



Pioneers in Quality Expert to Expert Webinar Series

2024 New Measure Review Webinar for HH-ORAE (CMS819v2) Opioid-Related Adverse Events

January 25, 2024

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Welcome!

But first things first...

"Get Started with



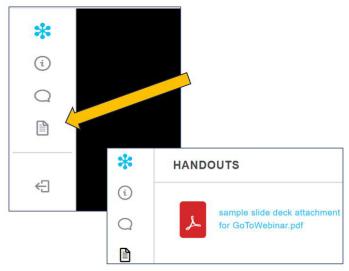




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- California Board of Registered Nursing

* 1 ACHE Qualifying Education Hour

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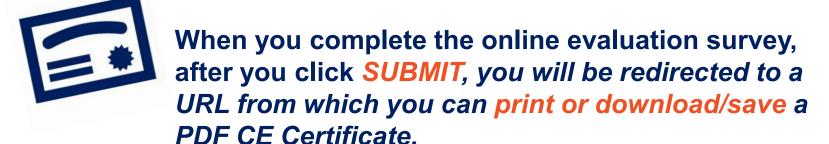




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Learning Objectives:

- Navigate to the measure specifications, value sets, measure flow diagrams and technical release notes
- Apply concepts learned about the logic and intent for the HH-ORAE eCQM
- Prepare to implement the HH-ORAE eCQM for the 2024 eCQM reporting period
- Identify common issues and questions regarding the HH-ORAE eCQM







Topics Not Covered in Today's Webinar

- Basic eCQM concepts
- Topics related to chart abstracted measures
- Process improvement efforts related to this measure
- eCQM validation







Disclosure Statement

These 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 provide grants, consultancies, honoraria, travel, or other benefits that would impact the presentation of today's webinar content.

From American Institutes for Research (AIR):

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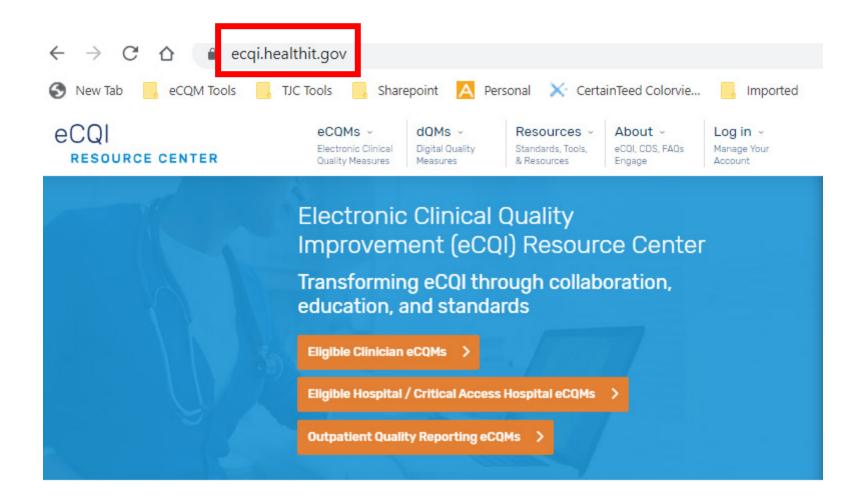
Pioneers in Quality Expert to Expert Webinar Agenda: HH-ORAE eCQM

- Demonstrate eCQI Resource Center navigation to measure specifications, value sets, measure flow diagrams and technical release notes
- Review the measure flow/algorithm
- Review the HH-ORAE eCQM
- Review FAQs
- Facilitate Audience Q&A Segment





eCQI Resource Center Website Demo







HH-ORAE Opioid-Related Adverse Events

HH-ORAE: Adopted Into CMS Program

In the FY 24 IPPS/LTCH PPS final rule, CMS finalized the adoption of the HH-ORAE measure into the Hospital IQR Program beginning with the CY 2024 reporting period/FY 2026 payment determination





HH-ORAE - Rationale

Measure Description:

This measure assesses the number of inpatient hospitalizations for patients age 18 and older who have been administered an opioid medication and are subsequently administered an opioid antagonist within 12 hours, an indication of an opioid-related adverse event

Rationale/Intent

- Opioid-based analgesia is the most commonly used treatment in postoperative pain management
- Measure is intended to be used to identify and reduce unintended adverse events such as over-sedation, delirium, and respiratory depression. Administration of opioid antagonist is used as an indicator of a severe ORAE.
- Associated with increase in hospital LOS (length of stay), increase in the odds of death, higher costs, and higher risk of 30-day readmission
- Opioid-related adverse events are preventable with better monitoring and response
- Rates of inpatient ORAE indicate quality of care



HH-ORAE Measure Specifications

Description: The number of inpatient hospitalizations for patients age 18 and older who have been administered an opioid medication and are subsequently administered an opioid antagonist within 12 hours, an indication of an ORAE

		,
Initial Population (Denominator = IP)	Denominator Exclusion	Numerator
Inpatient hospitalization	None	Inpatient hospitalization
Age: >= 18 at the <u>start of the inpatient</u> <u>hospitalization</u>		An opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication.
At least one opioid medication was administered <u>outside of the</u> <u>operating room (OR)</u>		The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection







HH-ORAE Measure Changes from 2023 to 2024 -**Technical**

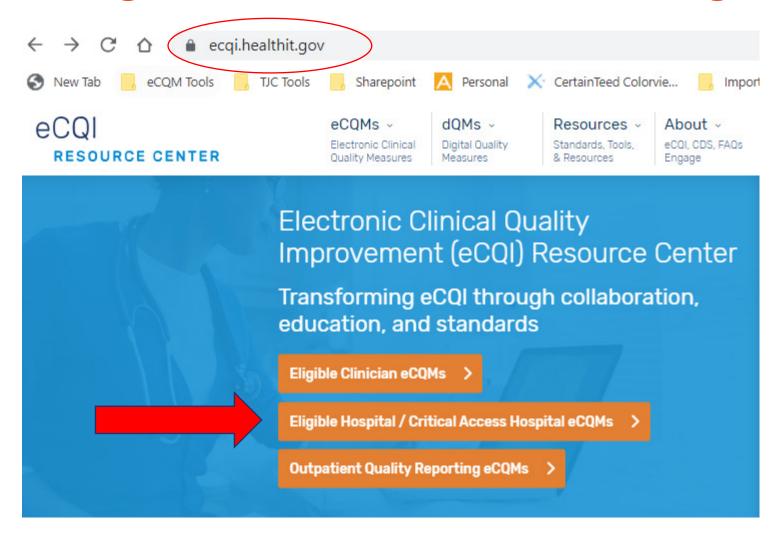
Measure Components	2023 Pre-Rulemaking Year	2024 Reporting Year
Initial Population Age	Age 18 and older at start of the Global.HospitalizationWithObservation	Age 18 and older at the start of the inpatient hospitalization
Initial Population	Inpatient hospitalizations for patients 18 years or older during which at least one opioid medication was administered	Inpatient hospitalizations for patients 18 years or older during which at least one opioid medication was administered outside of the operating room (OR)
Numerator	Inpatient hospitalizations where an opioid antagonist (naloxone) was administered outside of the operating room and within 12 hours following administration of an opioid medication.	Inpatient hospitalizations where an opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection.







