# Transcript – Expert to Expert Webinar: Annual Updates for the Hospital Harm – Severe Hyperglycemia and Hospital Harm - Severe Hypoglycemia eCQMs for 2026 Reporting Year

*Broadcast April 2, 2026*

**Slide 1**

[00:00:02] [Susan Funk] Hello, everyone. We're about to get started with today's broadcast, so thanks for your patience while we were gathering on the presenter platform. All right, welcome, and thank you for joining us for this Joint Commission Expert to Expert Webinar addressing the 2026 Annual Updates for the Hospital Harm - Severe Hyperglycemia and Hospital Harm - Severe Hypoglycemia eCQMs. The Expert To Expert Webinar Series is offered in partnership with the Centers for Medicare & Medicaid Services and eCQM Stewards. CE Credit is available for this webinar for the live broadcast attendance only. I'm Susan Funk, Associate Project Director for Engagement on Quality Improvement Programs at Joint Commission, and today I'll be serving as this webinar's moderator. Next slide, please.

**Slide 2**

[00:01:00] Before we begin with the webinar content, we would like to offer just a few tips about webinar platform functionality. Audio is by Voice Over Internet Protocol only. Use your computer speakers or your headphones to listen. There are no dial-in lines. Participants are connected in listen-only mode. Feedback or dropped audio are common for live streaming events. If you experience such audio or streaming issues, refresh your screen or leave and rejoin the session. We will not be recognizing the Raise a Hand or the Chat features. To ask a question, click on the Question Mark icon in the audience toolbar. A panel will open for you to type your question and submit. The slides are designed to follow Americans with Disabilities Act rules. Next slide, please.

**Slide 3**

[00:01:55] Speaking of the slides, they are available now. There are many links that we provide throughout this webinar, but they are not clickable on screen. By downloading the slides, you'll be able to access those links and also take notes. To access the slides now within the webinar navigation pane, select the icon that represents a document. A new popup window will open, and you can select the name of the file. A new browser window will open, and from it you can download or print the PDF of the slides. The slides will also be available within two to three weeks on the Joint Commission's website at the link included at the bottom of the slide. And we will also put them on the eCQI Resource Center. Next slide, please.

**Slide 4**

[00:02:47] I'm sure that many of you attending today will wish to receive Continuing Education credit or qualifying education hours. All relevant information about Continuing Education credit is available in a handout that we've included within the webinar resources and has also been communicated on the webinar registration page. The attachment includes the list of entities that will provide credit, the requirements for participants to earn credit, and information how to complete the survey and obtain a certificate. So, be sure to download that attachment to learn more. And credit is available for this live webinar broadcast attendance only. For information on the Joint Commission's Continuing Education policies, visit the link at the bottom of this slide. Next slide, please.

**Slide 5**

[00:03:41] The participant learning objectives are: Locate eCQM resources on the eCQI Resource Center. Facilitate your organization's implementation of the Hospital Harm - Severe Hyperglycemia and Hospital Harm - Severe Hypoglycemia eCQM annual updates for the 2026 reporting year. And utilize answers to common issues and questions regarding the Severe Hypoglycemia and Severe Hypoglycemia eCQMs to inform 2026 use and implementation. Next slide.

**Slide 6**

[00:04:20] This webinar does not cover these topics: Basic eCQM concepts. Topics related to chart abstracted measures. And process improvement efforts related to these measures. While we will not address how to validate eCQM data during this webinar, before submitting eCQM data to CMS or Joint Commission, please ensure your data is validated. Specifically, please ensure that extreme outlier results are verified. For example, extreme outliers may include reporting 0% or 100%. Please note that these two eCQMs are required measures for both CMS and Joint Commission for the 2026 reporting year. Next slide, please.

**Slide 7**

[00:05:15] All staff and subject matter experts have disclosed that they do not have any conflicts of interest. For example, financial arrangements, affiliations with, or ownership of organizations that provide grants, consultancies, honoraria, travel, or other benefits that would impact the presentation of today's webinar content. Next slide.

**Slide 8**

[00:05:45] During this webinar, there will be two different segments to cover both the Severe Hyperglycemia eCQM and the Severe Hypoglycemia eCQM. For each, we will review the annual updates and changes for that eCQM for the 2026 reporting year. Then we'll provide an overview of that eCQM's measure flow and algorithm. And then we'll address some frequently asked questions that are specific to that eCQM. Finally, we'll have a live Q&A segment that addresses questions regarding both eCQMs. Next slide, please.

**Slide 9**

[00:06:27] Before we transition to the discussion about changes for the 2026 reporting year, we wanted to point you to a PDF handout that includes directions to access eCQM specifications, value sets, measure flow diagrams, and the technical release notes. The link to the eCQI Resource Center landing page is provided on this slide. However, the PDF handout that we've included -- that we're showing you how to download has additional links and navigation guidance. And you can locate that PDF within the resource section of the audience navigation pane. We explained how to access documents within the resource pane earlier in the presentation, but as a reminder, you just access the icon that looks like a document, and you'll be able to access all of the handouts from there. Next slide, please.

**Slide 10**

[00:07:25] All right, I'm now ready to turn the webinar over to our presenters for today. Our first presenter for today is Moriah Bauman from the Mathematica team. Moriah, please introduce yourself, and when you're ready, feel free to start your part of the presentation. Thanks.

[Moriah Bauman] Great. Thanks, Susan. Hi, everyone. My name is Moriah Bauman, and I'm a researcher at Mathematica. So I'm going to start us off by presenting on the Hospital Harm - Severe

Hyperglycemia eCQM for 2026 reporting before I pass it over to my colleague Mike to cover the Hospital Harm - Severe Hypoglycemia eCQM for 2026 reporting. Next slide.

**Slide 11**

[00:08:14] But before I jump into the review of the Severe Hyperglycemia eCQM, I just want to provide some brief background on both eCQMs. So, the Hospital Harm - Severe Hyperglycemia and Hospital Harm - Severe Hypoglycemia eCQMs were adopted into CMS Quality Reporting programs in the fiscal year 2022 IPPS rule. And hospitals were able to self-select either eCQM for voluntary reporting beginning with the 2023 reporting period. CMS began publicly reporting the scores of the two eCQMS on Care Compare and the Provider Data Catalog in calendar year 2024. In the fiscal year 2025 IPPS rule, CMS finalized both eCQMs for mandatory reporting beginning with the 2026 reporting period. So this is the first reporting period that both eCQMs are mandatory for reporting. Next slide, please.

