

Getting Started with Electronic Quality Measures (eCQM 101) for Quality Reporting Programs

From One Implementer to Another

March 25, 2015



Sponsor: Implementation and Workflow Kaizen Workgroup



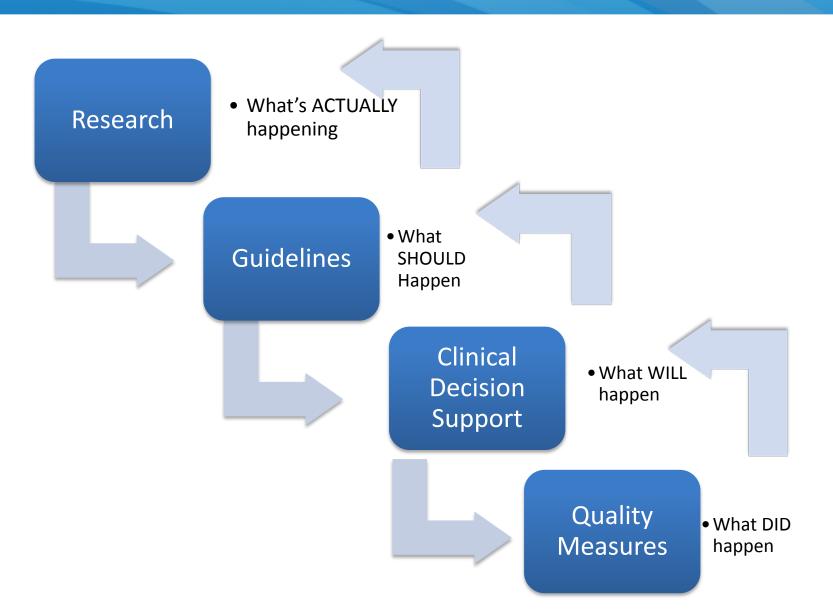
- Group of implementers, vendors, developers/contractors, and feds who volunteered during or after December 2014 CMS eCQM LEAN Kaizen event to improve the measure process
- Group charter signed in March 2015
- Primary goals:
 - To provide resources, education, and collaboration for implementers of eCQMs in every site, practice setting, location, and size
 - To help CMS/ONC develop a process to evaluate clinical workflows as the initial step in measure development and to integrate that workflow into the measure
 - To help CMS/ONC develop a curation process and centralized library for data elements required for capture in quality measure programs
 - To advocate for improved mechanisms for providing and responding to feedback from the measure community



What is the purpose of electronic clinical quality measures (eCQMs or eMeasures)?

Quality Improvement Pathway: Ideal State





CMS Framework for Measurement Maps to the Six National Quality Strategy Priorities



Care Coordination

- Patient and family activation
- •Infrastructure and processes for care coordination
- •Impact of care coordination

Clinical Quality of Care

- Care type (preventive, acute, post-acute, chronic)
- Conditions
- Subpopulations

Population / Community Health

- Health behaviors
- Access
- Physical and social environment
- •Health Status

Safety

- •All-cause harm
- HACs
- HAIs
- Unnecessary care
- Medication safety

Person- and Caregiver- Centered Experience and Outcomes

- Patient experience
- •Caregiver experience
- Preference and goal oriented care

Efficiency and Cost Reduction

- Cost
- Efficiency
- Appropriateness

Measured and Improved at Multiple Levels

Community

- Population-based denominator
- •Multiple ways to define
- denominator (e.g., county, HRR)
 •Applicable to all providers

Practice setting

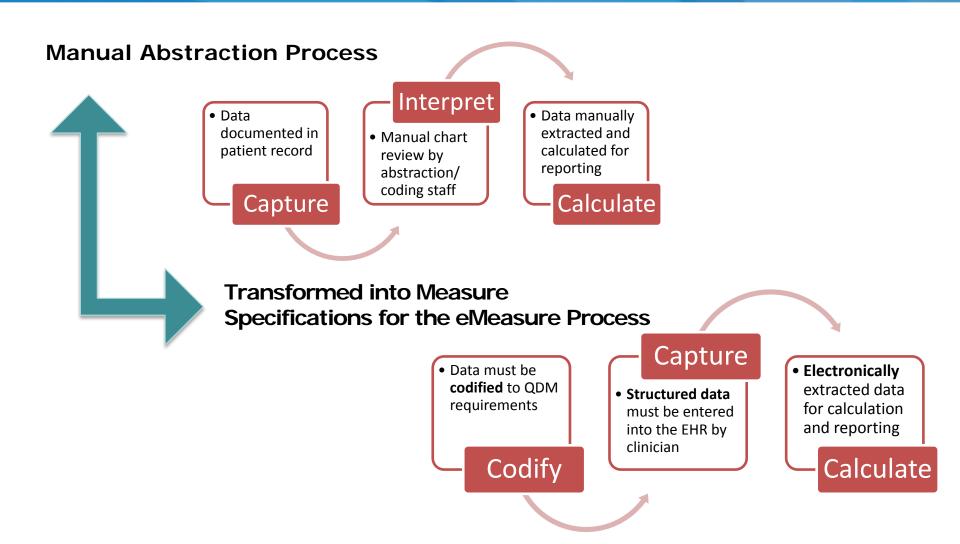
 Denominator based on practice setting (e.g., hospital, group practice)

Individual physician

- · Denominator bound by patients cared for
- Applies to all physicians
- Greatest component of a physician's total performance

Electronic Measures vs. Manual Abstraction





Electronic Measures vs. Manual Abstraction, cont.



Manually-Abstracted CQMs

- Utilizes a human-readable narrative definition
- Manual chart review allows data collection from any documentation
- Inconsistent provider documentation mediated by use of abstraction/coding staff trained to interpret clinical process of care from patient records
- Does not require codification of data elements captured at point of care
- Does not require changes in electronic health care record system (or ancillary system) prior to CQM reporting periods

Electronically-Extracted CQMs

- Utilizes an eMeasure specification and value sets
- For CMS programs, EHR certification requirements demand specific data coding in software.
- Software installation (or upgrades)
 required prior to data submission, but
 in time to ensure codification changes
 are made prior to data collection
- Consistent provider documentation is required to assure accurate analysis: workflow changes and training of staff to ensure proper data capture



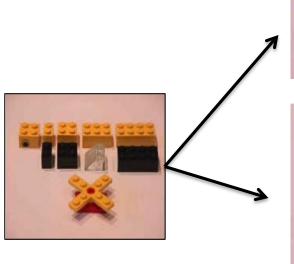
What is an eMeasure?

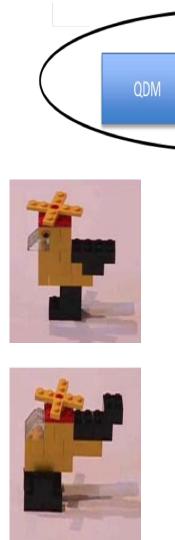
eMeasure (or eCQM)

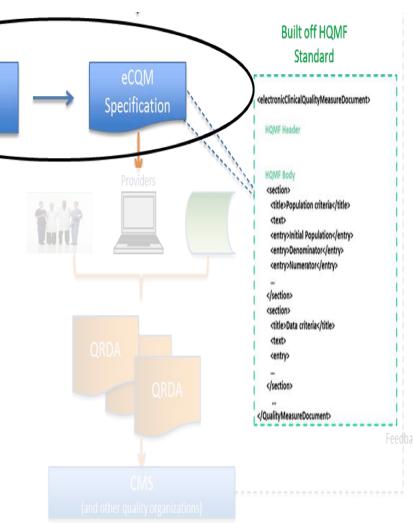


The electronic format for quality measures using:

- the Quality Data Model to define clinical concepts (Lego brick specifications) and
- the Healthcare Quality
 Measure Format to define
 quality measures (instructions
 constraining the use of Lego
 blocks to create meaningful
 structures).







