Hospital Inpatient Quality Reporting (IQR) Program

Support Contractor

Fiscal Year 2019 Medicare Spending per Beneficiary Measure Overview

Presentation Transcript

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June 5, 2018
2 p.m. ET

Bethany Wheeler-Bunch: Hello, and welcome to the Hospital Inpatient Quality Reporting and the Hospital Value-Based Purchasing Program Fiscal Year 2019 Medicare Spending per Beneficiary Measure Overview webinar. My name is Bethany Wheeler-Bunch, and I am with the Hospital Inpatient VIQR Support Contractor. Before we begin, I'd like to make our first few regular announcements. This program is being recorded. A transcript of the presentation and the questions and answers will be posted to the inpatient website, *www.QualityReportingCenter.com*. If you registered for this event, a reminder e-mail and the slides were sent out to your e-mail about two hours ago. If you did not receive that e-mail, you can download the slides at the inpatient website, *www.QualityReportingCenter.com*. If you have a question as we move through the webinar, please type your question into the chat window with the slide number associated to your question. We will answer as many questions as time allows at the conclusion of the webinar. Applicable questions that are not answered during our question-and-answer session will be posted to the *www.QualityReportingCenter.com* website in the upcoming weeks. I would now like to welcome our speaker for today's event, Dr. Cynthia Khan. Dr. Khan is a Data Scientist at Econometrica. Dr. Khan will also be presenting an additional webinar this Thursday covering the Clinical Episode-Based Payment measures. Please look for that registration on the *www.QualityReportingCenter.com* website. I hope everyone enjoys today's event, and I will now turn the floor over to you, Dr. Khan.

Dr. Cynthia Khan: Thank you, Bethany. On today's webinar, we will be talking about the Medicare Spending per Beneficiary measure, also abbreviated as MSPB. The purpose of this presentation is to give an overview of the MSPB measure and the hospital-specific reports that are sent to each eligible hospital. Today, we will cover the goals of the MSPB measure, the measure methodology, and how to perform and calculate the MSPB measure. We'll also go over the hospital-specific reports and where you can locate related supplemental files and where downloadable MSPB files can be found on the *Hospital Compare* website.

By the end of the presentation, we hope that you'll be able to identify the goals of the MSPB measure, explain the MSPB measure methodology,

and locate the following MSPB documents: The five downloadable MSPB files posted on the *Hospital Compare* website and each hospital's HSR and supplemental files.

The MSPB measure evaluates hospitals' efficiency relative to the national median hospital. Specifically, the MSPB measure evaluates the cost to Medicare for services performed by hospitals and other healthcare providers during an MSPB episode. An MSPB episode includes all Medicare Part A and B claims during the periods immediately prior to, during and after a patient's hospital stay.

The MSPB measure is an efficiency measure in the Hospital Value-Based Purchasing Program, also known as the Hospital VBP Program. The measure was included starting in fiscal year 2015, and the measure was required for inclusion by the Social Security Act and is endorsed by the National Quality Forum. More measure details are included in the fiscal year 2012 and 2013 Inpatient Perspective Payment System Final Rules. The links are included on this slide.

Over today's call, I will go over the goals of the measure, the measure methodology, calculation steps and example calculations. I will then go over the hospital-specific report and supplemental file to help everyone better understand the reports.

I'm going to start with the goals of the measure.

In conjunction with the Hospital Value-Based Purchasing Program quality measures, the MSPB measure aims to promote more efficient care for beneficiaries by financially incentivizing hospital to coordinate care, reduce system fragmentation and improve efficiency. For example, hospitals can improve efficiency through actions, such as improving coordination with pre-admission and post-acute providers to reduce the likelihood of re-admission.

Next, I will provide a description of the measure methodology and define a few key terms.

The MSPB measure is a claims-based measure that includes price standardized payments for all Part A and Part B services provided from

three days prior to a hospital admission through 30 days after the hospital discharge. The hospital admission is indicated by the red triangle on the slide and is also known as the “index hospital admission.” To help further explain how the MSPB measure is calculated, it is important to understand some key terms. The next few slides will define an MSPB episode and an MSPB amount.