**Slide 12**

[00:09:16] Okay, so transitioning into the measure-specific review of the Hospital Harm - Severe Hyperglycemia eCQM. This measure is an outcome ratio measure that assesses the ratio of inpatient hospital days for patients age 18 and older with a hyperglycemic event per the total number of qualifying inpatient hospital days for that hospitalization. This measure does not aim to measure overall glucose control in hospitalized patients. And rather, the goal of the measure is to assess the occurrence of severe hyperglycemia in inpatient hospitalization settings. Hyperglycemia is common among hospitalized patients, especially those with preexisting diabetes. But hyperglycemia can also affect individuals with no prior history of diabetes and may be induced by medications such as steroids or by tube feedings. Patients with elevated blood glucose levels of greater than 200 milligrams per deciliter are considered to be hyperglycemic and are considered to be at high risk of developing severe hyperglycemia. Severe hyperglycemia, where the blood glucose level is extremely elevated, is significantly associated with a range of harms, including increased in-hospital mortality, infection rates, and hospital length of stay. Lower rates of inpatient severe hyperglycemia may not only improve care for patients but may also reduce costs for healthcare payers. The rate of inpatient severe hyperglycemia can be considered a marker for quality of hospital care since inpatient severe hyperglycemia is largely avoidable with proper glycemic management. Next slide, please.

**Slide 13**

[00:11:10] Okay, so now we'll review the Measure Header narrative for the 2026 reporting period version of the Hospital Harm - Severe Hyperglycemia eCQM. So the following five slides are going to show the changes in the Measure Header narrative between the 2025 reporting period version of the measure and the version of the measure that was finalized for the 2026 reporting period. Next slide, please.

**Slide 14**

[00:11:38] So this measure's Initial Population includes inpatient hospitalizations for patients age 18 and older that end during the measurement period as well as the occurrence of a diagnosis of diabetes that starts before the end of the hospitalization or an administration of at least one dose of insulin or any hypoglycemic medication that starts during the hospitalization or the presence of at least one glucose value of greater than or equal to 200 milligrams per deciliter at any time during the hospitalization. And for this measure, the Denominator equals the Initial Population. And there were

no changes to the measure's Initial Population and Denominator narrative between the 2025 reporting period and the 2026 reporting period.

Before we move on, I just want to quickly add a note here about how the measure determines the timing of the inpatient hospitalization period to be assessed. So when determining the inpatient hospitalization period, the measure includes time spent in the emergency department and/or in observation status when the transition between discharge from these encounters and admission to the inpatient encounter is one hour or less. So the intent is for the inpatient hospitalization period to include any time spent in the emergency department and/or in observation status that immediately precedes a patient's inpatient encounter. Next slide, please.

**Slide 15**

[00:13:19] So here I'm going to provide an overview of the measure's Denominator Exclusions criteria, and that star icon that you see at the top left of the slide indicates that there are changes between the 2025 version of the measure and the version of the measure for the 2026 reporting period that are present on this slide. So you'll see those changes flagged on the slide with the underlined text showing new content and the stricken green text representing removed content.

So as for the Denominator Exclusions criteria, this measure excludes inpatient hospitalizations for patients who meet any of the following criteria. So those who have a glucose result of greater than 600 milligrams per deciliter anytime between one hour prior to the start of the hospitalization to six hours after the start of the hospitalization, or those who have comfort care measures ordered or provided during the hospitalization, or those who have a discharge disposition to hospice care at home or in a healthcare facility.

And the major change present on this slide is the lowering of the blood glucose value threshold used in that first component of the Denominator Exclusions criteria, or the exclusion of inpatient hospitalizations for patients who have a glucose result of greater than 600 anytime between one hour prior to the start of the hospitalization to six hours after the start. So the intent of this exclusion is to avoid penalizing hospitals for severe hyperglycemia that was caused by factors that might've preceded hospital care - as it may take hospitals some time to safely bring down those very high blood glucose levels at the start of the inpatient hospitalization period. So for the 2026 reporting period, the measure developer updated this blood glucose level threshold from greater than or equal to 1000 milligrams per deciliter to greater than 600 milligrams per deciliter based on feedback from clinical subject matter experts indicating that any blood glucose levels greater than 600 milligrams per deciliter may take time to safely address. And some blood glucose tests, like point-of-care tests, may not be able to read blood glucose values greater than 600 milligrams per deciliter.

The measure developer made the other change on the slide seen in the description in the hospice care exclusion just to improve the clarity of that component of the Denominator Exclusions criteria. Next slide, please.

**Slide 16**

[00:16:00] All right, so moving onto the Numerator. The measures numerator includes inpatient hospitalizations for patients with a hyperglycemic event within the first 10 days of the encounter minus the first 24 hours of the hospitalization and minus the last period before discharge from the hospital if that period is less than 24 hours. As you can see here, the measure defines a day with a hyperglycemic event as either a day with at least one glucose value of greater than 300 milligrams per deciliter or a day where a glucose test and result was not found and it was immediately preceded

by two contiguous, consecutive days where at least one glucose value during each of those two days was greater than or equal to 200 milligrams per deciliter. And there were no changes to the measure's Numerator Narrative between the 2025 reporting period and the 2026 reporting period. Next slide, please.

**Slide 17**

[00:17:03] Okay, so we'll move on here to the Numerator Exclusions. And as you'll remember, this is a ratio measure, and ratio measures operate a little bit differently than proportion measures. So in proportion measures, the Numerator is a subset of the Denominator Population. But in ratio measures, inpatient hospitalizations are pulled into the Numerator directly from the Initial Population, not from the Denominator. So in order to make sure that the measure's Exclusions criteria are also applied to the Numerator, this measure's Numerator Exclusions criteria are the same as the Denominator Exclusions criteria that we reviewed earlier. And that's because we want the same hospitalizations removed from the numerator and the Denominator when they're pulled from the Initial Population.

So inpatient hospitalizations for the following patients are excluded from the Numerator: Those who have a glucose result of greater than 600 milligrams per deciliter anytime between one hour prior to the start of the hospitalization to six hours after the start, or those who have comfort care measures ordered or provided during the hospitalization, or those who have a discharge disposition to hospice care at home or in a healthcare facility. And the changes in the Numerator Exclusions narrative between the 2025 reporting period and the 2026 reporting period are the same as those present in the Denominator Exclusions narrative that we reviewed earlier. Next slide, please.

