Hosptial Value-Based Purchasing (VBP) Program

Support Contractor

July 2020 Publicly Reported Claims-Based Measures Hospital-Specific Report Overview

Presentation Transcript

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Maria Gugliuzza Hello and thank you for tuning into the *July 2020 Publicly Reported Claims-Based Measures Hospital-Specific Report Overview* webinar On Demand. My name is Maria Gugliuzza, and I am the Outreach and Education Program Lead at CMS's Inpatient Value, Incentives, and Quality Reporting Outreach and Education Support Contractor. I will be your virtual host for the webinar.

I would like to welcome our speakers for this webinar. Bethany Bunch is the Hospital Value-Based Purchasing Program Lead at CMS's Inpatient Value, Incentives, and Quality Reporting Outreach and Education Support Contractor. Kristina Burkholder is the Measure Implementation and Stakeholder Communication Lead at CMS's Hospital Outcome Measure Development, Reevaluation, and Implementation Contractor. Josh Gerrietts is the Public Reporting Claims-Based Measures Project Lead at CMS's Healthcare Quality Analytics and Reports Contractor.

The purpose of the event is to provide an overview of Hospital-Specific Reports for select claims-based measures that will be publicly reported in July 2020, including a summary of national results, ways to receive and read the HSR, and measure calculations.

At the conclusion of the webinar, you should be able to understand how to determine performance categories, access and preview your hospital's HSR, and know where to submit questions during the preview period.

If you have questions during the webinar, you may submit them to the following email address, WebinarQuestions@hsag.com. Again, the email address is WebinarQuestions@hsag.com. When sending questions, please use the webinar title in the subject line. The webinar title is *July 2020 Publicly Reported Claims-Based Measures Hospital-Specific Report Overview*. In the email body, please include your question and, if your question pertains to a specific slide, please include the slide number for us to more efficiently assist you. We will answer your questions as soon as possible. If you have questions unrelated to the current webinar topic, we recommend searching for the topic in the *QualityNet* Inpatient Questions- and-Answers tool. If you do not find a similar topic, feel free to use the tool to submit a new question.

This slide displays a list of acronyms that will be referenced during the webinar. That concludes my introductions. I will now turn the webinar over to our first speaker. Bethany, the floor is yours.

Bethany Bunch Thank you, Maria, and thank you for tuning in and joining us on the on demand webinar.

Before I turn it over to Kristina and Josh to discuss the national results and how to read your HSRs, I wanted to make sure everyone has a good understanding of the measures and the updates for this year. The July 2020 *Public Reporting* HSR contains the measures listed on this slide, including measures of Mortality, Readmission, Complication, Payment, Excess Days in Acute Care, and Patient Safety Indicators. The measurement periods are listed on this slide for each measure for reference.

The July 2020 *Public Reporting* HSRs were delivered April 30 or May 1 to your *QualityNet Secure Portal* Secure File Transfer Auto Route Inbox. If you received the report, you should have received the notification in your email that the reports were available to download. Following the 30 days after the delivery of the HSRs, you have the opportunity to preview the data in the HSR prior to the results being publicly reported. Please note that CMS now uses the title of *Public Reporting* HSR instead of *Hospital Compare* HSR or Hospital IQR Program HSR. The *Public Reporting* HSR is equivalent to those HSR names from the past; additional HSRs titled *Hospital Compare* or Hospital IQR with these measures will not be delivered. We would also like to note that the 30-Day Readmission Measures for all conditions and procedures except for the hospital-wide readmission measure will include disparity method results. Last year's results only contained disparity method results for the pneumonia readmission measure.

This webinar and HSR bundle that you are currently receiving are for July 2020 Public Reporting. An additional HSR for the Medicare Spending per Beneficiary, or MSPB, measure is anticipated to be delivered in late May to early June. When the HSRs are delivered, CMS will provide a notification through the Hospital IQR and [Improvement] and the

[Hospital Inpatient] VBP [and Improvement] Program Listserve notification groups. If you are not signed up for those Listserve groups, you can sign up using the link available on this slide. In addition, you will receive the same email notification that your report is available to download once it has been delivered.

I will now hand the presentation over to Kristina Burkholder. Thank you.

