



eCQMs 101

National Health IT Week September 18, 2014

eCQMs 101: Introduction to eCQMs for use in CMS Programs

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The EHR Incentive Programs





Quality Reporting Programs

CQMs are used in more than 20 different programs

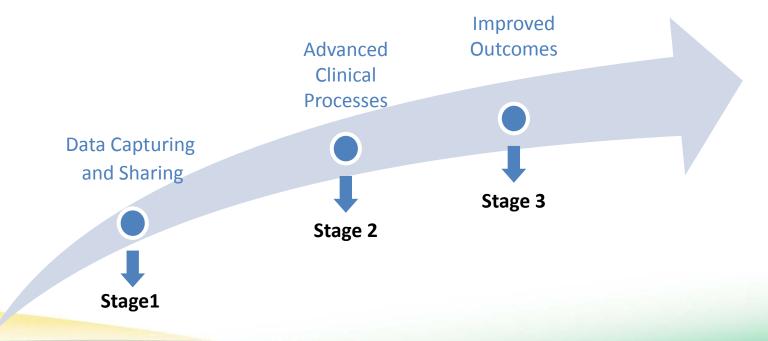
Hospital Quality	Physician Quality Reporting	PAC and Other Setting Quality Reporting	Payment Model Reporting	"Population" Quality Reporting
 Medicare and Medicaid EHR Incentive Program PPS Exempt Cancer Hospitals Impatient Psychiatric Facilities Inpatient Quality Reporting HAC Reduction Program Outpatient Quality Reporting Ambulatory Surgical Centers 	 Medicare and Medicaid EHR Incentive Program PQRS eRx Quality Reporting 	 Inpatient Rehabilitation Facility Nursing Home Compare Measures LTCH Quality Reporting Hospice Quality Reporting Home Health Quality Reporting 	 Medicare Shared Savings Program Hospital Value- based Purchasing Physician Feedback/Value- based Modifier ESRD QIP 	 Medicaid Adult Quality Reporting CHIPRA Quality Reporting Health insurance Exchange Quality Reporting Medicare Part C Medicare Part D





The EHR Incentive Programs

- The Electronic Health Record (EHR) Incentive Programs were created by the Health Information Technology for Economic and Clinical Health (HITECH) Act as part of the American Recovery and Reinvestment Act of 2009.
- The programs have three initial stages, each with its own conceptual approach and requirements to meet Meaningful Use (MU):







EHR Incentive Programs Participation

Eligible professionals (EPs) who successfully demonstrate meaningful use (MU) of certified EHR technology may receive incentive payments, which differ in amount based on participation in the Medicare or Medicaid EHR Incentive Program.

Medicare EPs	Medicaid EPs
 Doctors of Medicine or Osteopathy Doctors of Dental Surgery or Dental Medicine Doctors of Podiatric Medicine Doctors of Optometry Chiropractors 	 Physicians (primarily Doctors of Medicine or Osteopathy) Nurse Practitioner Certified Nurse-Midwife Dentist Physician Assistant who furnishes services in a Federally Qualified Health Center or Rural Clinic that is led by a Physician Assistant