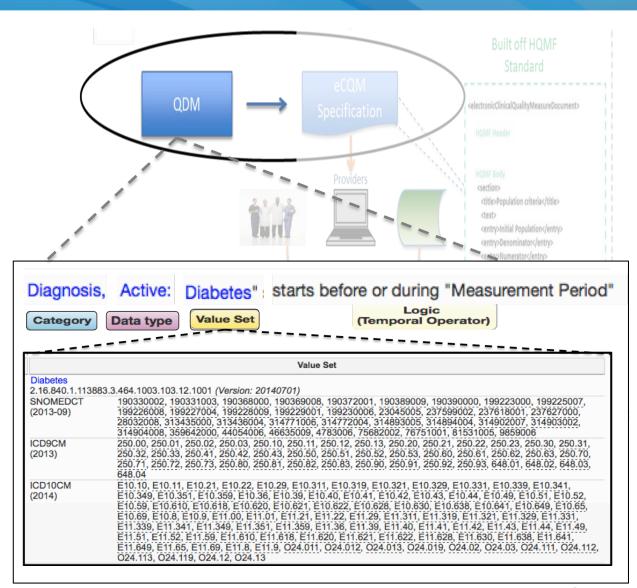
Quality Data Model (QDM)



An information model intended to *clearly* and *consistently* define concepts used in quality measures in a standardized format.

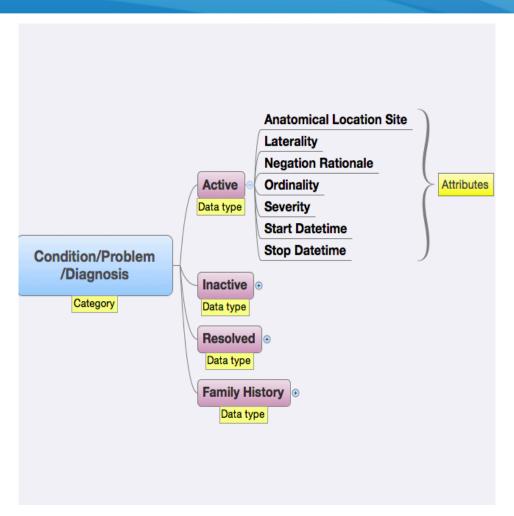
The QDM includes:

- criteria for data elements,
- relationships for relating data element criteria to each other, and
- <u>functions</u> for filtering criteria to the subset of data elements that are of interest.



Quality Data Element





How do we describe a problem for electronic quality measurement?

- <u>Category</u>: consists of a single clinical concept identified by a value set 'Medication', 'Laboratory Test'
- Data Type: The context in which each category is used to describe a part of the clinical care process 'Laboratory Test, Order' 'Laboratory Test, Performed'
- <u>Attribute</u>: provides specific detail about a QDM element 'Laboratory Test, Performed: (result)'
- Value Set: used to define the set of codes that can possibly be found in a patient record for a particular concept.

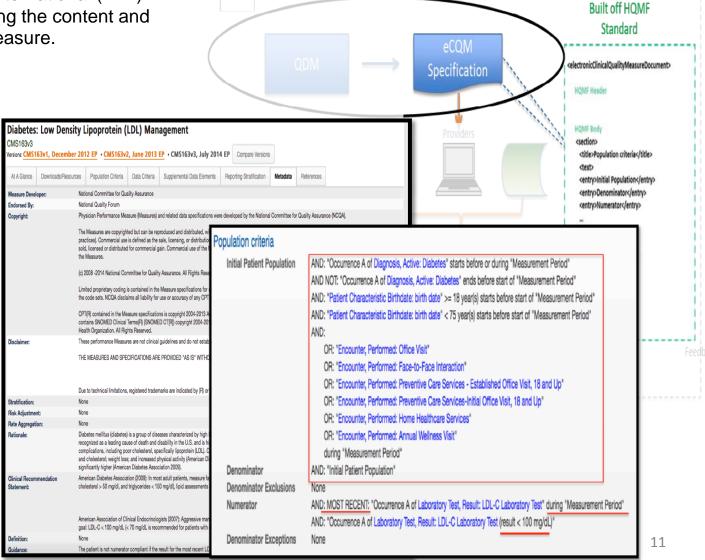
Health Quality Measures Format (HQMF)



A Health Level Seven International (HL7) standard for documenting the content and structure of a quality measure.

It includes:

- Metadata describing the quality measure
- Human readable narrative description, data criteria, and measure population
- Machine readable translation of the measure.





What is in an eMeasure package?

Quality Measures: Today



Here we walk through the download, understanding, and implementation of a single quality measure:

Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan CMS2v4

Content of Measure Package



Packaged zip contents:

EP_CMS2v4_NQF418_Depression_Screening.zip

- CMS2v4 html = human readable
- CMS2v4 xml = HQMF xml machine readable
- xls folder = stylesheet

Requires UMLS license authentication:

CMS2v4 excel = excel value sets

Measure Overview: Who and What You're Measuring



Initial Patient All patients aged 12 years and older before the beginning of the measurement period with at least one eligible encounter during the Population: measurement period.

Numerator:

Patients screened for clinical depression on the date of the encounter using an age appropriate standardized tool AND if positive, a follow-up plan is documented on the date of the positive screen

Exclusions: Not Applicable

Denominator:

Equals Initial Patient Population Exceptions: Patient Reason(s)

Patient refuses to participate

OR

Medical Reason(s)

Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status

OR

Situations where the patient's functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium **Exclusions**: Patients with an active diagnosis for Depression or a diagnosis of Bipolar Disorder

Human Readable Measure Header Background, Owner, Endorsement...



Measure Developer:	Quality Insights of Pennsylvania		
Endorsed By:	National Quality Forum		
Copyright:	Limited proprietary coding is contained necessary licenses from the owners of t Procedural Terminology (CPT [R]) or ot	The measure header in the human readable file can be used to understand:	all Current
	CPT (R) contained in the Measure spec	 Who created the measure 	
	LOINC (R) copyright 2004-2014 [2.46] F 2004-2013 [2013-09] International Heal	Who is the measure steward	copyright
	Due to technical limitations, registered t	 A brief description of the measure].
Disclaimer:	These performance measures are not o applications.	 What the rationale for the measure was and what evidence it is based on 	all potential
	THE MEASURES AND SPECIFICATION		
Stratification:	None	 What relevant clinical guidelines exist 	
Risk Adjustment:	None	 What copyright restrictions exist 	
Rate Aggregation:	None	What the measure type is	
Rationale:	The World Health Organization (WHO), Depression causes suffering, decreases health care costs as well as with higher symptoms are associated with poor hea Persons 40-59 years of age had higher similar rates of depression. Depression than non-Hispanic White persons. In the depression than those with higher incon poverty status.	 How the measure is scored Who has endorsed the measure Any additional guidance 	worldwide. n increased on net. der had pression s of cantly by
	Overall, approximately 80% of persons addition, 35% of males and 22% of femous work, get things done at home, or get a some difficulty in daily functioning attribution		oms. In or them to ported