**Slide 18**

[00:18:42] Okay, again, because this is a ratio measure, the measure is calculated differently than the way proportion measures are calculated. So the Denominator and Numerator criteria that we reviewed earlier look for encounters or hospitalizations. However, the measure also has Measure Observations, which identify days in the qualifying hospitalizations that are identified through the measure's Denominator and Numerator criteria. And the days are what is ultimately used in the measure's calculation.

So due to the length of the measure's Measure Observations description, we're only showing the Measure Observations description included in the 2026 reporting period version of the measure on this slide here. But changes in the narrative between the 2025 reporting period and the 2026 reporting period are shown via stricken-through and underlined text.

So this measure has two Measure Observations, one associated with the measure's Denominator and one associated with the measure's Numerator. So, Measure Observation 1, which is associated with the measure's Denominator, identifies the total number of eligible days of the inpatient hospitalizations that meet the denominator criteria and do not meet the denominator exclusions criteria. And here we made a small update to the narrative to use the term Measure Observation rather than Encounter Observation just to more closely align the presentation of the Measure Observations in the narrative with how they're presented in the measure logic.

And then Measure Observation 2, which is associated with the measure's Numerator, identifies the total number of hyperglycemic event days during the inpatient hospitalizations that meet the Numerator criteria and do not meet the Numerator Exclusions criteria. And here we also made that small update to the narrative to use the term Measure Observation rather than Encounter

Observation. And I want to provide some additional guidance here around the timing of the measure observations calculations.

So for this measure, hospital days are not defined as midnight to midnight. Rather, they're defined as full 24-hour periods that start at the beginning of the inpatient hospitalization period. And when calculating both measure observations, the length of stay for all eligible inpatient hospitalizations is truncated to 10 days when the length exceeds 10 days. Additionally, since the measure does not count any hyperglycemic events that occur in the first 24 hours of the hospitalization, the first day of the hospitalization is not considered an eligible hospital day for the measure observations. And finally, if the last day is less than 24 hours, it is also not considered as an eligible hospital day for the measure observations because the measure does not consider it to be a full day.

And you'll see that we removed this guidance from the measure's Measure Observations narrative, and that's just because this guidance is already located in other sections of the Measure Header, such as in the Numerator section and in the Guidance section. So, this additional text was just removed from the measure's Measure Observation narrative to streamline the narrative we have here and to avoid including duplicative information in the Measure Header. Next slide, please.

**Slide 19**

[00:22:13] So this slide includes several key resources specific to reporting this eCQM, including links to the Measure Specification for 2026 reporting on the eCQI Resource Center and then also the Technical Release Notes that describe all of the changes made to the measure between the 2025 reporting period and the 2026 reporting period. Next slide, please.

**Slide 20**

[00:22:41] So as part of our ongoing review of feedback from the public and updates to the webinar series for improvement, we have combined our review of the measure flow and logic together this year. So we'll spend most of our time in this next section reviewing the measure flow. However, if changes were made to the measure logic in the specifications or additional clarification on a definition is needed, we'll take a closer look at the specific logic on a subsequent slide. Next slide, please.

**Slide 21**

[00:23:10] I'm going to start by explaining the structure of this flow diagram, which is different from the structure of the flow diagrams used for proportion measures. The Hospital Harm - Severe Hyperglycemia eCQM flow is ordered to reflect the order in which the measure is calculated. Because this is a ratio measure, the Denominator is pulled from the Initial Population and then Measure Observation 1 calculates the total number of eligible days of the inpatient hospitalizations that meet the Denominator criteria and do not meet the Denominator Exclusions criteria. Then the Numerator is pulled from the Initial Population, and Measure Observation 2 then calculates the total number of hyperglycemic event days during the inpatient hospitalizations that meet the Numerator criteria and do not meet the Numerator Exclusions criteria. The returns from Measure Observation 1 and Measure Observation 2 are what are ultimately used in the measure's calculation. So first we'll begin with the "denominator flow" to show how Measure Observation 1 is calculated. And then we'll move onto the "Numerator Flow" to show how Measure Observation 2 is calculated. And then at the end of the flow, we'll present a sample calculation to show how the measure observations are used to calculate the overall measure score. Next slide, please.

**Slide 22**

[00:24:39] So before we begin our review of the flow, we know the display on the screen can be quite small, but if you download the PDF of the slides, you can zoom in to enlarge the display. Or you could also download the measure flow file directly from the eCQI Resource Center. Okay, so we're going to start with the Denominator flow, which, as I just mentioned, begins with the Initial Population. There are three main conditions in the Initial Population criteria as outlined by the three high-level logic definitions that you see at the top of this flow diagram. An inpatient hospitalization will be included in the Initial Population if it meets the criteria outlined in at least one of those three definitions. And all three of these definitions are looking for inpatient encounters where the patient is 18 years or older at the start of the hospitalization.

So for the first definition, "Encounter with Existing Diabetes Diagnosis," the logic identifies those inpatient encounters where the patient has a diagnosis of diabetes as reflected by a diagnosis code in the Diabetes value set before the end of the inpatient hospitalization.

For the second definition, "Encounter with Hypoglycemic Medication," the logic identifies those inpatient encounters where the patient has a hypoglycemic medication administered as reflected by a code in the Hypoglycemics Treatment Medications value set that starts during the inpatient hospitalization.

And then for the third definition, "Encounter with Elevated Glucose Greater Than or Equal to 200," the logic identifies those inpatient encounters where the patient has a glucose laboratory test performed during the inpatient hospitalization and the result of that test is greater than or equal to 200 milligrams per deciliter. And again, an inpatient hospitalization is included in the measure's Initial Population if it meets the criteria outlined in at least one of those three definitions. If an inpatient hospitalization does not meet any of these criteria, then the hospitalization is not included in the Initial Population, and processing ends. Next slide, please.

**Slide 23**

[00:26:57] And as a reminder, for this measure, the Denominator is equal to the Initial Population, so if the hospitalization is in the Initial Population, it is also included in the Denominator. Next slide, please.