Kristina Burkholder Thank you, Bethany. Today I am going to be providing you with a preview for the July 2020 publicly reported outcome measures. I will also review the approach that CMS uses to categorize hospital performance for these measures. This slide table provides information on the national results for the mortality, readmission, complication and payment measures. The column on the left-hand side lists the measures group by domain. The column in the middle lists the national observed rates to be publicly reported this summer, and the last column on the right-hand side depicts the change in the national rate from last year. This column tells you whether the rates have increased, decreased, or remained the same. For the mortality measures, the 2020 national results range from 3 percent for CABG to 15.4 percent for pneumonia. In 2020, there is a slight reduction in the national mortality rate for all mortality measures in comparison to 2019 by about .1 to about .2 percent points. For the readmission measures, the national observed readmission rates range from 4 percent for Total Hip/Knee to almost 22 percent for heart failure readmission. The CABG readmission measure was the only measure to decrease from 2019, while AMI, COPD, heart failure, and hospital-wide readmission (HWR) all increased from .1 to .4 percentage points. The pneumonia and hip/knee readmissions remains unchanged in comparison to last year. The national rates of the hip/knee complication measure is 2.4 percent. This is a slight reduction compared to last year. At the bottom of the table are the national payments which range from $17,600 for heart failure to about $25,500 for AMI payment. The payment measures that you see here are inflation adjusted, so they are presented to you in 2018 dollars. The payment measures aren’t compared across years because national payment results are usually adjusted for inflation based on a specific year, which is why

the change in 2019 is indeterminable. The national rate seen here on this slide are used by CMS to categorize hospital performance on these measures. The next two slides depict approaches that CMS uses to categorize hospital performance on these measures. I will first describe the approach that CMS uses for most of the outcomes measures and then describe payment measures. The following slide shows the approach CMS uses categorize the EDAC, or Excess Days in Acute Care, measures.

The image on the left side of the screen describes the approach CMS uses to categorize hospital performance for the mortality, readmission, and complication measures. At the top of the image is a small gray map of the United States the depicts the national rate. In this example, the national rate is 15.6 percent, and there is a small dotted line going down that shows you how each of the three examples compared to the national rate of 15.6. At the top left-hand corner, you can see Hospital A. The green hospital shows you can example of a hospital that has been categorized better than national. In the middle, Hospital B in yellow, shows you an example for hospitals categorized as no different than national, and, at the bottom, Hospital C in red depicts an example of a hospital categorized as a hospital worse than the national. Also, provided in this graphic are the risk standardized rates and the interval estimates represented by the square and line under each hospital. To classify these hospitals into these categories, CMS compares the hospitals 95 percent interval estimate or the line to the national observed rate, the gray dotted line. If we look at the example of Hospital A, the green hospital at the top left, you can see that its risk standardized rate is 12. 6 percent, and the interval estimate for that hospital ranges from 9.4 percent to 14.3 percent. This means that we estimate the hospitals rate to be 12.6 percent and we are 95 percent sure that the true score is somewhere between 9.4 percent and 14.3 percent. When we compare this interval estimate, the entire green line to the national observed rate, represented by the gray dotted line, you can see that the entire grey line is less than the national observed rate. Because the entire interval estimate is less than the national rate, this hospital is categorized as better than national. In contrast, if you look at Hospital C, at the bottom of the image, the entire interval estimates 16.1 percent to 20

percent, or the entire red line is greater than the national observed rate of 15.6 percent and thus is classified as worse than the national. For the yellow hospital, Hospital B, the rate is 15 percent and the 95 percent interval estimate ranges from 13.2 percent to 17.1 percent. In this instance, the interval estimate contains that national observed rate of 15.6 percent, depicted in this image by the yellow line crossing over the dotted grey line that represents the national observed rate. This means that the hospital is classified as no different than national. The image on the right-hand side of the screen shows that, for payment measures, a similar approach is used to categorize hospitals into three buckets. This time, however, the interval estimate is compared against a national average payment rather than a rate. The performance categories have a different label. Instead of being categorized as better or worse, they are categorized as less than the national average payment or greater than the national average payment. As is done with the payment outcome measures, the entire interval estimate is compared against the national results in order to determine the hospitals performance category.