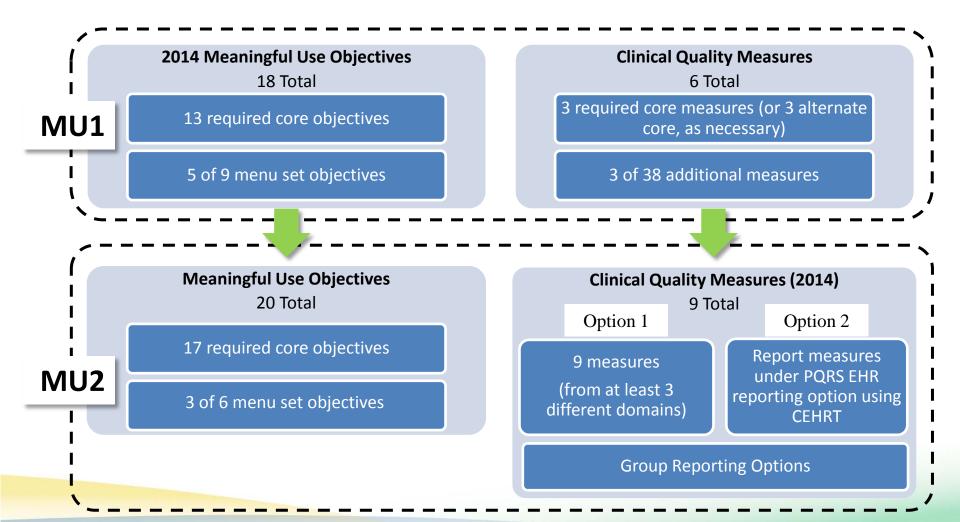
To participate in the EHR Incentive Programs, providers must:

- ✓ Meet Eligibility Criteria.
- ✓ Possess Certified Electronic Health Record Technology (CEHRT).
 - A list of certified EHR systems and modules is available at: http://healthit.hhs.gov/chpl.
- ✓ Register with the Centers for Medicare
 & Medicaid Services (CMS).
 - To register with CMS, visit: https://ehrincentives.cms.gov/hitech/login.action.
- ✓ Meet MU Requirements.
- Attest to MU.
 - To attest to MU, visit: https://ehrincentives.cms.gov/hitech/login.action.





Comparing MU Stage 1 & 2 Requirements







MU CQM Reporting Options in 2014

Report Through Certified EHR Technology (CEHRT)

- Submit 9 CQMs in at least 3 different domains
- Though not required, CMS suggests a core set of measures
- CQMs submitted on an aggregate basis reflective of all patients without regard to payer

Utilize the Physician Quality Reporting System (PQRS) EHR Option

- Submit and satisfactorily report PQRS CQMs under the PQRS EHR Reporting Option using CEHRT.
- EPs who select this option will be subject to the reporting periods established for the PQRS EHR reporting option.

Group Reporting

Option A: EPs in an ACO who satisfy requirements of Medicare Shared Savings Program can use CEHRT.

Option B: EPs who satisfy requirements of PQRS GPRO option can use CEHRT.





MU CQM Reporting Timelines

- In the first year of Stage 1 participation, an EP can submit any continuous 90-day period. Subsequent reporting periods will be 1 calendar year.
 - EPs have a reporting period of January 1 December 31 (calendar year).
 - Submissions must be made no more than 2 months following the end of the calendar year (Feb 28).
- EPs demonstrating meaningful use in the year 2014 will only be required to submit a 3-month period of CQM data for the year.
 - Unless an EP is in the first year of Meaningful Use, the three months must coincide with a calendar-year quarter, though EPs may select to submit data for any quarter in the year.
- Those initiating or continuing Stage 2 in 2015 will be required to report a full calendar year of data.





eCQMs & eCQM Development





What is an eCQM?

 Electronically specified clinical quality measures (eCQMs) are standardized performance measures derived solely from EHRs. Current CMS policy focuses eCQMs on six domains:

- Clinical Processes / Effectiveness
- Care Coordination
- Patient and Family Engagement

- Population and Public Health
- Patient Safety
- Efficient Use of Healthcare Resources

 The Meaningful Use Program provides financial incentives for Eligible Professional (EPs), Eligible Hospitals (EHs), and Critical Access Hospitals (CAHs) to report eCQMs





Why Are eCQMs Important?







eCQMs Advance Quality Measurement



Source: National Quality Forum, *Electronic Measures*, December 2011





eCQM Components

In order to report CQMs from an EHR, electronic specifications must be developed for each CQM. Each component helps to accurately capture, calculate and report eCQMs:

XML

Description: A CQM written in Health Quality Measures Format (HQMF) syntax. HQMF is the industry (HL7) standard for representing a CQM as an electronic document.

Likely User: EHR system developers and administrators, analysts.

