

# User Guide: How to Implement eCQM Annual Updates

## Version 1.1

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Battelle Data Classification: Restricted. This data is of business value to Battelle.

The Battelle logo is located in the bottom right corner of the page. It consists of the word "BATTELLE" in a bold, blue, sans-serif font. The logo is positioned on a light gray background that is part of a decorative footer element consisting of three horizontal bars: a top blue bar, a middle dark gray bar, and a bottom light gray bar.

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## 1 Introduction

The Centers for Medicare & Medicaid Services (CMS) requires an [eligible clinician](#), eligible hospital ([EH](#)) or critical access hospital ([CAH](#)), or hospital outpatient department (Hospital Outpatient Quality Reporting [OQR]) to use the appropriate version of the electronic Clinical Quality Measures ([eCQMs](#)) or [hybrid measures](#)<sup>1</sup> for the designated reporting/performance period for quality reporting programs using eCQMs.

CMS makes annual updates to the eCQMs and hybrid measures adopted in CMS programs.



eCQM updates may include

- Codes system changes – SNOMED CT, RxNorm, etc.
- Logic, data model, value set, and direct reference code (DRC) updates
- Clinical updates based on new research, literature, and clinical guidelines
- Clarifications based on implementation issues reported in the Office of the National Coordinator for Health Information Technology (ONC) Project Tracking System (Jira)
- Changes based on advances in technical standards and data exchange protocols

CMS also updates eCQM materials annually. Materials updates may include

- Guide for Reading eCQMs
- eCQM Tables
- Specifications (human-readable documents and machine-readable Extensible Markup Language [XMLs])
- Technical Release Notes
- Value Sets, Binding Parameter Specification (BPS), DRCs
- eCQM Logic and Guidance Document
- Telehealth Guidance
- eCQM Flows
- CMS Quality Reporting Document Architecture (QRDA) Implementation Guides

<sup>1</sup> For brevity, the document uses the term eCQM to mean eCQMs and hybrid measures.

## 2 Purpose

This document provides detailed, technical steps [health information technology](#) (IT) developers, implementers, and measured entities must follow to update their systems and processes with the eCQM Annual Update (AU).

This Guide enables Electronic Clinical Quality Improvement (eCQI) Resource Center users to

- Determine how to identify changes in the eCQM updates that could impact an existing eCQM implementation.
- Evaluate existing processes for managing workflow when implementing an eCQM.
- Understand the changes in eCQM specifications from one eCQM AU to the next.

**Please note:** The steps in this Guide assume a [measured entity](#) has determined which eCQMs to report.

### 3 Preparing to Implement eCQM Annual Updates

In order to implement annual updates, it is necessary to create several system accounts so that you will receive notifications and to conduct a preliminary eCQM specifications review. System accounts include:

- eCQI Resource Center
- ONC Project Tracking
- Unified Medical Language System
- Cypress Validator

Please follow these steps to create the required accounts.

#### 3.1 Create an eCQI Resource Center account.

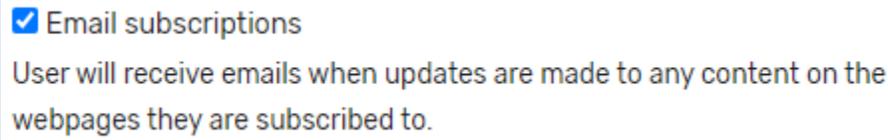
3.1.1 Go to the [eCQI Resource Center registration page](#) (optional).

The screenshot shows the registration page for the eCQI Resource Center. The browser address bar displays 'ecqi.healthit.gov/user/register'. The page header includes the eCQI logo and navigation links for eCQMs, dQMs, Resources, About, and Log in. A search bar is located in the top right corner. The main heading is 'Create new account', with buttons for 'Log in', 'Create new account', and 'Reset your password'. The 'Account Benefits' section states: 'By creating an account with the eCQI Resource Center, you are able to select pages of the website for which you would like to receive notifications. You will receive emails when updates are made to the pages for which you are subscribed. The sign up process walks you through a number of topics for which you can subscribe and most pages on the eCQI Resource Center have a "Receive updates on this topic" link for you to click to subscribe. Additionally, an eCQI Resource Center account is the first step to posting in the Measure Collaboration Workspace.' Below this text is a 'NAME' field with a text input box and the label 'First and Last name'.

3.1.2 Complete the fields for

- Name
- Email address
- User Name
- User Type

3.1.3 Select the option for receiving email updates for any pages which you choose to subscribe to in the next step.



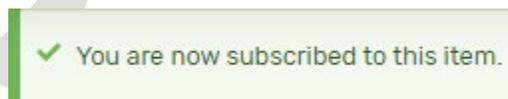
3.1.4 Sign up for updates on specific eCQMs, using these links to the pages as needed.

- [Eligible Clinician eCQMs](#)
- [Eligible Hospital/Critical Access Hospital](#) eCQMs (includes hybrid measures)
- [Outpatient Quality Reporting](#) (OQR) eCQMs

3.1.5 On each page, select the link "Receive updates on this topic." This will provide you with an email alert when there is an update to Eligible Clinician, EH/CAH, or OQR pages.



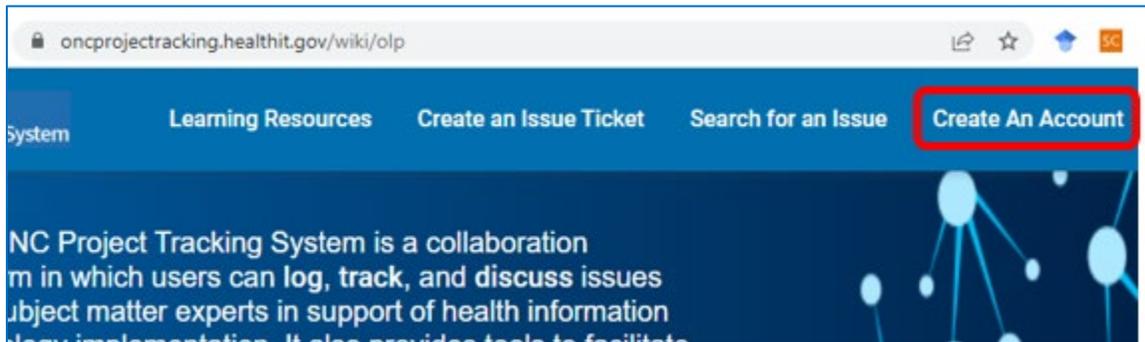
3.1.6 A green banner will pop up confirming your subscription each time you make this selection.



