



ST-Segment Elevation Myocardial Infarction (STEMI) Electronic Clinical Quality Measure (eCQM)

Appropriate Treatment for STEMI Patients in the Emergency Department (ED)

Speakers

Amanda Audette, MPH

Research Associate IV

Yale/YNHH Center for Outcomes Research and Evaluation
(CORE)

Karen VanBourgondien, RN, BSN

Education Lead

Outpatient Quality Program Systems and Stakeholder
Support Team

Agenda

- Objectives
- Background
- Measure specifications
- Reporting timeline - voluntary to mandatory
- Resources
- Questions

Objectives

By the end of the presentation, participants will be able to:

- State the 2024 mandatory reporting of the appropriate treatment for STEMI Patients in the ED eCQM.
- Identify calendar year (CY) 2024 eCQM reporting requirements for the Hospital Outpatient Quality Reporting (OQR) Program.
- Locate resources to ensure successful submission of STEMI eCQM measure data.

Background

- Hospitals have been reporting eCQMs in the Inpatient Quality Reporting (IQR) and Promoting Interoperability (PI) programs since CY 2016.
- The STEMI eCQM was finalized in CY 2022 Hospital Outpatient Prospective Payment System (OPPS) Final Rule as the first eCQM in the program.
 - Measure ID: OP-40; eCQM measure ID: CMS996e

Background (cont.)

Replaces two chart-abstracted measures:

- OP-2: Fibrinolytic Therapy Received Within 30 Minutes of Emergency Department (ED) Arrival, and
- OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention

Note: OP-2 and OP-3 were finalized for removal from the OQR Program beginning with CY 2023 reporting period/CY 2025 payment determination.

Measure Specifications

- Process measure via Electronic Health Record (EHR) data
- The percentage of ED encounters for patients with a diagnosis of STEMI who received appropriate treatment
- Improvement noted as an increase in rate
- Facility level

Measure Specifications (cont.)

Denominator	ED encounters for patients 18 years of age and older with a diagnosis of ST-segment elevation myocardial infarction (STEMI) who should have received appropriate treatment for STEMI.
Numerator	ED encounters for STEMI patients whose time from ED arrival to fibrinolytic therapy is 30 minutes or less; OR non-transfer ED STEMI patients who received PCI within 90 minutes of ED arrival; OR ED STEMI patients who were transferred to a percutaneous coronary intervention (PCI)-capable hospital within 45 minutes of ED arrival at a non-PCI-capable hospital.

Denominator Exclusions

Within 24 hours before start of ED encounter or during ED encounter:

- Aortic dissection or ruptured aortic aneurysm
- Severe neurologic impairment
- Mechanical circulatory assist device placement, including (aortic balloon pump), biventricular assist device, intra-aortic balloon, intra-aortic balloon counterpulsation, intra-aortic counterpulsation balloon pump, left ventricular device, percutaneous ventricular assist device, or ventricular assist device
- Intubation, including endotracheal intubation, mechanical ventilation, nasotracheal intubation, or orotracheal intubation
- Cardiopulmonary arrest (including cardiac arrest), CPR, defibrillation, respiratory arrest, or ventricular fibrillation (V-fib), ventricular tachycardia (VT), pulseless electrical activity (PEA); or, traumatic or prolonged (>10 minutes) CPR

Denominator Exclusions (cont.)

During ED encounter:

- Allergic reaction to alteplase, streptokinase, anistreplase, tenecteplase, or reteplase

Patients with the following conditions:

- Expired in the ED

Within 90 days before start of ED encounter:

- Intracranial or intraspinal surgery

Within 90 days before start of or at start of ED encounter:

- Ischemic stroke
- Significant facial and/or closed head trauma
- Peptic ulcer

Denominator Exclusions (cont.)