15-20 percent of adults older than age 65 in the United States have experienced depression (Geriatric Mental Health Foundation, 2008). 7 million adults aged 65 years and older are affected by depression (Steinman, 2007). Chronically ill Medicare beneficiaries with accompanying depression have significantly higher health care costs than those with chronic diseases alone (Unutzer, 2009). People aged 65 years and older accounted for

Excerpt from eCQM Specifications Human Readable file, available for download on CMS's EHR Incentive Programs eCQM Library: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM Library.html

Human Readable: Measure Logic



Population criteria

Initial Patient Population

Denominator Denominator Exclusions

AND: "Patient Characteristic Birthdate: birth date" >= 12 year(s) starts before start of "Measurement Period"

AND: "Occurrence A of Encounter, Performed: Depression Screening Denominator Encounter Codes New" during "Measurement Period" AND: "Initial Patient Population"

AND:

OR: AND: MOST RECENT: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: 'Depression Screening Result')"

AND NOT: "Occurrence A of Diagnosis, Active: Depression diagnosis" ends before start of "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: 'Depression Screening Result')"

AND: OR:

Numerator

Think of the measure logic as an equation of sorts—it relates different pieces of information together and calculates a measure result.

IF patient is >12yo,

AND they saw a PCP or psychiatrist within last 1 yr, **UNLESS** they were already being treated for depression, **THEN** they should have been screened for depression = if they were, result 1/1; if not, measure score 0/1

OR: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: 'Negative Depression Screening')" during "Measurement Period"

AND: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: 'Positive Depression Screening')" during

Machine Readable: Measure Header and Logic



```
1 k?xml version="1.0" encoding="UTF-8"?>
   <?xml-stylesheet type="text/xs1" href="xs1t/eMeasure.xs1"?>
   <QualityMeasureDocument xmlns="urn:hl7-org:v3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            Measure Details Section
 9
10
11
         <typeId root="2.16.840.1.113883.1.3" extension="POQM HD000001"/>
      <id root="40280381-4555-e1c1-0145-dd4e02e44678"/>
12
13
      <code code="57024-2" codeSystem="2.16.840.1.113883.6.1"</pre>
14
            displayName="Health Quality Measure Document"/>
15
      <title>Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan</title>
      <text>Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using
16
   an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the
   positive screen.</text>
      <statusCode code="InProgress"/>
17
                                                  The HQMF is an xml-based standard that shows the
      <setId root="9a031e24-3d9b-11e1-8634-00237d5</pre>
18
      <versionNumber value="4"/>
19
20
      <author typeCode="AUT">
                                                  measure content, both machine-readable logic and the
21
         <assignedPerson classCode="ASSIGNED">
22
            <representedOrganization classCode="OR</pre>
                                                  human-readable header, in a way that a machine can
23
               <id root="faf6af24-c661-40f6-bb98-8</pre>
               <name>Quality Insights of Pennsylva
24
                                                  parse the content into sections and perform calculations.
               <contactParty classCode="CON" nullF</pre>
25
            </representedOrganization>
26
         </assignedPerson>
27
      </author>
28
29
      <custodian>
                                                  While it does take some investment to create a tool that
         <assignedPerson classCode="ASSIGNED">
30
            <representedOrganization classCode="OR</pre>
31
                                                   "reads" the HQMF, it can be used to import the measure
               <id root="2.16.840.1.113883.3.560.3</pre>
32
33
               <name>Centers for Medicare &amp; Me
                                                  and generate the measure results automatically.
               <contactParty classCode="CON" nullF</pre>
34
            </representedOrganization>
35
         </assignedPerson>
36
      </custodian>
37
      <verifier typeCode="VRF">
38
39
         <assignedPerson classCode="ASSIGNED">
            <representedOrganization classCode="ORG" determinerCode="INSTANCE">
               cid root="2 16 840 1 113883 3 560"/>
```

Excerpt from eCQM Specifications Machine Readable file, available for download on CMS's EHR Incentive Programs eCQM Library: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM Library.html

Value Sets



Bipolar Diagnosis ICD10

Value Set Members Expansion ID: 20140513												
Expanded Code List												
□ View ∓ Toggle	Ф Clear Page 1 of 6 → № 20 ▼	View 1 - 20 of 113										
Code 🕏	Descriptor	Code System	Version	Code System OID								
10875004	Severe mixed bipolar I disorder with psychotic features, mood-incongruent (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
10981006	Severe mixed bipolar I disorder with psychotic features (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
111485001	Mixed bipolar I disorder in full remission (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
1196001	Chronic bipolar II disorder, most recent episode major depressive (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
13313007	Mild bipolar disorder (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
13581000	Severe bipolar I disorder, single manic episode with psychotic features, mood- congruent (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
13746004	Bipolar disorder (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
14495005	Severe bipolar I disorder, single manic episode without psychotic features (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								
1499003	Bipolar I disorder, single manic episode with postpartum onset (disorder)	SNOMEDCT	2013-09	2.16.840.1.113883.6.9								

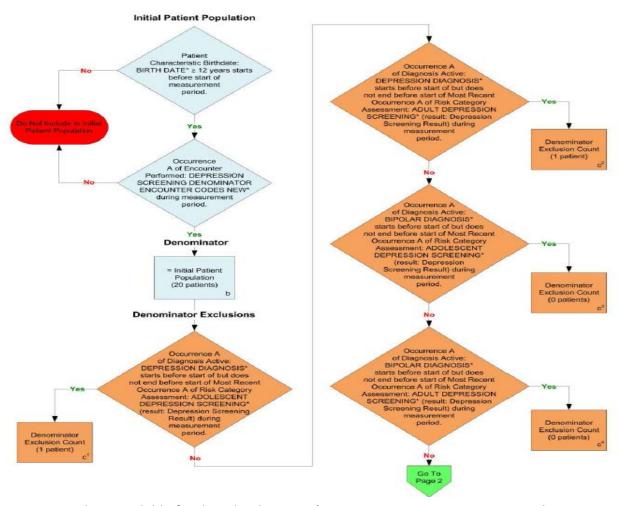
Bipolar Diagnosis (Grouping)

Grouping Members									
Name 🕏	OID								
Bipolar Diagnosis ICD10	2.16.840.1.113883.3.600.448								
Bipolar Diagnosis ICD9	2.16.840.1.113883.3.600.447								
Bipolar Diagnosis SNOMED	2.16.840.1.113883.3.600.449								
Page 1 of 1 → → 5 ▼									

eCQM Flow Diagram: CMS2v4



NQF 0418: Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan





What are the basic steps in implementing an eMeasure?

Implementing eCQMs



Enterprise CQM Reporting Model

Measure Specification Mapping Quality Data
Capture
Build
Assessment

CQM Workflow Design

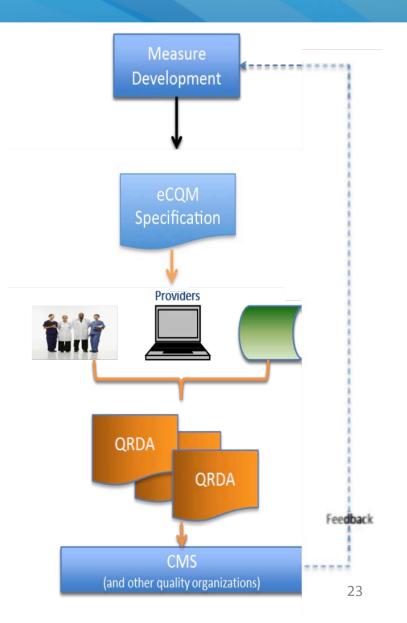
Verification and Validation

Implementation is not just the build



Implementation is:

- The system of processes between the organization's decision to adopt an intervention and the routine use of that intervention.
- The transition period during which targeted stakeholders become increasingly skillful, consistent, and committed in their use of an intervention.
- A social process that is intertwined with the context in which it takes place.