The MSPB measure is based on all MSPB episodes that an inpatient perspective payment system hospital, or IPPS hospital, has during a period of performance. An MSPB episode includes all services provided three days before the hospital admission through 30 days post hospital discharge. The reason why an episode includes three days prior to hospital admission is to promote consistency between services regardless of the diagnosis code and where services are provided. Including services that are three days prior to the index hospital admission allows diagnostic and non-diagnostic services that are related to the index admission to be captured in the inpatient payments, as well. Including services that are 30 days after the discharge emphasizes the importance of care transitions and care coordination improving patient care. Before we move on to the definition of MSPB amount, I'd like to clarify what type of hospital admissions qualify to start an MSPB episode. Hospital admissions that are not considered an index admission to start an episode include: Admissions that occur within 30 days of discharge of another index admission; transfers between acute hospitals; episodes where the index admission claim has zero dollars payment and lastly; admissions having a discharge date fewer than 30 days prior to the end of a measure performance period.

In addition to the MSPB episode, the MSPB measure is based on the MSPB amount. An MSPB amount is the sum of all standardized and risk-adjusted spending across all of the hospital’s eligible episodes divided by the number of episodes. Building on the terms we just discussed, MSPB episode and MSPB amount, the MSPB measure is defined as the hospital's MSPB amount divided by the episode-weighted median MSPB amount across all hospitals. As we'll discuss soon, the MSPB amount is normalized so that the median MSPB measure equals 1.0. I will now go

over how to interpret the measure and provide more detailed measure specifications.

An MSPB measure that is less than one indicates that a given hospital spends less than the national median MSPB amount across all hospitals during a given performance period. Improvement on this measure for a hospital would be observed as a lower MSPB measure value across performance periods. For example, a hospital would have improved in their MSPB measure if they had a measure value of 1.05 in 2012 baseline period and then that decreased to 1.01 in the 2014 performance period. Now, we do want to take a moment to point out that the MSPB measure alone does not necessarily reflect the quality of care provided by hospitals. The MSPB measure is most meaningful when presented in the context of other quality measures which is why the MSPB measure is combined with other measures in the Hospital Value-Based Purchasing Program to provide a more comprehensive assessment of hospital performance.

Now that I've gone over the definition of key terms and how to interpret the MSPB measure, this slide will discuss what populations are included and excluded when calculating a hospital's measure. Beneficiaries included are those who are enrolled in Medicare Parts A and B from 90 days prior to the episode through the end of the episode and who are admitted to subsection (d) hospitals. Starting with 2014 data, the beneficiaries covered by the Railroad Retirement Board were also included in the hospital's MSPB measure. Beneficiaries that are excluded are those enrolled in Medicare Advantage, those who have Medicare as a secondary payer or those who died during the episode.

The next part of this presentation will focus on the steps to calculate the hospital's MSPB measure.

There are eight calculation steps and one reporting step that we will walk through over the next several slides. The first step is to standardize claim payments so that spending can be compared across the country. The second step is to calculate the standardized episode spending for all episodes in a hospital. The third step is to estimate the expected episode spending using linear regression, and the fourth step, all extreme values

produced in step three are winsorized. The fifth step is to calculate the residuals for each episode from step three so that we can identify outlier payments. The sixth step is to exclude the outlier payments. The seventh step is to calculate the MSPB amount for each hospital. The eighth step is to calculate the MSPB measure for a hospital based on the MSPB amount, and finally, in step nine, we report the MSPB measure for the Hospital Value-Based Purchasing Program for eligible hospitals.

In the first step, claims payments are standardized to adjust for geographic differences and payments from special Medicare programs that are not related to resource use, such as hospitals, graduate medical education fund for training residents. However, payment generalization maintains differences that result from healthcare delivery choices, such as the setting where the service is provided, specialty of the provider, the number of services provided in the same visit and outlier cases. For more information and the full methodology that's used in calculating standardized payments, you can refer to the documents on this *QualityNet* website.