Lastly, the Excess Days in Acute Care, or EDAC, measures, the concept described on a previous slide is essentially the same, except this time, instead of using the national rate, we are comparing the average performing hospitals with the same case mix or zero days. This measure looks at the difference between your hospital's performance and the expected performance for your hospital if you were performing the same as an average hospital with a similar case mix to you. If these two numbers are the same, the difference would be zero days, which is depicted by the grey dotted line. Positive numbers mean the hospital had more days and negative numbers indicate the hospital has less days. Hospitals are categorized as fewer days than average, average days, or more days than average using a similar approach, as the other measures the 95 percent interval estimate. Hospital A, or the green hospital, was negative 41.2 days, and the interval estimate was negative 56.7 days to negative 19.1 days. This means that Hospital A patients spent fewer days in acute care and would be expected if admitted to an average performing hospital with the same case mix. Since the entire interval estimate is less

than zero days, or the grey dotted line, Hospital A is categorized as fewer days than average. Conversely, if we look at Hospital C in red, the entire interval estimate is greater than zero days. This classified as more days than average. When the interval estimate contains zero days within the range as shown by the yellow hospital, Hospital B, then the hospital is classified as average days. As a reminder, you will see updated information for your hospital's performance on each of these measures during the upcoming preview period.

Now, I am going to turn it over to Josh who is going to provide you with more information on Hospital-Specific Reports.

Josh Gerrietts

Thank you, Kristina. Hi, folks, my name is Josh Gerrietts. I am the project lead for the Healthcare Quality Analytics and Reports Contractor, otherwise known as HCQAR. I will be covering how you receive your IQR HSRs and user guide. After that, we will be going over some of the content in the IQR *Public Reporting* HSRs.

How to receive your HSR. A *QualityNet* notification indicating the reports are available will be sent via email to those who are registered for the notifications regarding the Hospital Inpatient Quality Reporting Program.

Hospital users with the Hospital Reporting Feedback-Inpatient role and the File Exchange and Search role will have access to the HSRs and user guide. For those with the correct access, the HSRs and user guide will be in their *QualityNet* Secure File Transfer Inbox, and, at the bottom of the slide, you will see an example of the Secure File Transfer notification that you will receive.

So, paraphrasing from the previous slide, who has access to the reports? Hospital users with a Hospital Reporting Feedback-Inpatient role and a File Exchange and Search role. How to access the report? For those with the appropriate access, the HSRs and user guide will be delivered to their *QualityNet* Secure File Transfer inbox. Just a quick note, this is associated with your OARS account and not your new access related to your HARP IDs, so you will be logging into *QualityNet* via your OARs log in.

OK, you can find the HSR User Guide on *QualityNet* as well. There is a link to an example provided here. You will notice that this one says mortality, but, for each of the program measure sets, you will find a link to the HSR User Guide. As I mentioned earlier, it does accompany your HSR bundle. The July 2020 Hospital *Public Reporting* User Guide PDF that accompanies the PR HSRs includes additional information about the data in the HSRs.

In this section, we will cover what is included in the HSR bundle and some of the content of the IQR HSR. Please note, I will not be going over every IQR HSR tab. That would take hours. If you have questions about specific tabs that are not included or covered here in this presentation, we will go over the process for submitting questions later in the presentation. Also note before we get into this, all representation of state and national rates are for reference only and do not represent actual July 2020 state and national values.

This is an example of the HSR bundle facilities will receive. Included in the bundle are seven HSRs. We have Readmission, Hospital-Wide Readmission, Mortality, Hip/Knee Complication, Payment, Patient Safety Indicators (otherwise known as PSI), and Excess Days in Acute Care (EDAC). It also includes the HSR User Guide, otherwise known as HUG. One thing to note about your bundles this year: A resources table included in past years is not included this year.

Each of the *Public Reporting* HSRs use the same basic structure for consistency with tabs providing the following information: your hospital's measure results, distribution of state and national performance categories, discharge-level data used to calculate your hospital's measure results, and case mix comparison of the risk factors used for risk adjusting the measures.