The Challenge of Data Capture



Types of Elusive Data	Examples
Discrete value available in electronic format but usually in devices or standalone special software systems	Ejection Fraction from Echocardiogram and PR or QT intervals in ECG
Structured data captured but available in a different setting of care/EHR system	Ambulatory or Long Term Care data not available in Acute Care Hospital EHR
Data usually captured on paper and not electronically	Clinician Notes
Data captured electronically but not as structured elements	Transcribed Notes

Enterprise CQM Reporting Model





The Enterprise CQM Model outlines the organizational strategy for measurement and reporting to deliver a more effective and streamlined approach for satisfying Accreditation, Certification, and Regulatory Program requirements.

- Outline quality measures to be reported for programs across all settings/sites of care and specialty programs for the organization
- Identify complementary and overlapping quality measures addressed in various programs
- Identify common populations and disease states/care processes of focus across measures

Enterprise CQM Reporting Model



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READM-30-HF	0330 Endorsed	Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following heart failure hospitalization	X			x				x												
READM-30-AMI	0505 Endorsed	Hospital 30-day all-cause risk-standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization.	x			x				x												1
READM-30-PN	0506 Endorsed	Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following pneumonia hospitalization	x			x				x												
READM-30-TH/TK/	1551 Endorsed	Hospital-level 30-day, all-cause risk- standardized readmission rate (RSRR) following elective primary total hip arthroplasty (THA) and / or total knee arthroplasty (TKA)	x			x				x												1
COPD READMIT	1891 Endorsed	Hospital 30-Day, All-Cause, Risk-Standardized Readmission Rate (RSRR) following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization	x			x				x												
STK READMIT	2027 Not Endorsed	Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following an acute ischemic stroke hospitalization	X			x				x												
CABG READMIT	N / A Not Endorsed	Hospital 30-day, all-cause, unplanned, risk- standardized readmission rate (RSRR) following Coronary artery Bypass Graft (CABG) Surgery	x			x				x												
OP-4	0286	Aspirin at arrival										x		x								٦
OP-2	0288	Fibrinolytic therapy received within 30 minutes										x		x								1
OP-5	0289	Median time to ECG										X		x								Ⅎ
OP-3	0290	Median time to transfer to another facility for acute coronary Intervention										X		X								Ⅎ
PC-05	0480	Exclusive breast milk feeding and the subset measure PC-05a Exclusive breast milk feeding considering mother's choice			х							x	x									1
OP-18	0496	Median time from ED arrival to ED departure for discharged ED patients										X		x								1
Sepsis	0500	Severe sepsis and spetic shock: management bundle	Х	x																		1
OP-11	0513	Thorax CT-Use of Contrast Material												x								1
OP-8	0514	MRI Lumbar Spine for Low Back Pain												X								7
OP-7	0528	Prophylactic antibiotic selection for surgical patients										x										1
OP-29	0658	Endoscopy/Polyp Surveillance: Colonscopy Interval for Patients with a History of Adenomatous Polyps- Avoidance of Inappropriate Use												x								
OP-30	0659	Endoscopy/Polyp Surveillance: Colonoscopy																	<u> </u>			_

Measure Specification Mapping



Enterprise CQM Reporting Model

Measure Specification Mapping

Quality Data Capture Build Assessment

CQM Workflow Design

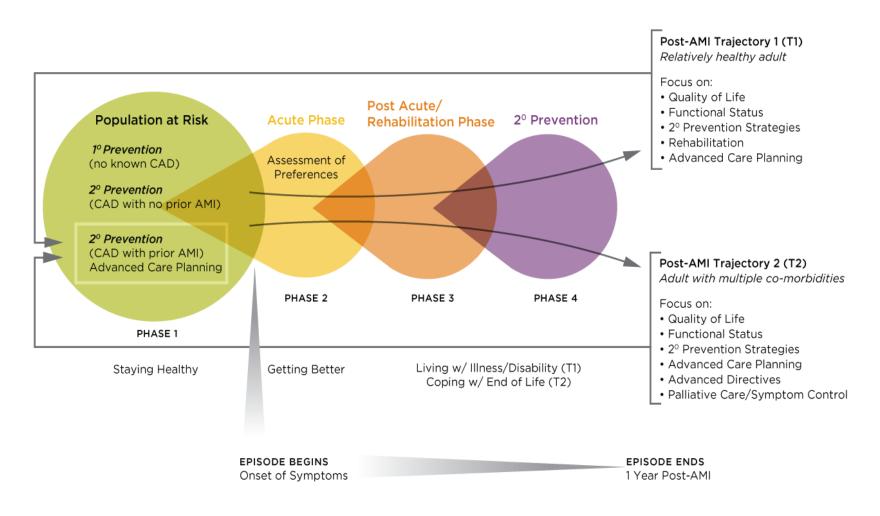
Verification and Validation

Quality measures are grouped by families based on common care processes, conditions, and disease states and specifications/quality data elements for 'like' measures are mapped.

- Create a quality data element inventory for each measure family by identifying unique data elements and workflow requirements base on measure specifications.
- ➤ For duplicative or overlapping clinical concepts, map data element attributes and value sets to define a single data element that satisfies requirements for use in all applicable measures.

Patient-Focused Episode of Care





Quality Data Capture Build Assessment





Regulatory build analysts work together to outline the alignment strategy for quality data across care settings and to define build rules and flexibilities based on:

- quality measure specifications and the EHR system's ability to code and reuse data for quality measurement,
- data requirements for Meaningful Use objectives and organizational documentation standards and policy, and
- patient oriented and shared data as a result of a single MUSC health record and health information exchange

Meaningful Use Core Data Set



Clinical **Decision Support**

- Alerts and Reminders
- Evidence Based Order Sets
- Patient Safety Checks

Patient Engagement

- Patient Education
- Patient Health Information in Patient Portal
- •Health Maintenance
- Outreach

- Patient name
- Sex
- Date of birth
- Race **
- Ethnicity **
- Preferred language
- Care team member(s)
- Allergies **
- Medications **
- 10. Care plan
- 11. Problems **
- 12. Laboratory test(s) **
- Laboratory value(s)/result(s) **
- 14. Procedures **
- 15. Smoking status **
- 16. Vital signs

NOTE: Data requirements marked with a double asterisk (**) also have a defined vocabulary which Reporting and

 Creating lists of patients for preventive health care, chronic condition management, identification of care gaps, etc.