In the second step, all standardized Medicare Part A and B claim payments made during MSPB amount are summed. This includes patient deductibles and co-insurance, as well as claims based on the “from” date variable. The inclusion of claims based on the “from” date variable is based on the first day of the billing statement covering services rendered to the beneficiary. Inpatient claims are based on admission date. Now, we often get questioned about post-acute care services that extend beyond 30 days after hospital discharge. All post-acute care services that have a claim “from” date within the 30-day post-hospital discharge period will be included. For example, if a patient is admitted to an eligible hospital which triggers an MSPB episode and makes the hospital an index hospital, and then this patient receives home health care, where services begin within the 30 days after discharge from the index hospital, the MSPB amount of the index hospital will include home health claims. The MSPB measure calculation does not prorate spending on home health care or any post-acute care.

The third step is to calculate the expected episode spending amount. In this step, the episode spending amount is adjusted for age and severity of

illness. Specifically, to account for case mixed variation and other factors across hospitals, a linear regression is used to estimate the relationship between a number of risk adjustment variables and the standardized episode cost calculated in step two. Risk adjustment variables include factors, such as age, severity of illness and comorbidity interactions. Severity of illness is measured using several indicators, including the hierarchical condition categories, or HCC indicators. HCC indicators are specified in the HCC Version 22 model which accounts for the inclusion of ICD-10 codes by mapping ICD-9 codes to condition categories and ICD-10 codes to condition categories. The expected spending for each episode is calculated by using a separate model for episodes within a major diagnostic category, or MDC. The MDC of an episode is determined by the Medicare severity diagnosis related group, or MSDRG, of the index hospital stay.

In the regression model in step three, many variables are included to more accurately capture beneficiary case mix. However, a risk of using a large number of variables is that the regression can produce some extreme predicted values due to having only a few outlier episodes in a given cell. In the fourth step, extremely low values for expected episode spending are winsorized or bottom coded. That is, for each major diagnostic category, episodes that fall below the 0.5 percentile of the major diagnostic category expected cost distribution are identified. Next, the expected spending of those extremely low spending episodes are set to the 0.5 percentile. Lastly, the expected spending scores are renormalized to ensure that the average expected episode spending level for any major diagnostic category is the same before and after winsorizing. This renormalization is done by multiplying the expected spending by the ratio of the average expected spending level within each major diagnostic category and average winsorized predicted spending level within each major diagnostic category.

In the fifth step, we calculate the residual for each episode to identify outliers. The residual is calculated as the difference between the standardized episode spending which was calculated in step two and the winsorized expected episode spending which was calculated in step four.

In the sixth step, the outlier episodes are identified and are then excluded to mitigate the effect of high spending and low spending outliers for each hospital's MSPB measure. High spending outliers are identified when the residuals fall above the 99th percentile of the residual distribution. Low spending outliers are identified when the residual falls below the first percentile. This last step also renormalizes the expected spending to ensure that the average expected spending is the same as the average standardized spending after outlier exclusions.

In the seventh step, the risk-adjusted MSPB amount is calculated as the ratio of the average standardized episode spending by the average expected episode spending. This ratio is then multiplied by the average spending level across all hospitals.

In the eighth step, the MSPB measure is then calculated as a ratio of the risk-adjusted MSPB amount for a given hospital as calculated in step seven and the national episode weighted median MSPB amount.

In the last step, the MSPB measure of hospitals that are eligible for the Hospital Value-Based Purchasing Program and have at least 25 episodes are reported and used for payment purposes. Hospitals with 24 or fewer episodes will not have the MSPB measures used for payment purposes.

Now that we've gone over each of the steps to calculate the MSPB measure, the next several slides will walk through the calculation for an example hospital.

In this example, Hospital A has 30 MSPB episodes ranging from $1,000 to $33,000 in standardized episode spending. After applying steps one through four of the calculations, we see that the hospital has one episode with the residual higher than the 99th percentile. Now, as a reminder, the residual is calculated as a difference between the standardized episode spending and the winsorized expected episode spending. This episode which has a residual higher than the 99th percentile is then excluded in step six. The MSPB amount and the MSPB measure will then be calculated based on the remaining 29 episodes for Hospital A. We will also have an example calculation as fully explained with sample data on the MSPB *QualityNet* webpage that's linked on this slide.

