Pioneers in Quality Expert to Expert Series: 2025 Reporting Year Annual Updates for VTE-1 and VTE-2

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Welcome to our On Demand Expert to Expert Webinar Annual Updates for VTE-1 and VTE-2 eCQMs for 2025 implementation. I'm Susan Funk, an Associate Project director with The Joint Commission's Engagement on Quality Improvement Team, and today I'll be serving as this webinar's facilitator. Thank you for joining us.

Before we start, just a few comments about today's webinar platform. Use your computer speakers or 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. Refresh your screen or rejoin the event if this occurs. 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 on the left side of your screen. A panel will open for you to type your question and submit. The slides are designed to follow Americans with Disability Act rules.

Before we get started covering today's electronic clinical quality measure content, we do want to explain that this webinar is highly technical and requires a baseline understanding of eCQM logic and concepts. Participant feedback from previous webinars indicated that the content is often too technical for individuals that are new to eCQMs to comprehend. We recommend that anyone new to eCQMs visit the eCQI Resource Center at the hyperlink provided on this slide. You will find a collection of resources to help you get started with eCQMs.

The slides are available now within the viewing platform. On the left side of your navigation pane, select the document icon. A new pop-up 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 be posted at the link at the bottom of this screen within a few weeks following this broadcast. One last note about the slides. The links are not clickable on screen within this viewing platform. However, if you download the slides, all the links provided within the webinar are functional.

This webinar is approved for one continuing education credit or qualifying education hour for the following organizations, the Accreditation Council for Continuing Medical Education, American Nurses Credentialing Center, American College of Healthcare Executives, and the California Board of Registered Nursing. Participants receive a certificate after completing the webinar and survey. Although we've listed the organizations that accredit Joint Commission to provide CEEs, many other professional societies and state boards that are not listed accept credit or will match credit from The Joint Commission's educational courses.

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Just a few words about how to navigate to the CE survey and obtain your certificate. You will receive the CE survey link in two ways. On the last slide, we've included a QR code that is accessible via most mobile devices. If you miss the QR code, you will also receive an automated email within 24 hours that includes the survey link. After you access and submit the online survey, you'll be redirected to a link from which you can print or download and save a CE certificate. In case you miss the popup screen with the certificate, an automated email will also deliver the certificate link. Complete the certificate by adding your own name and credentials.

The learning objectives for this session are locate measure specifications, value sets, Measure Flow Diagrams, and technical release notes on the eCQI Resource Center; facilitate your organization's implementation of the VTE-1 and VTE-2 eCQM annual updates for the 2025 calendar year; and utilize answers regarding common issues and questions regarding the VTE-1 and VTE-2 eCQMs to inform 2025 eCQM use and implementation.

This webinar does not cover these topics, basic eCQM concepts; topics related to chart abstracted measures; process improvement efforts related to this measure; and eCQM validation.

All staff and speakers have disclosed that they do not have any conflicts of interest. For example, financial arrangements, affiliations with, or ownership of organizations that would provide grants, consultancies, honoraria, travel, or other benefits impacting the presentation of today's webinar content.

Myself, Susan Funk, Raquel Belarmino, Melissa Breth, Yanyan Hu, Karen Kolbusz and Susan Yendro.

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The agenda for today's discussion follows. Highlight how to access eCQM resources on the eCQI Resource Center. Review the Measure Flow and algorithm. Review the VTE-1 and VTE-2 eCQM annual updates for Reporting Year 2025. And review Frequently Asked Questions. And then we will have a live Facilitated Audience Q&A Segment during which we'll respond to your questions submitted throughout the webinar.

The team will now highlight some of the resources available on the CMS eCQI Resource Center. The eCQI Resource Center provides a centralized location for news, information, tools and standards related to eCQMs. The majority of the tools and resources referenced within the eCQI Resource Center are openly available for stakeholder use and provide a foundation for the development, testing, certification, implementation, reporting, and continuous evaluation of eCQMs. Raquel, whenever you're ready, please begin your part of the presentation.

Thank you, Susan.

Okay. Hello, everyone, I am Raquel Belarmino, Associate Project Director for Clinical Quality Informatics. For the measure specifications and other helpful documents, navigate to the eCQI Resource Center website at https://ecqi.healthit.gov. Click on the second orange rectangle labeled Eligible Hospital / Critical Access Hospital eCQMs, which leads to a new webpage where you can download specifications or click on the hyperlink title of the desired measure and access and readily view the specifications and data elements.

Available documents include HTML version of the Human Readable measure specifications, value sets, data elements, the eCQM flow, technical release notes of all changes for this year and even link out to view JIRA tickets submitted for the selected measure. The eCQM flow document depicts the process flow diagrams that some may refer to as algorithms.

They walk through the steps to take to calculate an eCQM. Value sets links out to the Value Set Authority Center, VSAC, where one will find all the terms and associated codes continued within each value set. Note that a login is required but anyone can request a UMLS account and it's free. For more details, view the eCQI Resource Center navigation video short. I now turn it over to Melissa to provide some background information.

Hello, this is Melissa Breth, Associate Project Director for Clinical Quality Informatics. The VTE measure set consists of two measures, VTE-1 and VTE-2. We will provide some background information for VTE-1, Venous Thromboembolism Prophylaxis and VTE-2, Intensive Care Unit Venous Thromboembolism Prophylaxis.

Before we get into the technical details, we want to briefly review the clinical rationale for the VTE measures. VTE is an umbrella term that refers to blood clots that can develop in the pulmonary artery or deep proximal leg vein. Most VTE are related to recent hospitalization or surgery. Immobilization following these events increases the risk of developing a DVT or PE. ICU admission is particularly significant risk factor for not only due to immobilization but other comorbidities found in this patient population.

