Outpatient Quality Reporting Support Team

eCQMs for the Hospital OQR and REH Quality Reporting Programs Presentation Transcript

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Karen VanBourgondien: Hi, everyone. Thanks for joining us today to review eCQMs for both the Hospital OQR and REH Quality Reporting Programs.

If you have any questions regarding the information presented today, please submit them into the QualityNet Q&A Tool. We have a direct link here on the slide, and we will also place the link in the chat box.

Today, we have two subject-matter experts. Gloriana Montealegre is a senior analyst with the Outpatient Measures Team, and she will be discussing the eCQMs for the Hospital OQR and REH [Quality Reporting] Programs. Danielle Leffler is with the Outpatient Quality Reporting Support Team, and she will be discussing the QRDA Category I section. I, Karen VanBourgondien, will be moderating. Towards the end of the presentation, we'll review program measures and deadlines.

We are going to be covering a lot of information today. If you have not yet downloaded the PowerPoint from QualityReportingCenter.com, you can download the PowerPoint by accessing the paperclip icon on your control panel. By clicking on that icon, it should allow you to download the PowerPoint.

For your convenience, we do have a list of acronyms which will be used throughout the presentation.

Without any further delay, let me hand things over to our first speaker, Gloriana Lopez Montealegre. Again, she is a senior research analyst, and she will be discussing the eCQM component today. Gloriana.

Gloriana Montealegre: Thank you, Karen. So, as Karen just mentioned, my name is Gloriana, and I'm here on behalf of the Outpatient Measures Support Team. I'll be talking about the eCQMs, or electronic Clinical Quality Measures, for the Hospital Outpatient Quality Reporting, or OQR, and the Rural Emergency Hospital, or REH, Quality Reporting Programs.

So, first I will provide a quick overview of eCQMs. So, eCQM data are pulled directly from a hospital or provider's electronic health record, or EHR, system instead of the manual chart abstraction. One thing to note is that EHRs must be certified to all available eCQMs in the measure set. So they must meet certain certification criteria. eCQM data are submitted via the Hospital Quality Reporting System using the Quality Reporting Document Architecture, or QRDA, Category I files by the annual submission deadline, which is usually May 15 of each year.

So, currently there are three outpatient eCQMs across the Hospital OQR and the REH Quality Reporting Programs. First, we have the Appropriate Treatment for ST-Segment Elevation Myocardial Infarction, or STEMI, Patients in the Emergency Department. This is an Hospital OQR measure. This is the first, and I think the longest standing, eCQM in the Hospital OQR Program. For the 2026 reporting period and onwards, it is mandatory to submit data for this eCQM. So, for the 2026 reporting period, hospitals must submit three self-selected quarters. Starting the next reporting period, so that is 2027 and onwards, hospitals must submit all four quarters of eCQM data. Next, we have the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography, or CT, In Adults, also known as ExRAD, or Excessive Radiation, eCQM. This is also a Hospital OQR measure, and data submission for this eCQM is completely voluntary. Finally, we have the newest eCQM, and this one is for both the Hospital OQR and the REH Quality Reporting Program. So, this is Emergency Care Access and Timeliness, or ECAT. For both programs, actually, reporting starts with the 2027 reporting period. For Hospital OQR, this will be voluntary. Starting with the 2028 reporting period and onwards, data submission will be mandatory. Again, this is for Hospital OQR. For the REH Quality Reporting Program, starting with the 2027 reporting period and onwards, this eCQM is optional. So that means that REHs must report either the ECAT eCQM or the Median Time for Discharge ED Patients chart-abstracted measure to meet the program requirements.

So, now I'm going to go over the specifications of each of these eCQMs, starting with the STEMI eCQM.

So, the STEMI eCQM evaluates the percentage of emergency department encounters for patients 18 years and older with a diagnosis of STEMI. So, that is the measure denominator, and it evaluates those encounters that receive appropriate treatment, which is defined as either thrombolytic therapy within 30 minutes of ED arrival, percutaneous coronary intervention, or PCI, within 90 minutes of ED arrival, or discharge to an acute care facility within 45 minutes of ED arrival. So, that is the numerator component of the eCQM. For the discharged to acute care facility, this must be represented with a discharge disposition of discharge of to an acute care facility. For this measure, an increased score indicates improvement. So it is measuring how many patients with STEMI are treated appropriately per the numerator.