Use: To enable the automated creation of queries against an EHR or other operational data store for quality reporting.

Value Sets

Description: A value set is comprised of code groupings drawn from multiple code systems that represent clinical concepts. Value sets provide definitions of the data elements necessary to calculate the CQM.

Likely User: EHR users, system developers and administrators, analysts.

Use: To provide the necessary vocabulary to understand and implement the CQM.

Human-Readable

Description: The humanreadable HTML equivalent of the XML file content.

Likely User. EHR users.

Use: To identify the details of the CQM in a human-readable format, so that the user can understand both how the elements are defined and the underlying logic of the measure calculation.





Key Stakeholders

Stakeholder	Role in eCQM Development Process
Center for Medicare and Medicaid Services (CMS)	 CMS manages the meaningful use programs, including managing eCQM selection and development.
Office of the National Coordinator for Health Information Technology (ONC)	ONC publishes regulations on EHR Standards and Certification Criteria.
National Quality Forum (NQF)	 The NQF is a non-profit organization that reviews, endorses and recommends healthcare quality measures. NQF convenes the Measure Applications Partnership (MAP) a public-private partnership which reviews measures for potential use in public reporting and performance-based programs while also working to align measures being used in public and private-sector programs.
National Library of Medicine (NLM)	 NLM manages the Value Set Authority Center (VSAC) which publishes value sets for use in the eMeasure development process.
Health Level Seven International (HL7)	 HL7 is a standards development organization dedicated to providing a comprehensive framework and standards for the exchange, integration, sharing, and retrieval of electronic health information. The Quality Reporting Data Architecture (QRDA) and the Health Quality Measures Format (HQMF) are both published by HL7.





Key Tools

Tool	Use in eCQM Development Process
Measure Management System (MMS) and Blueprint	 A standardized approach to the development and maintenance of the quality measures used in CMS quality initiatives and programs, the MMS provides a set of business processes and decision criteria that CMS-funded measure developers (or contractors) follow to develop, implement, and maintain quality measures. The Blueprint requirements align with those cited by NQF for endorsement.
Measure Authoring Tool (MAT)	 The MAT is a publicly available, web-based tool for measure developers to create e-Measures.
Quality Data Model (QDM)	 The QDM is an information model that clearly defines concepts used in quality measures and clinical care and is intended to enable automation of EHR use. It provides a way to describe clinical concepts in a standardized format so individuals (i.e., providers, researchers, measure developers) monitoring clinical performance and outcomes can clearly and concisely communicate necessary information.





Key Tools, cont'd

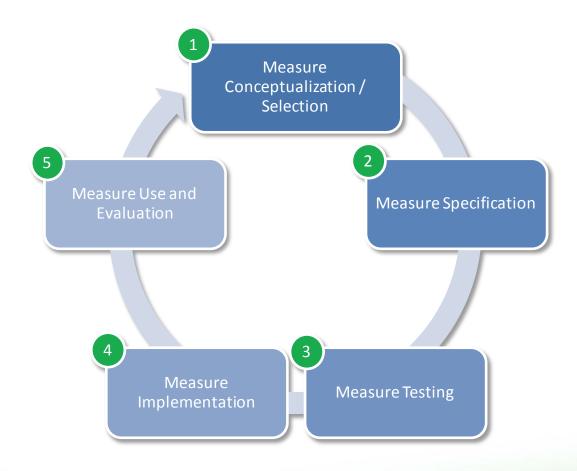
Tool	Use in eCQM Development Process
Value Set Authority Center (VSAC)	 The Value Set Authority Center (VSAC) currently serves as the central repository for the official versions of value sets that support Meaningful Use 2014 Clinical Quality Measures (CQMs). The VSAC provides search, retrieval and download capabilities through a Web interface and APIs.
Quality Reporting Document Architecture (QRDA)	 QRDA is the standard for transmitting health care quality measurement information.
Health Quality Measures Format (HQMF)	 HQMF is the industry (HL7) standard for representing a CQM as an electronic document.
Cypress	 Cypress is a tool for testing Meaningful Use of EHRs and EHR modules. It is open source and freely available for use or adoption, and is the official testing tool for the 2014 EHR Certification program.