> Care Coordination

- Health Information Exchange for referrals and discharges
- Patient initiated information exchange

Public Health Reporting

Internal

Registries

- •Immunization Registry
- Syndromic Surveillance Registry
- Cancer Registries

Quality Measurement and Reporting

- Inpatient Quality Reporting
- Joint Commission Core Measures
- PQRS/Value Based Physician Modifier

CQM Workflow Design





eCQM Implementation and Analysis Teams are formed for each measure family to finalize and confirm design for **data capture**, **CDS tools** and **reporting** needs, and to develop an **implementation strategy** based on:

- An understanding of the measure's clinical recommendation statement and targeted quality action
- A review of the build assessment supplied by the regulatory analysts and clear understanding of data capture requirements and flexibilities
- The culture of individual care settings, specialties, and services and anticipated problems that threaten the adoption and consistent use of new EHR workflows and data capture requirements

Verification and Validation





Regulatory build analysts and eCQM Implementation and Analysis Teams work together to confirm that the build functions properly for correct inputs, and to determine adequacy of implementation and utilization of supporting data capture.

- Identify deficiencies as related to data capture or true quality gaps
- Determine root cause for failures related to documentation (Build strategy? Implementation strategy?)
- Innovate and optimize.



What resources are available to help me understand the eCQMs?

eCQI Resource Center www.healthit.gov/ecqi-resource-center



eCQI Resource Center

About

Contact



The Office of the National Coordinator for Health Information Technology

The one-stop shop for the most current resources to support electronic clinical quality improvement.



The one-stop shop for the most current resources to support electronic clinical quality improvement

Learn about eCQI resources and connect with the community of professionals who are dedicated to clinical quality improvement for bethealth

Getting Started

A gentle introduction to understanding electronic clinical quality improvement and measures

More information

Putting eCQMs to Work

An overview of the eCQM lifecycle, including actors and their responsibilities

More information

Latest News

Thu 12 Mar

Advance Notice of Proposed Changes for the 2015 eCQM Annual Update

In response to feedback from the community, CMS and ONC are providing here links to the

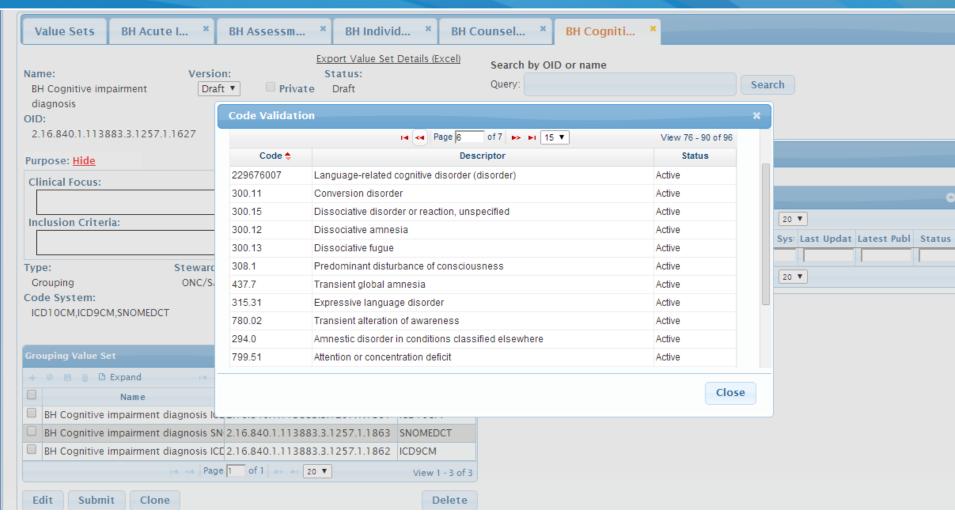
Events

Getting Started with Electronic Quality Measures (eCOM 101) for Quality Reporting Programs

Mar 25

Value Set Authority Center http://vsac.nlm.nih.gov/





United States Health Information Knowledgebase

Meaningful Use



All-Payer Claims

Draft Measures



USHIK Home

Agency for Healthcare Research and Quality Advancing Excellence in Health Care

Common Formats

Feedback / Help

Child EHR Format

Search Meaningful Use

Q

United States Health Information Knowledgebase HITSP

Clinical Quality Measures

Standards

Please note: USHIK provides the specifications for all versions of eCQMs published by CMS for the Meaningful Use Incentive Payment Program for a user to view and/or download. The release packages are referenced by the year it was released, i.e. "April 2014 EH". Please note, each release package is applicable to the following year's reporting period, for example, the 2014 eCQMs for eligible hospitals titled, "April 2014 EH" is applicable to the 2015 Reporting Year. The only exception is the 2012 release packages which are no longer valid for reporting purposes. Please refer to the CMS Implementation Guides as the source of truth for which version of an eCQM is associated with which reporting year. http://cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html



Download HQMF XML **Download Excel** Download Value Set SVS Download Flat File CSV Download Single File XML

2011 –	2012 Bogin	ning in 2014					Clear Filte	
		_						
Select	▼ CQM ID ○ selected	V NQF 0 selected	♥ Short Name	∨ Name	✓ Eligibility 0 selected	∨ Version 0 selected	Release Package	✓ Domain 0 selected
	(0 00100104	(o concensus	4		(concount	(0 00100104	(200,000,00	(o doileans a
	CMS2v4	0418		Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	Eligible Professionals	4	July 2014 EP	Population/Public Health
	CMS9v3	0480	BF	Exclusive Breast Milk Feeding	Eligible Hospitals	3	April 2014 EH	Clinical Processes/Effectiveness
	CMS22v3	Not Applicable		Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Eligible Professionals	3	July 2014 EP	Population/Public Health
	CMS26v2		HMPC	Home Management Plan of Care (HMPC) Document Given to Patient/Caregiver	Eligible Hospitals	2	April 2014 EH	Patient and Family Engagement
	CMS30v4	0639	AMI10	Statin Prescribed at Discharge	Eligible Hospitals	4	April 2014 EH	Clinical Processes/Effectiveness
	CMS31v3	1354	EHDI_1a	Hearing Screening Prior To Hospital Discharge	Eligible Hospitals	3	April 2014 EH	Clinical Processes/Effectiveness

Jira Issue Tracking Homepage http://oncprojectracking.org/



Welcome to the

ONC Issue Tracking System

The ONC Issue Tracking System is a collaboration platform that supports the implementation of health information technology by providing a space in which internal and external users can transparently log, prioritize, and discuss issues with appropriate subject matter experts on a host of topics.

Have a question about MU Policy/Program or PQRS and IQR Policy/Program?

- Ind	VALUE	- Droioo
1 1110	T OUI	· Project

These are the projects currently hosted on the ONC Issue Tracking System. Use the tool below to locate your project.

If you do not see your project listed, please log into JIRA to view.

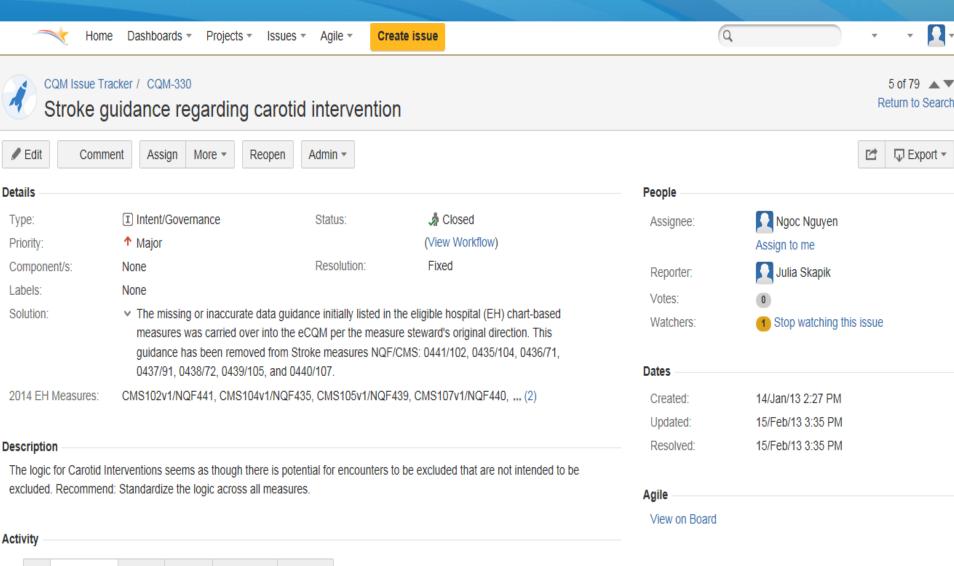
Filter By Category —	
© Certification	
© Quality-Measures	
© Other	
 All	