Navigation to the Measure Flow Diagrams







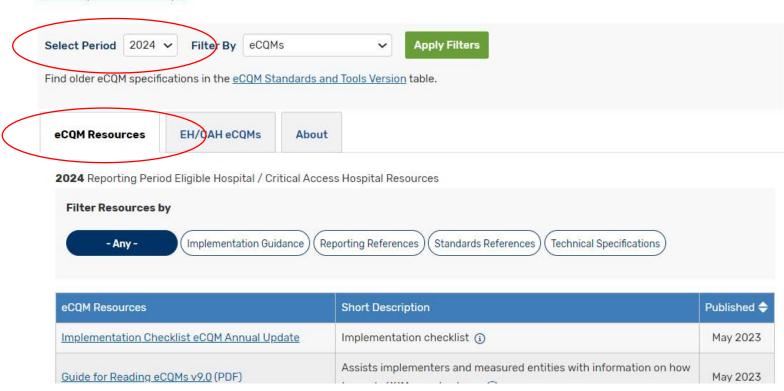


Navigation to the Measure Flow Diagrams

(continued)



Receive updates on this topic









Navigation to the Measure Flow Diagrams

(continued)

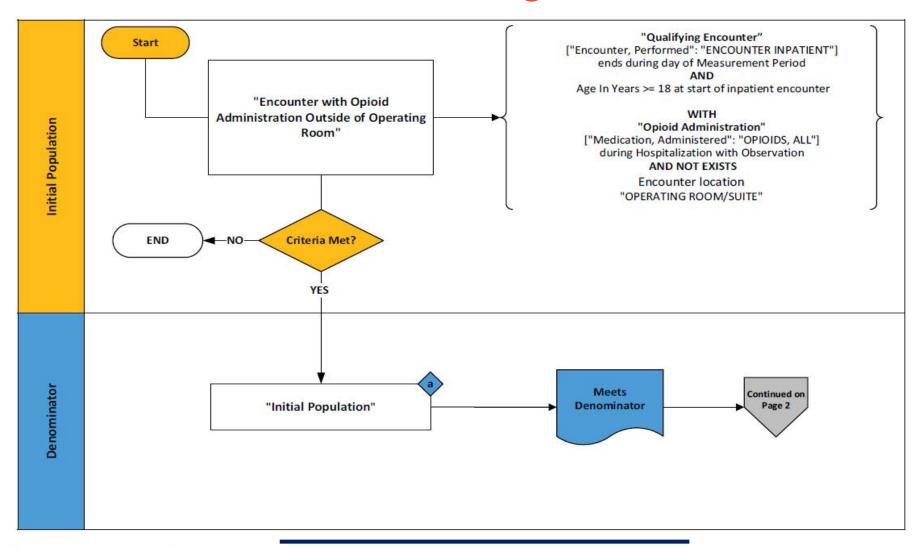
eCQM Resources	Short Description	Published 🔷
Implementation Checklist eCQM Annual Update	Implementation checklist ③	May 2023
Guide for Reading eCQMs v9.0 (PDF)	Assists implementers and measured entities with information on how to read eCQM specifications ③	May 2023
Hospital Quality Reporting Table of eCQMs (PDF)	List of eCQMs available for use (1)	May 2023
eCQM Specifications for Hospital Quality Reporting (ZIP)	eCQM technical specifications (3)	May 2023
Measure Authoring Tool (MAT) Global Common Library (GCL) Technical Specifications (ZIP)	MAT-CGL specifications ③	May 2023
eCQM and Hybrid Measure Value Sets [2]	Value sets used with eCQMs and Hybrid Measures ③	May 2023
eCQM Direct Reference Codes List [2]	eCQM Direct Reference Codes used in eCQMs ③	May 2023
Binding Parameter Spation (BPS)	Value set metadata ③	May 2023
eCQM Logic and Im	Assists implementers and measured entities with how to use eCQMs and report issues ③	May 2023
Standards and to reporting/perf ce period	Tools and standards versions measure developers used to create eCQMs and versions of standards and tools used for their reporting ①	Mar 2023
Technical Re Notes (PDF)	Year over year changes to eCQMs, including logic and terminology (1)	May 2023
Technic se Notes (ZIP)	Year over year changes to eCQMs, including logic and terminology (1)	May 2023
eCQM Flows (ZIP)	Assists implementers and measured entities with steps to take to calculate an eCQM ③	Aug 2023







HH-ORAE Measure Flow Diagram

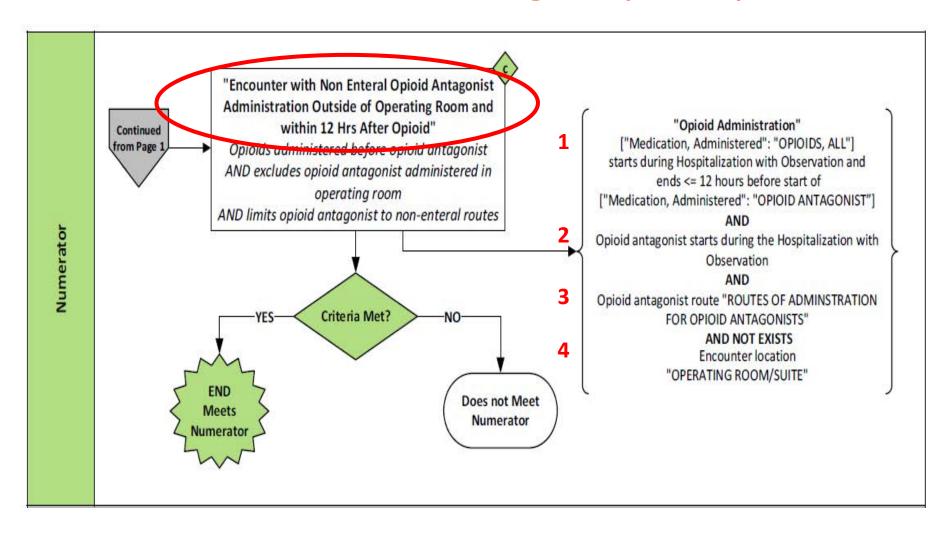








HH-ORAE Measure Flow Diagram (cont'd)