The MSPB amount for Hospital A is then calculated as the ratio of the average standardized episode spending or the average expected episode spending which is then multiplied by the average episode spending across all hospitals. So, for Hospital A, then MSPB amount is $8,462.

Next, the MSPB measure for Hospital A is calculated as the ratio of the MSPB amount, which we calculated in the previous slide, divided by the national episode weighted median MSPB amount. So, let's pretend that the national episode weighted median amount is $9,100. As a result, our example hospital would then have an MSPB measure of 0.93. Last, in step nine, we need to determine if the MSPB measure of our example hospital will be reported for payment purposes. As we stated before, to be eligible for payment purposes, the hospital must have at least 25 MSPB episodes during the performance period. Since our example hospital here has 29 episodes, its MSPB measure will be reported and used in the Hospital Value-Based Purchasing Program.

In the next two sections of this presentation, I will provide an overview of the MSPB hospital-specific report and supplemental files that each hospital receives, and I will also review the files that are publicly posted in *Hospital Compare*.

Once MSPB hospital-specific reports, abbreviated as HSRs, are sent to hospitals, there is a 30-day preview period where hospitals can review and submit questions or comments before the MSPB measure is released publicly on the *Hospital Compare* website. HSRs include six tables and three supplemental hospital-specific data files. The tables in the MSPB HSRs include results for the individual hospital, as well as results for hospitals in the state and the nation. The supplemental hospital specific data files contain information on the hospital admissions, as well as other data on Medicare payments that were included in the calculation of the hospital's MSPB measure.

Table 1 which is included in each hospital's HSR displays the hospital's MSPB measure.

In Table 2, we see the number of eligible admissions and the MSPB amount for a given hospital. This table also provides the hospital's average, state average, and the US national average MSPB amount.

Table 3 displays the major components used to calculate an individual hospital's MSPB measure, including the number of eligible admissions, MSPB amounts and the National Median MSPB amount.

Table 4 displays the national distribution of the MSPB measure across all hospitals in the nation, and figure one shows that in graphical form.

Table 5 provides a detailed breakdown of the given hospital spending for the three time periods of an MSPB episode. That is the three days prior to index admission, during index admission, and 30 days after hospital discharge. Spending levels are then broken down by claim type within each of these time periods. Hospitals can compare the percentage of total average of spending by claim type and time periods to the total average spending in hospitals in their state and the nation. The costs included in Table 5 are the average actual standardized episode spending amount. However, the spending amounts are not risk-adjusted for hospital case mix because risk adjustments are performed at the MDC level.

In this example, this hospital has an average actual spending of about $5,200 in inpatient services during the index hospital stay. This is about 32% of episode spending for the hospital.

Looking at the same excerpt of Table 5, we can also compare the percent of total average spending in hospital to that of the percent spending at the state and national levels. The red box highlights the comparison we can make for the percent of spending on inpatient services during the index hospital admission. We see that the hospital spends about 32% of episode spending which is lower than the percent of spending in the state which is 47%, as well as the percent of the spending in the nation which is about 46%. A lower percent of spending in a given hospital than the percent of spending in a state or in the nation means that, for a given category and claim type, the hospital spends less than the other hospitals in the state and in the nation.

Table 6 provides a breakdown of average actual and expected spending for an MSPB episode by major diagnostic category, or MDC. So, hospitals can compare their average actual and expected spending to the state and national average, actual and expected spending. The hospital can look at a specific MDC and identify the average actual and expected spending per episode.

In this example, we can look at the MDC for the circulatory system and see that we have an actual and expected spending per episode in Columns A and B. This hospital has an actual spending of about $19,000 per episode, an expected spending of about $17,000 per episode.

On the same table, you can use Columns C through F to compare the spending level of the hospital to the spending level in the state and in the nation. For episodes in the MDC for circulatory system, we can look at Columns E and F and identify the national average actual and expected spending which we see as being about $20,000 per episode. Hospitals can compare the national average expected spending per episode, which is Column F, to their hospital average expected spending per episode, which is Column B. Here, we see that this hospital has a lower than average expected spending per episode in Column B than the nation displayed in Column F.