### 3.2 Create an ONC Project Tracking Jira account.

3.2.1 To create an account for technical questions regarding eCQMs go to the [ONC Project Tracking System](#) (Jira) website (required to submit questions).

3.2.2 Select the link "Create An Account" in the upper right corner.



3.2.2.1 Once you have an ONC Project Tracking System account, you can submit and obtain feedback on eCQM implementation questions by creating an issue ticket in the ONC Project Tracking System. Key topic areas include

- Clinical Quality Language (CQL) Issue Tracker
- CMS Hybrid Measures
- Cypress Issue Tracker
- eCQM Issue Tracker
- eCQM Known Issues
- QRDA Issue Tracker
- QRDA Known Issue Tracker
- Quality Data Model (QDM) Issue Tracker

### 3.3 Create a Unified Medical Language System (UMLS) account.

3.3.1 Select this link to create an [UMLS](#) account. Select "Sign Up" (required to access value set details).



- 3.3.2 Your UMLS account will allow you to access the value sets in the [Value Set Authority Center \(VSAC\)](#) to view all concepts and codes included in eCQM value sets.

### **3.4 Create a Cypress Validator Account.**

- 3.4.1 Select this link to go to the [Cypress Sign Up page](#). This utility provides implementers with the ability to validate the conformance of QRDA Category I and Category III documents to CMS QRDA Implementation Guides and verify the results of eCQM calculation.

### **3.5 Conduct a preliminary eCQM specifications review.**

- 3.5.1 Review the code system versions used in the eCQM or hybrid measure specification for the upcoming reporting/performance year.
- [eCQM Pre-Publication Document](#)
  - [VSAC](#) download page information
- 3.5.2 Work with your coding department and health information technology (IT) vendor to update your systems to the latest code versions.
- 3.5.3 Some value sets contain “legacy codes.” These codes will be inactive in the current code system version but are active in one of the prior code system versions noted in the file.

### **3.6 Review the standards, tools, and documents.**

- Review the standards, tools, and documents used to support the eCQM or hybrid measure specification for the upcoming reporting/performance year.
- Work with your health IT vendor to ensure your systems are using updated technical standards and testing tools found in the [eCQM Pre-Publication Document](#) and [eCQM Standards and Tools Versions](#) table.

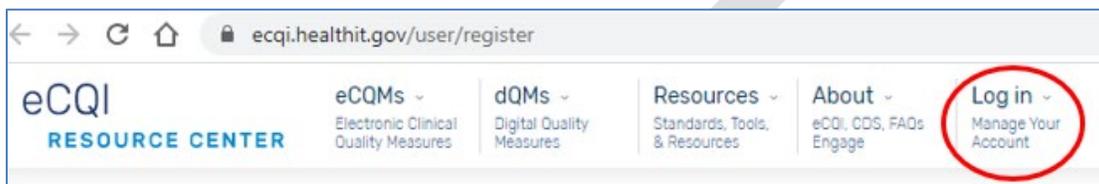
**Congratulations! You have completed the eCQM AU Preparation steps!**

#### 4 eCQM Annual Update Implementation Steps

Once you have registered for the necessary accounts and completed your preliminary review, you can access the appropriate eCQM AU.

##### 4.1 Access updated eCQMs, hybrid measures, and materials.

4.1.1 To access the updated **eCQMs, hybrid measures, and materials** used in CMS quality programs for the upcoming reporting/performance period, log in to the [eCQI Resource Center \(optional\)](#).

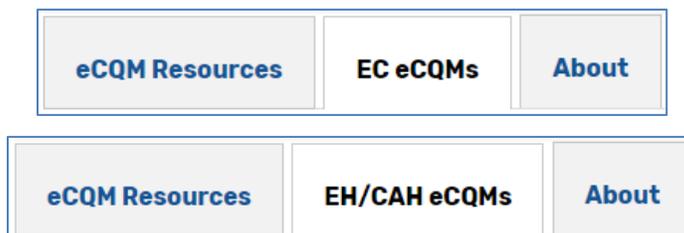


4.1.2 Select the [Eligible Hospital \(EH\)/Critical Access Hospital \(CAH\)](#), [Eligible Clinician](#), and/or the [Outpatient Quality Reporting eCQMs](#) webpage.



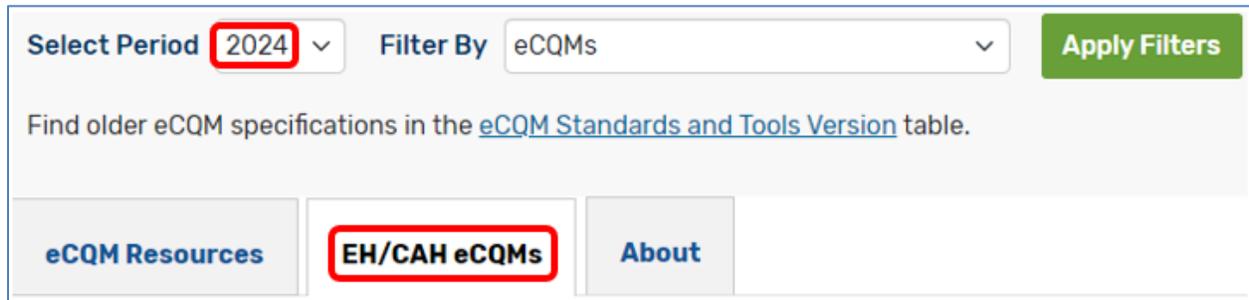
4.1.3 Find eCQMs and hybrid measures.

- Please note, there will be three tabs on the page selected. The middle tab will be for the eCQM type desired.