HH-ORAE Measure Flow Diagram (cont'd)

	Sample Calculation	
	Numerator (c = 10)	
Performance Rate =	Denominator (a = 100)	= 10%







HH-ORAE Initial Population

Inpatient hospitalizations for patients age 18 and older during which at least one opioid medication was administered outside of the operating room

Initial Population: "Encounter with Opioid Administration Outside of Operating Room"

Population Definition

Encounter with Opioid Administration Outside of Operating Room

"Qualifying Encounter" InpatientEncounter with "Opioid Administration" OpioidGiven such that Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) starts during Global."HospitalizationWithObservation (InpatientEncounter)

and not exists (InpatientEncounter.facilityLocations EncounterLocation

where EncounterLocation.code ~ "Operating Room/Suite"

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) starts during EncounterLocation.locationPeriod)

Qualifying Encounter

["Encounter, Performed": "Encounter Inpatient"] InpatientHospitalization where InpatientHospitalization.relevantPeriod ends during day of "Measurement Period" and AgeInYearsAt (date from start of InpatientHospitalization.relevantPeriod) >= 18

Opioid Administration

["Medication, Administered": "Opioids, All"]







HH-ORAE Initial Population – (cont'd)

Inpatient hospitalizations for patients age 18 and older during which at least one opioid medication was administered outside of the operating room

Initial Population: "Encounter with Opioid Administration Outside of Operating Room"

Encounter with Opioid Administration Outside of Operating Room

"Qualifying Encounter" InpatientEncounter with "Opioid Administration" OpioidGiven such that Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) starts during Global."HospitalizationWithObservation" (InpatientEncounter)

and not exists (InpatientEncounter.facilityLocations EncounterLocation

where EncounterLocation.code ~ "Operating Room/Suite"

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime,

OpioidGiven.relevantPeriod) starts during EncounterLocation.locationPeriod)







HH-ORAE Initial Population - Example

Inpatient hospitalizations for patients age 18 and older during which at least one opioid medication was administered outside of the operating room

	Start	End	Location	
Inpatient Encounter	9/1 8:00am	9/9 9:00am		
Opioid administered	9/2 11:30am		Outside of OR	Meets Denominator
OR location	9/3 9:30am	9/3 10:30am		
Opioid administered	9/3 9:45am		Inside of OR	



HH-ORAE Denominator

Denominator: "Initial Population"







HH-ORAE Numerator

Inpatient hospitalizations where an opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection.

Numerator: "Encounter with Non Enteral Opioid Antagonist Administration Outside of Operating Room and within 12 Hrs After Opioid"

```
["Medication, Administered": "Opioid Antagonist"] OpioidAntagonistGiven,
 "Opioid Administration" OpioidGiven,
 "Denominator" EncounterWithQualifyingAge
 where not exists (EncounterWithQualifyingAge.facilityLocations EncounterLocation
   where EncounterLocation.code ~ "Operating Room/Suite"
    and Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,
OpioidAntagonistGiven.relevantPeriod ) starts during EncounterLocation.locationPeriod)
  and (Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,
OpioidAntagonistGiven.relevantPeriod ) starts during Global."HospitalizationWithObservation" (
EncounterWithQualifyingAge )
    and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod
) starts during Global. "HospitalizationWithObservation" (EncounterWithQualifyingAge)
    and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod
) ends 12 hours or less before start of Global. "NormalizeInterval" (
```

and OpioidAntagonistGiven.route in "Routes of Administration for Opioid Antagonists")

OpioidAntagonistGiven.relevantDatetime, OpioidAntagonistGiven.relevantPeriod)



from



return EncounterWithQualifyingAge



HH-ORAE Numerator

Inpatient hospitalizations where an opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection.

Numerator: "Encounter with Non Enteral Opioid Antagonist Administration Outside of Operating Room and within 12 Hrs After Opioid"

from

["Medication, Administered": "Opioid Antagonist"] OpioidAntagonistGiven,

"Opioid Administration" OpioidGiven,

"Denominator" EncounterWithQualifyingAge

where not exists (EncounterWithQualifyingAge.facilityLocations EncounterLocation where EncounterLocation.code ~ "Operating Room/Suite"

and Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,

OpioidAntagonistGiven.relevantPeriod) starts during EncounterLocation.locationPeriod)

and (Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,

OpioidAntagonistGiven.relevantPeriod) starts during Global."HospitalizationWithObservation" (EncounterWithQualifyingAge)

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) starts during Global. "HospitalizationWithObservation" (EncounterWithQualifyingAge)

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) ends 12 hours or less before start of Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime, OpioidAntagonistGiven.relevantPeriod)

and OpioidAntagonistGiven.route in "Routes of Administration for Opioid Antagonists") return EncounterWithQualifyingAge







HH-ORAE Numerator

Inpatient hospitalizations where an opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection.

Numerator: "Encounter with Non Enteral Opioid Antagonist Administration Outside of Operating Room and within 12 Hrs After Opioid"

```
from
```

["Medication, Administered": "Opioid Antagonist"] OpioidAntagonistGiven,

"Opioid Administration" OpioidGiven,

"Denominator" EncounterWithQualifyingAge

where not exists (EncounterWithQualifyingAge.facilityLocations EncounterLocation

where EncounterLocation.code ~ "Operating Room/Suite"

and Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,

OpioidAntagonistGiven.relevantPeriod) starts during EncounterLocation.locationPeriod)

and (Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime,

OpioidAntagonistGiven.relevantPeriod) starts during Global."HospitalizationWithObservation" (

EncounterWithQualifyingAge)

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) starts during

Global."HospitalizationWithObservation" (EncounterWithQualifyingAge)

and Global."NormalizeInterval" (OpioidGiven.relevantDatetime, OpioidGiven.relevantPeriod) ends 12 hours or less before start of Global."NormalizeInterval" (OpioidAntagonistGiven.relevantDatetime, OpioidAntagonistGiven.relevantPeriod)

and OpioidAntagonistGiven.route in "Routes of Administration for Opioid Antagonists" return EncounterWithQualifyingAge