So, this measure has several denominator exclusions, and they have different timing. So, documenting the start time, and for some of them the end time, but mostly the time that any of these conditions or procedures start, is very important to meet the denominator exclusion criteria. So, for example, a documented allergic reaction to thrombolytics during the ED encounter, a discharge disposition of patient expired in the ED, or left against medical advice are excluded. Active conditions at the start of the ED encounter, meaning that they start either before the start of the ED encounter or at the start, are excluded. So, some of these conditions could be hospice status, cerebral vascular lesion, dementia, pregnancy. One thing to note about pregnancy is that for this reporting period, so 2026, that is an exclusion, but this will be removed starting with the 2027 reporting period. Other conditions, for example, starting 24 hours or less before the start of or during the ED encounter, we have aortic dissection or ruptured aortic aneurysm, Takotsubo cardiomyopathy or syndrome, severe neurologic impairment, and also some procedures like mechanical circulatory assist device placement or intubation. So for these, you have to have a start time, again, of 24 hours or less before the start of the ED encounter, or they must start during the ED encounter to meet the exclusion criteria.

So, continuing with the denominator exclusions, we also have major surgery, again, starting 21 days or less before the start of or starting during the ED encounter, some diagnoses or treatments starting at the start of the ED encounter or within 90 days or less before the start. So, some of these are ischemic stroke and active oral anticoagulant therapy, also have intracranial or intraspinal surgery starting 90 days or less before the start of the ED encounter, finally, documentation of hospice services six months or less before the start of the ED encounter. Finally, for denominator exceptions, we have ED encounters where the patient receives thrombolytic therapy at another facility within 24 hours or less before the start of the ED encounter and either a documented reason for not administering thrombolytic therapy or for not performing a PCI. One thing to note about denominator exceptions is that the exceptions only remove or exclude the ED encounter from the denominator only when the numerator is not met. We'll look a little bit into how a denominator exclusion or denominator exception is different in the following slide.

So, this slide will show a little bit how the measure logic works and how we put together all these specifications to calculate the measure. So, the first step in calculating the measure is determining the initial population and, by extension, the denominator. So, the first question that the logic is seeking to answer is: Is the patient being treated for STEMI during the ED encounter? So, does the ED encounter address a STEMI diagnosis? If the answer is Yes, then the encounter is included in the denominator. Then we go to evaluate whether the ED encounter meet the exclusion criteria, which as I just went through, there are many exclusion criteria, so we will not go into those in detail. If the ED encounter does meet the exclusion criteria, then it is counted as a denominator exclusion. If the encounter does not meet any of the exclusion criteria, we proceed to evaluate the numerator. So, that means: Was PCI performed within 90 minutes or less of ED arrival, or was the thrombolytic administered within 30 minutes or less of ED arrival? Finally, was the patient discharged to an acute care hospital within 45 minutes or less of ED arrival? If the answer is Yes to any of these, then the ED encounter is counted in the measure numerator.

If the ED encounter does not meet any of these conditions, you will want to check whether the encounter meets any of the denominator exception criteria. So, the denominator exception criteria are: Did the patient receive thrombolytic therapy 24 hours or less before the start of the ED encounter? Is there a documented reason for not performing a PCI? Is there a documented reason for not administering thrombolytic therapy? One thing to note is that these documented reasons must be coded or recorded during the ED encounter to meet the criteria. So if the answer to any of these questions is Yes, then it meets the denominator exception criteria. If the answer is No, then the ED encounter doesn't meet either the numerator or the denominator exception criteria.

So, now we're going to go through some sample scenarios to illustrate all of this logic and see how each situation maps to each of the components of the measure. So, in the first scenario, we have a patient arriving at the ED at 1 p.m., and a STEMI was diagnosed at 1:10 p.m. The patient has a diagnosis of dementia with an onset date of July 26, 2025, and received PCI at 2:30 p.m. So, in this case, of course, the patient in the ED is an ED encounter with a STEMI diagnosis during the ED encounter. So, it is part of the denominator, and we see that there is a recorded diagnosis of dementia with an onset date of July 26, 2025, which occurs before the ED encounter or has a start date and time before the ED encounter, which meets the denominator exclusion criteria. So, then the encounter is going to be completely removed from the denominator in the measure calculation. Even though this patient received a PCI within the 90 minutes of ED arrival, we are not evaluating the numerator because it meets the denominator exclusion criteria. Now, for Scenario 2, again, we have patient arriving at 1 p.m., STEMI diagnosed at 1:10 p.m. The patient is taken to the cath lab at 1:30, and a PCI is documented as not indicated due to clear coronary. So, a PCI was not performed because there was no need to perform the PCI. The patient was admitted as inpatient, which also marks the end of the ED encounter at 2:45 p.m. So, going to the data elements, it meets the denominator criteria as the patient was in the ED and STEMI was diagnosed. It does not meet any of the denominator exclusion criteria.

We don't see it meeting either any of the numerator criteria. So, we don't see a PCI, there's no discharge to acute care facility within 45 minutes, or thrombolytic administered. So, because the numerator was not met, we check for the denominator exceptions. So, we have documentation that the PCI is not indicated, and this was documented during the ED encounter between 1 p.m. arrival and 2.45 p.m., the end or discharge of the ED encounter. So, because we have that documentation, it meets the denominator exception criteria, so the encounter is removed from the denominator in the measure calculation.