VTE is a leading cause of preventable hospital death in the United States and a top patient safety priority. Sudden death is often the first symptom of PE, even before the diagnosis is suspected.

It is estimated that up to 70% of hospital-acquired VTE are preventable though prophylactic interventions such as use of anticoagulants or mechanical compression devices. Yet many hospitalized patients do not receive these measures.

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Clinical practice guidelines from the American College of Chest Physicians, American Society of Hematology and other professional groups recommend VTE prophylaxis. For most hospitalized patients. The intent of VTE-1 and VTE-2 measures is VTE prevention through the promotion of anticoagulant medications or mechanical prophylaxis such as sequential compression devices or compression stockings administered soon after the patient's admission to the hospital. Patients who receive pharmacological or mechanical VTE prophylaxis are included in the Numerator population. Also included in the Numerator are patients with a reason why VTE prophylaxis was not given and patients not at risk or low risk of developing VTE during the hospitalization. 2022 national averages for all hospitals in the CMS dataset that reported 25 or more cases were at 82.65% for VTE-1 and 93.88% for VTE-2. I now turn the presentation over to Raquel who will present the technical changes.

Thank you, Melissa. Now we will summarize the measure changes that impact both VTE-1 and VTE-2 for 2025. Please note that throughout this presentation that the star in a circle icon located on the left side of the slide will denote new content and underlying text, while stricken text denotes removed content. References were updated to be in a required standard format. The value set payer name is renamed to payer type globally based on recommended value set naming convention.

In addition, the Length of Stay less than or equal to 120 days is no longer a criteria for inpatient population. This was removed from the narrative and from the Global.Inpatient Encounter definition to align with global common library update. One global change for 2025 reporting year is that we renamed all libraries by adding QDM to the library names to specifically distinguish libraries use for Quality Data Model, QDM.

Another technical major change is we remove the time function TJC.Truncate Time from the TJC Overall Library for simplicity. With the TJC.Truncate Time function removal, we updated TJC.CalendarDayOfOrDayAfter function by replacing the Truncate Time with date from and replacing 2 day open parentheses with 1 day with closed bracket so that the logic expression is more aligned with function name as DayOfOrDayAfter. Please note that this content change does not impact function outcome.

For VTE-1 Denominator Exclusion, TJC Truncate Time removal also impacts the definition of Encounter with ICU Location Stay 1 Day or More, where an alternative way is used to get the same result per measure intent. We will discuss this more in detail in a later VTE-1 presentation slide. We updated VTE.FromDayOfStartOfHospitalization ToDayAfterAdmission function by replacing the Truncate Time with date from and replacing 2 day with open parentheses with 1 day with closed bracket. This function is used for VTE-1.

Please note the VTE Library store's definition and functions which are used by both VTE-1 and VTE-2. Again, this content change does not impact function outcome. For VTE-2, we updated VTE.FromDayOf StartOfHospitalization ToDayAfterAdmission function, with the same approach as we discussed with VTE-1. Again, this content change does not impact function outcome.

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Now we will cover the measure populations in detail, contrasting VTE-1 and VTE-2 as we go. The Initial Population is the same for VTE-1 and VTE-2, that is inpatient hospitalizations for patients age greater or equal to 18 years of age discharged from hospital inpatient acute care without a diagnosis of Venous Thromboembolism, VTE, or obstetrical conditions that ends during the measurement period. There are no changes to the measure populations this year. For VTE-1, the Denominator is identical to the Initial Population. VTE-2's Denominator is the same as VTE-1 with one additional criteria, patients who were directly admitted or transferred to ICU during the hospitalization. On the next three slides, we will call out the differences between VTE-1 and VTE-2.

Next, let us discuss the Denominator Exclusions for VTE-1 and VTE-2. For VTE-1, the Denominator exclusion is inpatient hospitalizations for patients with any of the following conditions. Length of Stay less than two days. Transferred to ICU the day of or the day after hospital admission with ICU Length of Stay greater than or equal to a one day. Principle diagnosis of mental disorders or stroke. Principle procedure of Surgical Care Improvement Project, SCIP, VTE selected surgeries. Comfort measures documented anytime between the day of arrival and the day after hospital admission. And comfort measures documented by the day after surgery end date for surgeries that end the day of or the day after hospital admission. For VTE-2, the Denominator Exclusions are similar to VTE-1 with a few differences. Length of Stay less than two days is an exclusion, same as VTE-1. Transferred to the ICU the day of or day after hospital admission with ICU Length of Stay greater or equal to one day, and principal diagnosis of mental disorders or stroke are not exclusions for VTE-2. SCIP VTE selected surgeries must end the day of or day after ICU admission or transfer. Comfort measures documented anytime between the day of arrival and the day after ICU admission or transfer. And comfort measures documented by the day after surgery end date for surgeries that end the day of or the day after ICU admission or transfer.

Next, let us review the Numerator for VTE-1 and VTE-2. The Numerator for VTE-1 is inpatient hospitalizations for patients who receive VTE prophylaxis between the day of arrival and the day after hospital admission, or the day of or the day after surgery end date for surgeries that end the day of or the day after hospital admission. Inpatient hospitalizations for patients who have documentation of a reason why no VTE prophylaxis was given between the day of arrival and the day after hospital admission, or the day of or the day after surgery end date for surgeries that end the day of or the day after hospital admission. The VTE-2 Numerator is similar except the timing of the prophylaxis and a reason why no prophylaxis was given. VTE-2 uses the ICU admission as the benchmark as opposed to the hospital admission for VTE-1.