Within 21 days before start of or starts during ED encounter:

- Major surgery

At the start of ED encounter:

- Bleeding or bleeding diathesis (excluding menses)
- Known malignant intracranial neoplasm (primary or metastatic)
- Known structural cerebral vascular lesion (e.g., AVM)
- Advanced dementia
- Pregnancy
- Active oral anticoagulant therapy

Access the Hospital OQR [Specifications Manual](#) for measure details.

Reporting Timeline

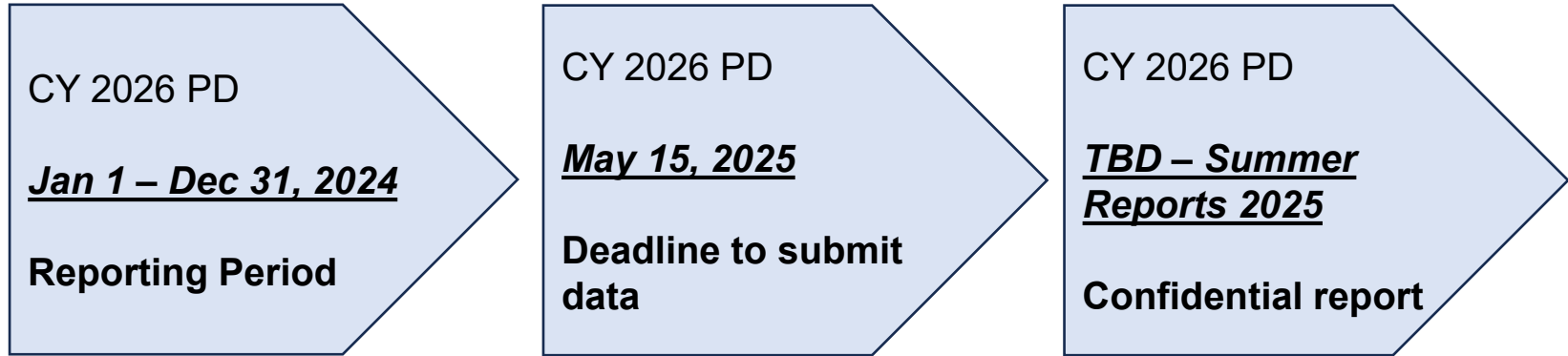
Reporting Period	Quarters	Submission Period	Payment Determination
CY 2023*	Any quarter(s)	May 15, 2024	NA
CY 2024	One self-selected quarter	May 15, 2025	CY 2026
CY 2025	Two self-selected quarters	May 15, 2026	CY 2027
CY 2026	Three self-selected quarters	May 17, 2027	CY 2028
CY 2027	Four quarters (one calendar year)	May 15, 2028	CY 2029

*Voluntary reporting begins with
CY 2023 reporting period.



Reporting Timeline Example

Example: Reporting period for calendar year (CY) 2024/CY 2026 payment determination (PD)



Note: A measured entity with no qualifying denominator population in the measurement period will be able to submit a zero-denominator declaration for the measure to meet reporting requirements.

Voluntary reporting began with the CY 2023 reporting period.

Hospitals must use Health Information Technology (IT) certified by the Office of the National Coordinator for Health IT (ONC) to the 2015 Edition Cures Update criteria



Resources

- eCQI* Resource Center: <https://ecqi.healthit.gov/>
 - Measure specifications, definitions, value sets, flowsheets
- ONC Project Tracking System: <https://oncprojecttracking.healthit.gov>
 - Create an account, search for an issue, and create an issue and submit technical and implementation questions in the ONC Project Tracking System (Jira)
- For hospital outpatient reporting guidance, visit [QualityNet](#) and the [Quality Reporting Center](#) for specific program reporting education.