So, in Scenario 3, you have the same criterion of patient arriving at the ED at 1 p.m. and the STEMI was diagnosed at 1:10 p.m., so during the ED encounter. The patient does not consent to PCI at 1:20 p.m., and that refusal is documented at 1:25 p.m. Then, the patient instead receives a thrombolytic, given that they didn't consent to the PCI, at 1:30 p.m., and the ED encounter ends at 3:20 p.m. So, STEMI during the ED encounter meets the denominator criteria. There is no indication of this scenario meeting the denominator exclusion criteria, and, since the patient received a thrombolytic within 30 minutes or less, here 30 minutes of ED arrival, it does meet the numerator criteria. So, for this, we are not going to check the denominator exception. So, one thing to note here is that patient refusal could be a documented reason for not performing a PCI. So, in theory, it does meet the denominator exception criteria because it was recorded during the ED encounter, but, because we have this scenario meeting the numerator in another way, then we don't check for that. However, if the patient received the thrombolytic at, for example, 1:35 p.m., so that is, you know, more than 30 minutes from ED arrival, then we would actually check for the denominator exception, and this would be removed from the denominator. So, that is kind of one of the main difference between the exception and the exclusion. The exclusion will remove an encounter from the denominator without checking for the numerator. The exception will remove the encounter from the denominator only when the numerator is not met. Now, for the last scenario, we have a patient arriving at ED at 1 p.m. and STEMI was diagnosed at 1:40 p.m.

So, in this case, it could be that the STEMI showed up in the second or third EKG rather than the first one recorded early on. So, the patient is taken to the cath lab at 2 p.m. for a PCI. The balloon is inflated at 2:35 p.m., and the patient gets admitted at inpatient at 3 p.m. So, because the patient had the STEMI during the ED encounter, regardless of when it was diagnosed or identified, this encounter is included in the measure denominator. It does not meet any of the denominator exclusion criteria, so we evaluate the numerator. The balloon was inflated at 2:35, which is 95 minutes from ED arrival. So, it does not meet the numerator criteria, and we don't have any documentation of any of the denominator exceptions criteria. This scenario is included in the measure denominator, but it will not be counted in the numerator because it does not meet the timing.

So, we put these four scenarios together and added them into the measure score. So, the measure score is the numerator over the denominator, and we will be subtracting the exclusions and the exceptions from the denominator. From there, we calculate the final measure score. So, we have four scenarios, and all of them meet the denominator criteria. So, you'll see that there are four in the denominator. One of them meets one of the exclusion criteria. So, we subtract one from that four. We also have Scenario 2 that meets the denominator exception criteria. So, we subtract that encounter from there. So, we have at the end, at the bottom of the kind of equation, two ED encounters. Finally, only Scenario 3 met the numerator criteria. So, at the top, we have one. So, one over two equals a 50 percent measure score.

So, now I'll briefly touch on the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic CT in Adults measure, or the Excessive Radiation measure. So, because there was a dedicated expert-to-expert webinar covering the 2026 annual updates for this measure, and it was held on April 30, and it's available in the link shown in the slide, I will only be providing a high-level overview of these specifications. So, this expert-to-expert webinar offered a detailed discussion of the measure specifications, updates, and implementation considerations for both the inpatient and outpatient settings.

So, we recommend reviewing that webinar for more details on this. With that said, the excessive radiation eCQM evaluates the proportion of CT exams for adults 18 years or older that were not performed in an inpatient setting and that exceed exam-specific, evidence-based thresholds for radiation dose or image quality across 18 clinical categories defined by body region and clinical indication. So, this measure excludes CT exams of the dose and image quality category. For those, we suggest going to the eCQI Resource Center for more information on those clinical categories, but it excludes the full body category. For the numerator, it counts CT exams where the calculated CT size adjusted dose exceeds its respective category threshold or the calculated CT global noise exceeds its respective category threshold. So, it can be one or the other. For this measure, the calculated CT size adjusted dose reflects the total radiation dose risk-adjusted by patient size and ranges from XXS to XXL. The calculated CT global noise assesses the pixel data to determine image quality, ensuring that reducing radiation noise does not result in noisy images that may hinder diagnosis. So, for this measure, a decreased score indicates improvement.

Finally, I will be covering the ECAT measure specifications. So, the ECAT eCQM assesses the proportion of ED encounters, so all ED visits for patients who experience at least one emergency care access or timeliness gap. So, those emergency care access or timeliness gaps are evaluated in the numerator. So, these quality gaps could be Numerator 1: The patient was not placed or waited longer than 60 minutes after arrival to the ED to be placed in a treatment room or a dedicated treatment area that allows for audio-visual privacy during history taking and physical examination. So, this will be the time to a treatment room or treatment area with privacy. Numerator 2 is the patient left the ED without being evaluated by a physician, advanced practice nurse, or physician's assistants, which is indicated by a discharge disposition of Left Without Being Seen. Numerator 3 is the patient was boarded in the ED for longer than 240 minutes. In Numerator 4, the patient had a length of stay of longer than 480 minutes.