Each HSR starts with a measure results or performance table that provides your hospital's measure results for the measures included in the given HSR. It provides the following information: the performance category that will be reported on *Hospital Compare*, the number of eligible discharges included in the measure, your hospital's rate for each measure, and the

interval estimates that were used to define the performance category that was assigned to your hospital. Also, for comparison, national values are provided. With the exception of CMS PSI, state values are also provided for comparison.

Each *Public Reporting* HSR includes a Distribution tab that shows the distribution of hospitals across the different performance categories within the nation and within your state. When coupled with the performance categories for your hospital from the previous tab, this can show how your hospital's performance compares to the rest of the hospitals in the nation and in your state.

The Readmission, Mortality, Hospital-Wide Readmission, Complication, and CMS PSI HSRs have a Discharges tab that provides the discharge-level data that were used to produce each measure. The Readmission and Mortality HSRs include all discharges that meet the inclusion requirements for each measure and use the inclusion/exclusion indicator to identify discharges that were excluded from the measure. In these HSRs, the count of discharges with an inclusion/exclusion indicator of zero can be tied to the denominator for each measure in the Performance tab. These are the facility-eligible discharges. Due to the volume of PSI discharges in the measures, the CMS PSI HSR includes discharges that are part of the numerator for each measure. The Hospital-Wide Readmission HSR includes discharges that were both planned and unplanned readmissions. The count of events in eligible discharges (for example, readmission, death, or complication) for the measure can be tied to the numerator in the Performance tab. Starting with 2019 and continuing with 2020, both the Health Insurance Claim Number (HICNO), or HIC number, and the new Medicare Beneficiary Identifier (MBI) can be found for each discharge. If a Medicare Beneficiary Identifier (MBI) is not available for a patient, then a "double dash" will display in the corresponding row.

On the Mortality Discharges tab, a zero with curly braces will display in the Stroke NIHSS column, column zero for stroke discharges on or after October 1, 2016, that do not have a [Stroke] NIHSS score. The zero with

curly braces indicates CMS assigned a National Institute Health Stroke score of zero for that patient. This is also explained in footnote “d”.

In the hip/knee complications, an index discharge can have more than one complication associated with it; however, only one complication is included in the calculation of the measure. When there is more than one complication the Additional Complication Record column will have a “No” value for the first complication and a “Yes” value for each additional complication attributed to that index discharge. If you filter the Additional Complications Record column to “No,” you can follow the same process used in the Readmissions and Mortality HSRs to identify the count of eligible discharges. The EDAC HSR differs from the other HSRs in that it uses two discharge- level data tabs to provide the discharge-level detail and event-level detail. As you can see here, we minimized the HICNO, MBI, and Medical Record Number fields here to allow the rest of the table to fit on this slide.

The Summary of Events tab lists the discharges that are included in the measure. It follows the same inclusion/exclusion, numerator, and denominator logic as the discharge’s tabs from the other HSRs. It lists summary-level event information about emergency department visits, observation stay visits, and unplanned inpatient readmissions within the 30 days following discharge. The ID Number on this tab is used to tie to the events on the Patient-Level Summary tab. Note that the row with ID Number 7 lists the patient had two emergency department visits, one observation stay and one unplanned readmission within the 30 days following discharge. These add up to four events with 4.5 Total Days included in measure outcome.

The EDAC Patient-Level Summary tab provides the detailed information for the emergency department, observation, and unplanned readmission visits listed in the Summary of Events tab. There are one to many Patient-Level Summary records for each Summary of Events tab record that had an event. Each individual event for a given discharge is listed on its own row. The ID Number on the Patient-Level Summary tab can be used to tie the record or records to the corresponding record on the Summary of

Events tab. The row here with ID Number 7 includes the two emergency department visits, the observation stay, and one unplanned readmission visit. Note that the individual Days per Event for these four records add up to six days. Three of these events overlap and therefore the total actual days for the overlapping records is what is used in the measure as noted in the previous slide, 4.5 days.