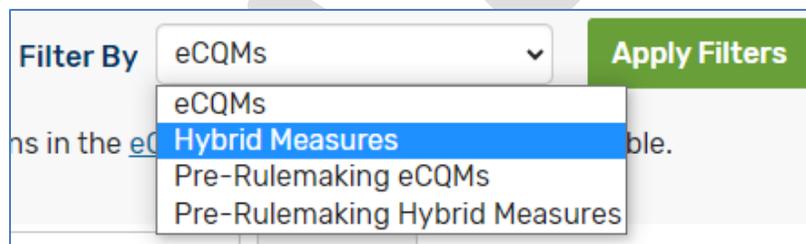




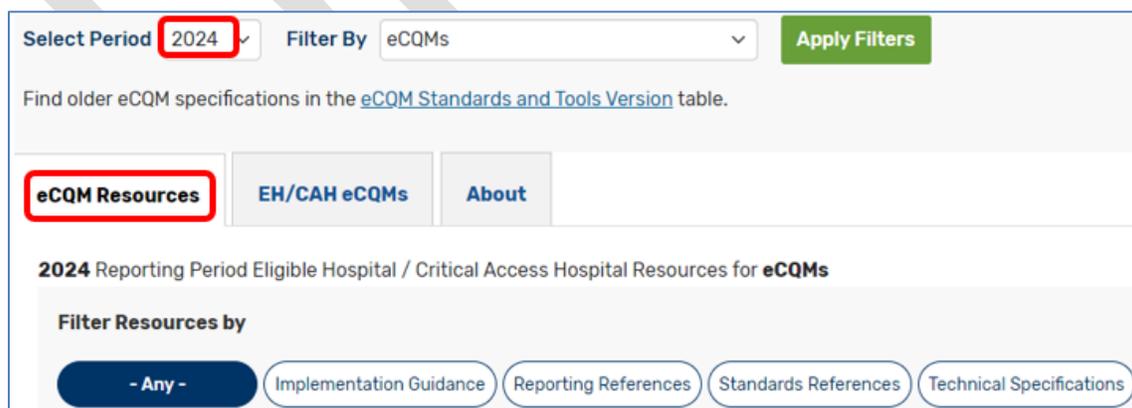
4.1.4 Select the EC, EH/CAH, or OQR eCQMs tab and select the appropriate year.



4.1.5 In this example, EH/CAH eCQMs are in the filter field by default, but you can also filter by hybrid measures, by pre-rulemaking eCQMs, and pre-rulemaking hybrid measures. Then select "Apply Filters." Note: EC and OQR eCQMs also have pre-rulemaking filters but no hybrid options.



4.1.6 To access the sortable tables on **resource materials** such as guidance documents, references, or specifications, select the eCQM Resources tab and select the appropriate year. Always select Apply Filters after changing your options.



- You can browse through all the resources, or you may also filter these results by selecting any of the options provided in the ovals: Implementation Guidance, Reporting References, Standards References, or Technical Specifications.

## 4.2 Secure detailed information about the eCQM.

4.2.1 Please note, there will be three tabs on the page selected. The middle tab will be for the eCQM type desired. In this example, select the EH/CAH eCQMs tab and locate the desired eCQM in the table. Then select the title of the eCQM to open the eCQM page.

eCQM Resources	<b>EH/CAH eCQMs</b>	About			
<b>2024 Reporting Period Eligible Hospital / Critical Access Hospital eCQMs</b>					
Total number of EH/CAH eCQMs: 12					
Title	Short Name	CMS eCQM ID	CBE ID	Download Specifications	Notes
<a href="#">Anticoagulation Therapy for Atrial Fibrillation or Flutter</a>	STK-3	CMS71v13	Not Applicable		
<a href="#">Antithrombotic Therapy By End of Hospital Day 2</a>	STK-5	CMS72v12	Not Applicable		
<a href="#">Cesarean Birth</a>	PC-02	CMS334v5	0471e		

- Note: selecting the Download Specifications option downloads a zip file that includes the files found on the individual eCQM’s Specifications and Data Elements tab. Same files as shown in 4.2.2.

4.2.2 Select the Specifications and Data Elements tab. Download and open zip files for the individual eCQMs or hybrid measures your organization uses to view detailed information on the eCQM or hybrid measure.

Measure Information	<b>Specifications and Data Elements</b>	Release Notes
<h2>Specifications</h2>		
<b>Attachment</b>		
 <a href="#">CMS72v12.html</a>		
 <a href="#">CMS72v12.zip (ZIP)</a>		
 <a href="#">CMS72v12-TRN.xlsx (Excel)</a>		
 <a href="#">CMS72v12-eCQMFlow.pdf (PDF)</a>		

- Human-Readable Hyper Text Markup Language (HTML) file - Provides high level understanding of the header information from the Health Quality Measure Format (HQMF) and the population criteria, definitions, functions, terminology, data criteria, supplemental data elements, and risk adjustment variables used in eCQM calculation.
- Machine-Readable (XML) - Translates metadata from human-readable header into computer code, the XML also contains code to reflect the population criteria.
- Technical Release Notes (TRNs) - Provides a list of all changes since the last version for the eCQM or hybrid measure.

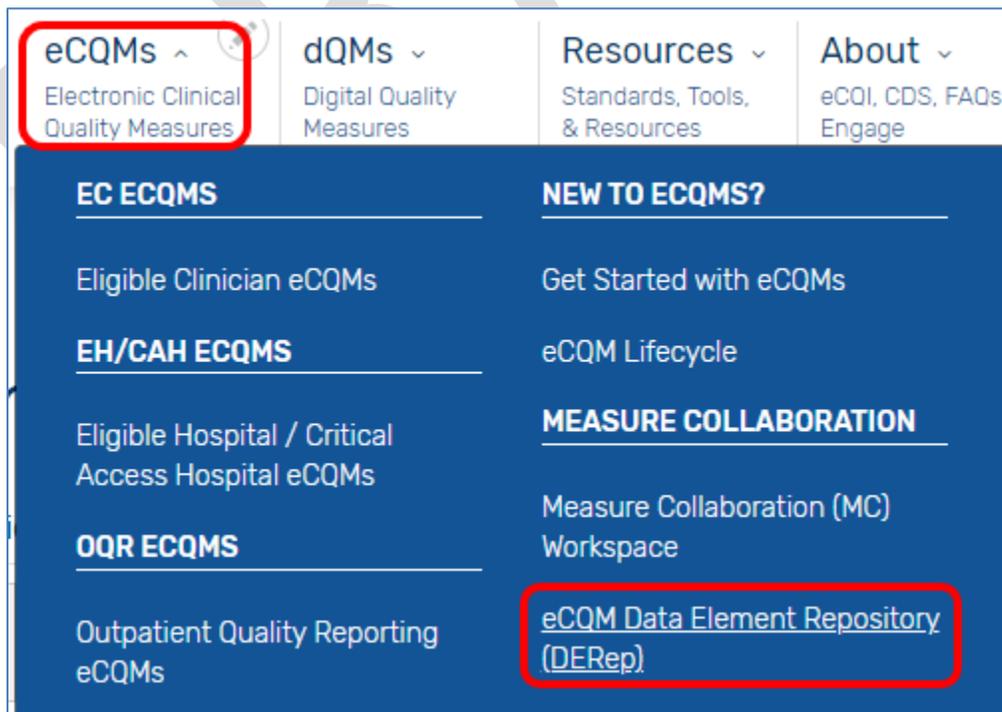
#### 4.2.3 Reference eCQM data elements.