For ED lengths of stay, we are evaluating the time from ED arrival to the time of ED departure, where ED departure is the timestamp indicating when the patient physically left the ED. One thing to note is that, for Numerator 3 and 4, boarding for longer than 240 minutes or an ED length of 480 minutes, we do not evaluate ED encounters with ED observation stays. So, to clarify on ED encounters with ED observation stays, for Numerators 3 and four, it might be a little challenging to distinguish the nature of observation stay. So, for example, a patient was admitted for observation in the ED, and, for Numerator 4, the length of stay exceeds the 480 minutes. So, let's say the total length of stay was 600, but that was because they were in observation. That ED encounter will not be counted in the measure numerator. So, that is a difference for three or four and the same thing applies to boarding, and we will go into the definition of boarding in the next slide.

One thing to note about ECAT, again, this eCQM is both in the REH Quality Reporting and the Hospital OQR Programs. So, the REHQR [Program] measure differs slightly from the [Hospital] OQR [Program] specifications for Numerator 3 to reflect the fact that REHs do not have inpatient beds. So, specifically, the REHQR [Program] version of ECAT defines boarding as the time from the decision to transfer order. So, if a patient is being transferred to an inpatient hospital or acute care hospital, it is the time from decision to transfer order to the ED departure time. So, that is what we are defining as boarding for the REHQR [Program] version. Whereas for the Hospital OQR version, boarding is defined as the time from the decision to admit order to ED departure for patients that are admitted to the inpatient status. For the [Hospital] OQR [Program] version, a decision to admit can be captured using any of the following: an evaluation that results in a decision to admit, an order to admit to inpatient, an order for a bed assignment, the start of the inpatient admission, or the inpatient stay itself.

The ECAT eCQM stratifies measure results by age and mental health principal diagnosis.

So, there are four different stratifications which classify the measure results by again, the patient's age at the start of the ED encounter and whether or not they have a principal diagnosis that is part of the mental health diagnosis without substance use disorders value set or, you know, the list of codes that correspond to that. So, we have Pediatric with No Mental Health Diagnosis, for patients age less than 18 with no mental health diagnosis; Adults with No Mental Health Diagnosis, age 18 and older at start of the ED encounter without the principal diagnosis of mental health without substance use; and similarly, Pediatric with Mental Health Diagnosis; and Adult with Mental Health Diagnosis.

So, now we're going to go over some sample scenarios and the measure logic. We'll be specifically using the Hospital OQR version of the measure and how each of these numerator components, so we have four of them, are evaluated in the measure.

So, in the first scenario, we have a patient age 25 arriving at the ED at 1 p.m. The triage nurse takes vital signs and does a brief history in the ED hallway at 1:30 p.m. The ED encounter ends at 4 p.m. with a discharge disposition of Left Without Being Seen. So, looking at the four different numerator components, we have that this meets two of them. So, in this case, it meets the time to treatment room greater than 60 minutes or missing because, although the triage nurse takes vital signs and does a brief history within half an hour, this is done in an ED hallway. So, there is no room or treatment area dedicated that provides that privacy for history and physical examination. So, it meets numerator Component 1 and the patient Left Without Being Seen. So, that meets numerator Component 2. So, next scenario, we have a patient age 5 arriving with the parents at the ED at 5 p.m. The child is placed in an ED room at 5:15 p.m. The nurse practitioner, or NP, decides to admit the child for observation in the ED at 6.30 p.m. The child is then discharged and leaves the ED at 1:18 a.m. So, again, looking at the four different numerator components, since the child is placed in an ED room at 5:15, within 15 minutes of ED arrival, it does not meet numerator Component 1. They were seen. The child was seen by a nurse practitioner. So, Left Without Being Seen is not met.

Here it is important to note that, because the child was admitted for observation or there is an observation stay during the ED encounter, we do not check for Numerators 3 or 4. So, technically, the ED length of stay exceeds the 480 minutes. So, it's more than 8 hours, but, because it was an observation stay, we do not evaluate those or count them in the measure numerator.