Filter By Keyword Search for a word or phrase
Clear Search

Project Title	Project Key	Project Category	Project Description
2014 Edition Release Two Criteria	ERTWO	Certification	This project tracks the public comments on updated test procedures for 2014 Edition Release 2. To leave a comment or to view test procedures, please visit: http://www.healthit.gov/EHR-Cert-2014-R2
BONNIE Issue Tracker	BONNIE	Quality-Measures	The BONNIE Issue Tracker is used to track issues related to the Bonnie Clinical Quality measure testing tool. This tool is used to test CQMs under development by building synthetic test patient records. This tracker captures questions, feature requests, and issues related to the Bonnie tool.
C-CDA Issue Tracker	CCDA	Quality-Measures	The C-CDA Issue Tracker is used to track implementation and policy issues related to the Consolidated-Clinical Document Architecture (C-CDA) standards adopted for Meaningful Use.
CDS Issue Tracker	CDS	Quality-Measures	The CDS Issue Tracker is used to collect comments on content, format and clinial aspects of CDS standards and artifacts.
CMS HQR and EP Supplementary Implementation Guides	HQRIG	Quality-Measures	This project is used to collect feedback and track change requests for the CMS QRDA Implementation Guide
Comments on eCQMs under development	PCQM	Quality-Measures	The eCQMs under development project is used to secure comments and feedback on proposed HHS clinical quality measures including questions on feasibility of implementation.
CQM Issue Tracker	CQM	Quality-Measures	The CQM Issue Tracker is used to track issues related to electronic clinical quality measures used in Meaningful Use program including questions on implementation (e.g., the specifications, logic, code sets, measure intent) or policy (e.g., reporting requirements). Please note that the issue review period for the 2015 annual update has closed. While we will make every attempt to respond promptly to your issue, we cannot guarantee corrections will be made to respond in time for the 2015 annual update measure publication.
CYPRESS Issue Tracker	CYPRESS	Certification	The CYPRESS Issue Tracker is used to track issues related to Meaningful Use certification testing tools such as questions on the test cases.

Jira Issue Tracking for eCQMs http://jira.oncprojectracking.org/





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There are no comments yet on this issue.

Activity

Transitions

History

Comments

Questions about CMS Policy/Reporting



Have a question about MU Policy/Program or PQRS and IQR Policy/Program?

Direct MU Policy and Program Questions to the following:

The Electronic Health Record (EHR) Information Center

EHR Information Center Hours of Operation:

7:30 a.m. – 6:30 p.m. (Central Time) Monday through Friday, except federal holidays.

1-888-734-6433* (primary number) *(press option 1) or 888-734-6563 (TTY number)

Direct PQRS and IQR Policy and Program Questions to the following:

QualityNet Help Desk (secure)

E-mail: qnetsupport@hcqis.org

Phone: (866) 288-8912

TTY: (877) 715-6222

Fax: (888) 329-7377



What resources are available to help me test the eCQMs?

Bonnie: An eCQM Testing Tool https://bonnie.healthit.gov/



BONN	WE .			Dashboard	Account	Help -	Logout
measure p	eriod: 2012						
■ MEAS	URES 🚣		≛ UPLOAD	EXPECTED	STATUS	TEST PA	ATIENTS
ADE Prevention	on and Monitoring: Warfarin Time in Therapeutic	CMS179v3	€ UPDATE	100	PASS	16 /16	4 +
Anti-depressa	ant Medication Management	CMS128v3	€ UPDATE			21	4 +
	Population: Population 1			100	PASS	21 /21	
	Population: Population 2			100	PASS	21 /21	
Appropriate T	esting for Children with Pharyngitis	CMS146v3	⊘ UPDATE	100	PASS	16 /16	4 +
Appropriate T	reatment for Children with Upper Respiratory)	CMS154v3	⊘ UPDATE	100	PASS	18 /18	4 +
Breast Cance	r Screening rmeasures/ASE96A45-8132-4E72-BF4F-E8C81DB9E641	CMS125v3	② UPDATE	100	PASS	20 /20	4 +

Standards Implementation & Testing Environment http://sitenv.org/



Clinical Quality Measure (CQM) Sandbox

Cypress is the official testing tool for the Electronic Health Record (EHR) Certification program for Meaningful Use (MU) Stage 2 Clinical Quality Measures (CQM). Cypress enables repeatable and rigorous testing of an EHR's ability to accurately calculate MU Stage 2 Eligible Provider (EP) and Eligible Hospital (EH) CQMs. Cypress has been designed to support both the EHR vendor and Authorized Testing Labs responsible for testing EHR technologies as part of the certification process. Cypress is sponsored by the Office of the National Coordinator for Health Information Technology (ONC) and has been designed and developed by The MITRE Corporation.



CYPRESS KNOWLEDGE BASE

The Cypress Knowledge Base is a starting point for vendors and Authorized Testing Labs responsible for testing EHR technologies. The Knowledge Base has Frequently Asked Questions, as well as links to additional eCQM resources.



FORUM

The Cypress Forum enables conversations among community members around topics related to the certification and testing of clinical quality measure calculations with the Cypress toolset.



ISSUE TRACKER

The Cypress Issue Tracker helps to track questions and issues which require input from the Cypress team. The issues are tracked through a simple workflow to interact and collaborate with the Cypress team.



SAMPLE REPOSITORY

The QRDA Sample Data Repository contains a collection of sample QRDA Category I and Category III documents.



INSTALL CYPRESS

Download your own instance of Cypress to test and experiment with prior to certification with an Accredited Testing Laboratory.

For support: project-cypress-talk@googlegroups.com



DEMO CYPRESS

Experiment with the current Cypress Baseline (Note: You will be prompted to log in with your NLM UMLS credentials)

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Cypress demo server



:::: cypress

Welcome, Julia account about feedback help logout

Version: 2.6.0

CERTIFICATION DASHBOARD

Master Patient List

Add EHR Vendor

Welcome to Cypress! This is the Certification Dashboard that displays the names of the EHR vendors and the status of their products being tested. You can begin by adding an EHR vendor or simply explore the complete Cypress Test Deck by clicking on "Master Patient List" above.

	EHR VENDOR NAME	PRODUCTS TESTED	PASSING	NOT PASSING	DATE OF LAST TEST	
▶	MPT	4 / 5 products	0 products	5 products		delete
▶	MDO	0 / 1 products	0 products	1 products		delete
>	KHOAN	0 / 1 products	0 products	0 products		delete
▶	MDDDDF	0 / 1 products	0 products	1 products		delete
▶	abc	0 / 1 products	0 products	0 products		delete
▶	dscz	1 / 1 products	0 products	1 products		delete
>	test	1 / 1 products	0 products	1 products		delete
>	ICTHEALTH	0 / 1 products	0 products	0 products		delete
▶	Sabiamed	1 / 1 products	0 products	1 products		delete
>	xyz	0 / 1 products	0 products	0 products		delete
>	MDF	1 / 1 products	1 products	0 products		delete
>	rgs	1 / 1 products	1 products	0 products		delete
>	MD	0 / 1 products	0 products	0 products		delete



How do I certify/get help with certification?