1

Measure Conceptualization / Selection

- Work with key stakeholders (e.g., TEP, EHR vendors, patients, beneficiaries and providers) to generate a list of measure concepts to be developed.
 - Take into consideration:
 - Balance between outcome and process measures
 - Areas or domains where there are measurement gaps
 - Scientific evidence, gaps in care, and opportunities for quality improvement to support measure concept





2

Measure Specification

- Draft measure narrative describing what will be measured, the clinical justification and evidence for measurement.
- Conceptualize the corresponding workflow to derive the data collection process.
- Vet draft measure specifications through a technical expert panel and other stakeholders in an iterative process.
- Develop value sets and enter draft specifications into Measure Authoring Tool (MAT) to generate eSpecification in Health Quality Measure Format (HQMF).
- Conduct initial assessments of measure feasibility.
- Prepare measure for and submit measure to the Measures Under Consideration (MUC) list for review by the Measures Application Partnership (MAP).





3

Measure Testing

- Develop appropriate research questions and data analysis approaches to determine validity and reliability, considering Blueprint and NQF endorsement criteria as a guide. Select the most appropriate testing techniques given the measure's structure, underlying science, and data availability.
- Test measure feasibility by assessing availability of data elements within the EHR, analysis of provider workflow and the ability to capture needed data via EHR/database queries and structured provider interviews, among other methods.
- Components of a comprehensive measure testing plan may include:
 - Claims analysis
 - Identification of and contracting with test sites and approval of testing protocol by an IRB (if needed)
 - Quantitative data analysis to include implementation of the measure in an EHR and extraction of data using automated and manual abstraction
 - Qualitative data gathering on measure usability and feasibility with test sites, vendors, and other experts
 - Conducting site visits to assess feasibility, usability, and review analysis results
 - Test case development and implementation
 - Public comment
- Development and implementation of a comprehensive measure testing plan can be a lengthy process.





4

Measure Implementation

- Prepare measure for Federal rulemaking process and support public comment period.
- Support measure roll out including development of roll-out plan, business process to support measure reporting, data management plan, auditing and appeals processes, and education and outreach efforts.
- Prepare documentation for endorsement by the National Quality Forum and support the measure as it goes through the endorsement process.





5

Measure Use and Evaluation

- Assess how the measure is performing in the field over time.
- Feed results of measure evaluation into new measure conceptualization.
- Conduct measure maintenance, including the annual updates as necessary by program or NQF requirements.





Paper-Based vs. eCQM Measure Development

Paper-Based Measure Development

- Measure developers develop measure narrative, numerator/ denominator in line with existing administrative data and/or data typically found in paper charts
- Measure developers develop value sets
- Measure developers conduct complete feasibility, usability, reliability and validity testing

eCQM Measure Development

- Measure developers develop measure narrative, numerator/ denominator, workflow and logic, in line with existing standards (e.g., Quality Data Model)
- Measure developers develop value sets, collaborating with the Value Set Authority Center and code set (e.g. SNOMED, LOINC) stakeholders as needed
- Measure developers use the Measure Authoring Tool to create the eCQM in Health Quality Measure Format (HQMF)
- Measure developers conduct complete feasibility, usability, reliability and validity testing which can include working with EHR vendors to understand data element availability and implementation in the field
- Measure developers develop the implementation test decks or test cases going forward. These are run through Cypress.
 Measure developers collaborate with Cypress owners to revise measures as needed
- Collaboration with other stakeholders is also required (e.g. HL7, the Electronic Measures Issues Group (eMIG), etc.)





* Timelines are notional, not actual, and intended for the purposes of discussion.

Measure development timelines vary based on the measure.