Next, let us discuss Denominator Exceptions. VTE-1 does not have a Denominator Exception. VTE-2 has one Denominator Exception, which is ICU Length of Stay less than one day. Now we will review the specifics of VTE-1 starting with the Measure Flow Diagram. The Measure Flows provide a high level overview of the algorithm flows and can be found in the eCQI Resource Center, as mentioned on the beginning of this webinar. Both VTE-1 and VTE-2 share the same Initial Population.

The main definition is Encounter with Age Range and without VTE Diagnosis or Obstetrical Conditions. Three conditions must be met to qualify for this definition. An Inpatient Encounter must be present without VTE Diagnosis or Obstetrical Conditions. The patient must be greater or equal to 18. If the criteria is met, the patient is in the Initial Population and processing continues. If not, the patient is not in the Initial Population and processing ends.

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Here's the VTE-1 Denominator of Measure Flow. The Denominator is equal to the Initial Population, which means that Encounter satisfying Initial Population will also meet the VTE-1 Denominator. Note the notation in the small diamond. We will refer back to this when we go to the sample calculation.

There are six criteria included in the VTE-1 Denominator Exclusions. An Encounter satisfying any one of them will exclude the patient from the Denominator population.

The first is if there is an Encounter with the Length of Stay less than two days.

Second is if an Encounter is with ICU Location Stay greater or equal to one day.

Third criterion is if there is an Encounter with Principal Diagnosis of Mental Disorder or Stroke. Please note the b1, b2, and b3 in the small diamonds. This will be used later in the sample calculation.

Fourth criterion is if there is an Encounter with Principal Procedure of SCIP VTE selected surgery.

Fifth criterion is if there is an Encounter with Intervention Comfort Measures From Day of Start of Hospitalization to Day After Admission.

Six criterion is if there is an Encounter with Intervention Comfort Measures on Day of or Day After Procedure.

If any of the criteria is met, the patient meets the Denominator Exclusion. If not met, the patient continues on through the algorithm to be considered if the Numerator is met. Again, note the b4, b5 and b6 in the small diamonds to be used later in the sample calculation.

There are two main category conditions in the VTE-1 Numerator. The first category is patient who received VTE prophylaxis and the second category is patients who have documented reason why no VTE prophylaxis was given. Under the first category, either of the two conditions will suffice. Encounter with VTE Prophylaxis Received From Day of Start of Hospitalization to Day After Admission or Procedure; or Encounter with Medication Oral Factor Xa Inhibitor Administered on Day of or Day After Admission or Procedure with either Prior Present Diagnosis of Atrial Fibrillation or Prior Diagnosis of VTE, or with Prior or Present Procedure of Hip or Knee Replacement Surgery. Under the second category, any of the three conditions are considered. Encounter with Low Risk for VTE or Anticoagulant Administered; or No VTE Prophylaxis Due to Medical Reason; or with No VTE Prophylaxis Due to Patient Refusal.

If any of these criteria are met, the patient is in the Numerator. If not met, the patient is not in the Numerator. Again, note the c1 through c5 in the small diamonds to be used later in the sample calculation. On the bottom page of the Measure Flow, a sample calculation for the performance rate is available.

Now that the Numerator, Denominator, and Denominator Exclusions are defined, we can plug the quantities in the calculation formula. The Numerator is divided by the Denominator minus the Denominator Exclusions. Here you see the diamond notations referenced from the previous slides.

Now let's examine the logic in detail. The main Initial Population definition is Encounter with Age Range and without VTE Diagnosis or Obstetrical Conditions, which is stored in the VTE Library as evidenced by the prefix VTE in front of the definition name. And this definition looks for an Inpatient Encounter that does not have an EncounterDiagnoses of Obstetrical or Pregnancy Related Conditions, VTE or Obstetrics VTE, and patient age is 18 year or older. There is no change for those two definitions this year except for the update to the Global Inpatient Encounter definition as we mentioned earlier. The Global.InpatientEncounter looks for Inpatient Encounters with the Encounter period end during the measurement period.

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Next, let's discuss a Frequently Asked Question related to the logic that we just presented.

"Does a prior history of DVT and/or Pulmonary Embolism exclude the patient from the Initial Population of VTE-1 and VTE-2?"

The answer is, there is no exclusion for patients with a history of DVT or PE. In fact, past history of DVT or PE increases the risk for developing VTE during the hospitalization and even more reason to make sure that VTE prophylaxis is administered timely.

Next, let's discuss the Denominator for VTE-1. The Denominator reads, "Initial Population." Because the Denominator does not change from the Initial Population, we can simply call in Initial Population as the definition. We just covered the Initial Population previously so we will not go into further detail.

Moving on to the Denominator Exclusions, the union operator allows for any of these six conditions to meet the Denominator Exclusions. No changes have been made to this definition for the 2025 reporting year. We will review each condition more in detail on the next slides.

Okay, the first exclusion is Encounter Less Than 2 Days. We use Encounter with Age Range and without VTE Diagnosis or Obstetrical Conditions as a QualifyingEncounter that moves through our measure algorithm. The logic will exclude patients with Length of Stay less than two days. The second exclusion is Encounter with ICU Location Stay 1 Day or More.

This logic is looking for a QualifyingEncounter that has an ICU stay greater or equal to one day where the ICU Location starts the day of or day after Encounter starts. As noted, this logic is updated due to the removal of TJC.Truncate Time function. Instead, we use two timing conditions to express the same intent.

Please note the TJC.CalendarDayOfOrDayAfter function is used in this condition. This was updated to the removal of the TJC Truncate Time and replaced it with date from and replaced two day open parentheses with one day with closed brackets as mentioned earlier on this presentation. So now the logic uses date from to capture the day of start datetime and the one day after the day of start datetime.

