evaluate providers for Medicare payments for clinically related Medicare Part A and Part B services. Medications paid by Part B will be included in measure calculation. Medications paid by Part D are not included.

Question 22: **Is there a minimum number of eligible admissions to be included in the calculation?**

The case minimum number of eligible admissions required for measure calculation and to receive a confidential HSR is at least one eligible episode. However, the case minimum for public reporting of a given condition measure is at least 40 of those condition episodes; for a given procedure episode, the case minimum is at least 25 of those procedural episodes during the performance period.

Question 23: **Slide 26. What is linear regression and a separate regression model?**

The linear regression used in risk adjustment is an ordinary least squares (OLS) regression. This statistical technique is used to compare a population of national episodes to predict the episode spending (dependent variable) of an episode based on the conditional means of the explanatory (independent variables) values.

In other words, this step estimates the relationship between the independent variables (age, HCCs, clinical subtype, disabled/ESRD enrollment status, long-term care indicator, variable interactions, and the MS-DRG of the trigger hospital stay) and standardized episode payments using an ordinary least squares (OLS) regression.

A separate regression model is run for the population of episode subtypes. This means a separate OLS regression is run for the differing population of episodes clinical homogeneity.

Question 24: **Slide 27. What does Winsorize mean?**

Winsorization is a statistical transformation that limits extreme (very high or very low) values in data to reduce the effect of possible outliers. This is done by reassigning an extreme score to another score closer to the distribution tail. This enables retaining extreme scores instead of deleting them. For CEBP measure calculations, Winsorization is meant to limit the impact of extreme values on expected costs that will be used for risk adjustment. For example, Winsorization of the lower end of a distribution of costs, also referred to as bottom coding, involves setting extremely low predicted values below a predetermined limit to be equal to that predetermined limit.

Question 25: **So, some admissions may be included in multiple episodes?**

Yes, it is possible for an inpatient admission to both trigger an episode attributed to the admitting hospital and be included in a preceding episode's clinically related post-discharge services. More information about this topic can be found in the measure methodology details located on *QualityNet* at https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228775614447.

Question 26: **To be included in the CEBP, do the number of patients in the three conditions added together need to be less than 40 and for the number of patients in the three procedures need to be greater than 25 episodes to be included?**

The case minimums are applied independently for each episode type. This means each individual condition or procedural episode type would need to meet the case minimum for that respective episode group to be reported.

Question 27: **What is the time frame for the 40 cases to meet reporting?**

The performance period is one calendar year. Data from January 1, 2017 through December 31, 2017, were used for the reports that just came out in May 2018.

Question 28: **Can you please clarify whether it was proposed that CEBP measures be removed from IQR as of 2018 reporting**?

CMS proposed to remove six CEBP measures from the Hospital IQR Program, beginning with the FY 2020 payment determination in the FY 2019 IPPS/Long-Term Care Hospital (LTCH) Prospective Payment System (PPS) Proposed Rule (83 FR 20479–20480). If the proposal is finalized, CMS anticipates removing the CEBP measures from *Hospital Compare* in the January 2020 refresh with the last reported performance period from FY 2019 of January 1, 2017 through December 30, 2017.

Question 29: **Regarding table 5A, under the clinically related post-discharge services, if "inpatient" is noted, does that reflect a readmission?**

Yes, inpatient spending included in the episode cost during the clinically related post-discharge period includes readmissions and any other hospital admissions deemed clinically relevant.

Question 30: **How is this payment report data applied to hospital reimbursement?**

The CEBP measures do not impact hospital reimbursement. Their public reporting fulfills hospital reporting requirements as part of the Hospital IQR Program.

Question 31: **In what month this year will the CEBP measures be posted on *Hospital Compare*?**

The CEBP measures will be posted publicly on *Hospital Compare* in January 2019.

Question 32: **What will be the impact if the CEBP measures are removed from IQR, as proposed in the IPPS proposed rule?**

If the CMS proposal is finalized, removing the six CEBP measures from the Hospital IQR Program would help to produce a more harmonized and streamlined measure set. In addition, the measure data are already captured within the overall hospital MSPB measure, which will be retained in the Hospital VBP Program. Although the MSPB measure does not provide the same level of granularity that these individual measures do, the most essential data elements will be captured by and publicly reported under the MSPB measure in the Hospital VBP Program.