HH-ORAE Numerator - Example

Inpatient hospitalizations for patients age 18 and older during which at least one opioid medication was administered outside of the operating room

	Start	End	Location	
Inpatient Encounter	9/1 8am	9/9 9am		
Opioid administered	9/2 11:30am		Outside of OR	
Opioid antagonist (IV) administered	9/2 10pm		Outside of OR	Meets Numerator
OR location	9/3 9:30am	9/3 10:30am		
Opioid administered	9/3 9:45am		Inside of OR	





Additional Resources

eCQI Resource Center – EH Measures:

https://ecqi.healthit.gov/eligible-hospital/critical-access-hospital-ecqms

Teach Me Clinical Quality Language (CQL) Video Series

https://ecqi.healthit.gov/cql?qt-tabs cql=2

- Coalesce
- Normalize Interval
- Time Zone Considerations
- Latest, LatestOf, Earliest, EarliestOf, HasStart, HasEnd

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https://oncprojectracking.healthit.gov/







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Expert to Expert Webinars

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Thank you for attending!





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Acronyms

AIR	American Institutes for Research
CDC	Centers for Disease Control and Prevention
CE	Continuing Education
CGM	Continuous glucose monitor
CMS	Centers for Medicare & Medicaid Services
CQL	Clinical quality language
CY	Calendar year
eCQI	Electronic Clinical Quality Improvement Resource Center
eCQM	Electronic clinical quality measure
EH	Eligible Hospital
EHR	Electronic Health Record
EQIP	Engagement in Quality Improvement Programs
FAQ	Frequently asked questions
FY	Fiscal year
НН	Hospital Ha <u>rm</u>





Acronyms (continued)

ICD10	International Classification of Diseases, Tenth Revision
IP	Inpatient
IPPS	Inpatient Prospective Payment System
IPPS	Inpatient Prospective Payment System
IQR	Inpatient quality reporting
LOS	Length of stay
LTCH	Long term care hospital
LTCH	Long term care hospital
OR	Operating room
ORAE	Opioid Related Adverse Events
МО	Measure observation
ONC	Office of the National Coordinator for Health Information Technology
SME	Subject matter expert
TJC	The Joint Commission
VSAC	Value Set Authority Center









Pioneers in Quality Expert to Expert Series: 2023 New Measure Review for Opioid-Related Adverse Events eCQM

Broadcast date: January 25, 2024

(00:04):

Welcome everyone and thank you for joining us today for our Expert to Expert series webinar 2024 New Measure review for the opioid related Adverse Events eCQM. Before we start, just a few comments about today's webinar platform Audio is by voiceover internet protocol only. Click the button that reads listen in, click for audio. Then 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 redoing the event. If this occurs, we will not be recognizing the raise of hand or the chat features. To ask a question, click on the question mark icon. In the audience toolbar, a panel will open for you to type your question and submit. The slides are designed to follow Americans with Disabilities Act rules. We would like to welcome you to our webinar.

(01:03):

Before we get started, we do want to explain that the webinar is fairly technical in nature and requires a baseline understanding of eCQMs. Participant feedback from previous webinars indicated that the content may have been too technical for individuals that are new to eCQMs. If you are new, we recommend that you visit the eCQI Resource Center at the hyperlink listed. On this slide, you'll find a collection of resources that can help you get started with eCQMs. If you'd like to follow along and take notes, you can access the slides now within the viewer toolbar. To access the slides, click the icon that looks like a document, select the file name and the document will open in a new window. You can print or download and save the slides. The slides will also be available several weeks after the session at the link denoted on this slide.

(02:02):

CE credit is offered for this webinar. This webinar is approved for one continuing education credit for the entities listed on this slide. The Accreditation Council for Continuing Medical Education, American Nurses Credentialing Center, American College of Healthcare Executives, California Board of Registered Nursing Participants receive a certificate following completion of the webinar and survey. Although we've listed the organizations that a credit Joint Commission to provide CEs many other professional societies and state boards that are not listed except credits or rule match credit from Joint Commission's educational courses. To claim CE credit for this webinar, participants must have individually registered for the webinar, participate for the entire live broadcast, and complete a post program evaluation and attestation. The program evaluation and attestation survey is accessible on the final slide via a QR code. You can scan with your mobile device and an email will also be sent to the address each participant used to register.

(03:09):

If you are listening with colleagues and did not use your own link to join, you can still obtain CE credit if you meet these three criteria. If you did not pre-register, do so now so you can be eligible when the session concludes. After you complete the online evaluation survey, you'll be redirected to a page from which you can access a CE certificate. You'll also receive an automated email after you complete the survey. That includes the certificate link. For more information on The Joint Commission's continuing education policies, visit the link at the bottom of this slide. The learning objectives for today's session are: Navigate to the measure specifications, value sets, measure flow diagrams and technical release notes, apply concepts learned about the logic and intent for the opioid related adverse events. M prepare to implement the opioid related adverse events QM for the 2024 reporting and identify common issues and questions regarding the opioid related adverse events.

(04:17):

This webinar does not cover these topics, eCQM concepts topics related to chart abstracted measures, process improvement efforts related to this Measure M validation. These 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 provide grants, consultancies, honoraria, travel, or other benefits that would impact the presentation of today's webinar content. We had a change to today's presenters, Katie Magoulick will be presenting from AIR American Institutes for Research, so we will make sure that we update this slide with her title and credentials and her department. So, it's Katie Magoulick, Michelle Lefebvre, Melissa Breath, Susan Funk, and Susan Yendro. The agenda for today's discussion follows demonstrate navigation to the measure specifications, value sets, measure flow diagrams and technical release notes, review the measure flow and algorithm, go through some Frequently Asked Questions, and then we'll have the live facilitated audience O&A segment. Before we get started with the featured, we would like to highlight some of the resources that are available on the eCQI Resource Center. The eCQI Resource Center provides a centralized location for news information inform and standards related to the eCQM. 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. We will now share a demo that illustrates the navigation to the eCQI Resource Center.

(06:26):

This video will demonstrate how to navigate the eCQI Resource Center website to locate the measure specifications, value sets and technical release notes for all measures in the CMS program. Here's a landing page for the eCQI Resource Center. Note the web address of ecqi.healthit.gov, click on the orange horizontal rectangle for Eligible Hospital Critical Access Hospital eCQMs. Here you can select the reporting period that you are interested in. For the purposes of this demo, I will select 2024 click applied filters and you will see multiple resources listed. Click on the EH/CAH eCQM tab. Here you will see a list of the 12 eCQMs available for Eligible Hospital and Critical Access Hospitals.