The [eCQM Data Element Repository](#) (DERep) provides all the data elements associated with eCQMs and hybrid measures adopted for use in CMS quality reporting programs including definitions and clinical focus for each data element. There are three ways to navigate to the eCQM DERep.

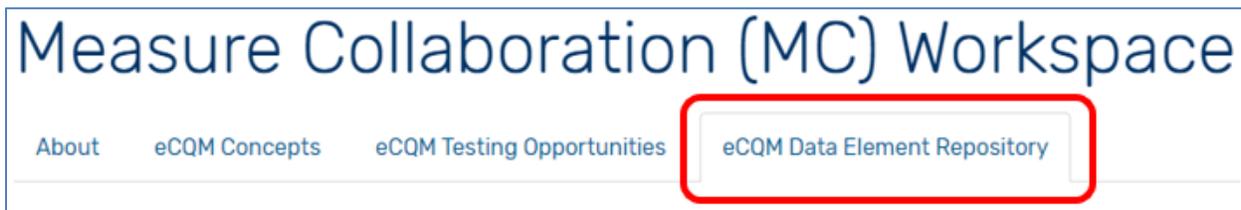
- From the individual eCQM or hybrid measure page, go to the Specifications and Data Elements tab and select the link for the data elements for that eCQM or hybrid measure. This will take you directly to that eCQM's or hybrid measure's DERep page.



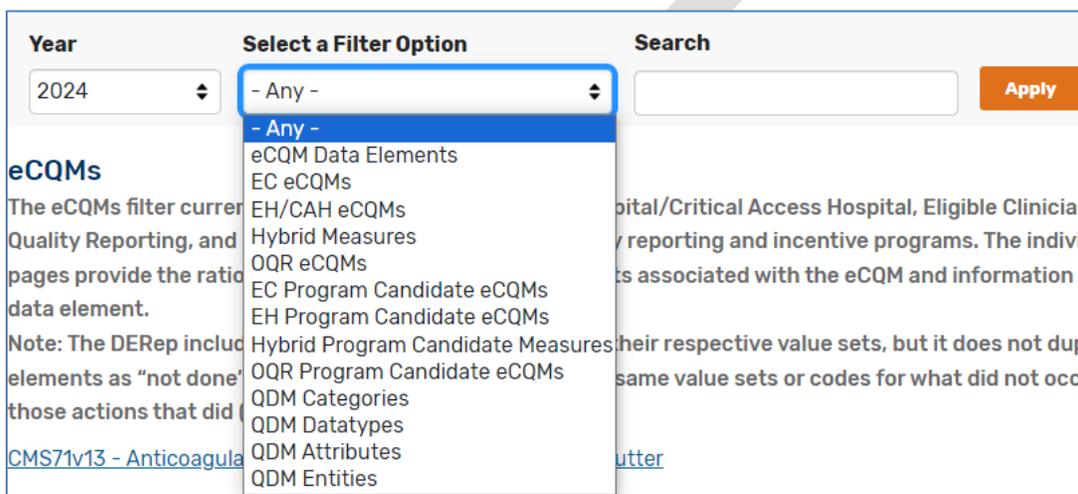
- Or, from the eCQI navigation bar at the top of the page, hover over the eCQMs tab to make the eCQM page links appear. Select the link for the eCQM DERep.



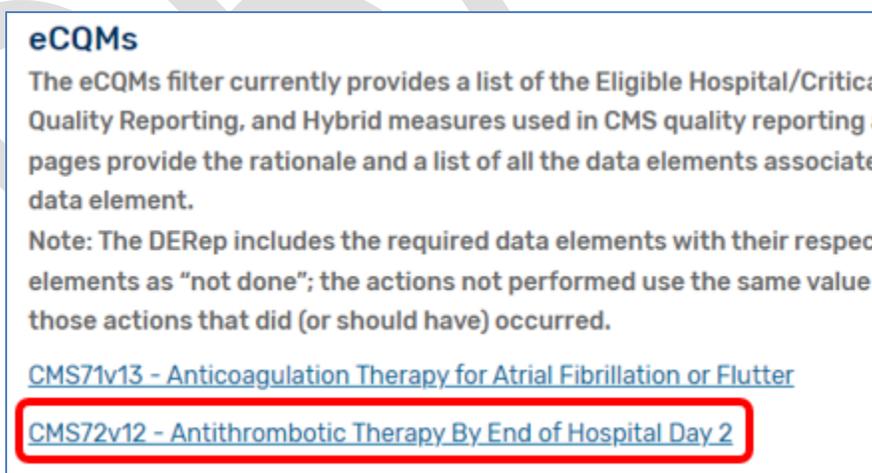
- Or, if you are on the MC workspace page, just select the eCQM Data Element Repository tab.



4.2.3.1 On the DERep page, select the filter option to search for the eCQM desired: EC eCQMs, EH/CAHs eCQMs, OQR eCQMs, or Hybrid Measures. Select "Apply."



4.2.3.2 Locate the desired eCQM or hybrid measure and select the link.



- 4.2.4 Select a specific data element for specific information such as clinical focus, QDM Datatype, QDM Attributes, and other eCQMs using this data element.