In addition to receiving an MSPB HSR, each hospital receives three supplemental hospital-specific data files. There is the Index Admission File, a Beneficiary Risk Score File, and an MSPB Episode File. In the Index Admission File, you'll see all the inpatient admissions for your hospital in which a beneficiary was discharged during the period of performance which for this year's report would be based on 2017 data. The Beneficiary Risk Score File identifies beneficiaries and their health status based on the beneficiary's claims history in the 90 days prior to the start of an episode. In this file, you'll see the data that was used in the risk adjustment regression model. In the MSPB Episode File, you'll see the type of care and the spending amount in the top five billing providers in each care setting for each MSPB episode at your hospital.

Hospitals may review and request corrections to their MSPB measure for 30 days after the release of their HSR. The Hospital Value-Based Purchasing Program review and correction period ends on June 25 at 11:59 Pacific Time. MSPB measure scores will be used to calculate the efficiency and cost reduction domain. Hospitals will be notified of their fiscal year 2019 Hospital Value-Based Purchasing Program results by August 1, 2018 in the Percentage Payment Summary Reports. During this preview period, hospitals may submit questions or requests for corrections to the e-mail address on this slide. That is cmsmspbmeasure@econometricainc.com. Please be sure to include your hospital CMS Certification Number, or CCN, so that we can easily analyze your hospital's questions against the data we sent. As with any other claims-based measures, hospitals may not submit additional corrections to underlying claims data, and they may not submit new claims to be added to the calculations.

As discussed in the previous slide, hospitals may preview their MSPB measure for 30 days after release. The MSPB measure data will be posted on CMS' *Hospital Compare* website after the conclusion of the preview period, and again, hospitals can submit questions or requests for correction at the e-mail listed on this slide.

I'm now going to turn to MSPB files that are publicly posted on *Hospital Compare.*

On this slide, we list a few of the data files that are published and available on the *Hospital Compare* website which is listed on the top of the slide. That is data.medicare.gov/data/hospital-compare. When you go to this website select Payment and Value of Care from the in-category drop-down menu to go directly to MSPB measures. The MSPB measures are listed for hospitals that have at least 25 episodes. MSPB files include the state and national average and Medicare episode spending by claim type. The Medicare episode spending by claim type is very similar to Table 5 of the HSRs that we reviewed earlier. It provides a breakdown of each hospital's average MSPB episode spending level by claim type and by time period. A more in-depth description of MSPB spending breakdowns by claim type can be found as a PDF on the Hospital Value-Based Purchasing website,

which is included as a link in this slide. The hospital's MSPB Measure for each hospital includes up six decimal places on the CMS *Hospital Compare* website for informational and research purposes.

Over this call, we went through quite a bit, including goals of the MSPB measure, steps involved in calculating the MSPB measure, the HSRs and the supplementary files that are available online. I hope you found this presentation helpful to better understand the MSPB measure, and I will now pass the presentation back to the organizers of this webinar to discuss the continued education approval process and to go over any questions that you may have.

Bethany Wheeler-Bunch: Thank you, Dr. Khan, for your presentation. As a reminder to participants submitting questions into the chat window, please include the slide number associated with your question. We received many good questions today, so let's jump right in. Dr. Khan, is there a specific time immediately prior to or following the episodes that is included in the Medicare spending for beneficiaries?

Dr. Cynthia Khan: An MSPB episode will include all Medicare Part A and Part B claims with the start date following between three days prior to an IPPS hospital admission, also known as the index admission for the episode, through 30 days post discharge.

Bethany Wheeler-Bunch: Thank you. Our next question, could you clarify the following on slide 15? Hospital admissions that are not considered as index admissions include admissions having discharge dates fewer than 30 days prior to the end of the performance period.

Dr. Cynthia Khan: Index admissions with discharge dates within 30 days from the end of the performance period are not included in measure calculations, as those episodes could contain costs not incurred during the period of performance. Period of performance spans January 1 to December 31.