(07:34):

Let's select the Cesarean Birth eCQM, which is also referred to as PC-02 for short or CMS334. Here you will see all the measure information. For this particular measure, we're going to click on the specifications and data elements tab. Here you can find the HTML file, the measure package, zip file,

and the technical release notes. For this measure, the value sets are also listed here. We will take a quick look at the HTML document, which is also referred to as the human readable. By clicking on the file name, the HTML file opens, this is where you find all details related to the measure. The top portion of the document highlighted in gray is referred to as the metadata or header information. Here you'll find relevant data for the measure including the version number of the measure, the measure steward, the measure developer, additional information like related to the rationale, the clinical recommendation statement, and here you see all the references that were used when building the eCQM measure.

(09:02):

Scrolling through all the references, you'll find additional guidance for implementing the measure and down at the bottom of the metadata you will find definitions for each of the population criteria beyond the metadata, you will find the definitions for the population criteria and then further down you will see the definitions that are used making up the logic. Continuing to scroll, you will see all the functions that are used by the measure. Then we get into the terminology. Notice these first couple of lines are the direct reference codes that are used by the measure and then the value sets are listed here.

(09:52):

Then we get into the QDM data elements, the supplemental data elements, and if this is a risk adjusted measure, that information would be listed here. This is your source of truth for all of the measure details, I went through this very quickly but wanted you to be aware of how to locate this document and to have a basic understanding of its contents. So back to the eCQI Resource Center. The next item is the zip file. Click on this link and then click to open the zip file. Here you will see all the files that make up the measure package. Note. The first file is the HTL file we just looked at. I will not go into detail on all of these files, but if you want to know more, go to the get started with eCQM site on this QI Resource Center. Next we look at the technical release notes by clicking on this link and opening up the Excel spreadsheet.

(11:07):

Here is a nice concise list of all of the changes to the measures for the 2024 reporting. In the first column, you will see the details of the change listed here. The next column indicates the type of change. Did it impact the header, the logic, or the value? The column is a specific section of the measure that was impacted. In this last column, you will see the source of change. Going back to the eCQI Resource Center website, again, we can access the value sets by clicking the link under value sets. You are now taken to the value set authority center, also known as the VSAC.

(11:58):

You will see all the value sets used for this. Please notice that you must be signed into the value set authority center to see the details within each value. I will log into the VSAC now by clicking on sign in and then by clicking the login button. If I would like to see the details of the abnormal presentation value, I click on the O and all of the codes making up that value set are displayed. Please note that if you prefer to download the value sets, select all value sets by clicking in this box and click download. This will return a zip file containing each value set in a separate Excel document. If you prefer to have all of the value sets in one file, go back to the homepage, select the Eligible Hospital Critical Access

Hospital tab. Again, select the reporting that you're interested in. I'm going to stick with 2024 and click apply filters.

(13:20):

On this page you will see eCQM and hybrid measure value sets as well as eCQM Direct Reference Code list. Let's look at the value sets open the most recent reporting year or whatever year you're interested in. I'm going to stick with 2024 and then click on the May 2023 release. You'll see several available downloads choosing the first option. I will select data sorted by CMS ID in Excel format opening the downloaded Excel file, so open the Excel spreadsheet here and here you will see all the tabs for all the different measures. Let's stick with CMS 3, 3, 4, and here you see the CMS ID and QF number, value set name and value 0 for every code for every value set within the measure. Scrolling over to column L, you will see the actual codes within each value set, the code description, and the code system. Note that direct reference codes are not listed as they are not included in value sets. You'll find information on direct reference codes in the measure specifications or from the file on the eCQM resources tab that I just called out. This concludes our eCQI Resource Center navigation demo.

(15:18):

Katie, we're really excited to have you here to present today everyone, I'm Katie. Mick is going to be presenting regarding the, and Katie, when you've got your slide deck up and ready, feel free to take it away. Thanks.

(15:33):

Okay, everyone just checking. You can see my screen.

(15:37):

We can, and it's in presentation mode, so you are all set. Thanks so much.

(15:41):

Wonderful. Thank you so much. Alright everyone, now we will provide some background information for hospital harm, opioid related adverse events, measure hospital harm, opioid related adverse events. This measure was adopted as one of the voluntary measures for selection in the hospital QR program beginning with calendar year 2024 reporting or fiscal year 2026 payment determination. Opioids are often the foundation for sedation and pain relief. However, use of opioids can also lead to serious adverse events including constipation over sedation, delirium, and respiratory depression. Opioid related adverse events have both patient level and financial implications. Patients who experienced this event have been noted to have 55% longer length of stay, 47% higher costs, 36% higher risk of 30-day readmission and 3.4 times higher payments than patients without these adverse events. This measure is an outcome measure.

(17:02):

It assesses the number of inpatient hospitalizations for patients age 18 and older who have been administered in opioid medication and are subsequently administered an opioid antagonist within 12 hours, which is an indication of an opioid related adverse event. This measure is intended to identify and reduce unintended adverse events of opioid administration that occurred during hospitalization rather than opioid overdose events that happen in the community and are treated in the emergency department. The measure uses the administration of an opioid antagonist. For example, Naloxone

following the administration of an opioid medication as an indicator of an Naloxone is not the only antagonist used in the measure, but it is a potent opioid reversal agent that can rapidly reverse central nervous system and respiratory depression and a patient with an opioid associated resuscitative emergency. The intent of the measure is not to reduce clinically appropriate use of Naloxone nor to reduce Naloxone use to zero, but to identify hospitals that have a particularly high rates of Naloxone use suggesting excessive dosing of opioids in the inpatient setting. Use of this measure will incentivize improved clinical practices such as avoiding over sedation and closely monitoring patients on opioids to prevent serious and potentially lethal adverse drug events.

(18:36):

In the next few slides, anything underlined indicates a change was made during the annual update cycle that we'll review in the presentation. The measured description is the number of inpatient hospitalizations for patients age 18 and older who have been administered in opioid medication and are subsequently administered in opioid antagonist within 12 hours. An indication of an the Denominator which equals the IP or inpatient population are inpatient hospitalizations. Inpatient hospitalizations revert to patients who were admitted to an inpatient status, but this also includes any time the patient spent in the emergency department and or an observation prior to being admitted to inpatient status. Patients must also be 18 years of age or older at the start of the inpatient encounter to be included and they must have at least one opioid medication administered outside of the operating room. The Numerator, our inpatient hospitalizations where an opioid antagonist was administered outside of the OR and within 12 hours following administration of an opioid medication, the root of administration of the antagonist must be by intranasal spray inhalation intramuscular, subcutaneous, subcutaneous or IV injection roots considered enteral or also not acceptable, which are oral nasogastric and intestinal.