## Antithrombotic Therapy By End of Hospital Day 2

**CMS Measure ID:** CMS72v12

**Performance/Reporting Period:** 2024

**NQF Number:** Not Applicable

**Description:**

Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2

### Data Elements and coded QDM Attributes contained within the eCQM

**["Diagnoses": "Hemorrhagic Stroke"]**

**["Diagnoses": "Intravenous Or Intra Arterial Thrombolytic TPA Therapy Prior To Arrival"]**

**["Diagnoses": "Ischemic Stroke"] (2.16.840.1.113883.3.117.1.7.1.247)**

**["Diagnosis": "Intravenous or Intra arterial Thrombolytic tPA Therapy Prior to Arrival"]**

DRAFT

### 4.3 Download value sets

- 4.3.1 The National Library of Medicine (NLM) publishes updates to the eCQM value sets annually as part of the AU. VSAC updates the terminologies with new releases as they come, but that is not the same as updating the value sets. It is up to the measure developer to actually update the value set. Examples include
- International Classification of Diseases (ICD)-10 Clinical Modification (CM) and Procedure Coding System (PCS)
  - SNOMED CT
  - Logical Observation Identifiers Names and Codes (LOINC)
  - RxNorm
- 4.3.2 The changes to the value sets may consist of
- Deletion of expired codes
  - Addition of relevant replacement codes
  - Addition of newly available codes representing concepts consistent with the intent of the value set and corresponding eCQM(s) and hybrid measure(s)
- 4.3.3 Download the selected reporting/performance period value sets, DRCs, and BPS from NLM's [VSAC](#) using your UMLS license log in.
- 4.3.4 eCQM value set files, DRCs, and the BPS are available on the Download tab on the VSAC website under the CMS eCQM & Hybrid Measure Value Sets section.



4.3.5 Download value sets by eCQM (CMS ID), value set name, or QDM category.

2023 Reporting/Performance Period of eCQM & Hybrid Measure Value Sets

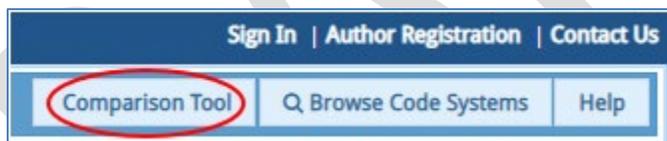
May 2022 Release eCQM & Hybrid Measure Value Sets Publication Date: May 05, 2022

Note: Sign In to access all files  
Expansion Version: eCQM Update 2022-05-05  
The Eligible Hospital Pre-rulemaking measures, CMS986 and CMS1028, are located here in the CMS eCQM & Hybrid Measure Value Sets.

Available Downloads	Sorted by CMS ID*	Sorted by Value Set Name*	Sorted by Quality Data Model Category*
eCQM Value Sets for Eligible Hospitals Published May 05, 2022	Excel (xlsx) SVS (xml)	Excel (xlsx) SVS (xml) SVS (text)	Excel (xlsx)
eCQM Value Sets for Eligible Clinicians Published May 05, 2022	Excel (xlsx) SVS (xml)	Excel (xlsx) SVS (xml) SVS (text)	Excel (xlsx)
eCQM Value Sets for Hospital Outpatient Quality Reporting Published May 05, 2022	Excel (xlsx) SVS (xml)	Excel (xlsx) SVS (xml) SVS (text)	Excel (xlsx)

4.3.6 Review the DRCs, BPS, and value sets to track retired code lists and confirm your electronic health record (EHR) is ready to support the most current eCQM release.

4.3.7 The VSAC now has a Comparison Tool to identify the changes from the last version to the most recent expansion version of a value set more easily.



4.3.8 Note: The Specifications and Data Elements tab of each individual eCQM and hybrid measure provides a link to the value sets for use in that specific eCQM or hybrid measure.

## 4.4 Evaluate Changes to the eCQM or Hybrid Measure

In order to implement updates, it is necessary to understand changes to the eCQM or hybrid measure. Key points to consider include

- Are there new data elements you need to capture?
- Are there changes to the eCQM or hybrid measure logic that may have workflow implications?
- Are there changes that may impact calculation such as updates to inclusion/exclusion criteria?

### 4.4.1 Perform a Gap Analysis.

4.4.1.1 Compare the eCQM metadata (content in the header of the HQMF) using the Compare feature on the Measure Information tab of each individual eCQM page. Note: The Compare feature is not available for new eCQMs, nor does it compare the logic. Review the TRN to see any changes in logic.

4.4.1.2 To use the Compare feature, access the eCQM on the relevant Eligible Clinician, EH/CAH, or OQR page. For example

eCQM Resources		EH/CAH eCQMs		About	
<b>2024 Reporting Period Eligible Hospital / Critical Access Hospital eCQMs</b>					
Total number of EH/CAH eCQMs: 12					
Title	Short Name	CMS eCQM ID	CBE ID	Download Specifications	Notes
<a href="#">Anticoagulation Therapy for Atrial Fibrillation or Flutter</a>	STK-3	CMS71v13	Not Applicable		
<a href="#">Antithrombotic Therapy By End of Hospital Day 2</a>	STK-5	CMS72v12	Not Applicable		
<a href="#">Cesarean Birth</a>	PC-02	CMS334v5	0471e		

4.4.1.3 The “Compare eCQM Versions” text will display, describing how the Compare tool highlights changes between versions. Select the years desired for comparison and select the orange Compare button.

### Compare Versions of: "Antithrombotic Therapy By End of Hospital Day 2"

The Compare function compares two years of the measure specifications found in the header of the measure's HTML. It does not include a comparison of any information in the body of the HTML, e.g., population criteria, Clinical Quality Language, or value sets.

Strikethrough text highlighted in red indicates information changed from the previous version.