So, Scenario 3, we have a patient age 65 arriving at the ED at 9 a.m. with dementia related psychosis. So, that would be the principal diagnosis of the ED encounter. The patient is placed in a treatment room at 9:45 a.m. The doctor signs an admit order at 10:30 a.m., but no inpatient beds are available. So, the ED encounter ends at 3:20 when the patient leaves the ED and is admitted as an inpatient. Looking at the four numerator criteria, the patient was placed in a treatment room that allows for audio-visual privacy within 45 minutes. So, at 9:45 a.m., which is less than 60 minutes, it does not meet Numerator 1. The patient was seen by a doctor, so Left Without Being Seen is not met. We see that the time from the decision to admit order, so the time the doctor signed the admit order, to the time that the patient leaves the ED is 380 minutes, which is greater than 240. So, it does meet the 240 minute threshold and meets Numerator 3. Finally, it doesn't meet Numerator 4 as the ED length of stay is less than 480 minutes.

Now, for the last scenario, we have a patient age 35 arriving at the ED at 11 a.m. and is placed in an ED room at 12:05 p.m. The patient is discharged and leaves the ED at 3 p.m. This one is a little more straightforward. For Numerator 1, the time to the treatment room is greater than 60 minutes. In this case, it's 65 minutes. So, it meets Numerator Component 1, and there's no discharge disposition of Left Without Being Seen. The patient was not admitted as inpatient, so boarding is not met. The length of stay is less than 480 minutes, so it doesn't meet Numerator 4.

So, putting all of this together, this table shows the four scenarios I just walked through and the four numerator criteria. So, one thing to note is that the numerator is ED encounters that meet at least one of the criteria for the numerator.

So, that means that each scenario will only be counted once, even though, for example, in Scenario 1, we see that two of the numerator criteria are met. So, when calculating the overall measure score, we only have numerator over denominator, as this measure does not have any exclusions or exceptions. So, there are three scenarios that meet at least one of the numerator criteria over the total of four scenarios, which leads to a score of 75 percent. In this case, a decreased score shows improvement. A score of 75 percent means that there's a lot of room for improvement in this scenario.

So, now we're going to go into the stratification of the measures. So, we have the overall score as in the previous slide, which is 75 percent, but each of these scenarios had a different combination of the age of the patient and whether or not they had a mental health diagnosis. So, when stratifying the measure score we have for these scenarios, there are three different stratifications. Pediatric With No Mental Health Diagnosis: For Scenario 2, we had a five-year-old with no mental health diagnosis that did not meet the numerator. So, we have a numerator of 0 and a denominator of 1. So, the measure score for the Pediatric With No Mental Health Diagnosis stratification would be 0 percent. Then, we have for Adult With No Mental Health Diagnosis for which we have Scenarios 1 and 4, and both of them met the numerator criteria. So, numerator is 2; the denominator is 2; and there's the measure score of 100 percent. Finally, Adult With Mental Health Diagnosis Scenario 3 was the 65-year-old with dementia related psychosis, which is included in the mental health diagnosis category, which also met the numerator criteria. So, it's a numerator of 1, the denominator of 1, and the measure score of 100 percent. So, hypothetically, in this scenario, a hospital could use this information to identify which populations that could use some improvement. So, in this case, one could say that this hospital is doing pretty well in terms of the pediatric population, specifically here with no mental health diagnosis, as they have a score of 0 percent. However, they could use more targeted improvement in the adult population, either, in this case, both with and without a mental health diagnosis. So, that is how the stratifications work for the ECAT measure.

So, to wrap this up, here are some eCQM resources. So, a very helpful page is the eCQI Resource Center and Hospital Outpatient eCQM page, which includes information on measure specifications, definitions, value sets, flow sheets, and more information on all of these elements. There's also the ONC Project Tracking System. So, if you have any questions about any of the measures, want to submit feedback, or have implementation questions, you may submit a ticket in the ONC Project Tracking System, JIRA. Also, search issues to see if there are other folks that have the same questions that you have. Finally, I want to refer folks to the eCQM Expert to Expert webinar series, which was mentioned earlier in the presentation, specifically the Annual Updates for Excessive Radiation eCQM webinar that took place on April 30 of this year, which, again, covers the measure specifications and implementation and changes to the 2026 specifications in more detail. Back to you, Karen. Thank you.

Karen VanBourgondien: Thank you, Gloriana. We really appreciate your information. We appreciate your time. So, now we're going to turn our attention to discussion on QRDA Category I and topics related to that. So, let me hand things over to our expert Danielle Leffler. Danielle.

Danielle Leffler: Thank you, Karen. CMS Quality Reporting Programs increasingly rely on electronically submitted clinical data to evaluate quality performance, reduce manual abstraction burden, and improve consistency in measure reporting across healthcare organizations. For hospitals participating in the [Hospital] OQR and REH Quality Reporting Programs, QRDA files are the standardized mechanism used to communicate eCQM data from the electronic health record environment to CMS. Throughout this part of the presentation, we will review how that information is structured, validated, and submitted, along with several practical considerations organizations should keep in mind when preparing files for reporting. As healthcare quality reporting has evolved, CMS has shifted from primarily manual chart abstraction toward more automated electronic reporting approaches.