**Slide 24**

[00:27:12] All right, so moving onto the Denominator Exclusions, which are expressed by the three high-level logic definitions that you see here at the top of the flow diagram. So an inpatient hospitalization will meet the Denominator Exclusions criteria if it meets the criteria outlined in at least one of those three definitions. The first definition, "Encounter with Glucose Greater Than 600 within 1 Hour Prior To and 6 Hours After Encounter Start," identifies inpatient encounters in the Initial Population where patients have a glucose lab test performed and the lab test result is not null and is greater than 600 milligrams per deciliter. You'll see here that the lab test must also be performed during the one hour prior to or up to six hours after the start of the inpatient hospitalization and before the end of the inpatient hospitalization in order to meet the criterion expressed by this definition.

So the second definition, "Encounter with Comfort Measures during Hospitalization," identifies inpatient encounters in the Initial Population for patients with an intervention of comfort measures care that is ordered or performed during the inpatient hospitalization. And then finally, the third

definition, "Encounter with Discharge for Hospice Care," identifies inpatient encounters in the Initial Population where patients have a discharge disposition to hospice care at home or a healthcare facility. And this is reflected by a discharge disposition code in either the Discharged to Home for Hospice Care value set or the Discharged to Healthcare Facility for Hospice Care value set. And again, a hospitalization meets the Denominator Exclusions criteria and is excluded from the measure calculation if it meets the criteria outlined in at least one of those three definitions.

So you'll note here by the red circles and boxes that you see on this page, the measure developer updated this page of the flow to reflect the lower blood glucose level from greater than or equal to 1000 milligrams per deciliter to greater than 600 milligrams per deciliter used in that first component of the Denominator Exclusions criteria as expressed by that definition, "Encounter with Glucose Greater Than 600 within 1 hour Prior To and 6 Hours after Encounter Start." And so the measure developer also updated that threshold in the name of the high-level definition used to express the Denominator Exclusions that you see at the top of the the page there, "Encounter with Early Glucose Greater Than 600 or with Comfort or Hospice Care." So we're going to take a closer look at the corresponding changes in the measure logic on the next slide. So next slide, please.

**Slide 25**

[00:30:08] So here we see the Denominator Exclusions logic impacted by the lowering of that blood glucose threshold from greater than or equal to 1000 to greater than 600. So the measure developer updated the name of the high-level definition used to express the Denominator Exclusions. It used to be "Encounter with Early Glucose Greater Than or Equal to 1000 or with Comfort or Hospice Care." And it's now "Encounter with Early Glucose Greater Than 600 or with Comfort or Hospice Care." So that's the definition you see in the blue box there. And then we see, oh... Sorry, it looks like the slides changed. Ah Back... a couple more. Yep, there we go. Thank you. And forward one more.

[00:31:10]

This is the slide, thank you. So we just covered the change to the definition name in that blue box, and we also see a similar change in the name of the more narrow definition, "Encounter with Glucose Greater Than 600 Within 1 hour Prior To and 6 Hours After Encounter Start," in that next definition down, which is used to specifically express the component of the Denominator Exclusions that excludes inpatient hospitalizations for patients who have a glucose result of greater than 600 any time between one hour prior to the start of the hospitalization to six hours after the start of the hospitalization. And then within that more narrow definition, we can also see the lowering of the threshold in the logic itself, where the logic now reads, "and GlucoseTest.result >600 mg/dL," where it used to say "greater than or equal to 1000." All right. Next slide, please.

**Slide 26**

[00:32:19] Thank you. Okay, so moving onto Measure Observation 1, shown here, which is associated with the measure's Denominator. So the logic uses several definitions to calculate the Measure Observation 1 function. The "Days in Hospitalization" logic definition returns the number of days within the hospitalization period. And then the "Days with Glucose Results" logic definition filters the eligible hospitalizations and returns the day number, so days 1 through 10, for each day within the hospitalization period to then determine the eligible hospital days, which could be days 2 through 10.

The Measure Observation 1 function then returns the number of eligible days within the first 10 days of the hospitalization minus that first 24 hours of the hospitalization and minus the last period before

hospital discharge if less than 24 hours. And as a reminder, these days are part of inpatient hospitalizations that meet the Denominator criteria and do not meet the Denominator Exclusions criteria. And as you'll note here, the returns of Measure Observation 1 are represented by the letter 'a', which we can plug into the sample calculation that we're going to present later on. Next slide, please.

**Slide 27**

[00:33:43] Okay, so next we're going to move onto the Numerator portion of the measure flow diagram. Again, here we're going to start with the Initial Population, because, as you may remember, this is a ratio measure, and the Numerator is pulled directly from the Initial Population and not the Denominator. Because we've already reviewed the Initial Population page of the flow earlier in the presentation, I'm not going to walk through it in detail again here. But just a reminder that to evaluate the Numerator for this measure, you must start with the measure's Initial Population rather than the measure's Denominator. Next slide, please.

**Slide 28**

[00:34:23] Okay, so we're going to move onto the Numerator. So an inpatient hospitalization, we'll meet the Numerator criteria if the hospitalization has at least one hyperglycemic event day. The criteria for a hyperglycemic event day can be met in two ways, as you can see here. So the measure defines a hyperglycemic event day as an inpatient hospitalization day where there's a glucose lab test of greater than 300 milligrams per deciliter or an inpatient hospitalization day where there's no glucose lab test result but that day is preceded by two consecutive days where there was a glucose lab test result each day of greater than or equal to 200 milligrams per deciliter. Next slide, please.

**Slide 29**

[00:35:09] Okay, so moving onto the Numerator Exclusions. And as you'll notice, and as we discussed earlier, the Numerator Exclusions here mirror the Denominator Exclusions that we reviewed earlier. So because we reviewed these exclusions earlier on the Denominator Exclusions page, I'm not going to review them again in full detail here. But as a refresher, there are three main conditions in the Numerator Exclusions criteria as outlined by the three high-level logic definitions that you see here. So that's "Encounter with Glucose Greater Than 600 within 1 hour Prior To and 6 Hours After Encounter Start," "Encounter with Comfort Measures During Hospitalization," and then "Encounter With Discharge for Hospice Care." Because the Numerator, oh, excuse me, important reminder.

So an inpatient hospitalization will meet the Numerator Exclusions criteria and will be excluded from the Numerator if it meets the criteria outlined in at least one of those three definitions. And because the Numerator Exclusions are specified using the same logic as is used for the Denominator Exclusions, we're not going to review the specific logic change associated with this lower blood glucose threshold because we reviewed that logic change earlier in the presentation when we were discussing the Denominator Exclusions. So next slide, please.