So, for example, a beneficiary discharged on December 20 would not have their index admission counted towards the MSPB measure calculation because the 30-day post discharge period for this episode would end on January 9 which is outside the period of performance for that year.

Bethany Wheeler-Bunch: Thank you. On Table 5 of the HSR, what does the category carrier represent?

Dr. Cynthia Khan: From the Research Data Assistance Center website, the carrier file, also known as the physician or supplier Part B claims file, contains file 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.

Bethany Wheeler-Bunch: Thank you. The next question, what is included in the outpatient claim type?

Dr. Cynthia Khan: The outpatient file contains final action fee-for-service claims data submitted by institutional outpatient providers. Examples of institutional outpatient providers include hospital and outpatient departments, oral health clinics, renal dialysis facilities, outpatient rehabilitation facilities, comprehensive outpatient rehabilitation facilities and community mental health centers. In fact, additional information on outpatient claim types is available on the resdac.org website.

Bethany Wheeler-Bunch: The next question, are claims in the Medicare Spending per Beneficiary measure included even if the hospital is not an IPPS hospital?

Dr. Cynthia Khan: Admission to hospitals that Medicare does not reimburse through IPPS, for example, cancer hospitals, critical access hospitals, hospitals in Maryland, are not considered index admissions and are therefore not eligible to begin an MSPB episode. Now, if an acute to acute hospital transfer or a hospitalization in an IPPS exempt hospital type happens during the 30-day window following and including index admission, however, it will be counted in the measure. So, for more information, MSPB measure information can also be found on *QualityNet.*

Bethany Wheeler-Bunch: Our next question, why are Medicare Advantage patients excluded?

Dr. Cynthia Khan: 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 resource use can be accounted for through the duration of an episode. The system of validating and counter data differs between services under Medicare

Advantage and services under the Fee-For-Service system, and such differences make it difficult to compare claims data across patients who are and patients who are not enrolled in Medicare Advantage.

Bethany Wheeler-Bunch: Thank you. Our next question, we see a lot of MDC zero pre-MDC episodes. what does this mean?

Dr. Cynthia Khan: The MDC expense episodes determined by the Medicare severity diagnosis related group, or MSDRG, of the index hospital stay. The pre-MDC represents hospital stays related to transplants given that the MDC is determined from a number of diagnosis or procedure situations. Specifically, pre-MDC DRGs include organ transplants, bone marrow transplants, tracheostomy cases. This is because transplants tend to be very expensive and can be needed for a number of reasons that do not come from one diagnosis domain. That's the explanation of the pre-major diagnostic category, or MDC, is also explained in a footnote of Table 6 in the HSR.

Bethany Wheeler-Bunch: Thank you. Our next question, are planned readmissions included in the inpatient category of the post-acute portion of the episode?

Dr. Cynthia Khan: The 30 days after hospital discharge category includes all Medicare Parts A and B claims for services furnished from an index hospitalization discharge up to and including 30 days post discharge. Given that readmissions would be an inpatient claim, they would show up in the inpatient category of the 30 days after hospital discharge category in Table 5 of the HSR.

Bethany Wheeler-Bunch: Thank you. The next question we received quite a few times, is inpatient rehab spending included in the index hospital visit or post-acute?

Dr. Cynthia Khan: Since inpatient rehabilitation services would be billed as an inpatient claim, they would show up in the inpatient category of the 30 days after a hospital discharge category in Table 5 of the HSR.

Bethany Wheeler-Bunch: Thank you. The next question, what if the post-acute care goes past the 30 days after an index stay? In other words, how is payment included in the episode of care calculations if the end claim of the post-acute claim is beyond 30 days post discharge from the hospital.

Dr. Cynthia Khan: This is a good question. We do get this often. So, the MSPB measure associates index hospitals with the cost of all claims that start within 30 days after discharge from the index admission, and costs are not prorated. Thus, is a patient is admitted to the hospital, triggers MSPB episode and then receives home health care that is billed within 30 days after discharge, the index hospital is responsible for the full cost of that home health claim. Again, the measure calculation does not prorate the cost of home health care. Another example is if a patient is admitted to the hospital, triggers an MSPB episode and is then discharged to a skilled nursing facility and remains in the skilled nursing facility for more than 30 days, for example, say, they're there for 90 days, then the index hospital is responsible for the full cost of the skilled nursing facility stay.