Certification Testing Tool: Cypress http://projectcypress.org



Add EHR Vendor

delete

delete

delete

delete

Cypress: Meaningful Use Stage 2 Testing and Certification Tool The Office of the National Coordinator for Health Information Technology

Home About Resources Timeline Release Notes FAQ

Meaningful Use Stage 2

Clinical Quality Measure Testing And Certification Tool

Join Announcement List

Submit Comments

Post a Jira Issue

Timeline

Download Cypress v2.6.0

cypress Welcome, Rob account about feedback help logout Master Patient List CERTIFICATION DASHBOARD Welcome to Oypress! This is the Certification Dashboard that displays the names of the EHR vendors and the status of their products being tested. You can begin by adding an EHR vendor or simply explore the complete Cypress Test Deck by clicking on "Master Patient List" above. EHR VENDOR NAME PRODUCTS TESTED PASSING NOT PASSING DATE OF LAST TEST CQM Vendor 1 / 4 products 0 products 2 products Digital EHR 1 / 2 products 1 products 0 products Sagacious EHR 1 / 2 products 0 products 2 products 1/1 products 1 products TestVendor 0 products Acme EHR Vendor 0 / 1 products 0 products 0 products Ambulatory EHR Systems 0 / 2 products 0 products 1 products New Vendor Line Inc. 0 / 1 products 0 products 0 products Expeditionary EHR 0 / 1 products 0 products 0 products Error Report Indicators: O passing insufficient info

Cypress: An Open Source EHR Quality Measure Testing Framework

How Do I Know Products Are Certified?



Certified Health IT Product List (CHPL) http://oncchpl.force.com/ehrcert

Certified Health IT Product List

The Office of the National Coordinator for Health Information Technology

The Certified Health IT Product List (CHPL) provides the authoritative, comprehensive listing of Complete Electronic Health Records (EHRs) and EHR Modules that have been tested and certified under the ONC HIT Certification Program, maintained by The Office of the National Coordinator for Health Information Technology (ONC).

Each Complete EHR and EHR Module listed on CHPL has been tested and certified by an authorized testing and certification body against applicable standards and certification criteria adopted by the HHS Secretary. EHR technologies that have been certified under the ONC HIT Certification Program are eligible to be used for the Centers for Medicare and Medicaid (CMS) EHR Incentive Programs. The CHPL provides CMS EHR Certification ID for qualified products to be used for the Center Programs.

Eligible providers have the ability to use EHR technology that is certified to 2011 edition certification criteria, 2014 edition certification criteria, and a combination of 2011 and 2014 edition certification criteria to generate CMS EHR Certification ID that is submitted to CMS as part of attesting to meaningful use of certified EHR technology.

Please send suggestions and comments regarding the Certified Health IT Product List (CHPL) to ONC.certification@hhs.gov, with "CHPL" in the subject line.

Vendors or developers with questions about their product's listing should contact their certification body that certified their product.

STEP 1: TO WHICH EDITION OF ONC HIT EHR CERTIFICATION ARE YOU ATTESTING?

2011 Edition

Combination of 2011 and 2014 Edition

2014 Edition

USING THE CHPL WEBSITE / CERTIFICATION ID NUMBERS FOR OPTIONS UNDER THE 2014 CEHRT FLEXIBILITY RULE

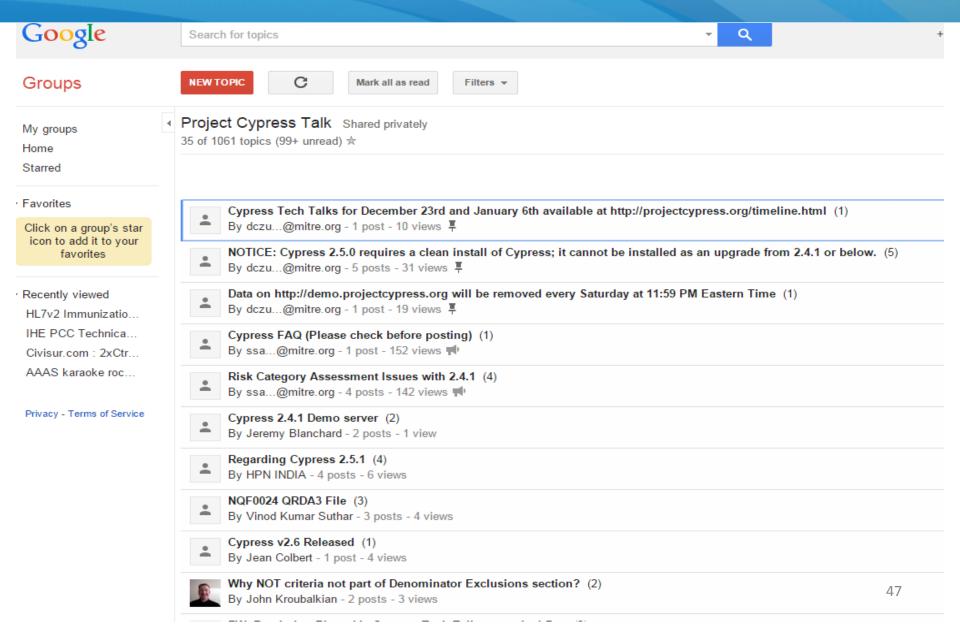
UPDATE: These step-by-step instructions also would apply to providers who intend to use a certified EHR technology option identified in the <u>Flexibility</u> Rule, which was published by CMS on September 4, 2014. The Flexibility Rule grants flexibility to providers who are unable to fully implement 2014 Edition for an EHR reporting period in 2014 due to delays in the availability of 2014 certified EHR technology. Under the Flexibility Rule, such providers participating in the Medicare and Medicaid EHR Incentive Programs in 2014 may use EHRs that have been certified under the 2011 Edition, a combination of the 2011 and 2014 Edition, or the 2014 Edition. More information on the Flexibility Rule may be found <a href="https://example.com/here/branchings/lexibles

To browse the CHPL and review the comprehensive listing of certified EHR products, follow the steps outlined below:

- Select the EHR Certification Criteria Edition for attestation (2011 Edition, Combination of 2011 and 2014 Edition, 2014 Edition)
 2011 Edition List of EHR products that are certified to 2011 Edition certification criteria.
 2014 Edition List of EHR products that are certified to 2014 Edition certification criteria.
 Combination of 2011 and 2014 Edition List of EHR products that are certified to 2011 Edition certification criteria AND/OR equivalent 2014 Edition certification criteria.
- 2. Select Practice Type (Ambulatory or Inpatient). Practice Type selection available only for '2011 Edition' and 'Combination of 2011 and 2014 Edition' attestation
- 3. Select the "Browse" button to view the list of all CHPL products