**Slide 30**

[00:36:41] Okay, so moving onto Measure Observation 2, which is associated with the measure's Numerator. So the Measure Observation 2 function calls in several logic definitions. The days in hospitalization logic definition returns the number of days within the hospitalization period. The days with glucose results logic definition filters the eligible hospitalizations and returns the day number,

so days 1 through 10, for each day within the hospitalization period to determine the eligible hospital days, which could be days 2 through 10. And then finally, the days with hyperglycemic events logic definition identifies the number of hyperglycemic event days for each eligible hospitalization that meets the Numerator criteria and does not meet the Numerator Exclusions criteria.

Measure Observation 2 then returns the number of eligible inpatient hyperglycemic event days within the first 10 days of the hospitalization minus the first 24 hours of the hospitalization and minus the last period before hospital discharge if less than 24 hours. And as a reminder, these are days of inpatient hospitalizations that meet the Numerator criteria and do not meet the Numerator Exclusions criteria. And as you'll note here, the returns of Measure Observation 2 are represented by the letter 'c', which we're going to plug into the sample calculation that we'll present on the next slide. So next slide, please.

**Slide 31**

[00:38:14] Okay, so now that the measure criteria are defined, we can plug the quantities into the calculation formula. So as a reminder, this ratio measure is calculated by dividing the returns of Measure Observation 2, associated with the Numerator, by the returns of Measure Observation 1, associated with the Denominator, for all qualifying hospitalizations for that measurement period. So Measure Observation 2 returns the number of inpatient hyperglycemic event days for inpatient hospitalizations that meet the Numerator criteria, do not meet the Numerator Exclusions criteria. And then Measure Observation 2 returns the number of inpatient hospital days for inpatient hospitalizations that meet the Denominator criteria and not the Denominator Exclusions criteria. So in this example, the returns of Measure Observation 2, associated with the Numerator, is divided by the returns of Measure Observation 1, associated with the Denominator, and is equal to a ratio of 0.182. Next slide, please.

**Slide 32**

[00:39:27] Okay, so to wrap up our review of this measure, we're going to review a few frequently asked questions about the eCQM. So the first question is, could you please explain the first 24 hours of the hospitalization that's excluded in the measure? And the answer to this question is, for the CMS871 Hospital Harm-Severe Hyperglycemia measure, hospital days are not defined as midnight-to-midnight. Rather, they're 24-hour periods that start at the beginning of the inpatient hospitalization period. When evaluating for days with a glucose level of greater than 300 milligrams per deciliter, glucose results from the first 24-hour period of the hospitalization are not evaluated to account for potentially poor glucose control outside of the hospital setting or that preceded the start of hospital care. Next slide, please.

**Slide 33**

[00:40:31] The next question is, does this measure assess time spent in the emergency department? And the answer to this question is the inpatient hospitalization period assessed by the measure includes time in the emergency department and/or an observation status when the transition between discharge from these encounters and admission to the inpatient encounter is one hour or less. And that's regardless of how much time the patient actually spends in the emergency department encounter and/or in observation status. So that one-hour threshold that we're looking at is just concerned about the transition between the end of the emergency department encounter or observation status and the start of the inpatient encounter. Next slide, please.

**Slide 34**

[00:41:23] Okay, so the next question is, for glucose test results, does the measure use the result time or the time of specimen collection? And the answer to this question is the measure uses the "Laboratory Test, Performed": "Glucose Lab Test Mass Per Volume" QDM data element, which relies on the timing of the laboratory test or specimen collection, not the timing of the results. So, the relevant dateTime attribute used with this data element references the time of the laboratory test or specimen collection when the laboratory test occurs at a single point in time. The relevantPeriod attribute used with this data element in the logic references a start and a stop time for a laboratory test or specimen collection that might occur over a time interval. But if you are interested in looking at more information on that QDM data element, you can visit the eCQI Resource Center's Data Element Repository, which will include more information and some examples to explain the data element. And we've included the link for that data element on the Data Element Repository on the slide here. Next slide, please.

**Slide 35**

[00:42:41] All right, so the next question is, what types of glucose tests count for this measure? And the answer to this question is, for this measure, the specimen source for the glucose test is blood, serum, plasma, or interstitial fluid and can be obtained by a laboratory test, a point-of-care test, or a continuous glucose monitor. And this includes results obtained from a glucometer. Glucose test results from urine specimen are not considered. And again, as a reminder, this measure uses the "Laboratory Test, Performed": "Glucose Lab Test Mass Per Volume" QDM data element. So for more information on the types of glucose test results and specimen sources that are considered by the measure, you can go to the Value Set Authority Center, the VSAC, and you can see the specific LOINC codes that are included in that "Glucose Lab Test Mass Per Volume" value set. We've included the OID number for that value set on this slide here. Next slide, please.

**Slide 36**

[00:43:45] All right, and the final question is, what is the difference between what the Numerator and Denominator identify and what the Measure Observations return for this measure? And the answer to this question is, so this is a ratio measure. So the measure includes two measure observations that assess the inpatient hospitalizations that are identified through the Numerator and Denominator criteria to return the inpatient hospital days that are ultimately used in the measure calculation. So to calculate the ratio of inpatient hospital days, the Denominator and Numerator first identify the inpatient hospitalizations to be assessed by the measure.

Then Measure Observation 1, associated with the Denominator, returns the total number of eligible hospital days of inpatient hospitalizations that meet the Denominator criteria and do not meet the Denominator Exclusions criteria.

Then Measure Observation 2, associated with the Numerator, returns the total number of hyperglycemic event days during inpatient hospitalizations that meet the Numerator criteria and do not meet the Numerator Exclusion criteria. The returns of the two measure observations are then used to calculate the ratio of the number of inpatient hospital days with a hyperglycemic event over the total number of eligible inpatient hospital days. And that's truncated to 10 days per hospitalization when the hospital length of stay exceeds 10 days. And that concludes my formal review of the Hospital Harm - Severe Hyperglycemia eCQM for 2026 reporting. So thank you, everyone, and I'm going to pass it over to Mike to walk us through the Hospital Harm - Severe Hypoglycemia eCQM.

[Susan Funk] And Mike, just before you start your presentation, I just wanted to remind the audience that this is a 75-minute webinar, so we will be going to 15 minutes past the hour so that we can address the questions during the live Q&A segment. And Michael, please feel free to take over, I'll go back on mute. Thanks.