The Payment HSR has three tabs for providing discharge level data: the Index Stay and Summary tab and two Post-Acute Care tabs. The Index Stay and Summary tab lists the discharges that are included in the measure. It includes all discharges that meet the inclusion requirements for each measure and uses the inclusion/exclusion indicator to identify discharges that were excluded from the measure. It provides the summary-level payment information and provides the split between facility, physician, and post-acute care payments. The Total Payments Value (Column N) is split into payments for the index admission and payments after the index admission represented by the Total Index Admission Payments column and the Total Post-Acute Care Payments column (shown in columns O and U along with their percentages in Columns P and V). The Total Index Admission Payments (column O) is further split up into the Facility and Physician Payments columns seen in Columns Q and S along with their percentages in Columns R and T, respectively.

Beginning with the July 2019 *Public Reporting* Payment HSRs and continuing with July 2020, the ID Numbers in the Post-Acute Care tabs will correspond to the same ID Number on the Index Stay and Summary Tab. There are one to many post-acute care records for each Summary of Events tab record on the Index Stay and Summary Tab. ID Number 1, 2, and 3 will be shown on the next slide.

The Payment Post-Acute Care tables break out the Post-Acute Care costs to provide further detail on where the post-acute care payments were made. The Condition Payment Post-Acute Care tab provides distributions of post-acute care costs across 11 care settings for AMI, heart failure and pneumonia payment measures. The Procedure Payment Post-Acute Care

tab provides distributions of post-acute care costs across 13 care settings for the total hip/knee (THA/TKA) payment measure.

Each PR HSR, except for CMS PSI, includes one or two case mix comparison tabs with a distribution of Patient Risk Factors for the included measures. Procedure-based measures are listed in a separate tab from diagnosis-based measures in the Readmission, Mortality, and Payment HSRs. Not all risk factors apply to every measure. N/A is used to denote risk factors that do not apply to a given measure. If your hospital has no qualifying cases for a measure, then NQ will show in the risk factor cells. These are the conditions that are used to risk adjust the measure rate to account for differences in the health of your patient population in comparison to the national average. Hospital percentages are provided along with the state and national percentages to let you see how your patient population compares for each risk factor.

In the Complication HSR, Table 2 displays the percentage of eligible index admissions where the patients experienced each type of complication. A patient may have more than one complication associated with an index admission, but only one complication is counted in the raw complication rate. The percentages for the individual complications may not add up to the raw complication rate. If a patient has the same specific complication coded multiple times, this is only counted once in the specific complication rates provided in the table.

Again, beginning with the July 2019 PR HSRs, a Dual Eligible column was added into the Readmission Discharges tab for the PN measure. For July 2020 public reporting, dual eligibility is included for all Readmission measures. This column is provided to distinguish patients who are dual eligible from those who are non-dual eligible. Note that Missing/Unknown means the dual eligible status is unable to be determined.

New for July 2020 public reporting, the Within-Hospital Disparity Method tab will include the calculation for the difference (or disparity) in 30-day risk-standardized readmission rates for AMI, COPD, heart failure, CABG, hip/knee (THA/TKA) between dual eligible and non-dual eligible patients.

As I mentioned earlier, the pneumonia disparity method was introduced in July 2019 public reporting. Please note that the data within this tab are confidential and will not be publicly reported. It is included for your reference only.

The [Readmission] Across-Hospital Disparity Method tab compares performance across hospitals by calculating a hospital's outcome rate for dual eligible patients only. As with the Within-Hospital Disparity tab, the data within this tab are also confidential and will not be publicly reported. It is included for your reference.

Now ,we will go into the HSR preview period questions and notes.

Questions can be submitted to the question-and-answer tool found on *QualityNet*. The URL is listed here. The URL is also contained with each of the HSRs. Use the navigation guide listed here to find the Q&A tool section on *QuaityNet*. This is also included in each of the HSRs.

Please be aware the HSRs contain patient identifiable information, otherwise known as PII, and protected health information, otherwise known as PHI. Any disclosure of PHI should be in accordance with and to the extent permitted by the HIPAA privacy and security rules and other applicable law. Emailing such data is a security violation. If you have questions on transmitting data, please contact the *QualityNet* help desk. A good rule of thumb: Use the ID Number found within the HSRs when referring to the content of each report.