*eCQI: Electronic Clinical Quality Improvement

The eCQI Resource Center

<https://ecqi.healthit.gov>

The Homepage

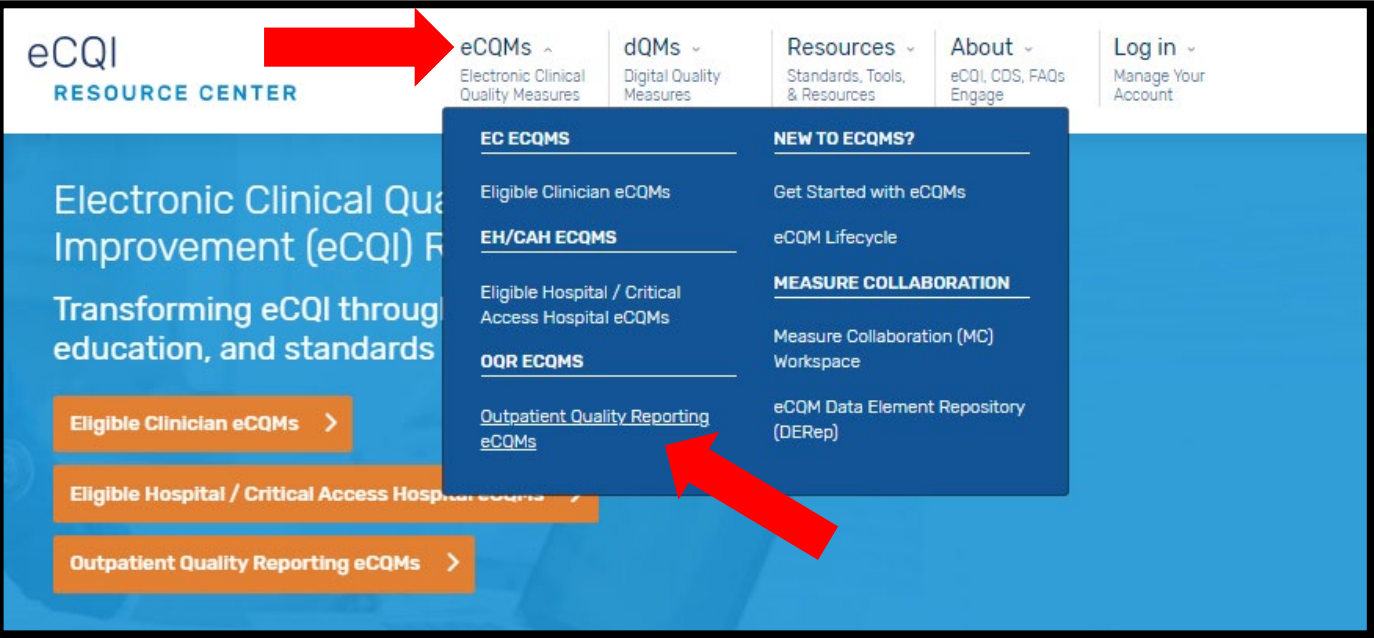
The screenshot displays the homepage of the eCQI Resource Center. At the top, there is a navigation bar with the eCQI logo and 'RESOURCE CENTER' on the left. To the right are dropdown menus for 'eCQMs' (Electronic Clinical Quality Measures), 'dQMs' (Digital Quality Measures), 'Resources' (Standards, Tools, & Resources), 'About' (eCQI, CDS, FAQs, Engage), and 'Log in' (Manage Your Account). A search bar is located on the far right of the navigation bar.

The main banner area features the title 'Electronic Clinical Quality Improvement (eCQI) Resource Center' and the tagline 'Transforming eCQI through collaboration, education, and standards'. Below this are three orange buttons: 'Eligible Clinician eCQMs', 'Eligible Hospital / Critical Access Hospital eCQMs', and 'Outpatient Quality Reporting eCQMs', each with a right-pointing arrow.

On the right side, there is a 'Featured News & Events' section. It contains two news items: one dated 'Mar 04, 2024' with the link 'New Video Short: Safety-Related Electronic Clinical Quality Measures...', and another dated 'Mar 20, 2024 @ 3:00pm EDT' with the link 'QDI User Group'. A 'View All' button is positioned below these items.