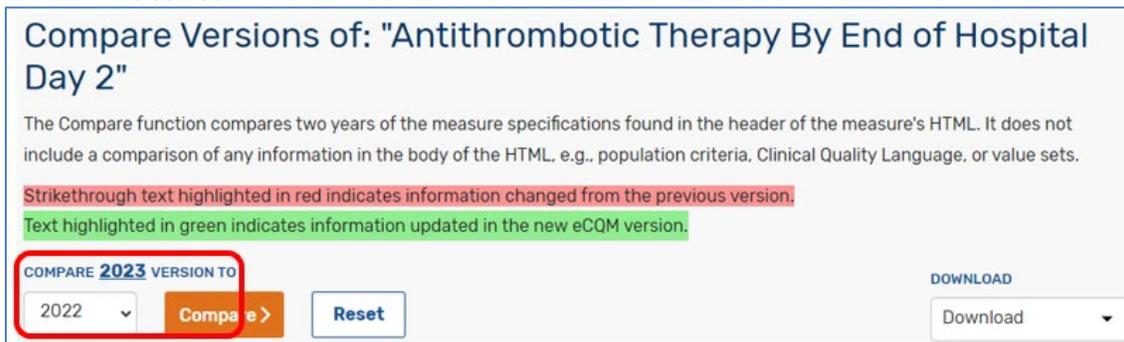
Text highlighted in green indicates information updated in the new eCQM version.

COMPARE **2024** VERSION TO

2022 Compare > Reset

DOWNLOAD Download

4.4.1.4 It is possible to compare two previous versions, but you must select a previous year’s version to start. See step 4.1.4 for instructions on selecting the year desired.



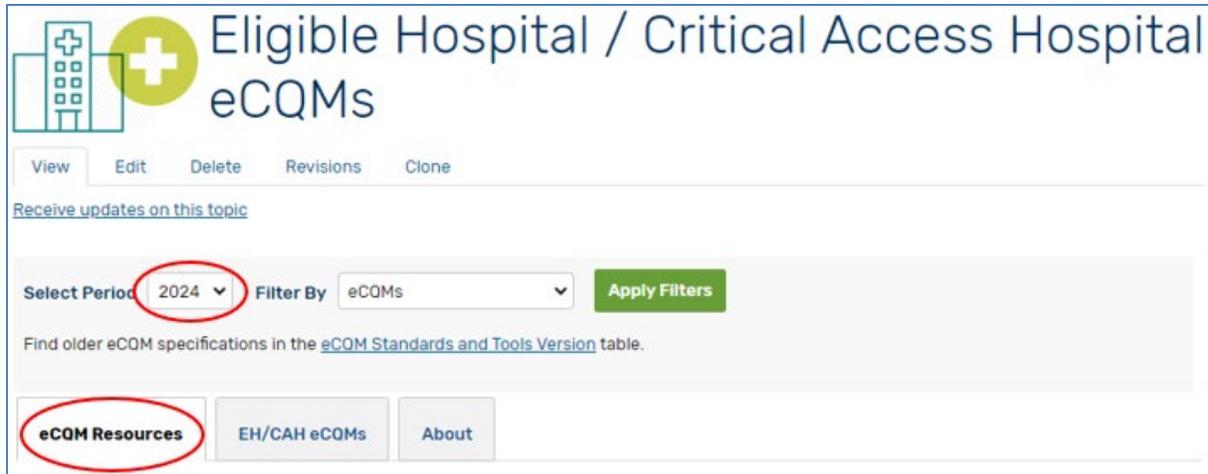
4.4.1.5 The table will display a new column comparing the two years selected with the newest in the right column, allowing you to see exactly where all changes are in relation to the previous version.

Measure Information	2022 Reporting Period	2024 Reporting Period
Title	Antithrombotic Therapy By End of Hospital Day 2	Antithrombotic Therapy By End of Hospital Day 2
CMS eCQM ID	CMS72v10	<del>CMS72v10</del> CMS72v12
Short Name	STK-5	STK-5
CBE ID	Not Applicable	Not Applicable
Description	Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2	Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2
Definition	*See <a href="#">CMS72v10.html</a>	*See <del>CMS72v10.html</del> None
Initial Population	Inpatient hospitalization for patients age 18 and older discharged from inpatient care (non-elective)	Inpatient hospitalization for patients age 18 and older discharged from inpatient care (non-elective)

#### 4.4.2 Read the Technical Release Notes

4.4.2.1 The TRNs provide an overview of technical changes, e.g., logic and terminology to each eCQM or hybrid measure. Read these notes to identify the updates requiring action on your part such as updating diagnosis codes and/or data fields available in your EHR or an end user’s workflow. Note: new eCQM/hybrid measures do not have technical release notes.

4.4.2.2 Go to the [EH/CAH page](#) (or eligible clinician or OQR as needed) and select the eCQM Resources tab and the year.



#### 4.4.2.3 Select "Apply Filters."

- NOTE: it is always necessary to select "Apply Filters" in order to display the information for that year.

#### 4.4.2.4 Select the Implementation Guidance filter to further refine the search results.



- #### 4.4.2.5 The eCQM Resources table will display, filtered for Implementation Guidance results. Select your preferred format for viewing TRNs: PDF or ZIP file. Note: The PDF has all the eCQMs in one file whereas the zip has an Excel sheet for each individual eCQM.

eCQM Resources	Short Description	Published
<a href="#">Implementation Checklist eCQM Annual Update</a>	Implementation checklist ⓘ	May 2023
<a href="#">Guide for Reading eCQMs v9.0 (PDF)</a>	Assists implementers and measured entities with information on how to read eCQM specifications ⓘ	May 2023
<a href="#">eCQM Logic and Implementation Guidance v7.0 (PDF)</a>	Assists implementers and measured entities with how to use eCQMs and report issues ⓘ	May 2023
<a href="#">Technical Release Notes (PDF)</a>	Year over year changes to eCQMs, including logic and terminology ⓘ	May 2023
<a href="#">Technical Release Notes (ZIP)</a>	Year over year changes to eCQMs, including logic and terminology ⓘ	May 2023

#### 4.4.3 Read the eCQM Logic and Implementation Guidance

4.4.3.1 The [eCQM Logic and Implementation Guidance](#) provides general logic and implementation guidance along with detailed information on topics such as eCQM versioning and time interval calculations.

eCQM Resources	Short Description	Published
<a href="#">Implementation Checklist eCQM Annual Update</a>	Implementation checklist ⓘ	May 2023
<a href="#">Guide for Reading eCQMs v9.0 (PDF)</a>	Assists implementers and measured entities with information on how to read eCQM specifications ⓘ	May 2023
<a href="#">eCQM Logic and Implementation Guidance v7.0 (PDF)</a>	Assists implementers and measured entities with how to use eCQMs and report issues ⓘ	May 2023
<a href="#">Technical Release Notes (PDF)</a>	Year over year changes to eCQMs, including logic and terminology ⓘ	May 2023
<a href="#">Technical Release Notes (ZIP)</a>	Year over year changes to eCQMs, including logic and terminology ⓘ	May 2023

#### 4.4.4 Define what system requirements you need to implement the update.

4.4.4.1 This will be system-specific. Work with your health IT department to define system requirements needed to implement the update.