**Slide 37**

[00:45:58] [Michael Kerachsky] Okay, great. Thank you, Susan. Hi, my name's Michael Kerachsky, I'm a data analyst with Mathematica. And I will now review the Hospital Harm - Severe Hypoglycemia measure, or CMS816 version five, beginning with some background information. Next slide, please.

**Slide 38**

[00:46:24] Severe hypoglycemia is a hospital harm event that causes patients to experience distressing symptoms, ranging from confusion to coma, and is also associated with increased odds of in-hospital mortality. CMS816 is an outcome measure that is scored as a Proportion measure, and as indicated in the measure description at the top of the slide, assesses the number of inpatient hospitalizations for patients age 18 and older who were administered at least one hypoglycemic medication during the encounter and who suffer the harm of a severe hypoglycemic event during the encounter. Inpatient hypoglycemic events in the hospital setting are amongst the most common adverse drug events. In a study published by the Office of the Inspector General in 2018, adverse drug events represent nearly half of all adverse events in hospitals among Medicare patients. Of those events, hypoglycemia represented the fifth most common adverse drug event. Rates of inpatient hypoglycemia events are an indicator of quality of care. Severe hypoglycemia events are largely avoidable by careful use of hypoglycemic medications. Moreover, the rate of severe hypoglycemia varies across hospitals, indicating an opportunity for improvement in care. The literature and measure testing results show variable performance across hospitals as well as room to improve harm rates. Finally, severe hypoglycemia is preventable by careful use of antihyperglycemic medications, also referred to as hypoglycemic medications. The goals of this measure are to improve safety for inpatients at risk of severe hypoglycemia, to provide a means for hospitals to track performance trends of hospital harm caused by severe hypoglycemia, and implement practices to lower rates as needed. Next slide, please.

**Slide 39**

[00:48:33] Okay, now we'll review the Measure Header narrative for the 2026 version of the Hospital Harm - Hypoglycemia eCQM. The following two slides show changes in the Measure Header narrative between the 2025 reporting period version of the eCQM and the version finalized for 2026 reporting. Next slide, please.

**Slide 40**

[00:49:03] So first, the description, which we just reviewed on the background slide, is again presented here. I won't review that again. There have been no changes applied to the 2026 implementation. The Initial Population is comprised of inpatient hospitalizations that end during the measurement period for patients age 18 years of age or older and at least one hypoglycemic medication administration starts during the encounter. Again, there are no changes in the 2026 implementation.

Note for this measure, as we indicated in the hyperglycemic section, the term inpatient hospitalizations includes time in the emergency department and observation when the transition

between these encounters, if they exist, and the inpatient encounter are within an hour or less of each other. Finally, the Denominator is equal to the Initial Population, and as indicated, as there was no changes to the Initial Population, that also applies to the Denominator. Please note for this eCQM, there are no Denominator Exclusions. Next slide, please.

**Slide 41**

[00:50:20] All right, the Numerator remains unchanged from 2025 to 2026 as well. The Numerator evaluates for inpatient hospitalizations where a severe hypoglycemic event occurred during the encounter. Severe hypoglycemic event is defined as a glucose test with result less than 40 milligrams per deciliter and a hypoglycemic medication was administered within 24 hours before the start of the severe hypoglycemic event. In other words, glucose tests with a result less than 40 milligrams per deciliter. And there was no subsequent repeat test for glucose with a result greater than 80 milligrams per deciliter within five minutes or less from the start of the initial glucose test with a result less than 40 milligrams per deciliter. Only one qualifying severe hypoglycemic event is counted in the Numerator, and only one severe hypoglycemic event is counted per encounter. The 24-hour and 5-minute timeframes are based on the time the glucose was drawn, as this reflects the time the patient was experiencing that specific glucose level. And note there are no Numerator Exclusions for this measure. Next slide, please.

**Slide 42**

[00:51:50] This slide contains resources associated with the measure updates for the 2026 implementation, including a link to the Measure Specification as well as a link to the Technical Release Notes, which describe all the changes between the 2025 and 2026 version of the Hospital Harm - Hypoglycemia eCQM. Next slide, please.

**Slide 43**

[00:52:19] Okay, just re-noting that hyperglycemia logic and measure flow section. As part of an ongoing review of feedback from the public and updates to the webinar series for improvement, we've combined reviewing the measure flow and logic together. Next slide, please.

**Slide 44**

[00:52:39] Now, let's continue with the review of the Initial Population. So, starting with the yellow swim lane. The Initial Population definition is "Encounter with Hypoglycemic Medication Administration." Three conditions must be met to qualify for this definition, which are included in the logic on the right. First, pulling in the qualifying encounter definition, there must be evidence of an inpatient encounter that ends during the measurement period. And the patient must be greater than or equal to 18 years of age at the start of the inpatient encounter. With "Hypoglycemics Medication Administration," meaning a medication from the Hypoglycemics Severe Hypoglycemia value set was administered during the hospitalization with observation.

If the criteria are met, the inpatient hospitalization is included in the Initial Population. And if not, they are not in the Initial Population, and processing ends. In the blue Denominator section at the bottom, we see the Denominator equals the Initial Population. Note the blue diamond in the upper right corner of the Initial Population box with an 'a'. This is used to identify the Denominator component, which, as we will see, we'll include in the sample calculation in the subsequent slide. As a reminder, this eCQM does not include Denominator Exclusions. Next slide.

**Slide 45**

[00:54:21] The flow continues to depict how the Numerator is evaluated. The Numerator criteria definition included on the left is "Encounter with Severe Hypoglycemic Harm Event." Note the green diamond in the upper-right corner of the definition box with a 'c'. Again, this is used to identify the Numerator component in the sample calculation. Three conditions must be met to qualify for this Numerator definition. On the right, first pulling in the Denominator, or definition "Encounter with Hypoglycemic Medication Administration," the logic then evaluates for a severe glucose harm event. Which includes definition "Glucose Test with Result Less Than 40," where a laboratory test is performed with a code documented from value set "GLUCOSE LAB TEST MASS PER VOLUME" and the result, or where the result, is less than 40 milligrams per deciliter. And looking at the "Hypoglycemic Medication Administration" definition and medication from the "HYPOGLYCEMICS SEVERE HYPOGLYCEMIA" value set was administered 24 hours or less on or before the glucose result of less than 40 milligrams per deciliter during the hospitalization with observation and where not a "Low Glucose Test followed by Glucose Test Result Greater Than 80." So this looks at the absence of a repeat laboratory test with a code from the "GLUCOSE LAB TEST MASS PER VOLUME" with a result greater than 80 milligrams per deciliter within five minutes or less after the glucose test with result less than 40 milligrams per deciliter during the hospitalization with observation.