That transition has created the need for standardized methods of exchanging clinical quality data between healthcare organizations and CMS. QRDA serves as that standardized reporting format. It allows quality data captured within certified electronic health record systems to be organized consistently so CMS systems can receive, validate, and process the information appropriately.

Hospitals are required to successfully submit QRDA Category I files for all episodes of care. In HQR, if you have five or fewer cases, you will need to select the appropriate number, 0 through 5. If your hospital has more than five cases, leave the dropdown blank and just enter your eCQM data. CMS published the 2026 CMS QRDA Category I Implementation Guide, or IG; Schematron; and Sample File for HQR and outlines requirements for eligible hospitals and critical access hospitals to report eCQMs. It's a companion to the 2026 CMS QRDA Category I Schematron and allows for computerized validation of QRDA documents against the IG requirements. Now that we have discussed the role of eCQMs, we can look more closely at QRDA itself and how it supports CMS quality reporting. CMS uses QRDA Category I files for patient-level eCQM reporting. Each file contains information about a patient encounter, the applicable quality measures, and the data elements needed for measure calculation. Schematron validation acts as a rules-based quality check against the CMS Implementation Guide. It evaluates whether required templates, identifiers, value sets, and structural elements are present and correctly formatted. This relationship between the EHR, the eCQM specifications, the QRDA Implementation Guide, and Schematron validation is critical. The EHR produces the data; the eCQM specifications define what data matters; the QRDA Implementation Guide defines how the data must be represented; and Schematron validation verifies that the final report file meets CMS expectations. Hospitals are generally expected to submit QRDA Category I files for all applicable episodes of care, unless a zero denominator declaration or other approved exception applies. For organizations looking for additional technical guidance, the eCQI Resource Center contains implementation guides, educational materials, and supporting documentation related to QRDA reporting.

The process begins with clinicians documenting patient care activities within the electronic health record. Accurate structured documentation at the point of care is essential because the quality reporting process depends entirely on the data captured in the EHR. Next, the EHR system or a supporting quality reporting application applies the eCQM logic to the patient data. During this step, the system determines which encounters qualify for specific measures and identifies the related outcomes or quality actions. Once that analysis is complete, the system generates QRDA Category I files according to the CMS QRDA Implementation Guide requirements. Before submission, organizations should perform technical validation of the files. This typically involves validating against the CMS Schematron rules and ensuring the XML structure meets the required specifications. Performing validation ahead of submission helps identify issues early and reduces the likelihood of rejected files or delayed processing. After validation, the QRDA files are usually packaged into ZIP files for upload through the Hospital Quality Reporting portal. CMS then performs additional validation once the files are received. If the files pass validation, CMS systems process the data and calculate measure results for the applicable quality reporting programs.

CMS expects one QRDA Category I file per patient, per quarter. Each file should contain all applicable measures and all qualifying episodes of care for that patient during the reporting period represented in the file. CMS also establishes technical constraints around file packaging and submission size. Individual QRDA files may not exceed 10 megabytes in size. In addition, files are submitted to CMS using ZIP packages through the Hospital Quality Reporting portal. Each ZIP file may contain up to 14,999 QRDA Category I files. Organizations may submit multiple ZIP files if needed. Another important detail is that ZIP submission batches may contain files from different reporting quarters. However, individual QRDA Category I files themselves may only contain data from a single reporting quarter. This distinction is important because reporting period consistency is part of CMS validation logic.

Organizations should also review the annual Hospital OQR Reference Checklist and current CMS implementation guidance each reporting cycle since submission expectations and technical specifications may evolve over time.

Data uniqueness is an important but sometimes overlooked aspect of QRDA reporting. Duplicate information within QRDA files can create several problems. At a minimum, duplicates may increase processing time. More importantly, duplicate clinical data may interfere with measure calculations and potentially produce inaccurate quality results. The HL7 QRDA guidance includes processing considerations that help organizations ensure data uniqueness within QRDA Category I submissions. In particular, hospitals should pay close attention to how encounter data and clinical data elements are represented within the file. Organizations should ensure that patient encounters are uniquely represented and that duplicate data entries are not unintentionally created during extraction, transformation, or file generation workflows. This becomes especially important when organizations use multiple data feeds, vendor systems, or data aggregation processes that may combine information from different sources. Careful validation and internal testing can help identify duplication issues before files are submitted to CMS.

The next several slides focus on some of the core technical and reporting requirements associated with QRDA Category I submissions. Although many organizations rely on vendors or technical teams to generate QRDA files, quality reporting staff should still understand the major concepts involved. A general understanding of these requirements can help organizations interpret validation errors, communicate effectively with vendors, and troubleshoot submission problems. QRDA Category I reporting is built upon a layered standards structure. At the foundation is the HL7 CDA QRDA Category I Release 1 STU 5.3 standard. This base standard defines the overall reporting framework and establishes the core structure used to represent patient-level quality reporting data. CMS then builds upon that foundation by publishing its own QRDA Category I Implementation Guide.