Underlying claims: The public reporting period does not allow hospitals to submit corrections related to the underlying claims data or to add new claims to the data extract used to calculate results. Suspected calculation errors on your report can be submitted for review with the possibility of a correction. Requests for submission of new or corrected claims are not allowed. A "snapshot" of the administrative claims data available approximately 90 days after the end of the applicable period is taken in order to perform program calculations. For July 2020, the applicable period ended on June 30, 2018, and the administrative claims data file

used for calculations was produced on September 28, 2018. The review and corrections process does not allow hospitals to submit additional corrections related to the underlying claims data used to calculate the rates nor add new claims to the data extract used to calculate the rates. CMS cannot regenerate the report for this period to reflect corrected claims. If your facility submitted or wishes to submit a corrected claim after September 28, 2018, that pertained to an incorrect claim originally submitted prior to September 28, 2018, the corrected claim will not be included in your measure results. Because claims data are generated by the hospital itself, hospitals in general always have the opportunity to review/correct these data until the deadlines specified. Lastly, in many cases where the claims listed in the HSRs don't match internal records, it is due to the fact that corrections were made to those claims after the deadline. Thank you.

Maria Gugliuzza Thank you, Josh. We will now address some frequently asked questions regarding the Hospital VBP Program claims-based measures and the HSRs.

First question: "Is it possible to have a heart failure index admission claim included in my Hospital VBP Program heart failure mortality HSR and excluded from my *Hospital Compare* heart failure mortality HSR?"

Josh Gerrietts Yes, it is possible for index admissions in your Hospital VBP Program HSRs and *Hospital Compare* HSRs to be slightly different. Although the results use the same measure specifications and timeframes of eligible Hospital Value-Based Purchasing (VBP) Program hospitals, the differences you observe between your heart failure mortality measure results are likely related to the differences in hospitals included in the Hospital VBP Program and for *Public Reporting*.

For the mortality measure reported on *Hospital Compare*, the mortality measure calculations include index admissions to short-term acute care hospitals in the U.S. (including U.S. Virgin Islands, Puerto Rico, Guam, Northern Mariana Islands, and American Samoa), critical access hospitals (CAHs), Veterans Health Administration hospitals (for the AMI, heart failure, COPD, and pneumonia mortality measures), and Maryland

short-term acute care hospitals participating in the All-Payer model. For the mortality measure in the Hospital VBP Program, measure calculations include only index admissions to subsection (d) hospitals located in the 50 states and the District of Columbia.

Please note, it is possible for an admission to appear in both your Hospital VBP Program HSR and *Public Reporting* HSR. In addition, it is important to note that the mortality measures randomly select one eligible index admission per patient, per split year (July–June), per measure. Therefore, if a patient had multiple eligible heart failure index admissions in a given split year, it is possible that different admissions can be randomly selected for inclusion in the cohort when the measure results are run for *Hospital Compare* and the Hospital VBP Program.

Maria Gugliuzza Yes. Next question: "Can you explain the difference between the Within-Hospital Disparity Method and the Across-Hospital Disparity Method?"

Josh Gerrietts Yes. The within-hospitals tab contains information for both dual and non-dual eligible readmission. The across-hospitals tab contains information for duals only. Ultimately, the within-hospitals tab allows the reader to compare hospital-specific dual versus non-dual eligible readmissions along with state and national readmission rates; wherein, the across-hospital table allows the reader to compare risk-standardized, dual eligible readmission with state and national risk-standardized, readmission rates.

Maria Gugliuzza Next question: "Is the HSR the same as the Hospital IQR Program HSR?"

Josh Gerrietts Yes, last year the names were slightly different. Due to a CMS directive, all references to *Hospital Compare* (or HC) were removed or replaced with PR for *Public Reporting*. The goal of the new naming convention is to prevent confusion due to Hospital IQR Program measure removals and to specify when the data would be reported on *Hospital Compare* compared to the fiscal year.

Maria Gugliuzza Thank you. Next question: "Where can you find a list of the deadlines for claims data changes?"

Josh Gerrietts A "snapshot" of administrative claims data available approximately 90 days after the end of the applicable measure reporting period is taken to perform program calculations. For FY 2021, the applicable reporting period ended on June 30, 2019, and the administrative claims data file "snapshot" used for calculations was produced on September 28, 2019.