Okay. Oh, yeah, I'm looking at the arrow below the Numerator definition. So, back on the left-hand side, "Encounter with Severe Hypoglycemic Harm Event," we see that if the Numerator criteria we reviewed are met, the inpatient hospitalization is included in the Numerator. And if not, they are not in the Numerator, and the processing ends. Next slide, please.

**Slide 46**

[00:56:57] Okay, now that the measure's Denominator and Numerator are defined, we can plug quantities into the sample calculation formula displayed here. The performance rate aggregates the populations into a single performance rate for reporting purposes. So in this example we see here, the Numerator is 20, or c = 20, is divided by the Denominator, a = 80, to equal a 25% performance rate. Remember, the lower the rate, the higher the quality. Next slide, please.

**Slide 47**

[00:57:37] Okay. We'll now review a frequently asked question. So question is, for the Numerator criteria, is a subsequent repeat glucose test required to be performed within five minutes from the start of the glucose test with a result of less than 40 milligrams per deciliter. So the answer to this, specific to the Numerator criteria for an encounter with severe hypoglycemic harm event, there is no requirement within the measure's Numerator criteria for repeat testing following the initial glucose test result less than 40 milligrams per deciliter. Per the definition included in the Measure Specification, the purpose of the repeat test within five minutes is to eliminate false positives that can occur with point-of-care testing. However, the measure allows for an encounter to be removed from the Numerator if a repeat test within five minutes indicates that the blood glucose is above 80 milligrams per deciliter.

And that concludes the hypoglycemic portion of the presentation, and I'll pass it back to you, Susan.

[Susan Funk] Oh great. Thanks so much, Michael. Thanks, Moriah and Michael, for leading us through the annual updates. Jessica, if you can go to the next slide.

**Slide 48**

[00:58:57] So, Michael and Moriah, please take a couple minutes and catch your breath, as I will just go through a couple more slides, and then we'll go into the Q&A segment. So that the audience is aware, we are going until 15 minutes past the hour. This was scheduled to be a 75-minute webinar and offer 1.25 CE credits. So, with that said, we've included a couple resource slides here for the audience. The first provides the links to the eCQI Resource Center, the CMS Eligible Hospital Measures page, and the Get Started with eCQM links. We've also linked to the Teach Me Clinical Quality Language Video Series and specifically the videos on Hospitalization with Observation and What is a Value Set. Next slide, please.

**Slide 49**

[00:59:53] So continuing here with additional resource links. We've provided the link to the Value Set Authority Center, or the VSAC, Support. We've also included the link where you can find information about the Expert to Expert Webinar Series on Joint Commission's website. And finally, the ASTP/ONC Issue Tracking System. And that's where clinical and technical questions about these eCQMs should be submitted following this webinar. And just to give a little context about the ASTP/ONC Issue Tracking System before we head into our Q&A segment, the same subject matter experts that are on today's webinar also respond to the questions that are posed within the ASTP/ONC platform. So the Q&A document that follows this webinar will likely take a few weeks, and it requires CMS approval before we can distribute it. So if you need a more immediate response, please consider submitting that question via the Issue Tracker. Next slide, please.

**Slide 50**

[01:00:58] Okay, with that said, let's move into our live Q&A segment. The rest of today's time will be used for Q&A. I will just restate the directions to ask questions. You can submit questions via the question pane. Click on the Question mark icon in the audience toolbar, a panel will open for you to type and submit a question. The questions asked during the live event will be addressed in a written follow-up Q&A document, and that follow-up document will be posted on the Joint Commission's website several weeks after the live event, as noted earlier, after CMS review and approval.

Our subject matter experts have been very busy during the presentation, and they've been responding to many of the audience's questions as they have been submitted. We will now share some of those questions and answers. We'll welcome back both Moriah and Michael to tag team through this Q&A segment. Moriah, if you're ready to jump in, let's start with you. And when you're ready, just proceed with the first question. Thanks.

[01:01:59] [Moriah Bauman] Thanks, Susan. All right, so let's jump in. So the first question I see is, how do these measures define 'glycemic control'? And the response is these measures do not aim to measure overall glucose control in hospitalized patients, Only severe glycemic events which are adverse reactions with consequences for patient health. For the Hospital Harm - Severe Hyperglycemia measure, a day with a severe hyperglycemic event is a day with at least one glucose value of greater than 300 milligrams per deciliter or a day with no glucose result preceded by two consecutive days with a result of greater than or equal to 200 milligrams per deciliter each day. For the Hospital Harm - Severe Hypoglycemia measure, a severe hypoglycemic event is a glucose value of less than 40 milligrams per deciliter where a hypoglycemic medication was administered within 24 hours prior and there was no subsequent repeat test with a result of greater than 80 milligrams per deciliter performed within five minutes. Mike, over to you.

[Michael Kerachsky] Thanks. Next question. Are there any exclusions for these measures? So for CMS871 Hospital Harm - Severe Hyperglycemia, it has three exclusions. Inpatient hospitalizations, one, for patients with a glucose result of greater than 600 milligrams per deciliter any time between one hour prior to the start of the hospitalization to six hours after the start of the hospitalization. Two, for patients who have comfort care measures ordered or provided during the hospitalization. And three, for patients who have a discharge disposition to hospice care at home or in a healthcare facility. For CMS816, Hospital Harms - Severe Hypoglycemia, does not have any Denominator Exclusions.

[Moriah Bauman] The next question is, is the severe hypoglycemia and the severe hyperglycemia measure considered one measure, or are they evaluated separately? And the response is the Severe Hypoglycemia eCQM and the Severe Hyperglycemia eCQM are two separate eCQMs that are evaluated separately.

[Michael] Okay. Next question, do these measures consider bedside glucometer results or results from point-of-care testing? The response is Yes. Both CMS816, Severe Hypoglycemia, and 871, Severe Hyperglycemia, measures allow use of bedside glucometer or point-of-care testing results. Specimens must be blood, serum, plasma or interstitial fluid.