Bethany Wheeler-Bunch: Thank you. Our next question is a great question. Can you explain why the hospital's MSPB amount is divided by the national median MSPB and not the national average MSPB?

Dr. Cynthia Khan: So, the median score represents the score that falls in the middle of the distribution scores going from lowest score to highest score, and the median is less influenced by scores in the high or low ends of the distribution than if you took the average score. This is why we use the MSPB median score as opposed to the MSPB average score.

Bethany Wheeler-Bunch: Great. Our next question, can you explain what is meant by price standardized payments?

Dr. Cynthia Khan: So, price standardization accounts for payment differences in geographic locations and special Medicare programs that are unrelated to care, for example, guided medical education, while retaining other aspects and differences in Medicare payments. For more information, you can refer to the MSPB measure information form which is located on the *QualityNet* measure methodology reports webpage, and that same webpage also provides documentation describing payment standardization.

Bethany Wheeler-Bunch: Thank you. I think we have time for a few more questions. Can you explain what is meant by risk adjustment?

Dr. Cynthia Khan: The MSPB risk adjustment methodology adjusts the MSPB measure for age, severity of illness and enrollment status indicators. Specifically, the

methodology includes 12 age categorical variables and 79 hierarchical condition category variables, or HCC, that are derived from the beneficiary's claims during the period 90 days prior to the start of the episode to measure of severity of illness, as well as the Medicare severity diagnosis related group, MSDRG, of the index hospitalization. The risk adjustment methodology also includes 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. For more information, please refer to the MSPB measure information form which is located on the *QualityNet* measure methodology webpage.

Bethany Wheeler-Bunch: Thank you. Our next question, do we want our MSPB as close to one as possible or is it better to be well below one?

Dr. Cynthia Khan: An MSPB measure of greater than one indicates that your hospital's MSPB amount is more expensive than the US national median MSPB amount. An MSPB measure of less than one indicates that your hospital's MSPB amount is less expensive than the US national median MSPB amount. The MSPB measure should be viewed in the context of other measures to evaluate the quality of care. The MSPB measure is not the only measure by which CMS evaluates hospitals. It is actually, instead, one part of the Hospital Value-Based Purchasing Program that contributes to overall evaluation of a hospital's performance.

Bethany Wheeler-Bunch: Since most hospitals do not have access to the Medicare numbers and since hospitals are paid based on diagnostic related group payments, how do you expect hospitals to do performance improvement? The second half of that question, nationally, what areas do you see the best areas to focus on for improvement?

Dr. Cynthia Khan: All right. Well, starting with the first question. The hospital-specific reports provide each hospital with a wealth of information to assess their performance in the current period performance to compare against previous HSRs and evaluate their performance against other hospitals in their state and in the nation. In addition to the MSPB measure, the HSRs present the major components used to calculate the MSPB measure for the

hospital stay, and the US includes average spending per episode, average risk-adjusted spending or the MSPB amount, the number of eligible admissions, the national MSPB amount. In addition, the HSR includes the national distribution of the MSPB measure and tables, and they provide, you know, a breakdown of the MSPB spending by seven claim times, three times period and is three days prior to next admission, during index admission and 30 days after hospital discharge, and these adjusters also provide a breakdown of spending actual and expected by the major diagnostic category. Now, alongside the MSPB HSRs, each hospital is given three supplemental hospital specific data files that enable hospitals to explore the driving forces behind our MSPB measure. So, for example, a hospital can analyze the breakdown of its spending by service type and period of service and figure out the most expensive providers from the episode file. With this information, the hospital can identify the areas where the spending is most concentrated and coordinate with other healthcare providers to improve efficiency. So, by improving care coordination and efficiency and reducing delivery system fragmentation, the provider can improve its relative performance. So, I guess moving on to sort of the second question, so given that the main drivers of MSPB spending will vary by hospital, there is an improvement that will be hospital specific, but more generally, most of the variation in MSPB spending tends to come from post discharge spending, specifically skilled nursing facilities followed by inpatient readmissions. So, better care coordination in the post discharge setting is one of the areas to focus on for improvement.