The third exclusion is Encounter with Principal Diagnosis of Mental Disorders or Stroke. We use the EncounterDiagnoses attributes of rank and code to identify a principal diagnosis of Mental Health Diagnoses or Hemorrhagic Stroke or Ischemic Stroke.

Moving to the fourth exclusion, Encounter with Principle Procedure of SCIP VTE Selected Surgery. SCIP refers to Surgical Care Improvement Project, which is a discontinued measure set.

This logic excludes any Principal Procedure defined as a SCIP VTE Selected Surgery that occurred during the Encounter and we use Global.NormalizeInterval function to access whichever timing element is available in the patient data submission file for the time comparison. The SCIP VTE Selected Surgery definition that is called, simply collects patients with procedures in any of these value sets listed.

The fifth exclusion is Encounter Intervention Comfort Measures From Day of Start of Hospitalization To Day After Admission. The QualifyingEncounter is combined with the Intervention Comfort Measures definition. This definition looks for the Intervention Order and the Intervention Performed data types with a code in the Comfort Measures value set. The Coalesce logic looks complicated, but basically Coalesce and Global.NormalizeInterval ensure that the available data is used in a consistent manner. First, Global.NormalizeInterval looks for a relevantDatetime or a Period and creates an interval from that. The start of this interval as well as the authorDatetime is then used by the Coalesce function.

Note that Coalesce chooses the first not null value that it finds. If Global.NormalizeInterval returns a null because both relevantDatetime and Period start were null, the Coalesce would select authorDatetime.

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Please see the resources slide at the end of this presentation for links to excellent video shorts on the Coalesce and NormalizeInterval functions. Please note the function VTE.FromDayOfStartOfHospitalization ToDayAfterAdmission is called out as a qualifying timeframe in this logic. As mentioned earlier, we made an update to this function due to the TJC TruncateTime removal by replacing it with a date from and replacing two day open parentheses with one day with open bracket. Again, this content change does not impact function outcome. In summary, the fifth exclusion will check if Comfort Measures were ordered or performed during day of arrival date to the day after hospital admission.

The last Exclusion is Encounter Intervention Comfort Measures on Day of or Day After Procedure. Starting with the QualifyingEncounter, the logic looks for any Procedure with a code in the value set indicative of General or Neuroaxial Anesthesia. Next, we see the same definition we covered on a previous slide, Intervention Comfort Measures where the surgical procedure ends the day after the start of the QualifyingEncounter and Comfort Measures are performed or documented by the day after surgery end date. As mentioned earlier, TJC CalendarDayOfOrDayAfter function was updated this year due to the removal of the Truncate Time function.

Moving on to the Numerator, the union operator allows for any one of these conditions to meet the VTE-1 Numerator. The first part of the Numerator focuses on inpatient hospitalizations for patients who received VTE Prophylaxis, shown as condition one and two. Conditions three, four, and five are the second part of the Numerator, where the logic is looking for reasons why a patient did not receive VTE Prophylaxis. Both need to be within the required timing criteria. Let's review each statement one at a time.

Let's review the first condition. Encounter with VTE prophylaxis Received From Day of Start of Hospitalization To Day After Admission or Procedure. In this definition, the union operator is to include two qualifying timeframes for VTEProphylaxis. The first timeframe is prophylaxis was received between the day of arrival and the day after hospital admission.

The timeframe is in the red box. The second qualifying timeframe is prophylaxis was received the day of or the day after surgery end date for surgeries that end the day of or the day after hospital admission. Notice the definition Pharmacological or Mechanical VTE Prophylaxis Received is used in this logic. We will discuss this more in detail on the next slide. In summary, the definition is looking for Pharmacological or Mechanical VTE Prophylaxis given any time from day of start of hospitalization to the day after admission or starts during the day of or the day after the end of the procedure and that the procedure ends one calendar day at the start of the encounter.

Let's review the definition Pharmacological or Mechanical VTE Prophylaxis Received which the Numerator definition has called. It includes all qualifying medications administered and mechanical devices applied for VTE Prophylaxis. There is no change for 2025 reporting year.

Now I believe we have a Frequently Asked Question regarding the logic for the previous slide.

Yes, the question is, "Why apixaban is not listed in the value set as a medication for VTE prophylaxis?"

At this time, there is no approved indication to use apixaban for Venous Thromboembolism, VTE prophylaxis, and treatment with an exception of hip/knee replacement surgery. We continuously moderate FDA approved indications for medications to determine which ones are appropriate for inclusion in the value set. Once apixaban is approved, we will add it to the list. If the FDA approved indications for apixaban should be changed in the future to include a VTE prophylaxis indication for all hospitalized medical and surgical patients, then we will update the measure specifications.

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The next condition is Medication Oral Factor Xa Inhibitor Administered on Day of or Day After Admission or Procedure. In this definition, the union operator includes two qualifying timeframes for Oral Factor Xa Inhibitor Administered.

The first part of the union is to look for Oral Factor Xa Inhibitor medication was administered on the day of or day after start of encounter. The second part of the union is to look for the Oral Factor Xa Inhibitor medication was administered on the day of or day after a procedure that ends day of or day after start of an encounter.

Next, we will evaluate for patients with a history of atrial fibrillation or flutter. Note that we use the diagnosis data type to capture history of these diagnosis that may be present prior to admission or a current diagnosis of atrial fibrillation or flutter or a history of VTE. Last, we are evaluating if a hip or knee replacement surgery was performed on or before the end of the encounter.