The CMS guide inherits the requirements of the HL7 standard while also introducing additional CMS-specific constraints and reporting expectations. This relationship is important because organizations must satisfy both the foundational HL7 requirements and the CMS-specific implementation requirements. In addition to the QRDA structural requirements, eCQM specifications define the measure populations, clinical logic, terminology standards, and value sets used to calculate performance.

Here, we also introduce the concept of succession management. Succession management refers to the process used when organizations need to replace previously submitted QRDA files with corrected versions. For example, a hospital may discover a documentation issue, coding problem, or file generation error after an earlier submission. Succession management is especially important for organizations that need to correct or resubmit QRDA files. Within the Hospital Quality Reporting system, file replacement is based on specific identifying elements rather than the internal QRDA document identifier alone. When CMS receives a newer accepted production file that matches the required identifying elements, the newer file replaces the previously submitted version. It is important to understand that the replacement file must contain the complete cumulative patient data for the reporting period. Organizations should not submit only the corrected portion of the file. In other words, the replacement file should represent the entire corrected record for that patient and reporting period. If one of the identifying elements is incorrect, the HQR system may not recognize the file as a replacement submission. In those situations, organizations may need to delete prior submissions manually before resubmitting corrected files. Understanding succession management rules can help prevent duplicate submissions, incomplete corrections, and unexpected measure calculation outcomes.

This slide identifies the five key elements CMS uses for succession management and file uniqueness. These elements work together to identify a specific QRDA submission within the Hospital Quality Reporting system. The first element is the CMS Certification Number, or CCN, which identifies the reporting facility.

The second is the CMS program name, which identifies the reporting program associated with the submission. The third is the EHR patient identifier or MRN. The fourth is the EHR submitter identifier. Finally, the reporting period specified within the reporting parameters section is also part of the uniqueness determination. Together, these five elements allow CMS systems to determine whether a newly submitted file should be treated as a new submission or as a replacement for a previously accepted file. Organizations should ensure these values are accurate and consistent across submissions, especially when resubmitting corrected files.

Template versioning is one of the most important technical concepts within QRDA reporting. QRDA files rely heavily on standardized CDA templates. When a template changes, a new version of that template is created by assigning a new extension date to the template identifier. This means that two templates may share the same template identifier root but differ in the extension value that identifies the specific version. Using the correct template versions is critical because CMS validation systems look for the exact versions required for the applicable reporting year. If a QRDA file uses outdated templates, CMS systems may ignore portions of the data or reject the submission entirely. This is why organizations and vendors must carefully review annual implementation guide updates and ensure their systems are generating the correct template versions for the current reporting cycle.

Here, we review a practical example of how template versioning works. For 2025 reporting, the QRDA Category I document template version required by CMS used the extension value dated February 1, 2022. That version remained valid through multiple reporting years because no changes requiring a new template version had been introduced. For 2026 reporting, however, CMS updated the administrative gender code requirement. Because the template requirements changed, the document template received a new version designation. The updated version retained the same template identifier root but introduced a new extension value dated March 1, 2025.

This example highlights an important concept: The template root identifies the general template, while the extension identifies the specific version of that template. Even small implementation guide updates may trigger template version changes. As a result, organizations should never assume that a previously accepted version will remain valid in future reporting periods. Annual review of implementation guide updates is essential for maintaining compliant QRDA submissions.

Here, you'll see several of the version-specific templates required for 2026 QRDA Category I reporting. These required templates represent foundational structural elements CMS expects to see within submitted files. If these required templates are missing or use incorrect extension values, the QRDA file may fail validation before CMS can process the clinical quality data. Although the object identifiers, or OIDs, shown on the slide may appear highly technical, the key point for most organizations is that both the template root and the associated extension date matter. CMS validation systems check for the exact required combinations. In practice, this means vendors and technical teams must ensure their QRDA generation logic is aligned with the current CMS implementation guide specifications. It is also important to remember that these are only the baseline required templates. Additional templates may be required depending on the patient data, clinical encounters, and measures included in the file.

CMS requires the use of eCQM Version Specific Measure Identifier to uniquely identify the measure version being reported. This requirement helps ensure that CMS systems apply the correct measure logic and specifications during processing. CMS also recommends avoiding inclusion of the eCQM version number within QRDA submissions because of known compatibility and data type mismatch issues between QRDA standards and Health Quality Measure Format, or HQMF, standards. The practical takeaway is that organizations should follow the CMS Implementation Guide guidance carefully and ensure only the required Version Specific Measure Identifiers are included.