Measure Conceptualization/ Selection

Generate a list of measure concepts to be developed

Measure Specification

Draft measure specifications and conduct initial feasibility **Measure Testing**

Develop and implement comprehensive measure testing plan

Measure Implementation

Support measure rollout including Federal rulemaking, business process and education and outreach Measure Use and Evaluation

Assess how measure performs in the field and conduct measure maintenance

Month 1 Month 5 Month 12 Month 21 Month 27





Reporting eCQMs for Eligible Professionals





Medicare EHR Incentive Program Alignment with PQRS Program

- For 2014*, it is possible to report once for Medicare Physician Quality Reporting Programs by reporting through the Physician Quality Reporting System (PQRS)
- Some EPs may wish to report once and fulfill multiple programs' requirements:
 - To receive PQRS incentives
 - To avoid PQRS payment adjustment in 2016
 - To satisfy the CQM component of the Medicare EHR Incentive Program
 - To avoid Physician Value-based modifier payment adjustments/potentially qualify for upward payment adjustments in 2016
 - To meet Medicare Shared Savings Program quality requirements





2014 Individual EP Reporting Options

Option 1: Submit to Medicare EHR Incentive Program through Certified EHR Technology (CEHRT)

 Using CEHRT, or an EHR data submission vendor that is CEHRT, or a qualified clinical data registry that is CEHRT reporting on 9 CQMs in at least 3 different domains

Option 2: Utilize the Physician Quality Reporting System (PQRS)* EHR Reporting Option

Using CEHRT or an EHR data submission vendor that is CEHRT report 9
 CQMs in at least 3 domains and satisfactorily report PQRS requirements

*For more information on the requirements of the PQRS, refer CMS Regulation: CMS-1600-FC available here: https://www.federalregister.gov/articles/2013/12/10/2013-28696/medicare-program-revisions-to-payment-policies-under-the-physician-fee-schedule-clinical-laboratory





2014 eCQM Group Reporting Options

- Group practices (2+ EPs with a single Tax Identification Number) must register to participate in the PQRS Group Practice Reporting Option (GPRO) and satisfy PQRS reporting requirements. There are two options:
 - Using CEHRT or an EHR data submission vendor that is CEHRT, report 9 CQMs from at least 3 domains and satisfy the PQRS reporting requirements
 - For groups with 25+ EPs, it is possible to use the GPRO Web interface to report on all measures in the web interface for the pre-populated sample





Stage 2 eCQM Group Reporting Options, cont'd

- Medicare Shared Savings Program (MSSP) Accountable Care Organizations (ACOs) must report on all measures included in the GPRO web interface
- ➤ Pioneer ACO participants must report for the respective program through a combination of CMS claims and administrative data, the GPRO web interface and the patient experience of care surveys*
- ➤ Comprehensive Primary Care Initiative (CPCI) practice sites that report quality data in accordance with CPCI requirements

^{*}For more information on reporting options for Pioneer ACO's, please see: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html









Hospital Quality Reporting Alignment

Centers for Medicare & Medicaid Services
Presented by: Cindy Tourison, MSHI
Lead of Hospital Inpatient Quality Reporting & Value
Based Purchasing

Agenda

Hospital Quality Reporting Alignment

eCQM Reporting

- Medicare Electronic Health Record (EHR) Incentive Program
- Hospital Inpatient Quality Reporting (IQR) Program
- Requirements
- Deadlines
- Who can participate
- Validation

Other Topics

Summary: Key Takeaways

Questions & Answers





Hospital Quality Reporting Alignment

CMS believes the collection and reporting of data through health information technology (HIT) will greatly simplify and streamline reporting for CMS quality reporting programs

- CMS's goal is to align and harmonize measures across hospital quality reporting programs to minimize the reporting burden imposed on hospitals
- The initial focus is to align the Hospital Inpatient Quality Reporting (IQR) Program and the Medicare Electronic Health Record (EHR) Incentive Program for eligible hospitals and critical access hospitals
- CMS intends to align quality reporting programs in the future to measure across care settings





Hospital Quality Reporting Alignment

What are eCQMs?