Bethany Wheeler-Bunch: Thank you. What is the difference between a hospital-specific report and the downloadable files on the *Hospital Compare* website?

Dr. Cynthia Khan: The MSPB hospital-specific reports basically provide information on your specific hospital's performance during a given performance year and enables you to compare your hospital performance to that of hospitals in your state and the nation. The downloadable files available on *Hospital Compare* provide the MSPB measure scores for all hospital stays and the nation. However, unlike the hospital-specific reports, the downloadable

files do not include hospital's MSPB amounts or a breakdown in spending by the measure diagnostic category.

Bethany Wheeler-Bunch: Thank you. When will the downloadable MSPB files be available?

Dr. Cynthia Khan: So, downloadable MSPB files based on the 2016 clearance date are currently available on *Hospital Compare's* website, however, the MSPB files based on 2017 claims data may not be available on *Hospital Compare* until early next yet.

Bethany Wheeler-Bunch: That's all the time we have for questions today. If your question was not answered or if you would like to review all of the questions and answers covered today, please go to the *QualityReportingCenter.com* website in the upcoming weeks to find the question-and-answer transcript.

If you have any immediate questions that you would like addressed, please contact Econometrica directly at cmsmspbmeasure@econometricainc.com. That e-mail address is displayed on Slides 46 and 47. For those that are interested in learning more about the CEBP measures, Dr. Khan will be presenting a webinar on Thursday, June 7. Registration for that webinar is available on the *QualityReportingCenter.com* website. Thank you for joining today, and I will now turn the webinar over to Dr. Deborah Price for instructions on receiving continuing education credits and closing remarks. Thank you and have a great day.

Dr. Deborah Price: Well, thank you very much. Today's webinar has been approved for one continuing education credit by the boards listed on this slide. We are now a nationally accredited nursing provider, and as such, all nurses report their own credits to their boards using the national provider number 16578. It is your responsibility to submit this number to your own accrediting body for your credit.

We now have an online CE certificate process. You can receive your CE certificate two ways. First way is if you registered for the webinar through ReadyTalk®, a survey will automatically pop up when the webinar closes. The survey will allow you to get your certificate. We will also be sending out the survey link in an e-mail to all participants within the next 48 hours. If there are others listening to the event that are not registered in

ReadyTalk®, please pass the survey to them. After completion of the survey, you'll notice at the bottom right-hand corner a little gray box that says “Done.” You will click the “Done” box, and then another page opens up. That separate page will allow you to register on our Learning Management Center. This is a completely separate registration from the one that you did in ReadyTalk®. Please use your personal e-mail for this separate registration, so you can receive your certificate. Healthcare facilities have firewalls that seem to be blocking our certificates from entering your computer.

If you do not immediately receive a response to the e-mail that you signed up with the Learning Management Center, that means you have a firewall up that's blocking the link into your computer. Please go back to the “New User Link” and register a personal e-mail account. Personal e-mails do not have firewalls up. If you can't get back to your “New User Link”, just wait 48 hours because remember, you're going to be getting another link and another survey sent to you within 48 hours.

Okay, this is what the survey will look like. It will pop up at the end of the event and will be sent to all attendees within 48 hours. Click “Done” at the bottom of the page when you are finished. This is what pops up after you click “Done” on the survey. If you have already attended our webinars and receive CEs, click “Existing User.” However, if this is your first webinar for credit, click “New User.”

This is what the “New User” screen looks like. Please register a personal e-mail like Yahoo or Gmail or ATT since these accounts are typically not blocked by hospital firewalls. Remember your password, however, since you will be using it for all of our events. You notice you have a first name, a last name and the personal e-mail, and we're asking for a phone number in case we have some kind of backside issues that we need to get in contact with you.

This is what the “Existing User” slide looks like. Use your complete e-mail address as your user ID and of course the password you registered with. Again, the user ID is the complete e-mail address, including what is after the “@” sign. Thank you for taking the time spent with me.