(20:12):

Here's a side by side comparison of last year's version of the E measure in the IP. Patients must be 18 years of age or older at the start of the IP encounter rather than at the start of the hospitalization, which includes ED and observation. In other words, regardless of the patient's age while in the ed or in observation, if they turn 18 before they're admitted to inpatient, they will meet the age criteria of the measure. This change aligns with the other hospital measures currently in the program in the IP, we also limited opioid administrations that occur outside of the majority of general anesthesia cases in the or involve opioid administration for pain control and rapid induction followed by an antagonist to reverse induction. The measure does not consider opioids administered in the OR when evaluating for the IP or Denominator. Changes to the Numerator include we revise the narrative to use opioid antagonists rather Naloxone since it's no longer the only opioid antagonist medication in the measure. In 2022, the FDA approved a second opioid antagonist called Nalmefene, which has been added to the measure's opioid antagonist value set. We removed the eternal roots of opioid antagonist administration from the value set. This is because oral forms of antagonists are not used to reverse opioid CNS depression or opioid overdose rather, they're used for other off-label indications such as opioid induced constipation and pruritus.

(22:04):

Next we would like to share the measure flow diagram with you. The measure flow diagrams provide a high-level overview of the algorithm flows and could be found on the eCQI Resource Center. The measure specifications are the source of truth, but the measure flow diagrams can be helpful in

understanding the measures main concepts, so navigate to the eCQI Resource Center at ecqi.healthit.gov and click on Eligible Hospital Critical Access Hospital eCQMs. Next, select the reporting you are interested in and then click on the eCQM resources tab. Now scroll down through the eCQM resources and click on the eCQM flows zip file. Once you open the zip file you will see the measure flows for all measures in the CMS hospital, inpatient quality reporting or HIQR program.

(23:18):

As we go through these flows, it may feel repetitive, but for those new to e CQM and this measure I have found repetition is helpful. The initial population main definition for hospital harm, opioid related adverse events is encounter with opioid administration Outside of operating room, these conditions must be met to qualify for the IP. An inpatient encounter must be present which ends during the measurement period. The patient must be greater than or equal to 18 at the start of the inpatient encounter and there must be an administration of an opioid medication during the encounter that is not administered within an operating room suite location. If the criteria is met, the patient is in the initial population. If not, the patient is not in the initial population and processing ends and since the Denominator is equal to the IP, excuse me, if the patient is in the IP, they also meet the Denominator also notes that there are no Denominator exclusions for this measure.

(24:39):

Moving on to the Numerator, the main definition is circled here, encounter with non-enteral opioid antagonist administration outside of operating room and within 12 hours after opioid. We have broken this down to the four criteria that make up this definition noted on the right side of the slide, so the encounter will get into the Numerator if there is a non-enteral opioid antagonist administered 12 hours or less before an opioid antagonist was administered and the opioid antagonist administration starts during the encounter shown here as hospital observation, excuse me, shown here as hospitalization with observation and the opioid antagonist. Root of administration is any of the non-enteral roots int nasal inhalation, intramuscular, subcutaneous, or intravenous injection and the opioid antagonist is not administered in the operating room suite, which is an encounter location. If all four criteria are met, the Numerator is met. If not, the Numerator is not met, and the case stays in the Denominator.

(25:54):

Now that the Denominator and Numerator are defined, we can plug the quantities into the calculation formula. The performance rate aggregates the populations into a single performance rate for reporting purposes. In this example, a Numerator or C equals 10 is divided by the Denominator A equals 100 to equal a 10% performance rate. Remember that the lower the rate, the higher the quality. Now getting into the logic review, let's quickly level set on the layout of the slide. At the top of the slide is the clinical narrative of the measure population. The blue box defines the CQL logic definition of the narrative. Below the box are all the defined statements that in total represent the clinical narrative. The bolded headers are the definition names and beneath that are the logic expressions. Throughout the presentation you see a waterfall pattern. The arrows here illustrate how each definition is nested in the other.

(27:03):

Additionally, any text and close in a box indicates key elements I will be speaking to on the slide and any underlying text indicates a change from last year starting with the changes to the IP criteria logic to reiterate, it was updated to constrain the age 18 and older criteria to start of the inpatient hospital encounter. The patient must also have received at least one opioid medication outside of the OR during their hospitalization. Beginning with the broadest criteria, we want to define the qualifying encounter. The qualifying encounter creates the inpatient hospital encounter where the patient has to be 18 years of age at the start of the inpatient hospitalization. During the measurement, if you follow the arrow upwards, you'll see that it's nested in another definition. What this is doing is pulling all the related criteria of age, the encounter type, and the measurement period into the next definition.

(28:07):

Now we know the patient must also have received an opioid outside of the OR to qualify, so to build this criteria, take a look at the opioid administration definition. Here we are looking for the administration of a medication included in the opioids all value set. The value set provides the list of eligible medication codes that meet the intent of the logic, so for example, morphine and hydromorphone. If you follow the arrow on the right, the opioid administration definition is also nested within the encounter with opioid administration outside of operating room definition, so in total this definition pools all the criteria into one defined statement to include age and patient status and opioid administration all within the same hospitalization. During the measurement, I want to point out two Frequently Asked Questions here. One is what does global hospitalization with observation mean and the second, what does global normalized interval mean?

(29:23):

The hospitalization with observation is a global function, meaning it is used across several other eCQM measures. Its purpose is to determine if the inpatient hospitalization should also include care that occurred in the ED and or in observation. Remember, the requires an inpatient encounter, but we all know that treatment can start as soon as the emergency department, so we want to credit hospitals for any care provided to the patient prior to the time of the inpatient admission. This function allows us to connect the ED and or observation encounters if they exist to the inpatient encounter to create the full hospitalization timeframe from the start until discharge. So, the patient came through the ED and was admitted to inpatient, then the hospitalization start time will begin in the ed. If the patient was admitted direct to inpatient, then the hospitalization start time would be at the time of inpatient admission.