- Electronically specified (EHR derived) clinical quality measures
- Developed specifically so Certified Electronic Health Record Technology (CEHRT) can calculate, export and transmit the measure specifications/data without human interaction
- May also be called:
 - eMeasures
 - EHR-Extracted
 - Electronically specified CQM
 - EHR derived or EHR based





Aligning the Hospital IQR Program with the Medicare EHR Incentive Program (1 of 2)

- Expand Medicare EHR Incentive Program electronic submission period starting from January 2, 2014 to November 30, 2014
 - Allows 9 additional months for file submissions to the previous submission period of October 1, 2014 to November 30, 2014
 - Hospitals in their first year of demonstrating meaningful use may either submit the 1st or 2nd FY quarter by the July 1, 2014 deadline to avoid the payment adjustment for hospitals
 - 16 CQMs out of the list of 29 CQMs covering 3 domains in any FY quarter or the full FY would count for the Medicare EHR Incentive Program CQM submission

Enable hospitals in their first year of meaningful use to submit quality measures in CY quarter 1 by July 1, 2014 to be considered under the IQR and Medicare EHR Incentive Programs

 A total of 16 measures from the 29, across 3 domains to be considered for the Medicare EHR Incentive Program





Aligning the Hospital IQR Program with the Medicare EHR Incentive Program (2 of 2)

Allow only electronic clinical quality measure submission in the QRDA I (release 2) format for the Medicare EHR Incentive Program in 2014

 Aggregate data can be attested in the Registration & Attestation module, but attested CQM does not fulfill optional reporting option for the Hospital IQR Program

Submit case number threshold exemption population data (i.e. five or fewer discharges) in QualityNet with electronic CQM data submission





Medicare EHR Incentive Program Overview of Requirements for Eligible Hospitals Beginning 2014

Stage 1, Year 1

Beginning in 2014

- Electronically Report or Attest on 16 clinical quality measures (CQMs) out of 29 CQMs
- Selected CQMs must cover at least 3 of the 6 National Quality Strategy (NQS) domains

And

- 14 required core objectives
- 5 objectives chosen from a list of 10 menu set objectives

Stage 1, Year 2 or beyond

Beginning in 2014

- Electronically report 16 out of 29 CQMs
- Selected CQMs must cover at least 3 of the 6 NQS domains (Aggregate CQM data could be attested, but no aligned credit with Hospital IQR possible)

And

- 16 required core objectives
- 3 objectives chosen from a list of 6 menu set objectives

Beginning in 2014, CQMs are a separate requirement from the core objectives of the EHR Incentive Programs to demonstrate meaningful use. Meaningful Use Core & Menu functional measures must be attested by hospitals in order to complete the reporting requirements for the Medicare EHR Incentive Program.





Medicare EHR Incentive Program eCQM Submission Options for Eligible Hospitals

EHR Incentive Program

Electronically report 16 out of 29 CQMs

Selected CQMs must cover at least 3 of the 6 NQS domains



Option 1: Aggregate data submitted through the attestation system

OR

Option 2: Patient-level data submitted through QualityNet utilizing Quality Reporting Data Architecture (QRDA)

Category 1 Revision 2





Hospital IQR Program Overview of eCQM Requirements for Eligible Hospitals Beginning 2014

IQR Successful Criteria:

- Select one or more measure sets (ED, STK, VTE, PC) for one quarter of discharges
- □ All discharges for selected measure sets must be same discharge quarter. If more than one quarter is submitted, earliest discharge quarter measure set(s) will be assessed for Annual Payment Update (APU)
- □ Accepting Q1, Q2, Q3 of Calendar Year only
- Successful submission of all 4 measure sets meets MU
 - MU requires 16 measures across 3 domains
- Measure sets not submitted electronically must follow existing IQR guidelines