Using incorrect identifiers or unsupported version formats may result in validation errors or unintended measure processing outcomes.

Value sets are another critical component of eCQM reporting. Value sets define the standardized clinical codes associated with measure logic. These may include diagnosis codes, procedure codes, encounter codes, medication codes, and other clinical terminology elements. In some situations, the value sets referenced within eCQM specifications may not align perfectly with broader QRDA template definitions. When that occurs, the value sets defined directly within the eCQM specifications take precedence. Another important consideration is that value set codes are case sensitive. CMS validation systems evaluate codes exactly as they appear within the official vocabulary resources and Value Set Authority Center, commonly called VSAC. Even differences in uppercase versus lowercase characters may cause validation failures. For this reason, organizations should ensure their systems use official value set references and maintain accurate code formatting throughout the QRDA generation process.

Time zone reporting may seem like a minor technical detail, but it plays an important role in eCQM calculation accuracy. Many quality measures depend on time comparisons or elapsed time calculations. For example, measures may evaluate how quickly a medication was administered, how long a patient remained in a specific status, or whether an intervention occurred within a required timeframe. Because healthcare organizations may operate across different time zones, CMS requires time zone information to be represented consistently within QRDA files. Incorrect or missing time zone information can affect measure calculations and potentially alter reporting outcomes. Organizations should review the implementation guide specifications carefully and confirm that timestamps generated within QRDA files include the required time zone formatting.

As we conclude, it is important to highlight several resources organizations can use for ongoing support and troubleshooting. The eCQI Resource Center is one of the primary sources for QRDA implementation guidance, educational materials, and eCQM reporting resources.

The National Library of Medicine's Value Set Authority Center, or VSAC, provides the official value sets used within eCQMs and hybrid measures. The ONC Project Tracking System can also be used to submit questions, report issues, or request clarification related to measure logic, specifications, and certification topics. Organizations should make use of these resources regularly, especially when preparing for new reporting years or investigating validation issues. Now, let me hand things back over to Karen. Karen?

Karen VanBourgondien: Thank you, Danielle. Great information. I appreciate your time as well. Before we close out today, let's review the eCQM measure deadlines for both Hospital OQR and REH Quality Reporting Programs.

So, let me just start with a quick review of the STEMI measure for the Hospital OQR Program. Gloriana did reference this earlier in the presentation, but when the STEMI measure was first adopted for mandatory reporting in the calendar year 2023 reporting period at that point, hospitals could submit any quarter in that calendar year. The following year, hospitals had to report one self-selected quarter, and it gradually increased in 2025. You had to report two self-selected quarters, and, in the current reporting period, 2026, hospitals must submit three self-selected quarters and submit that data by the submission deadline. Now, next year, calendar year 2027 reporting period, hospitals will have to submit all four quarters of data to meet program requirements. As a reminder, if you use the denominator declaration option, you have to fill that out for each quarter. It's not a one and done. So, you would have to complete that with every quarter of data.

So, here is the current reporting period for this STEMI measure. The reporting period has started in January, on January 1, and goes through December 31, 2026. The submission deadline is May 17, 2027. It's on the 17th instead of the 15th because the 15th falls on a weekend that year. That reporting period will be connected to the payment determination year of 2028.

Here, we see all the eCQMs for the Hospital OQR Program. This is looking at the calendar year 2027 reporting period. So, you have the STEMI measure and the Excessive Radiation dose measure, or the ExRAD, measure. The ExRAD measure, as Gloriana pointed out earlier, is voluntary. You can choose to report that or not. If you do not report the data, it will not affect your payment. The ECAT measure begins with voluntary reporting for hospitals, for the Hospital OQR Program, and mandatory reporting will begin the following year. The ECAT measure will replace the Left Without Being Seen and the OP-18 measure.

Now, for the REH Quality Reporting Program, you see the ECAT measure for the calendar year 2027 reporting period. That is when optional reporting begins. So, REHs can report the ECAT measure, or they can continue to report the OP-18 measure, the Median Time from ED Arrival to ED Departure for Discharged ED Patients measure. Either one is perfectly fine.

As always, we do have resources available for you. For details on the Hospital OQR and REH Quality Reporting Programs, you can reference the Successful Reporting guides for each of those programs on the QualityReportingCenter.com website. For a list of all measures and their deadlines, you can access that information on the QualityNet website. The direct links are here on the slide if you have a downloaded copy, or we'll put those links in the chat box as well.

In addition to the links and resources provided earlier, we have additional resources. Of course, our number is up at the top. If you have any issues with passwords for HQR or Security Official for HQR system, any sort of technical issues with reporting, you would want to get up with CCSQ, and we have their phone number and e-mail here.

Kindly take our post-event survey. We really do appreciate your feedback. We want to know your thoughts on the presentation and even what you would like to see presentations on in the future. So that's all for today. Have a great day.