

ECQI RESOURCE CENTER USER GROUP

December 21, 2021

Presenters:

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CMS eCQI Resource Center Contractors*



ECQI RESOURCE CENTER USER GROUP AGENDA

- Welcome
- Review of Recently Live Enhancements and Key Content
- Review of Approved Enhancements
- Discussion
 - USCDI and eCQM DERep Integration
 - MC Workspace Test Module – Testing Bundles
 - Guide to Reading eCQMs
 - Open
- Next Steps
- Appendix
 - eCQI Resource Center User Group
 - Membership
 - Goals
 - Objectives
 - Suggested Enhancements



SUBMITTING FEEDBACK DURING THE USER GROUP

- Polling Feature:
 - Look at right panel – one poll during this session
- General feedback:
 - Use the chat feature at anytime to provide input



POLL 1 – USER GROUP MEMBERS IN ATTENDANCE

- Please respond to the poll in the polling feature
- Select the user type you most identify with:
 - A. CDS Developer/Steward/Implementer
 - B. eCQM Implementer working with Eligible Hospital and Critical Access Hospital 16%
 - C. eCQM Implementer working with Eligible Professional and Eligible Clinician 32%
 - D. eCQM Implementer working with Eligible Hospital, CAH, Professional and Clinician 10%
 - E. Health IT Developer/Vendor 10%
 - F. Measure Developer/Measure Steward 10%
 - G. Other 22%



ECQI RESOURCE CENTER NEW CONTENT &/OR ENHANCEMENTS

Enhancement	Source	Status
Measure Compare HQMF	End Users	Live
Conversion to Drupal 9	Software Company	Live
Outpatient Quality Reporting eCQM	CMS	Live



DEMONSTRATIONS NEW ENHANCEMENTS AND CONTENT

- Outpatient Quality Reporting
- Measure Compare
 - “Would recommend adding the value sets in measure-specific compare” NLM is developing a value set compare feature in VSAC.
 - Review fields currently compared against HQMF html output
 - Does the group have other fields they would like parsed and viewable on the eCQI Resource Center?
 - “Rationale would be helpful”
 - “eQMC version number, population criteria, rational, and definition would be good”
 - “Recommend adding the HHS measure programs”
 - “What is the content of the risk adjustment field?”
 - For risk adjustment, it could be yes, no, or n/a. or it could be the categories for risk adjustment: demographic, clinical, functional, and/or social variables.



HQMF FIELDS ON THE ECQI RESOURCE CENTER

Posted on eCQI Resource Center

- CMS eCQM Identifier
- NQF Number
- Measure Description
- Population Criteria
 - Initial Population
 - Denominator Statement
 - Denominator Exclusions
 - Numerator Statement
 - Numerator Exclusions
 - Denominator Exceptions
- Measure Steward
- Domain
- Measure Scoring
- Measure Type
- Improvement Notation
- Guidance

Not posted and within html

- eCQM Version Number
- GUID
- Measure Period
- Measure Developer
- Copyright
- Disclaimer
- Population Criteria
 - Stratification
- Risk Adjustment
- Rate Aggression
- Rational
- Clinical Recommendation Statement
- Reference
- Definition
- Transmission Format

Are there any fields on the right side of the slide that you would like to see within the measure compare?



UPDATE ON SUGGESTED ENHANCEMENTS FROM LAST USER GROUP MEETING

- Measure Collaboration Workspace - Concepts module update in progress
- eCQM 'Shopping Cart' feature – approved for discovery
- eCQM Data Element Repository USCDI integration – discuss today
- Measure Collaboration Workspace - Test Results module enhanced to include eCQM testing bundles – in discovery and to discuss today
- eCQM FHIR on-line Implementation Guide – remains on suggested list
- CMIT integration - remains on suggested list
- eCQM Jira Tracker integration - remains on suggested list
- CQL Libraries - FHIR based - remains on suggested list
- CQL Libraries - QDM based - remains on suggested list



ECQI RESOURCE CENTER APPROVED ENHANCEMENTS

Enhancement	Source	Status
InfoTRAC / Tools and Resources Update	End Users eCQI RC Team	In Development
Measure Collaboration Workspace Improvements	End Users eCQI RC Team	In Development
Measure Compare Additional Functionality*	End Users	In Development
Measure Selection*	eCQI RC Team	In Discovery
'Get Started with eCQMs'*	End Users	In Discovery
Measure 'Shopping Cart' Feature*	End Users	Planned Discovery

* Added since last User Group Meeting



RESPONSE TO LAST MEETING OPEN DISCUSSION

- Will eCQMs be developed for quality measures such as hospital acquired pressure injuries?
 - IMPAQ is developing a pressure injury eCQM.