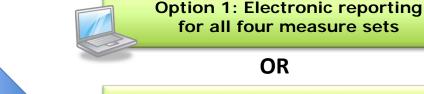




Hospital IQR Program eCQM Submission Options for Eligible Hospitals

Four Measure

- √ Stroke (STK)
- √ Venous
 thromboembolism (VTE)
- ✓ Emergency Department (ED) Throughput
- ✓ Perinatal Care (PC)



Option 2: Electronic reporting for a subset of the four measure sets; chart-abstraction for remaining

OR

Option 3: Chart-abstraction for all four measure sets

OR

Option 4: Electronic reporting with Chart-abstraction

All other Hospital IQR chart-abstracted measures and any electronic measure set not reported for the first successful electronically reported quarter, prior to the reporting deadline must still be reported via chart-abstraction for the full CY 2014.





eCQM Submission Alignment

IQR Program

Electronically report all 4 measure sets (ED, STK, VTE, PC) for one quarter of discharges.

- √ Stroke (STK)
- ✓ Venous thromboembolism (VTE)
- ✓ Emergency Department (ED) Throughput
- ✓ Perinatal Care (PC)



EHR Incentive Program

Electronically report 16 out of 29 eCQMs (Utilizing the STK, VTE, ED, and PC eCQMs)

Selected eCQMs must cover at least 3 of the 6 NQS domains





FY 2016 Hospital IQR Reporting Periods and Submission Deadlines

FY 2016 Hospital IQR Program Reporting Periods and Electronic Reporting Submission Deadlines for Eligible Hospitals <u>not in their first year</u> of the Medicare EHR Incentive Program

Discharge Reporting Periods	Submission Deadlines
January 1, 2014 – March 31, 2014	November 30, 2014
April 1, 2014 – June 30, 2014	November 30, 2014
July 1, 2014 – September 30, 2014	November 30, 2014
October 1, 2014 – December 31, 2014	Not Applicable

FY 2016 Hospital IQR Program Reporting Periods and Electronic Reporting Submission Deadline for Eligible Hospitals <u>in their first year</u> of the Medicare EHR Incentive Program

Discharge Reporting Periods	Submission Deadline
January 1, 2014 – March 31, 2014	July 1, 2014





Who Can Participate?

Who can participate

- Subsection (d) hospitals paid under the Inpatient Prospective Payment System
- Critical Access Hospitals
- Any hospital participating in the IQR voluntary submission program

Notice of Participation Form

- Hospital will need to indicate eReporting in the attestation system for Meaningful Use
- My QualityNet has developed an entry screen to capture "intent to submit" which a hospital can complete





Summary: Key Takeaways

- One submission may satisfy both the Hospital IQR and Medicare EHR Incentive Programs if all four measure sets selected by the Hospital IQR Program for electronic reporting are submitted in CY quarters 1, 2, or 3 (or CY quarter 1 for hospitals in the 1st year of meaningful use)
- Meaningful Use Core & Menu functional measures must still be attested in order to complete the reporting requirements for the Medicare EHR Incentive Program
- ALL finalized Hospital IQR measures must still be reported to meet the requirements for FY 2016 Hospital IQR Payment Determination
- Hospital IQR Program data submission deadlines depend on whether the hospital is submitting via electronic reporting or chart abstraction





CMS eCQM Resources

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)

QualityNet Help Desk (secure)

- Submission issues, password reset, authorization and role management, new accounts
- E-mail: <u>qnetsupport@hcqis.org</u>
- Phone: (866) 288-8912
 TTY: (877) 715-6222
 Fax: (888) 329-7377

QRSupport@hcqis.org (for EH and CAH)

Program questions and general questions





CMS eCQM Resources

EHR ListServe (public) (for EH and CAH)

- QRDA submission specific to CMS, program questions, general questions
- Join: https://www.qualitynet.org >Join ListServes> EHR Hospital Reporting Discuss
- Message: <u>hrehr-poc-discuss@lists.qualitynet.org</u>

JIRA (public)

- QRDA, HQMF, HL7, or Meaningful Use Questions
- http://oncprojectracking.org/





Q & A