A Frequently Asked Question regarding the logic from the previous slide, "Patients with a hip/knee replacement surgeries are included in the VTE-1 and VTE-2 Numerator but are excluded from the VTE-1 and VTE-2 Denominator. Is this possible?"

The answer is a patient with a principal procedure of hip/knee replacement surgery will be excluded from the measure Denominator. If the hip/knee surgery is not a principal procedure, the patient will be included in the Denominator and will continue to the Numerator for further evaluation.

Moving into the third Numerator condition, we transition the focus to patients who have a documented reason for no VTE prophylaxis. This definition of Low Risk for VTE or Anticoagulant Administered unions two definitions using two timing conditions. Low risk for VTE or Anticoagulant Administered From Day of Start of Hospitalization To Day After Admission and Low Risk for VTE or Anticoagulant Administered Day of or day After Procedure.

Let's start with the first definition, a Low Risk for VTE or Anticoagulant Administered from Day of Start of Hospitalization To Day After Admission. We will review the Low Risk Indicator For VTE definition in greater detail on the next slide where you will see where the variable LowRiskDatetime is originating from.

In the definition Low Risk Indicator For VTE, the logic is evaluating if the patient is at low risk for VTE. Based on an assessment, the LowRiskDatetime variable is used as a timestamp placeholder to represent the Datetime and assessment was performed that indicates the patient is a low risk for VTE. Next, the logic evaluates if the patient is low risk based on an INRLab result greater than three. Here, the LowRiskDatetime represents the INRLab resultDatetime. Lastly, the logic evaluates if the patient is low risk if the patient is currently on an anticoagulant for VTE. Here, the LowRiskDatetime represents an AnticoagulantMedication administration Datetime. The logic allows the timestamp from any of the three options to fill in the LowRiskDatetime variable to meet the condition. No changes were made for this year.

Next, we look at the second definition in the Encounter with Low Risk for VTE or Anticoagulant Administered definition. This definition uses a low risk indicator for VTE that we just reviewed on the previous slide and applies it if a procedure was performed the day of or a day after the start of the encounter.

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Let's take a minute here to discuss a Frequently Asked Question. Is a specific- Here's a popular- Oh, sorry. Here's a popular question,

"Is a specific VTE risk assessment tool required to document low risk?"

Good question, Melissa. There are several externally validated risk assessment models, RAMs, available for us for use but no requirement to use a specific tool. Use of an internally

developed tool is also acceptable. Note that scoring methodologies vary depending on the tool selected. Documentation that the patient is low risk or not at risk for developing VTE is needed to include the case in the Numerator.

Moving to the fourth Numerator condition, Encounter with No VTE Prophylaxis Due to Medical Reason. A clinician needs to document a medical reason for why Pharmacological and Mechanical VTE Prophylaxis was not done, so we use intersect to satisfy both conditions to pass the Numerator. The first clause looks for the timing from the Day of Start of Hospitalization To Day After Admission. The second clause looks at the timing of Day of or Day After Procedure. If either timing constraint is met, the Numerator will be satisfied.

Let's discuss the Pharmacological VTE Prophylaxis. The logic is looking for a medical reason why any of the listed medications was not given as ordered. We use the negation Rationale attribute which looks for a medical reason why VTE Prophylaxis was not done. We use the authorDatetime attribute so the documentation must occur during FromDayOfStartOfHospitalization ToDayAfterAdmission.

Looking at the No VTE Prophylaxis Medication Administered or Ordered definition, the logic evaluates if any of these medications were not administered or ordered.

Now let's talk about the Mechanical VTE Prophylaxis. The logic is looking for a medical reason why any of the mechanical devices were not applied or ordered from the day of start of hospitalization to day after admission. No changes was made for this year.

The definition of No Mechanical VTE Prophylaxis Performed or Ordered is checking that the three Mechanical VTE Prophylaxis devices are not applied or not ordered.

Moving to the next set of definitions, we continue to use the same medications and device not done concept. However, this has to be documented on the day of or the day after procedure and that the procedure must end one day after hospital admission.

Moving to the definition of No Mechanical VTE Prophylaxis Due to Medical Reason on the Day of or Day After Procedure, the definition is the same as the previous medical reason logic. Again, no changes were made for this year.

The last Numerator condition is No VTE Prophylaxis Due to Patient Refusal. Just like the medical reason, this looks for patient refusal as a reason for No VTE Prophylaxis. The same two timing conditions are repeated From Day of Start of Hospitalization To Day After Admission and Day of or Day After Procedure. For definition No VTE Prophylaxis Due to Patient Refusal from Day of Start of Hospitalization To Day After Admission, no changes were made for 2025 reporting year. Unlike Medical Reasons for No Mechanical and Pharmacological VTE Prophylaxis, the Patient Refusal logic only evaluates for either

Medication or Mechanical Prophylaxis to have not been done due to patient refusal to meet the Numerator.

For definition No VTE Prophylaxis Due to Patient Refusal On Day of or Day After Procedure, no changes were made for the 2025 reporting year. We have completed our review for the VTE-1 measure.

Now we will transition to logic unique to VTE-2. We will first start with the Measure Flow Diagram. Starting with the Measure Flow Diagram, both VTE-1 and VTE-2 share the same Initial Population which we have already covered. We will move along to the Denominator.

The Denominator population condition is encountered with ICU Location. If this criteria is met, follow the algorithm to YES and this meets the Denominator and the flow continues the next page. If criteria is not met, processing ends.

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There are four criteria included in the VTE Denominator Exclusions. An encounter satisfying any one of them will exclude the case from the Denominator population. The first is if there is an encounter with an overall Length of Stay less than two days. Second is if an Encounter with First ICU Stay with Principled Procedure of SCIP VTE Selected Surgery. Note the b1 and b2 in the small diamonds to be used later in the sample calculation.