- [Workflow Assessment for Health Information Technology \(IT\) Toolkit](#)

4.4.4.2 Compile a list of system requirements across the eCQMs and hybrid measures the measured entity will report, as well as overall workflow impacts.

##### 4.4.4.3 Data Capture

- Consider new query builds in your EHR.
- Consider interfaces to bring data from disparate applications into certified EHR technology.
- Deploy alerts, reminders, and order sets judiciously.

4.4.4.4 Process management: once you have captured the current state of the existing process, work with stakeholders and key performers to revise the process according to the desired changes. Consider

- Where/how to capture data (e.g., cardiovascular services)
- Evaluating aspects of care coordination or transitions of care

4.4.5 Consider potential workflow impacts and interactions.

Implementing eCQM updates may create significant and unforeseen impacts. The most effective way to identify and manage workflow impacts and interactions is to conduct a careful workflow analysis of the existing process. Consider

- The flow of information, in paper or electronic formats, among people in a clinical environment
- The activities of everyone involved during a patient visit or hospitalization
- The workflow between health care organizations
- What people know, learn, and understand about the process

Process analysis: the first phase is to establish the current state of the process. How are things actually done right now? To discern that, follow these steps.

4.4.5.1 Determine which process(es) to examine.

4.4.5.2 Identify stakeholders and key performers.

4.4.5.3 Work with stakeholders and key performers to capture fundamental steps and roles. Draft a preliminary flowchart and capture roles and responsibilities.

4.4.5.4 Observe key performers in the process of executing their tasks to capture steps they may not have mentioned. One facet of being good at something is to internalize what is necessary to do it well; it becomes automatic and so easy to overlook and difficult to describe.

4.4.5.5 Revise the preliminary flowchart according to the observations and details captured. Present to stakeholders and key performers for review. Repeat this cycle until it reflects how the process is currently accomplished.

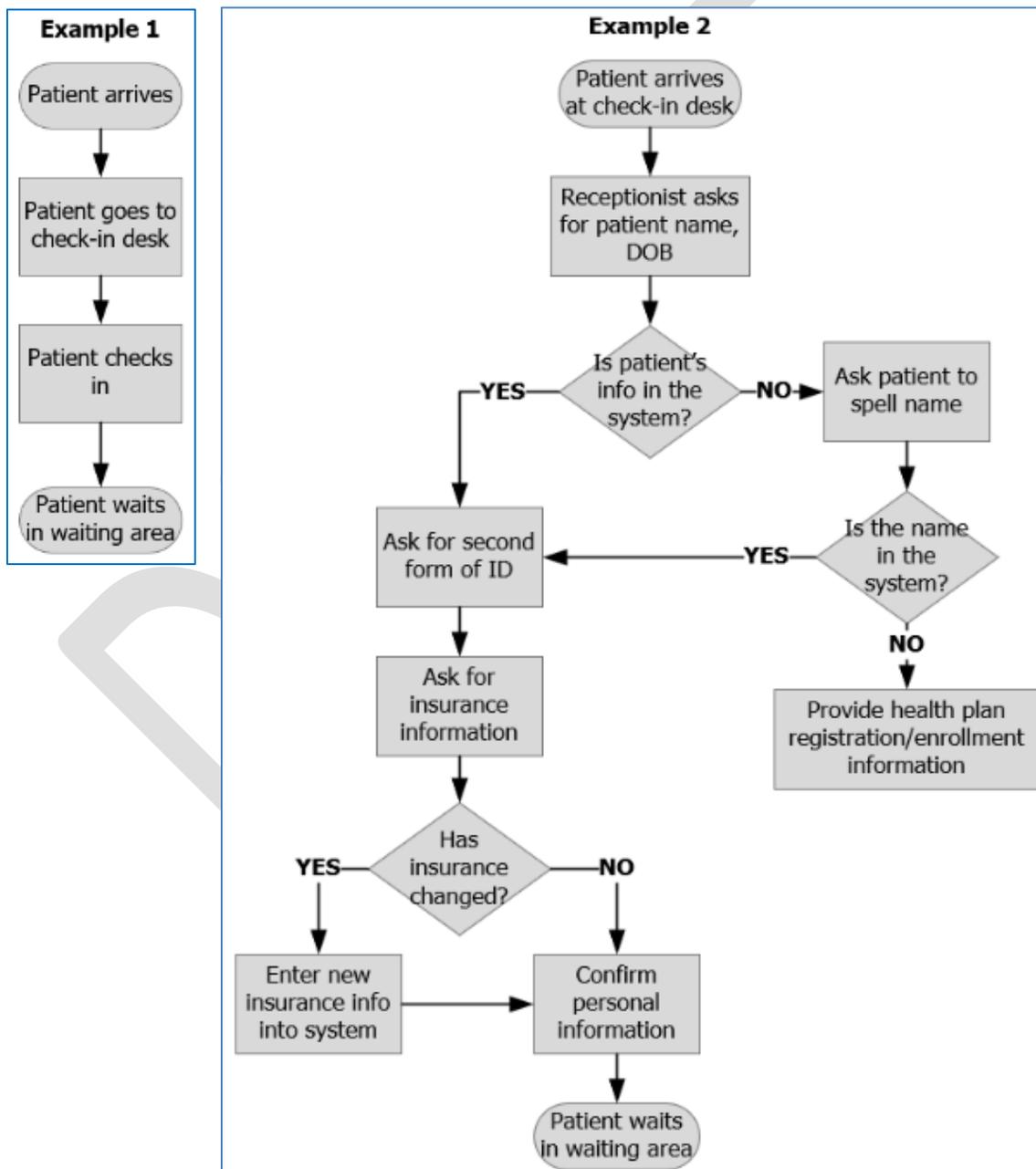
4.4.5.6 **NOTE:** this activity will identify ways to improve the process. Do **NOT** implement those changes until you have completely mapped the current process. Unplanned changes made at this point may have unintended consequences. Instead, *capture all potential improvements for later consideration.*

4.4.5.7 Creating a detailed, accurate process map has several benefits, the process map

- Shows how processes really happen, as opposed to how they are supposed to happen or how we expect they will happen.