[Moriah] All right, the next question is, are these measures only for patients with diabetes? And the response is both measures may assess inpatient hospitalizations for patients with and without diabetes. The Hospital Harm - Severe Hypoglycemia measure's Initial Population includes inpatient hospitalizations for patients age 18 and older who are administered at least one hypoglycemic medication during the encounter regardless of whether the patient has a diabetes diagnosis. And then the Hospital Harm - Severe Hyperglycemia measure's Initial Population includes inpatient hospitalizations for patients age 18 and older who may or may not have diabetes. Non-diabetic patients could qualify for the measure if they are administered at least one dose of a hypoglycemic medication or have at least one glucose value of greater than or equal to 200 milligrams per deciliter during their hospitalization.

[01:06:15] [Michael] Where can we find the list of medications that the measures consider as qualifying hypoglycemic medications? Value sets within the terminology section of the measure specifications list the medications to be used in the measures. For CMS871, Severe Hyperglycemia, measure uses Hypoglycemics Treatment Medications value set. CMS816, Severe Hypoglycemia, measure uses the Hypoglycemics Severe Hypoglycemia value set. Codes used in the value sets can be found on the Value Set Authority Center.

[Moriah] The next question is, is this a required eCQM or an optional one to pick from? And the response is the Hospital Harm - Severe Hypoglycemia and Hospital Harm - Severe Hyperglycemia eCQMs are currently available for mandatory reporting in the Hospital Inpatient Quality Reporting Program, or IQR. Mandatory reporting for both measures began in the calendar year 2026 reporting period, so this current reporting period.

[Michael] Okay, we're just scrolling through.

[Moriah] Mike, do you want me to take the next one?

[Michael] Yes, go ahead. Sorry.

[01:08:10] [Moriah] Sure. So the next question is, are patients on a GLP-1 for weight loss and that do not have a diagnosis of diabetes included in the hyperglycemia measure? And the response is the

Hospital Harm - Severe Hyperglycemia measure's Initial Population includes inpatient hospitalizations for patients age 18 and older who may or may not have diabetes. Non-diabetic patients would qualify for the measure if they are administered at least one dose of a hypoglycemic medication or have at least one glucose value of greater than or equal to 200 milligrams per deciliter during the encounter. Certain GLP-1 receptor agonists are qualifying hypoglycemic medications. The list of qualifying hypoglycemic medications evaluated as part of the measure's Initial Population criteria are listed in the Hypoglycemics Treatment Medications value set, which you can look into more on the Value Set Authority Center, or the VSAC.

[Michael] Okay. Are there any changes to the timeframe of historical diabetes diagnoses that exclude patients who are coded as diabetic 10+ years ago but are no longer hyperglycemic or actively being treated for diabetes? Both measures may assess inpatient hospitalizations for patients with and without diabetes. CMS816, Severe Hypoglycemia, measure's Initial Population includes inpatient hospitalization for patients age 18 and older who were administered at least one hypoglycemic medication during the encounter regardless of whether the patient has a diabetes diagnosis. For CMS871, Severe Hypoglycemia, the measure's initial population includes inpatient hospitalizations for patients age 18 and older who may or may not have diabetes. Non-diabetic patients would qualify for the measure if they're administered at least one dose hypoglycemic medication or have at least one glucose value greater than or equal to 200 milligrams per deciliter during the encounter.

[Moriah] All right. The next question I see is, is the encounter start date time the arrival start date time to the ED or the inpatient start date time? And the response is the inpatient hospitalization period assessed by these measures includes time in the emergency department and observation when the transition between discharge from these encounters and admission to the inpatient encounter is one hour or less. So if the emergency department encounter immediately precedes that inpatient encounter, the inpatient hospitalization period assessed by the measure is going to start at the start of the emergency department encounter. [Susan] Michael and Moriah, I think we have time for maybe one or two more. I can speed through the closing segment, so if you guys want to just pick maybe, if you think you have time for one more each if they're short, then we can get through just a couple more.

[Michael] Sure. Does this eCQM use calendar day or 24 hours? The Hospital Harm - Severe Hyperglycemia measure does not use calendar day, it uses 24-hour periods that start at the time of admission to the hospital, including time in the emergency department and observation as appropriate.

[Moriah] Thanks. And I see one more short one that I can do to close this out. So the question is, are there any exclusions for people who DoorDash their own food to the hospital? And the answer is there are no exclusions for patients who consume food that is not provided by the hospital while in the hospital. Back to you.

[Susan] Excellent. Okay. I will, yeah. I'll hurry through the end, because I know everyone really valued that segment, so I can hurry through this part.

**Slide 51**

[01:12:33] So, thanks for facilitating the Q&A segment. Just a quick reminder that the written Q&A document will take several weeks. And it's the same subject matter experts that are on today's call

that will also be answering the questions from the ASTP/ONC Issue Tracking System. So if you need an immediate response, just a reminder, that is another mechanism to submit a question.

So this slide shows where the different follow-up pieces will be available following this webinar. So the recording links, the slides, and the transcripts will be available at the link displayed on this slide. And the eCQI Resource Center will also have links that go to all of these pieces. If you have questions about webinar operations or obtaining CE credit, you can submit them via email to tjcwebinarnotifications@ jointcommission.org. And for those of you that wish to attend any of the future webinars in the series, there's also a handout that includes the registration links to all of the future webinars. Next slide, please.

**Slide 52**

[01:13:46] So real quick, just a few words about the survey. We use your feedback to inform future content, determine the education gaps, and assess the quality of our educational programs. A QR code will be available on the next slide. You can use your mobile device to scan and access the survey. If you need to access the survey later, an automated email will also include the survey link. After you complete and submit your survey responses, you will be redirected to a page from which you can print or download a blank CE certificate. You will add your own name and credentials. In case you miss that opportunity to download, an automated email will also be sent to you that includes a link to the certificate. Next slide.

**Slide 53**

[01:14:32] All right, and we've now reached the end of the broadcast. We will leave this slide up for a few moments so anyone that wishes to can scan that survey QR code. Thank you so much to Moriah and Michael for presenting and also facilitating the Q&A today. Many thanks to the Mathematica team that was responding to all of the questions throughout the webinar in the Q&A widget and also to the Joint Commission team operations staff that supported this webinar. Finally, thanks to all of our participants in the audience today. This concludes our presentation, and we hope you have a great day. I will just leave this slide up for another few seconds so that those that wish to get that survey link can get to it. Thanks, everyone. Have a great day.