Maria Gugliuzza Great. Next question: "Please explain HOSP_EFFECT and AVG_EFFECT."

Josh Gerrietts Yes, the hospital-specific effect (HOSP_EFFECT) reflects the underlying risk of mortality or complication at a hospital after accounting for patient risk; it takes into consideration the number of patients eligible for the cohort, patient risk factors, and number of how many died or had a complication. The average effect (AVG_EFFECT) is the average of all individual hospital effects in the national sample.

The hospital-specific effect is used in calculating the predicted outcome rate, while the average effect is used in calculating the expected outcome rate for the mortality measures and hip/knee complication measure.

The predicted mortality or complication rate is the number of deaths or complications within 30 days (90 days for complication) from the start of the index admission that are predicted based on a hospital's performance with its observed case mix. It is calculated using the coefficients estimated by regressing the risk factors identified for the measure and an estimated "hospital-specific effect" for your hospital. The results are log transformed and summed over all patients attributed to a hospital to get the predicted value. The hospital-specific effect will be negative for a better-than average hospital, positive for a worse-than-average hospital, and close to zero for an average hospital.

If a hospital has a hospital-specific effect close to zero, the overall ratio of predicted to expected outcomes will be lower, which indicates lower-than-expected outcome rates or better quality.

The expected mortality or complication rate is the number of deaths within 30 days or complication within 90 days from the start of the index admission that are expected based on the nation's performance

(or average hospital performance) with a hospital's case mix. It is calculated in the same manner except the average hospital-specific effect is used in the model in place of the hospital specific effect.

To create risk-standardized mortality or complication rates, CMS compares the predicted mortality or complication rate to the expected mortality or complication rate and multiples that ratio by the national observed mortality or complication rate.

Maria Gugliuzza Thank you, Josh. "How many patients are needed for each measure to receive a category?"

Kristina Burkholder For these measures, if the hospital has at least 25 eligible cases during the performance period, they'll be classified into one of the three categories. Otherwise, they will be assigned into the category "the number of cases is too small."

Maria Gugliuzza Are the changes in national results from 2019 to 2020 percent changes?

Kristina Burkholder The changes from 2019 listed are percentage point changes, or the national rate from 2020 minus 2019, not percent changes.

Maria Gugliuzza Why is there an overlap between the three different performance categories for the outcome measures (slide 13)?

Kristina Burkholder The graphic on the left side of slide 13 illustrates the results and performance categories of three different hospitals on one outcome measure. Performance categories are created by comparing a hospital's outcome rate and interval estimate to the national observed rate or the colored line to the grey dotted line rather than colored lines to each other. Because interval estimates are unique for each hospital, an interval estimate for one hospital can visually overlap with an interval estimate for a different hospital.

Maria Gugliuzza For the payment measures, does "less than the national" mean better or worse performance?

Kristina Burkholder For the payment measures, a performance category of "less than national" does not imply whether or not the hospital is performing better or worse because the measure results do not provide an indication of the quality of care in hospitals. This is also true for the payment category of "greater than national." It doesn't mean that the hospital is performing better or worse. The reason this is so is because the payment measures are not meant to be interpreted in isolation. They're meant to be considered alongside other existing quality outcome measures such as the mortality measures. A payment categorization of less or greater than national simply indicates that the average cost of treatment at your hospital for AMI, heart failure, or pneumonia, tends to be either significantly less or significantly more than the average cost of treatment for that condition, in the nation.

Maria Gugliuzza Thank you, Kristina. That is all the time we have for questions today. If you had questions during the webinar that were not addressed, you may submit them to the following email address, WebinarQuestions@hsag.com. When sending questions, please use the webinar title in the subject line. The webinar title is *July 2020 Publicly Reported Claims-Based Measures Hospital-Specific Report Overview*. In the email body, please include your question and, if your question pertains to a specific slide, please include the slide number for us to more efficiently assist you. We will answer your questions as soon as possible.

If you have questions unrelated to the current webinar topic, we recommend searching for the topic in the *QualityNet* Inpatient Questions and Answers tool. If you do not find a similar topic, feel free to use the tool to submit a new question.

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