The third criterion is if there is an Encounter with Intervention Comfort Measures From Day Of Start of hospitalization To Day After First ICU Stay. Fourth criterion is if there is an Encounter with Intervention Comfort Measures on Day of or Day After Procedure. If any of the criteria is met, the patient meets the Denominator exclusion. If not met, the patient continues on through the algorithm to be considered if the Numerator is met. Again, note the b3 and b4, the small diamonds to be used later in the sample calculation.

Similar to VTE-1, there are two main category conditions in the VTE-2 Numerator. One is patient who received VTE prophylaxis and another is patients who have a documented reason why no VTE prophylaxis was given. Under the first category, any of the two conditions are considered for satisfaction. One is Encounter with VTE Prophylaxis Received Day of or Day After First ICU Stay or Procedure; or Encounter with Medication Oral Factor Xa Inhibitor Administered on Day of or Day After First ICU Stay or Procedure with either Prior/Present Diagnosis of Atrial Fibrillation or Prior Diagnosis of VTE, or With Prior or Present Procedure of Hip or Knee Replacement Surgery.

Under the second documentation category, any of the three conditions are considered. Encounter with Low Risk for VTE or Anticoagulant Administered; or No VTE Prophylaxis Due to Medical Reason; or with no VTE Prophylaxis Due to Patient Refusal. If any of the criteria is met, the patient is in the Numerator. If not met, the patient continues on through the algorithm to be considered if the Denominator Exception is met. Note the c1 through c5 in the small diamonds to be used later in the sample calculation.

The Denominator Exception condition is an Encounter with Intensive Care Unit Length of Stay lost in one day. If this criteria is met, follow the algorithm to YES and the patient will meet the Denominator Exception to be excluded from the measure. If not, the patient is not in the Denominator Exceptions. Note the d in the small diamond to be used later in the sample calculation. On the bottom of the page of the Measure Flow, a sample calculation for the performance rate is available.

Now that the Numerator, Denominator and Denominator Exclusions are defined, we can plug the quantities into the calculation formula. The Numerator is divided by the Denominator minus the Denominator Exclusions minus the Denominator Exceptions. Here you see the diamond notations referenced from the previous slides.

We have completed review of the Measure Flow. Let us discuss the measure logic. As mentioned earlier, both VTE and VTE-2 measure share the same Initial Population.

We will move along to the Denominator. For VTE-2 and the VTE-1, Denominator is refined to include only direct admits to the IC or transfers to the ICU anytime during the hospital stay. So, we start with the QualifyingEncounter from VTE-1 and apply the attributes of facility. Locations in code to specify Intensive Care Unit, and the ICU stay must be during the QualifyingEncounter period.

Moving to the VTE-2 Denominator Exclusions. By using union, a patient who meets any of these four conditions will be excluded from the Denominator. Encounter with ICU Location and Encounter Less Than 2 Days union; Encounter with First ICU Stay with Principal Procedures of SCIP VTE Selected Surgery; union Encounter with Intervention Comfort Measures from Day of Start of Hospitalization To Day After First High ICU Stay, and union Encounter with Intervention Comfort Measures on Day of or Day After Procedure. In the first exclusion, to start the expression we use Encounters with ICU Location, which we saw used in a Denominator. If the inpatient hospital stays is less than two days, it will be excluded.

00:50:59

The second exclusion is First ICU Stay with Principal Procedure of SCIP VTE Selected Surgery. The SCIP Procedure must end on the day of or day after the start of the first ICU visit.

As a refresher, let's review the VTE.StartOfFirstICU function that was called in the previous definition. Three functions together define the start date and time of the first ICU. Let's look at how StartOfFirstICU function is built upon. Global.FirstInpatientIntensiveCareUnit function is looking for the first ICU admission or transfer to ICU during the encounter. Now we will get FirstInpatientIntensiveCareUnit Period by VTE.FirstICULocationPeriod function. Lastly, we can capture the first ICU Admission Datetime by calling VTE.StartOfFirstICU function.

Moving on to the next exclusion, you may recall that we've already reviewed Intervention Comfort Measures in VTE-1. However, the timing conditions here for VTE-2 uses a function to look for ComfortMeasures to occur from the day of start of the hospitalization to the day after the first ICU admission or transfer. A function of the same name uses the interval operator to capture a timeframe start of Global.HospitalizationWithObservation totheDayAfterAdmissiontotheFirstICU. Like other timing functions, the function was updated by replacing Truncate Time with date from without outcome change as mentioned earlier on this presentation.

In the last exclusion, we've already reviewed the logic in VTE-1. The difference here is in the timing condition where we are looking for Comfort Measures to occur on the day of or the day after the procedure ends and that the procedure ends one calendar day after the start of the first ICU. Moving on to the Numerator, recall the comparison of VTE-1 to VTE-2 we looked at earlier. We used the same clinical concepts, however, VTE-2 uses the first IC stay for timing constraints where VTE-1 uses the hospital admission. No new concepts or logic is introduced in the Numerator logic that has not already been covered, so we will not present those slides during the presentation. However, please note that the Numerator slides that show the logic are provided as a resource at the end of the slide deck for your convenience. Moving on to VTE-2's Denominator Exception, it is important to note the difference between an exclusion and exception. Simply put, it differentiates in the way it processes. A Denominatord exclusion is processed before the Numerator so a patient is excluded and never in the Numerator. An exception is processed after the Numerator. If a case fails the Numerator and meets the Denominator Exception, it will be excluded from the measure. In this instance, a patient with a first ICU stay less than one day will be excluded from the measure if the Numerator was not met. And that wraps up our VTE-2 review, and back to you, Susan.