At the bottom of the page, there is a search bar with three input fields: 'ECQM' (with a dropdown menu showing '- Any -'), 'PERIOD' (with a dropdown menu showing '- Any -'), and 'eCQM Title or CMSID' (with the placeholder text 'May use partial Title or ID'). A 'Find an eCQM' button is located to the right of these fields.

Navigating to OQR Outpatient eCQM



From the homepage:
Hover your cursor over **eCQMs**
Select **Outpatient Quality Reporting eCQMs**

Navigating to Measure Information Page

Outpatient Quality Reporting eCQMs

[Receive updates on this topic](#)

Select Period **2024** Filter By eCQMs [Apply Filters](#)

[eCQM Resources](#) [OQR eCQMs](#) [About](#)

2024 Reporting Period Outpatient Quality Reporting eCQMs

Title	Short Name	CMS eCQM ID	CBE ID	Telehealth Eligible*	Download Specifications	Notes
Appropriate Treatment for ST-Segment Elevation Myocardial Infarction (STEMI) Patients in the Emergency Department (ED)	OP-40 (STEMI)	CMS996v4	3613e	No		There are known issues on CMS996v4. See issues EKI-25 and EKI-26 on the ONC eCQM Known Issues Dashboard for details.

Filter by period from the *Select Period* drop-down box.

Select the STEMI eCQM option.

Features on the Measure-Specific Page

The screenshot displays a web interface for comparing measure versions. At the top, there are three navigation tabs: "Measure Information", "Specifications and Data Elements", and "Release Notes". The "Measure Information" tab is highlighted with a red border. Below the tabs, the main content area shows the title "Compare Versions of: 'Appropriate Treatment for ST-Segment Elevation Myocardial Infarction (STEMI) Patients in the Emergency Department (ED)'" and a brief description of the Compare function. Two lines of text are highlighted: one in red indicating changes from the previous version and one in green indicating updates in the new eCOM version. At the bottom, there is a "COMPARE 2024 VERSION TO" section with a dropdown menu set to "2023", a "Compare >" button, a "Reset" button, and a "DOWNLOAD" section with a "Download" dropdown menu.

Features available include:

- Measure Information
- Specifications and Data Elements
- Release Notes

Navigating to QRDA*

The screenshot shows the eCQI Resource Center homepage. The navigation menu is open, showing the following options:

- RESOURCES AND TOOLS
 - eCQI Tools & Resources
 - eCQM and eCQI Educational Resources
 - eCQM Implementation Checklist
 - eCQM Annual Timeline
 - Value Set Information
- ECQI STANDARDS
 - Standards Summary
 - Standards Harmonization
 - CQL - Clinical Quality Language
 - FHIR® - Fast Healthcare Interoperability Resources®
 - HQMF - Health Quality Measure Format
 - QDM - Quality Data Model
 - QRDA - Quality Reporting Document Architecture**
 - USCDI+ Quality - United States Core Data for Interoperability Plus Quality

At the bottom of the page, there is a search bar with the following fields:

- ECQM: - Any -
- PERIOD: - Any -
- eCQM Title or CMSID: May use partial Title or ID
- Find an eCQM

From the homepage:
Hover your cursor over
Resources.

Select **QRDA- Quality Reporting Document Architecture.**

*QRDA: Quality Reporting Document Architecture

Navigating to Education

QRDA - Quality Reporting Document Architecture

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About

Tools & Resources

Previous Versions

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Connect

The Quality Reporting Document Architecture (QRDA) is the data submission standard used for a variety of quality measurement and reporting initiatives. It is based on the [Health Level Seven International® \(HL7®\) Clinical Document Architecture \(CDA\)](#). QRDA creates a standard method to report [quality measure](#) results in a structured, consistent format and can be used to exchange [eCQM](#) data between systems.

Current QRDA Reference and Implementation Guides:

Find [QRDA Known Issues](#) in the [ONC QRDA Known Issues Project](#).