(30:25):

So, second, the global normalized interval is another function used across several measures as well. Its purpose is to support implementation for two timing attributes, relevant date, time and relevant. So, for example, in this logic we are referring to medication administration of an opioid. Think about when the nurse scans a medication to be given. Does the MAR document a single point in time, relevant daytime or does the MAR capture a start and end time for the medication or a relevant? The answer likely depends on the medication. An oral medication will likely have a single point in time, but an IV antibiotic for example may have a start and end time. These variations in how information is documented differs across systems and so to help standardize the normalized interval function allows for either method of timing to meet criteria.

(31:28):

Diving a little bit deeper into the definition underlined here is the logic update To look for opioids administered outside of the or To do this, we use location codes such as operating room suite or something equivalent. The logic then evaluates if the opioid is given during the period of time the patient was in the OR location. So, putting it all together, the IP is looking for IP encounters with an opioid administration during the encounter, which is not the opioid given while in the OR. Here's a simple example to further illustrate the concept. There is an inpatient encounter from September 1st 8:00 AM to September 9:00 AM. During the encounter, the patient received two opioid administrations. There was one given on September 3rd while in the or so that does not count towards meeting the IP criteria. The administration on September 2nd, which was given outside of the OR will meet the IP criteria.

(32:39):

Since the Denominator is equal to the initial population, we can just pull in the definition of initial population. The Numerator is inpatient hospitalizations when opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. As you may recall, the only updates made to the Numerator from last year include replacing the opioid antagonist Naloxone with just opioid antagonist limiting the opioid antagonist to those where the root of administration is intranasal spray inhalation, intramuscular, subcutaneous, or intravenous injection. Now the Numerator definition is titled Encounter with non-enteral opioid antagonist administration outside of operating room and within 12 hours after opioid. This expression is looking for a non-enteral opioid antagonist given to the patient outside of the operating room. The expression within the red box is specific to the measure updates of adding the OR location criteria. This clause works the same as explained in the IP logic review where it is to ignore occurrences where an opioid antagonist were given in the OR. The logic then evaluates if the opioid antagonist is given during the period of time the patient was in the OR location.

(34:11):

The next highlighted logic refers to an opioid administered at least 12 hours or less before the start of the opioid antagonist administration. Remember, to ensure we are correlating the use of an antagonist to an adverse opioid event is the requirement of an opioid being given prior to the antagonist and the last two lines beneath the box where it says roots of administration for opioid antagonists. This refers to a value set consisting codes representing non-oral roots of intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection. So, let's take a look at a use case that meets the Numerator. In this example, we see an IP encounter that starts on September 1st and ends on September 9th to meet Denominator. We see there was one opioid given outside of the OR on September 2nd. We also see the patient was in the OR on September 3rd from 9:30 AM until 10:30 AM. Therefore, the opioid administration given at 9:45 is not evaluated. Now this case meets the Numerator because on September the second at 11:30 AM there was an opioid given outside of the OR, which is about 11 and a half hours later. The patient received an IV opioid antagonist outside of the or which indicates an opioid adverse event occurred.

(35:46):

And that takes us to the end of the measure review. Susan, back to you.

(35:53):

Great, thank you so much Katie and thanks for giving us the overview. Just going to go through a few additional resources that we have here before we jump into the Q&A segment. So we've included some links here to direct the audience to the eCQI Resource Center Eligible Hospital measures page, the Teach Me Clinical Quality Language Video Series, which includes video shorts on several clinical quality language concepts that are listed on this slide, the pioneers in quality landing page on The Joint Commission's website, the Expert to Expert webinar series landing page, and the ONC Issue Tracking System and this is where clinical and technical questions about these eCQMs should be submitted following this webinar. And if you ask any questions that we don't get to today and you don't want to wait several weeks for the written document to go through the various levels of review and approval to get posted, that's where you should submit your questions to get a more immediate response. Katie, next slide please.

(37:02):

Okay, and then we're going to open up for the Q&A segment. Now, I know people have been submitting questions the entire time that we've been broadcasting, but let me reiterate how to ask a question. Please submit questions via the question pane. There's a question mark icon in the audience toolbar. If you click on that, a panel will open for you to type and submit your question. Include the slide reference number when at all possible, and all questions that are not answered verbally during this live event will be addressed in a written follow-up Q&A document and that document will be posted on The Joint Commission's website within several weeks after the live event. As I noted, they do need to go through some levels of review, so that's why it takes a little while to get that available to you, Susan and Melissa, when you're ready, feel free to start facilitating the Q&A segment and I will take over screen sharing. So, thanks Katie for screen sharing and I will go on mute and let Melissa and Susan take over.

(38:05):

Thanks Susan. The first question, "When does the measure need to be reported?"

The answer is currently this is a voluntary measure for the calendar year 2024 reporting CMS evaluates measures on an annual basis to determine if submission is voluntary or mandatory.

(38:28):

Great, thanks. The next question is, "How do we exclude the medications are given in the OR." And the answer is that the way that medication administers within an operating room location are documented may vary between hospitals. So, it is recommended that you consult with your implementation team.

(38:54):

Okay, the next question, "The encounter will not meet the Denominator if the patient was discharged directly from the ED or Obs? Correct?"

The answer is that the Denominator is met. If the patient is admitted inpatient a preceding ED or observation stay prior to the admission will meet the Denominator if the proceeding ED or OBS stay discharge was within an hour prior to the start of the inpatient admission. So, if a patient was discharged from ED to observation and the admission, the discharge from ED and the admission to observation was within one hour kind of connects it all together. So, if that observation discharge

and the admission to inpatient was also within one hour, all those three would be in the measure and counted as the inpatient admission.

(39:53):

Okay, got a couple similar questions to that, so I'm just scanning through a little bit more here. So, this question asks, "What if a visitor brings in opioids and the patient reacts to that? Is this is of course unknown to the staff until there's an adverse reaction? Is there accommodation for this type of incident?"

So, the answer is that this measure requires that a documented administration of opioids by hospital staff must precede the opioid antagonist to be considered for the measure.

(40:30):

Thanks. The next question is, "How does the measure affect pregnant women and newborns?" The answer is the measure only includes inpatient hospitalizations for patients age 18 and older, therefore does not affect newborns. Adult pregnant women that are included in the measure could potentially have an opioid related adverse event. So, they're included in the measure.

(41:00):

Okay. So, we've gotten a couple of questions about how a hospital might plan for follow-up on pain management or about tracking of ADR. So, this measure is not, and this webinar is not really the place for those types of questions, and so we would refer you to your hospital policy and procedures to gain answers to those questions.