Excellent, thanks so much, Raquel. If you could keep screen sharing for another couple slides, I'll take over when we get to the Q&A.

So, thanks Raquel and Melissa for presenting the updates for the eCQMs and the Frequently Asked Questions. We've included a couple of resource slides here and provided links that will direct the audience to the eCQI Resource Center, CMS Eligible Hospitals Measures page and the Get Started with eCQM links as well as the "Teach Me Clinical Quality Language" video series, including video shorts on Hospital with Observation and What is a Value Set.

Next slide.

Continuing with the resource links, on this slide we've included links to the Value Set Authority Center or the VSAC Support, the Pioneers in Quality landing page on The Joint Commission's website, the Expert to Expert Webinar series landing page, and finally the ASTP/ONC issue tracking system where the clinical and technical questions about these eCQMs should be submitted.

00:55:29

So now we're going to be moving into the question and answer segment. Just a quick reminder, as we move into the live Q&A segment, that this broadcast is scheduled to go until 15 minutes after the hour. I will bring up the slide deck real quick. Thanks, Raquel, for screen sharing for those couple of slides. Let me switch over the presenter here. Great, everyone, so just as a quick reminder, here's how you ask questions for this segment. There's a question pane. It looks like a question mark in the audience toolbar, A new panel will open for you to type and submit your question. Just indicate which eCQM your question concerns. And all of the questions that are not answered during the live event will be addressed in a written follow-up Q&A document. To clarify, the Q&A document does also include the questions that have typed responses from today's session. So, all of the questions that were asked today will be included in that Q&A document and that document will be posted to The Joint Commission's website within several weeks of the live event. So, with that I will turn it over.

Melissa, I believe you offered to take the first question, so whenever you're ready, please jump right in.

Sure. First question, "Why are patients admitted to mental health for a substance abuse disorder as a primary diagnosis, being included in VTE-1?"

The answer, patients admitted with primary diagnosis of mental disorders including substance abuse are excluded because these patients are usually ambulatory and clinically considered to be a low risk for developing a VTE during the hospital stay. Also, the exclusion of these patients eases the data collection burden since many will present via the emergency department.

Okay, thanks, Melissa.

Our next question here is, "We frequently see cases fail when Eliquis is administered on day one or day two of admission. How can this be prevented?"

Answer is, Eliquis may meet VTE prophylaxis for selected patients if administered on the day of or after admission. The US Food and Drug Administration, FDA, has approved Eliquis, apixaban, to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation or to reduce the risk of blood clots, deep vein thrombosis, DVT, and pulmonary embolism, PE, following knee or hip replacement surgery only. It is additionally approved for treatment of DVT and PE and for the reduction in the risk of recurrent DVT and PE following initial therapy.

Great, it looks like the next item is a request for a simple list of current medications that will qualify and that do not qualify. And the Human Readable File provides a list of medication value sets with names and OIDs under the data criteria section. For detailed qualified medications, please go to the VSAC website, https://vsac.nlm.nih.gov/welcome and then search by name and/or OID.

Okay, and, "How do you handle when patients refuse to wear SCDs?"

All SCDs were not applied due to patient refusal and the reason was documented within the qualifying timeframe. This patient will pass the Numerator.

Okay, next one. "How do the eCQMs get reported?"

eCQMs should be reported in QRDA-1 format based on the HL7 standard. For detailed guidance, please refer to the CMS QRDA-1 Implementation Guide.

01:00:06

"Does an order for low risk count as a reason for not giving both mechanical and pharmacologic prophylaxis?"

If a physician assess and documents that the patient is low risk for VTE within the qualifying timeline, then the case will satisfy the Numerator condition.

Okay, next. "Are there any benchmarks for VTE-1 and VTE-2? Are we able to see the data from like hospitals?"

2022 national average rates were at 82.65% for VTE-1 and 93.88% for VTE-2.

Okay, our next question here is, "We are seeing fall outs for VTE-2 for patients who received heparin in surgery still in the day of or day after time. Is this correct?"

The answer is, the qualifying timeframe is surgery enddate, for surgeries that end the day of or the day after ICU admission or transfer. Therefore, if surgery ends beyond the qualified timeframe, patient who received heparin in surgery will fall the measure.

Okay, the next one is, "If there is documentation of patient refusal and initiation of prophylaxis documented both within the reporting timeframe, will this be included in the Numerator or excluded?"

Refusal of any form of VTE prophylaxis will put the patient case in the Numerator and is documented within the timeframe for measurement. It is not necessary for the patient alternative form for prophylaxis.

Okay, so we do have a question here regarding the slide does not say greater or equal in one day and it says greater in one day transferred to ICU the day of or the day after hospice admission with ICU length to stay. Thank you for that feedback and we can follow up with the commenter after this webinar for more details.

Okay, "When hospital admission referenced, does this include observation or hospital inpatient admission?"

The answer is, hospital inpatient admission refers to the admitted time in inpatient setting, while the start of hospitalization includes emergency department, observation services, or inpatient setting, whichever patient hospitalization starts the encounter.

Okay, "Are patients with a history of VTE at the problem list excluded from the Initial Population for VTE-1 and 2?"

There is no Denominator exclusion for patients with a history of VTE. Patients with a history of VTE are at increased risk for developing a VTE during the hospitalization and should receive prophylaxis.

Okay, "If a patient experienced a VTE during the hospitalization, but not necessarily upon admission, would they be removed from the Initial Population?" The timeframe for measurement is day of or day after hospital admission. The intent of the measure is prophylaxis or prevention of VTE. If the patient received VTE prophylaxis within the timeframe, the case will be included then in the Numerator regardless of a VTE that occurs later in the hospital stay.