DISCUSSION



- USCDI and eCQM DERep Integration - No comments/concerns regarding on not moving this integration forward
- MC Workspace Test Module – Testing Bundles
 - “I think this would be very beneficial!”
 - “Yes helpful, Json test bundle”
 - Both QDM and FHIR bundles would be beneficial (7 members)
- Guide to Reading eCQMs
 - One of the things that we would find helpful is defining timing functions in the logic. For example, this year there were several new timing functions added into the logic. These included: Normalize Interval, Has Start, Has End, Latest, Latest of, Earliest, Earliest of
 - While some of these are self-explanatory, others are a little more open to interpretation. It would be beneficial if the guides would include a section on CQL definitions that would explain the intent in simple terms.





ECQM TESTING BUNDLES

eCQI Resource Center User
Group

December 21, 2021



DISCUSSION GOALS

- Identify if publishing eCQM test bundles would be beneficial for implementers
 - QDM-based eCQM test bundles
 - FHIR-based eCQM test bundles

BONNIE TEST BUNDLES

- Synthetic patient records
- 100% testing of eCQM logic pathways
- Show the expected results of each defined statement/decision point for test cases, expected category assignment for each test case at the measure population level (i.e. numerator, denominator) and at the algorithmic decision point
- In-browser logic highlighting



BONNIE TEST BUNDLE – EXCEL

- Human readable, but it is not machine readable
- Includes expected results of testing decision points, but not procedures or attributes
- There is no automated way to link the data in Excel back to the eCQM being tested. It requires human intervention to prove expected outcome and needs more information (procedures/attributes) and links back to population descriptions in eCQMs.
 - **Confirm:** It is important for implementers to be able to run the same tests that eCQM developers use when testing in their systems?



BONNIE TEST BUNDLE – JSON

- Machine readable
- Includes the expected results of testing decision points and a list of the actual QDM procedures and attributes of the eCQM
- Allows for end users to import bundle to test within their own system to test their own implementation of the eCQM



BONNIE TEST BUNDLE VALUE

- Would the test data help you answer the question, "does my measure calculation perform as expected?"
- Would having access to this data outside of the Bonnie system be easier than testing within the Bonnie tool?
- Do you feel the test bundles would be useful for measure implementation during each eCQM Annual Update release cycle?
 - If yes, how would you use the bundles?
 - If yes, would Excel and/or JSON file format be preferred?
 - If yes, would it be necessary to convert the bundles from JSON to QRDA?



BONNIE TEST BUNDLE PUBLICATION

- If helpful is this needed for the current QDM-based eCQMs?
- If helpful is this needed for future FHIR-based eCQMs?
- If helpful to publish where would be best to publish these?
 - Posting within the MC Workspace Testing Module
 - Posting within the eCQM specification zip file
 - Within the same zip file?
 - As an individual zip file side by side?





ECQI RESOURCE CENTER USER GROUP

User Feedback Request:
Exploring current and future versions of
the
eCQM Annual Update Reading and
Logic Guides



Search Resources

Apply

Gather feedback on the use of two eCOM annual update guides that are updated and posted with the measure specifications for each reporting year.

For Use	eCOM Implementation Resources	Published
Jan 1 - Dec 31 2021	Implementation Checklist eCOM Annual Update ⓘ	
Jan 1 - Dec 31 2021	*NEW* Telehealth Guidance for eCOMs for Eligible Professional/Eligible Clinician 2021 Quality Reporting (PDF) ⓘ	Sep 2020
Jan 1 - Dec 31 2021	Guide for Reading eCOMs v6.0 (PDF) ⓘ ←	May 2020
Jan 1 - Dec 31 2021	Eligible Clinicians and Eligible Professionals Table of eCOMs v2 (PDF) ⓘ	Jun 2020
Jan 1 - Dec 31 2021	eCOM Specifications for Eligible Clinicians and Eligible Professionals (ZIP) ⓘ	May 2020
Jan 1 - Dec 31 2021	eCOM Value Sets ⓘ	May 2020
Jan 1 - Dec 31 2021	eCOM Direct Reference Codes List ⓘ	May 2020
Jan 1 - Dec 31 2021	Binding Parameter Specification (BPS) ⓘ	May 2020
Jan 1 - Dec 31 2021	eCOM Logic and Implementation Guidance v4.0 (PDF) ⓘ ←	May 2020
Jan 1 - Dec 31 2021	Technical Release Notes (PDF) ⓘ	May 2020
Jan 1 - Dec 31 2021	Technical Release Notes (ZIP) ⓘ	May 2020
Jan 1 - Dec 31 2021	Standards and tool versions used for performance period ⓘ	May 2020
Jan 1 - Dec 31 2021	eCOM Flows (ZIP) ⓘ	Aug 2020
Jan 1 - Dec 31 2021	2021 Quality Benchmarks ⓘ (ZIP) ⓘ	Jun 2021
Jan 1 - Dec 31 2021	2021 CMS ORDA III Implementation Guide for Eligible Clinicians and Eligible Professionals (PDF) ⓘ	May 2021
Jan 1 - Dec 31 2021	2021 CMS ORDA III Schematrons and Sample Files (ZIP) ⓘ	May 2021
Jan 1 - Dec 31 2021	eCOM Annual Update Pre-Publication Document (PDF) ⓘ	Oct 2020