Cypress Talk List and CYPRESS Jira Projects





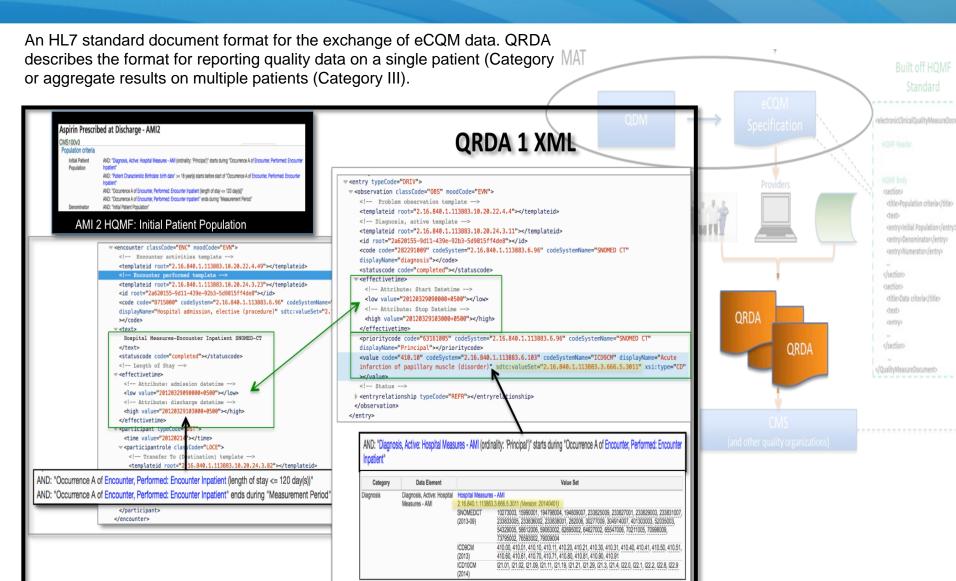


Can I use my ONC-certified measure output to report to CMS?

Quality Reporting Document Architecture (QRDA)



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eCQM Reporting for 2014: CMS QRDA IG REQUIRED for successful submission



You cannot successfully report without additional QRDA restrictions in CMS IG!!

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA EP HQR Guide 2015.pdf

CMS Implementation Guide for Quality Reporting Document Architecture Category I and Category III

Eligible Professional Programs and Hospital Quality Reporting (HQR)

Supplementary Implementation Guide for 2015

Version: 1.0 07/29/2014



How do I report or attest to the measures?

Reporting on the 2014 eCQMs



- Determine your reporting method, which measures are required, and what additional measures you will report
- Verify your EHR product is ONC Certified
 certification edition requirements based on your program(s)
- 3. Capture data required for the appropriate measures
- 4. Register for reporting/attestation
- 5. Submit eCQM data



What changes should I expect for the 2015 Annual Update?

2015 eCQM Annual Update



- All 93 eCQMs to be published in HQMF R2.1
- Value sets updated to include latest 2014/2015 code systems
- Corrections to incorporate feedback from users and changes to other standards
- All measures pre-tested using BONNIE testing tool, which creates QRDA libraries

What do you want to know?



What topic do you think would be most helpful for the next webinar (April/May timeframe)?

- A. Changes in the 2015 annual update and the process expert implementers use to make updates
- B. Data capture and data mapping from user to reporting
- C. Workflow assessment and integrating quality measures into clinical practice



Discussion and Questions

Panel:

- Nalini Ambrose, Program Manager/Measure Development Contractor, Booz Allen Hamilton
- Itara Barnes, Manager of Regulatory Affairs and Accreditation, Medical University of South Carolina
- Kimberly Bodine, EHR Manager Clinical Quality Measures, HCA
- Susan McBride, Professor, Texas Tech University Health Sciences Center
- Peri Saunders, Project Coordinator, Healthcare Management Solutions LLC

Moderator:

Julia Skapik, Medical Officer, ONC <u>Julia.skapik@hhs.gov</u>



What other questions/information would you like to see presented in this series and others?

Please enter a question/write into the chat with your suggestions or email psaunders@hscmsllc.com



Appendix: Other Information

Abbreviations



Term	Definition
ACOs	Accountable Care Organizations
CEHRT	Certified Electronic Health Record Technology
CQM	Clinical Quality Measure
EHR	Electronic Health Record
HL7	Health Level Seven International (HL7)
IQR	Inpatient Quality Reporting
PQRS	Physician Quality Reporting System
QDM	Quality Data Model
QRDA	Quality Reporting Document Architecture

Definitions



Term	Definition
eMeasure or eCQM	Electronic formatted clinical quality measures (here, using the HL7 standard QDM-based HQMF)
QDM	An "information model" intended to clearly define concepts used in quality measures and clinical care
HQMF	HL7 standard used to represent quality measures in an electronic format.
Value set	Lists of specific values (terms and their codes: CPT®, ICD-10-CM, LOINC®, MeSH®, RxNorm, SNOMED CT®, etc.) derived from single or multiple standard vocabularies used to define clinical concepts
VSAC	Library of value sets used by eCQM. Maintained by the National Library of Medicine
QRDA	HL7 standard document format for the exchange of eCQM data. QRDA reports represent eCQM data at the patient or organization level.

Quality Measurement (eCQM) Standards



- Measure Definition Standards
 - Quality Data Model (QDM)
 - Health Quality Measure Format (HQMF)
- Measure Reporting Standards
 - Quality Reporting Document Architecture (QRDA)
 - Category I for patient level data
 - Category III for aggregate data

Attestation/Reporting to the 2014 eCQMs



You have several options for submitting your 2014 eCOM data.

Reporting once: Depending on your eligibility to participate in other CMS programs, you may be able to report quality measures one time during the 2014 program year in order to satisfy the CQM component of the Medicare EHR Incentive Program and satisfactorily participate in other programs, such as the Physician Quality Reporting System (PQRS) program.

EHR incentive payment: Attestations for the Medicare EHR Incentive Program are not complete until CQM data is submitted, so EHR incentive payments will be held until the electronic submission is processed. If you are a Medicaid eligible professional, you must submit your CQM data to your State Medicaid Agency.

If you are in your second year and beyond of Medicare EHR Incentive Program participation and choose to submit your CQMs electronically to receive credit for other CMS programs that require 12 months of CQM data, you will not receive EHR payment prior to 2015.

Resources: For more information about electronic submission of CQM data, visit the CMS website.

To attest for the EHR Incentive Program, go to: https://ehrincentives.cms.gov/hitech/login.action

CMS Reporting Guidance for EPs



For EP:

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/CQM2014 GuideEP.pdf

2014 AND BEYOND

ELIGIBLE PROFESSIONALS

9 OF A POSSIBLE 64 MEASURES

- Choose from 3 different domains
- CMS has a recommended core set for adults and children

- Option 1: Attest through the EHR Registration & Attestation System
- Option 2: eReporting through PQRS
- Option 3: Satisfy requirements of PQRS Reporting Options
- Option 4: Group Reporting (GPRO)
- Option 5: Group Reporting through Pioneer ACO
- Option 6: Group Reporting through the Comprehensive Primary Care (CPC) Initiative

CMS Reporting Guidance for EHs



For EH:

https://www.qualitynet.org/

For Q&A:

https://cms-

<u>ip.custhelp.com/app/home3/session/L3RpbWUvMT</u>QyNzEzMzU1Ni9zaWQvMkEzdWwyaW0%3D

- Option 1: Attest through the EHR Registration & Attestation System
- Option 2: eReporting through Hospital Inpatient Quality Reporting (IQR) using QualityNet (more information at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-

Instruments/HospitalQualityInits/HospitalRHQDAPU.html