- Integrates perspectives; a workflow map shows how people interact across different roles, responsibilities, and functions. It provides a basis for a common understanding of concepts, activities, and goals.
- Identifies unacknowledged gaps, potential flaws, outdated practices, or inefficiencies; when you understand how things actually work, you can identify ways to improve them while minimizing unintended consequences.

4.4.5.8 Process maps Example 1 and Example 2 both depict the process for patient check-in.



#### 4.4.5.9 Points of comparison to consider:

- Both maps show the workflow for “patient check-in.”
- Both describe the same process accurately, but example #2 shows the details of what the workflow really is.
- The details of the workflow will change when you implement health IT.
- If you do not understand the details, you cannot plan for the changes that will come.

#### 4.4.6 Incorporate process improvements.

Once you have established a complete understanding of the existing process, you can begin to incorporate process improvements based on the opportunities identified by uncovering unacknowledged gaps, potential flaws, outdated practices, or inefficiencies. When you make process changes, be sure to

- Consult with the people directly involved in or affected by any changes. People are much more likely to accept change when they have genuine ownership of the new process.
- Educate clinicians and coders on changes to data entry or workflow, if any.
- Consider how new or revised actions may affect subsequent steps both within and across roles.
- Consider how you can remove redundant steps.
- Keep communications open. Consider who needs to know what changes are occurring.

##### 4.4.6.1 Implement system changes to support data capture for the updated and/or new eCQMs or hybrid measures.

##### 4.4.6.2 If performance is not as expected, continue iterative process of validation and immediately engage entire collaborative team to determine the type of issue.

- Cross-functional issue: most workflow problems occur in the handoff between roles or functional areas.
- Unintended/unforeseen consequences
- Make sure that any changed or removed steps did not inadvertently result in loss of critical information.

##### 4.4.6.3 Make tweaks to data capture and/or workflow after validation, if necessary.

##### 4.4.6.4 Update internal documentation based on workflow changes.

##### 4.4.6.5 Once data are available, move forward with data extraction and calculation.

#### 4.4.7 Validate Data

Implementing the new process will allow you to use available data, knowledge of patient population, and secondary data sources to review performance, including

- Data capture
- Mapping
- eCQM or hybrid measure
- Value set
- Other

##### 4.4.7.1 Access the [CMS QRDA Pre-Submission Validation Tools](#).

- The [Hospital Quality Reporting \(HQR\) System](#), launched in 2020, includes troubleshooting functionality in the test portion of the HQR System, such as checking for valid submission period dates and providing eCQM outcome information. Submitters can perform all functions for validation of CMS QRDA Category I files in the test portion of the HQR System and receive succinct and informative feedback. Users have simultaneous access to the test and production portions of the HQR System as they prepare for production QRDA Category I file submissions for eCQM and hybrid measure reporting to the Hospital Inpatient Quality Reporting (IQR), Hospital OQR, and Promoting Interoperability Programs. CMS retired the Pre-Submission Validation Application (PSVA) in the summer of 2020.
- [The Cypress QRDA Validation Utility \(CVU\)](#) conformance tool provides implementers with the ability to validate the conformance of QRDA Category I and Category III documents to CMS implementation guides and verify the results of eCQM calculation. The most recent release, along with release notes, are available on the [Cypress website](#).

Version 7.1 includes the fully integrated Cypress Validation Utility + Calculation Check (CVU+) supporting the [2015 Edition Cures Update Certification](#) for the ONC Certification Program for eCQMs. This version also supports testing the EH/CAH eCQMs, the Eligible Clinician eCQMs, and the OQR eCQMs updated for calendar year 2024 reporting.

##### **Cypress v7.1**

- Supports the 2015 Edition Cures Update §170.315(c)(1), §170.315(c)(2), §170.315(c)(3), and §170.315(c)(4) certification criteria.
- Enforces reporting requirements defined by the CMS QRDA Implementation Guides.
- For the 2024 Reporting Periods
  - Supports validation with Health Level Seven International (HL7®) Clinical Document Architecture (CDA®) Release 2 Implementation Guide: QRDA I, Release 1, Standard for Trial Use (STU) Release 5.3 – US Realm
  - Supports validation with HL7 CDA® Release 2 Implementation Guide: QRDA III, Release 1

- Supports the eCQMs for eReporting for the 2024 Reporting Period (eCQM value sets as of May 4, 2023).

**CVU+**

- Supports validation with the CMS Implementation Guides for QRDA Category I – Implementation Guide for 2024.
- Supports validation with the CMS Implementation Guides for QRDA Category III – Implementation Guide for 2024.

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#### 4.5 Report eCQMs and hybrid measures

- Review the [QRDA Reference and Implementation Guides](#) for eCQMs and hybrid measures.
- For inpatient hospital reporting guidance, visit [QualityNet inpatient quality measures](#), for outpatient hospital reporting visit [QualityNet outpatient measures](#). For specific program reporting education for inpatient and outpatient eCQMs, visit the [Quality Reporting Center](#).
- For clinician reporting guidance, visit the [Quality Payment Program](#) website and the [Quality Payment Program Resource Library](#).
- For information about the Medicare Promoting Interoperability Program for EHs and CAHs, refer to the [CMS Promoting Interoperability Program](#).
- For federal health agency programs using eCQMs, refer to specific program requirements.

#### 4.6 Reach out for help

- Visit the [Contact Us](#) page.
- Send suggestions for improving this checklist to the eCQI Resource Center to [ecqi-resource-center@hhs.gov](mailto:ecqi-resource-center@hhs.gov).