"Does an order for medication count or must there be evidence of administration?"

Documentation that VTE prophylaxis was administered is required. Administration should be within day of or day after hospital admission.

Okay, on slide 24 it says, "Comfort measure documentation created after patient arrival at the hospital will exclude the patient. What if the patient goes from the ED to outpatient in a bed status and then finally inpatient status? If the patient is given a comfort measure order when the patient is outpatient in a bed, does that count towards this inpatient measure as an exclusion?"

And the answer is, comfort measures only documented on the day of or day after hospital arrival excludes the case.

01:05:25

Okay, "If a medication is ordered but then held for a procedure or medical reason, will the suffice or does another form of prophylaxis need to be implemented?" Medical reasons for not administrating VTE prophylaxis must be explicitly documented by the provider, the MD, APB [CORRECTION: APN], PA, or pharmacist within the two-day timeframe for measurement.

Okay, "A patient with ER visit then transferred to observation then to inpatient status. Which of these dates and times is considered the first day of admission?"

A patient with ER visit then transferred to observation and then into inpatient. The start of the hospitalization would be the day of the ED visit. The first day of inpatient would be the day of inpatient admission. Please note, the end of the ER visit has to end within one hour before observation and observation ends within one hour prior to inpatient admission time.

"We were experiencing patients failing this measure because it's being addressed while patient is in the ER prior to being admitted to inpatient status. Any suggestions?" A qualifying ER has to end within one hour prior to inpatient admission time to count ER as the start of hospitalization.

Okay, "If a patient's level of care changes and is transferred to ICU on day three, does that patient need to be reassessed for VTE-2 measure?"

Yes, patients directly admitted or transferred to the ICU anytime during the hospitalization will be included in the VTE-2 measure.

Okay, "Apixaban is no longer considered VTE prophylaxis if the patient has a history of AFib or admitting diagnosis of Afib?"

Apixaban alone is now considered VTE prophylaxis, but apixaban was given to patient within a qualifying timeframe who has a history of AFib or admitting diagnosis of AFib will meet the measure Numerator.

Let's see here. "Regarding VTE-1, if a patient arrives to the hospital and is admitted to outpatient in a bad status for comfort care and subsequently is converted to inpatient status, does the comfort care order prior to admit qualify to exclude the patient from the measure? For example, comfort care order exists anytime between hospital arrival and day after hospital admission."

Yes, patients with comfort measures documented at any time between day of arrival and the day after hospital admission will be excluded from the measure VTE-1 Denominator.

"Are there any standardized assessments available to determine the risk level for VTE?"

This measure does not require the use of a specific risk assessment model or tool to determine VTE risk.

Okay, "If a provider documents low risk for VTE and also orders mechanical prophylaxis, would the low risk qualify the patient for Numerator regardless of application of the mechanical prophylaxis or does the mechanical prophylaxis need to be documented as applied by hospital day two?"

Yes, low risk for VTE was assessed during any time from day of start of hospitalization to day after admission alone will meet VTE-1 Numerator condition.

01:10:00

Okay, "Ted hose or compression stockings alone are considered adequate now?" TED hose compression stockings will meet VTE prophylaxis if documented as applied on the day of or day after hospital admission.

Just real quick, we are getting close to the end of the time. How about you guys take maybe two more questions and then we'll wrap up the session?

Sure. Here's one. "Is nursing documentation enough for a refusal or does it need to be in a licensed practitioner's note?"

All documentation of patient refusal of VTE prophylaxis is accepted. This is the only exception. Other reasons need to be documented by the physician, APN or physician's assistant or pharmacist within the measurement timeframe.

Okay, and I'll just read one more here. "The physician documents other anticoagulant as a reason no VTE prophylaxis and it is apixaban, does it count for prophylaxis?"

Apixaban is a factor Xa inhibitor and the measure will check for a atrial fibrillation and flutter. Other anticoagulant will not count as a reason.

Excellent, Raquel and Melissa, geez, so many questions. You guys did such a great job and thanks especially to our team in the background that's been typing up the question or the responses for all of these.

With that said, anything that was not read verbally today but was submitted will be included in the written Q&A document. All questions asked today will be. All Expert to Expert Webinar recording links, slides, transcripts, and when available, Q&A documents, will be accessed on The Joint Commission's webpage. The caption to recording and materials will be available via the link we've provided on this slide within several weeks of the webinar.

In today's handouts, we have also included a PDF that includes the registration links for all of the Expert to Expert Webinars that are currently open for registration. The link on this slide leads to that page and we will also update the Expert to Expert landing page to include

the links to additional webinars as the registrations open for them. So just bookmark that link and you can stay in the loop as we progress through the series.

Before the webinar concludes, a reminder about the CE survey. We use your feedback to determine education gaps and your organization's needs to inform future content and assess the quality of our educational programs. As we explained earlier, a QR code is provided on the final slide. If you prefer to take the CE survey later, an automated email also delivers the survey link. At the end of the survey, when you click SUBMIT you will be redirected to a page from which you can print or download a certificate. You'll complete that certificate by adding your name and credentials. In case you log off without downloading or printing your certificate, you'll also receive an automated email to the address that you provide within the CE survey.

So with that, we are at the end of today's webinar. We will pause on this slide for several moments to permit those that wish to use the QR code to scan it with your mobile device.

Thanks again to Raquel and Melissa for developing and presenting the content and facilitating the Q&A segment. Thanks to Karen and Yanyan in the background for typing the responses to the submitted questions. And finally, thanks to everyone that attended today. Have a great day.