2024 Reporting and Performance Period

The 2024 CMS [QRDA I Implementation Guide for Hospital Quality Reporting](#) for 2024 eCQM reporting is based on the HL7 CDA Release 2: QRDA Category I, Release 1, [Standard for Trial Use Release 5.3 with errata](#) (published December 2022).

- [2024 CMS QRDA I Implementation Guide for Hospital Quality Reporting \(PDF\)](#) (Updated August 2023)
- [2024 CMS QRDA I Schematron and Sample Files for Hospital Quality Reporting \(ZIP\)](#) (Updated August 2023)

The 2024 CMS QRDA III IG, Schematron, and Sample Files for [Eligible Clinicians](#) for 2024 eCQM reporting is based on the HL7 Implementation Guide for CDA Release 2: QRDA Category III, Release 1 (published September 2021).

- [2024 CMS QRDA III Implementation Guide for Eligible Clinicians \(PDF\)](#) (updated November 2023)
- [2024 CMS QRDA III Schematrons and Sample Files for Eligible Clinicians \(ZIP\)](#) (updated February 2024)

Select **Education** from the available resources' tabs.

The QRDA Education Page

QRDA - Quality Reporting Document Architecture

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About

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CMS QRDA I (for patient-level data)

- 2024 CMS QRDA I Implementation Guide (IG), Schematron, and Samples File - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - June 20, 2023
- Updated 2023 CMS QRDA I IG and Schematron for Hospital Quality Reporting - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - March 28, 2023
- Updated 2022 CMS QRDA I IG and Hybrid Measure Sample File for Hospital Quality Reporting [Slides \(PDF\)](#) / [YouTube](#) - December 14, 2021
- CMS QRDA Category I IG Changes for CY 2021 Hospital Quality Reporting [Slides](#) (PDF) / [YouTube](#) - April 27, 2021

CMS QRDA III (for aggregate data)

- 2023 QRDA III Updates for the CY 2023 Physician Fee Final Rule - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - January 17, 2023
- 2023 QRDA III Updates - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - March 1, 2022
- Final 2022 CMS QRDA III IG Publication - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - July 27, 2021

CMS QRDA I and III

- 2023 CMS QRDA I and III Updates - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - August 11, 2022
- [Public Comments](#) on the Draft 2023 CMS QRDA I IG and Updates to the 2023 CMS QRDA III IG and Sample Files - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - May 10, 2022
- 2022 CMS QRDA I and III Updates - CMS Quality Bi-Monthly Forum [Slides \(PDF\)](#) / [YouTube](#) - May 20, 2021

Informational slides and videos are available in each category.

Note: A detailed reporting webinar is coming soon!

The ONC* Project Tracking System

<https://oncprojecttracking.healthit.gov>

ONC: Office of the National Coordinator for Health IT



The Homepage

ONC Project Tracking System

Learning Resources **Create an Issue Ticket** Search for an Issue Create An Account Log In

The ONC Project Tracking System is a collaboration platform in which users can log, track, and discuss issues with subject matter experts in support of health information technology implementation. It also provides tools to facilitate knowledge sharing and agile project management.

Reminder:
This is an open platform that does not intend for users to communicate sensitive or confidential information such as protected health information and personal identifiable information.

BONNIE and MAT Issue Tracker	BONNIEMAT
CMS Hybrid Measures	CHM
Comments on eCQMs under development	PCQM
CQL Issue Tracker	CQLIT
CYPRESS Issue Tracker	CYPRESS
eCQM Issue Tracker	CQM

ONC's Health IT Feedback and Inquiry Portal

Share your health IT-related feedback or concerns that you wish to bring to the ONC's attention:
<https://inquiry.healthit.gov>

Hospital Inpatient Quality Reporting (IQR)

Contact the Hospital Inpatient Support Team:
https://cmsqualitysupport.servicenowservices.com/qnet_qa
(844) 472-4477

Quality Payment Program (QPP)

Contact the QPP Information Center:

To create a ticket, select **Create an Issue Ticket** from the homepage.