(41:38):

So, this question is the ER without admission or same day surgery would not count correct. To meet the initial population Denominator, an inpatient admission must occur. Therefore, the ED visit or ER visit that is not followed by an inpatient admission will not be considered. Similarly, if a patient was admitted to the inpatient was not admitted to the inpatient following a same day surgery visit would not be considered in the measure.

(42:14):

Okay. The next question asks, "Our facility is not required to submit opioid data, but can you clarify what you want us to collect SDO attestation questions?"

So, this is asking specifically about SDOH data, and the answer is that the measure does not include any SDOH reporting requirements. So, to further clarify, this measure is currently available for voluntary, not mandatory reporting for 2024.

(42:46):

Okay, next question. "Patients discharged to our SNF or skilled nursing facility unit with the same EHR, how would you handle two or more opioids flowing into the next level of care?"

The answer is that only inpatient hospitalizations for acute care are eligible for inclusion of the measure. If a patient is discharged to sniff unit from the acute inpatient hospitalization level of care, the measure will stop evaluation at the time of discharge.

(43:23):

Okay. The next question, "Please discuss the intent of ORAE and also the intent of safe use of opioids and why discharge to long-term care and swing bed are included."

So, the answer is this measure. The ORAE measure is intended to be used to identify and reduce unintended opioid related adverse events such as over sedation delirium and respiratory depression. Administration of opioid antagonist is used as an indicator of a severe ORAE regarding the discharge. Only inpatient hospitalizations for acute care are eligible for inclusion in the measure. If the patient was discharged to long-term care from an acute inpatient hospitalization level of care, the measure will stop evaluating at the time of discharge regarding the safe use of opioid measures. This webinar is not focused on that content. However, we did present a safe use of opioids measure related Expert to Expert webinar and that information and recording will be posted to The Joint Commission website in the near future.

(44:39):

Thanks. The next question, "What evidence establishes Naloxone as clearly indicating preventable antigenic harm among inpatients who receive opioids?"

There's a few things to unpack here. So first, Naloxone has been a long use to track opioid safety and events in hospitals and has also been used as an outcome measure in studies of opioid safety such as from the American Journal of Health System Pharmacy quality indicator of opioid stewardship in hospital related to adverse events article.

Second, during our validity testing, we found evidence that providers were administering reversal agent because the patient was exhibiting signs of opioid related adverse events such as respiratory distress or was non-responsive, and also their response post administration of Naloxone being more alert. Third, here our measure requires evidence of opioid administration within 12 hours proceeding. Naloxone strengthening the link between the two and supporting the Naloxone as an RA.

(46:01):

Okay, thank you. The next question asks, "What is the expected benchmark?"

All benchmarks are established using the hospital measure performance data. Since these measures were introduced beginning with the 2024 reporting year performance rates and benchmarks from CMS will not become available until at least 2025.

(46:27):

Okay. "What tips can you share on data validation for this measure?"

Clinical codes such as ICD 10, clinical modification, ICD 10, procedure coding system, SNOMED, LOINC, RX Norm, et cetera, are used to define certain data elements used in the measures. These can be found in the value sets used in measure specifications. However, we are not in the position to provide direction on how data validation is performed within organizations.

(47:06):

Okay, thank you. Next question. "Why aren't all opioids considered for this measure? Why are only two and three? The main focus?"

So, the answer is that opioids all value set includes all formula formulations of opioids that may be administered to an inpatient or outpatient setting regardless of intended use. According to federal law, no prescription may be written for scheduled one substances and they are not readily available for clinical use. Substances that are scheduled for and above are low risk for abuse, for example, overdosing and are least likely to be misused.

(47:58):

Okay. The next one might have been addressed, but I will, so sorry for the repeat here.

"Is there a national rate or benchmark?"

All the answer is that benchmarks are established using historic measured performance data. Since the measures were introduced beginning with 2024 reporting, performance rates and benchmarks from CMS will not become available until at least 2025.

(48:24):

Okay. And I am scanning through to see if there's any additional questions. I see one more that we can answer at this time, and so I will read this last answer or question,

"Is the age calculated at admit to inpatient date time, or included ED observation date time?" So once again, the age of 18 or older is determined at the time the patient was admitted to inpatient. So that's at the time of admission for inpatient acute inpatient care. So, with that, we thank everyone for all of your questions, and we appreciate your time today and I will hand it back over to Susan with a few more pieces of information to help close us out today. Thank you.

(49:15):

Thanks so much Susan and Melissa for facilitating the Q&A segment just now. And thanks to the team in the background that was answering so many of those questions, we know you were typing up responses and trying to get to as many of them as we could during the live segment. Just as a quick reminder, we'll post the responses to the questions that we didn't address during the live broadcast via a written document. And let me go to the next slide here because it gives you the link where you'll be able to find that when available. All Expert to Expert webinar recording links, slides, transcripts, and Q&A documents can be accessed for previous and any on-demand webinars that we do on The Joint Commissions webpage via the link that is shown on this slide. Just to reiterate, the eCQMS we've already covered in this series, the 2024 eCQM annual update webinar series began with an on-demand webinar that was released in August on Joint Commissions PC-01, 05, and 06 eCQMs. We continued with the aligned PC measures in September, stroke in October VTE in November and glycemia in December, and we concluded in January with the safe use of opioids concurrent prescribing eCQM.

(50:31):

As of today's webinar, we are also addressing the new measures for 2024 implementation with the opioid related adverse events. eCQM we just covered and the global malnutrition composite score eCQM will be addressed during a live broadcast on February 22nd. This series incorporates expertise from the Joint Commission, CMS Mathematica, and other measure stewards. If you missed any of those topics, the link on this slide will provide you access to the recordings and slides and other documents when they are available. Before the session concludes just a few words about the CE

survey. We use your feedback to inform our future content and also assess the quality of our educational programs. You can access the CE survey in two ways.

On the next slide, we provide a QR code that you can scan with your mobile device to immediately access the survey. If you miss that QR code, the link will be provided within an automated email sent to the email address that you used to register to obtain your CE certificate.

(51:35):

At the end of the survey, when you click submit, you're redirected to a page from which you can print or download a PDF certificate. After completing that survey, you will also receive another automated email that includes the link to the certificate. So, with that, thank you to Katie for jumping in today and doing that presentation. On behalf of your team, Melissa, and Susan for facilitating the Q&A segment and thanks to our content experts that were in the background answering all the submitted questions.

Finally, thanks to all of our participants that registered and attended today. We'll leave this slide up for just a few more moments before we end the broadcast. For anyone that would like to access the survey using the QR code, have a great day.