Guide for Reading eCOMs:

This guide seeks to help providers, quality analysts, implementers, and HIT vendors understand eCOMs and their related documents. The guide provides background on eCOM packages, which are the building blocks of eCOMs, and an overview for a user to understand the human-readable format of eCOMs

Link to v7 for 2022 reporting:

<https://ecqi.healthit.gov/sites/default/files/Guide-for-Reading-eCOMs-v7.pdf>

eCOM Logic and Implementation Guidance:

This resource provides guidance for understanding, using and implementing eCOMs.

Link to v5 for 2022 reporting:

<https://ecqi.healthit.gov/sites/default/files/eCOM-Logic-and-Guidance-v5.pdf>



USER FEEDBACK REQUEST: CURRENT STATE ECQM ANNUAL UPDATE READING AND LOGIC GUIDES

1. Which of these guides do you currently use?
 1. Guide for reading eCQMs
 2. Logic and Implementation Guide
 3. Both
2. What content is most helpful?
3. What content is least useful?
4. Is there content that is currently missing from either guide?
5. How can we improve usability?



USER FEEDBACK REQUEST: FUTURE STATE ECQM ANNUAL UPDATE READING AND LOGIC GUIDES:

1. Would adding more measure developer focused material (CQL style guide) as an addendum to the guide be helpful to understand measure developer processes?
2. Would combining all content into one document that is structured for easy reference be preferable to having content in two guides?



The sessions feature open discussion from [subject matter experts](#) on the [Measure Authoring Tool \(MAT\)](#), show how to express measures using CQL, and review questions. Visit the [Electronic Clinical Quality Improvement \(eCQI\) Calendar](#) to find registration information.

- Get a good start with CQL by visiting the [CQL Frequently Asked Questions \(FAQs\)](#) page to review common questions and answers.
- Visit the [Connect](#) tab to find out how to connect to various CQL resources and register for upcoming CQL sessions.

CQL Tools for Implementers

Access these tools to support your use of CQL.

- [GitHub Tools Repository](#) - Find tools in support of CQL, such as the [CQL-to-Expression Logical Model \(ELM\) Translator](#) used by implementation vendors.
- Explore the [eCQI Tools & Key Resources Library](#) for a complete list of tools and resources used with [electronic clinical quality measures](#) (eCQMs) and eCQI.
- [CQL-to-ELM Translator Reference Implementation](#) - The [Health Level Seven International \(HL7\)](#) [CQL specification](#) defines both a high-level, author friendly syntax for expressing clinical knowledge, as well as a machine friendly, syntax-independent canonical representation of clinical knowledge called ELM. The design of the high-level ELM syntax is to support measure and decision support authors, while the design of the canonical representation is to support point-to-point sharing and machine processing applications.

CQL Resources for Authors

View these resources to learn about CQL formatting, usage, and standards.