Note: If you do not have an account, select the **Create an Account** option. You will create a username and password.

Logging Into the System

Welcome to Office of the National
Coordinator for Health Information
Technology

Username

Password

Remember my login on this computer

Not a member? [Sign up](#) for an account.

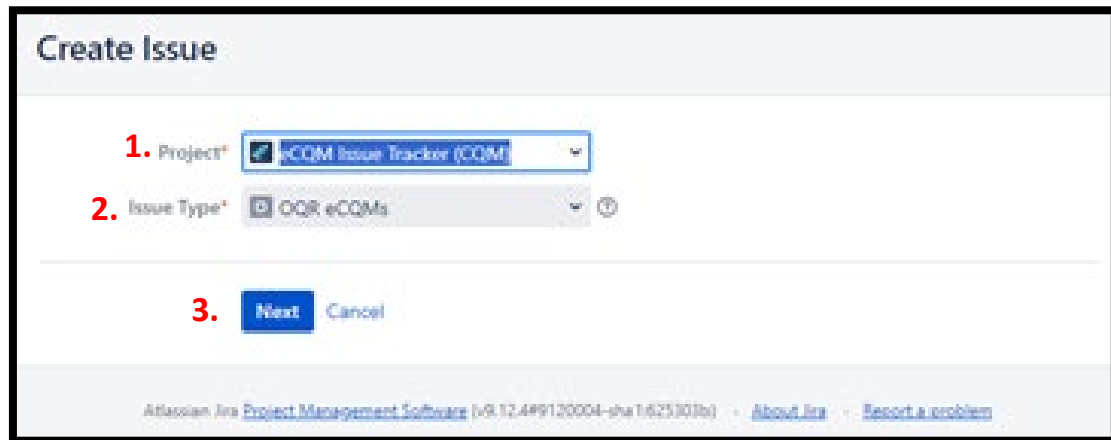
[Can't access your account?](#)

Atlassian Jira [Project Management Software](#) · [About Jira](#) · [Report a problem](#)

Enter your Username and
Password.

Select **Log In**.

Accessing the System



The screenshot shows a web form titled "Create Issue". It contains two dropdown menus and two buttons. The first dropdown menu is labeled "Project*" and has "eCQM Issue Tracker (eCQM)" selected. The second dropdown menu is labeled "Issue Type*" and has "OQR eCQMs" selected. Below the dropdowns are two buttons: "Next" (highlighted in blue) and "Cancel". At the bottom of the form, there is a footer with the text "Atlassian Inc Project Management Software (v9.12.449120004-sha1625303e) · [About Us](#) · [Report a problem](#)".

1. Select **eCQM Issue Tracker (eCQM)** from the *Project* drop-down menu.
2. Select **OQR eCQMs** from the *Issue Type* drop-down menu.
3. Select **Next**.



Addressing Your Questions

Hospital OQR Program Support Team

- Phone: 866.800.8756
- Ask a question via [QualityNet Q&A Tool](#)

Center for Clinical Standards and Quality Service Center

- Phone: 866.288.8912
- Email: qnetsupport@cms.gov

Acronyms



AVM	Arteriovenous Malformation	ONC	Office of the National Coordinator for Health Information Technology
CMS	Centers for Medicare & Medicaid Services	OQR	Outpatient Quality Reporting
CPR	Cardiopulmonary resuscitation	PEA	Pulseless electrical activity
CY	Calendar Year	PCI	Percutaneous Coronary Intervention
eCQI	Electronic Clinical Quality Improvement	PD	Payment Determination
eCQM	Electronic Clinical Quality Measure	QA	Question and Answer
ED	Emergency Department	QRDA	Quality Reporting Document Architecture
EHR	Electronic health record	STEMI	ST-Segment Elevation Myocardial Infarction
HCP	Healthcare Personnel	VF	Ventricular Fibrillation
OPPS	Outpatient Prospective Payment System	VT	Ventricular Tachycardia

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