- [CQL Formatting and Usage Wiki](#) - Visit this wiki which serves as a collaborative workspace for the development of CQL formatting conventions and usage patterns for the representation of logic within [quality measures](#). A selection of resources found on the wiki are
 - [Formatting and Usage Topics](#)
 - [Cooking with CQL Examples and CQL Questions and Answers \(Q&As\)](#)
- [CQL Standard](#) - Visit the [HL7 Website](#) to access the [CQL Specification](#)
- [CQL Style Guide \(v5\) \(PDF\)](#) provides guidance to [measure developers](#) for authoring measure expressions and using functions, libraries and definitions for calendar year 2022 reporting. Modifications to the Style Guide include references to changes in the ODM used in eCQMs for 2021 and 2022 reporting ([ODM version 5.5 Guidance Update \(PDF\)](#)), the HL7 CQL standard, the HL7 CQL-based [Health Quality Measure Format \(HQMF\)](#) implementation guide (v3), and input from standards owners and measure developers to refine CQL expression. The purpose of the Style Guide is to standardize expression of measure concepts across eCQMs and define a uniform "look and feel" to eCQM logic using CQL. The guide focuses on a set of common best practices implemented across CQL-based eCQMs in CMS quality reporting programs. The Style Guide also promotes the use of consistent language within the framework of CQL, including libraries, aliases, definitions, functions, and guidance on other conventions, such as operator precedence. [Measure stewards](#) and measure developers who are developing or specifying eCQMs for future inclusion in CMS programs should align with these best practices.

CQL style guide:

This document provides guidance to [measure developers](#) for authoring measure expressions and using functions, libraries and definitions. The purpose of the Style Guide is to standardize expression of measure concepts across eCQMs and define a uniform "look and feel" to eCQM logic using CQL. The guide focuses on a set of common best practices implemented across CQL-based eCQMs in CMS quality reporting programs. The Style Guide also promotes the use of consistent language within the framework of CQL, including libraries, aliases, definitions, functions, and guidance on other conventions, such as operator precedence.



PLEASE PROVIDE FEEDBACK AND/ OR QUESTIONS ON GUIDES TO:

- Juliet Rubini – jrubini@mathematica-mpr.com
- Claudia Hall – chall@mathematica-mpr.com



OPEN DISCUSSION



ECQI RESOURCE CENTER USER GROUP NEXT STEPS

- Send feedback and suggestions for site improvement to ecqi-resource-center@hhs.gov
- Attend the next eCQI Resource Center User Group Meeting: February 15, 2021 at 3pm EST
- Meeting series add to calendar link: <https://ecqi.healthit.gov/events/1431>



APPENDIX

- eCQI Resource Center User Group Membership
- eCQI Resource Center Goal
- eCQI Resource Center Objectives
- Suggested Enhancements



ECQI RESOURCE CENTER USER GROUP MEMBERSHIP

- Volunteer forum of stakeholders who use the electronic clinical quality improvement (eCQI) Resource Center to obtain key resources necessary for electronic clinical quality measure (eCQM) development, implementation, and reporting and education about eCQM and eCQI concepts and standards.
 - Open membership
 - Bi-monthly meetings held the third Tuesday at 3pm EST
 - Dec 21
 - Feb 15
 - April 19



ECQI RESOURCE CENTER USER GROUP GOAL

- Provide broad stakeholder input in the development and maintenance of the eCQI Resource Center's functionality and content to support the eCQI community.
 - Identify, discuss, and review the needs of the eCQI implementer community.
 - The outcome of discussions will result in suggested enhancements to the Centers for Medicare and Medicaid Services (CMS) eCQI Resource Center COR for approval.
 - Approved suggestions for enhancements will result in implementation on the eCQI Resource Center, deeper investigation at eCQI Resource Center focus groups, and/or be placed on the eCQI Resource Center backlog suggestion list.



ECQI RESOURCE CENTER USER GROUP OBJECTIVES

- Focus on the implementer community including the usability of and gaps in resources provided
- Inform users of new functionality and content
- Gather real-world feasibility and community feedback on proposed eCQI Resource Center enhancements and features
- Provide eCQI Resource Center focus group opportunities
- Prioritize items for in depth discussion during eCQI Resource Center focus groups
- Advance CMS's understanding of implementer needs for Fast Healthcare Interoperability Resources® eCQMs
- Understand the needs of the eCQI community



ECQI RESOURCE CENTER SUGGESTED ENHANCEMENTS

Enhancement	Source
A. eCQM Data Element Repository United States Core Data Interoperability (USCDI) integration	End Users
B. eCQM Jira Tracker integration	End Users
C. CMS Measures Inventory Tool (CMIT) integration	eCQI RC Team
D. Measure Collaboration Workspace - Concepts module enhanced	eCQI RC Team
E. Measure Collaboration Workspace - Test Results Module enhanced to include eCQM testing data	End Users
G. CQL Libraries - QDM based	End Users
H. CQL Libraries - FHIR based	eCQI RC Team
I. eCQM FHIR on-line Implementation Guide	eCQI RC Team
J. At a glance documentation for interpreting CQL logic (timing functions)	End Users
K. Advanced search for resources: high-level review and clinician vs IT audience	End Users

