



HIMSS[®]16

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**TRANSFORMING
HEALTH THROUGH IT**



QRDA Submissions to CMS

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Agenda

- Welcome
- Introduction to CMS QRDA
 - Annual CMS QRDA documents
 - Appendix to 2016 CMS QRDA Implementation Guide (IG)
- Common submission errors – Eligible Professionals, Eligible Hospitals, and Comprehensive Primary Care
- Cypress Validation Utility demonstration

- Questions?

Annual CMS QRDA Documents

- CMS QRDA Implementation Guide for Eligible Professional Programs and Hospital Quality Reporting
- QRDA I and QRDA III Schematrons
- Sample Files
- Addendum
- Appendix
- Found on the eCQI Resource Center and on the CMS eCQM Library
 - <https://ecqi.healthit.gov/qrda>
 - https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms/ecqm_library.html

2016 CMS QRDA IG Overview

- Part A – QRDA-I for Eligible Professionals (EPs) and Hospital Quality Reporting
- Part B – QRDA-III IG for EPs
- Appendices
 - Troubleshooting and Support
 - Additional QRDA-I Validation Rules for HQR Programs
 - Null Flavor Rules for Data Types
 - QRDA-I Draft Standard for Trial Use (DSTU) R3 Supplemental IG Changes to Base Standard
 - QRDA-III DSTU R1 Supplemental IG Changes to Base Standard
 - Change Log for 2016 CMS QRDA IG from the 2015 CMS QRDA IG
- Appendix to the 2016 CMS QRDA IG

Sample High-Level Changes QRDA-I

	2016 CMS QRDA IG	2015 CMS QRDA IG
Based HL7 Standard for QRDA-I	HL7 CDA R2 Implementation Guide: Quality Reporting Document Architecture Category I (QRDA I), Release 1, DSTU Release 3 - US Realm (June 2015) http://www.hl7.org/documentcenter/public/standards/dstu/CDAR2_QRDA_I_R1_DSTU3_2015JUN.zip	HL7 Implementation Guide for CDA Release 2: Quality Reporting Document Architecture Category I, DSTU Release 2 , (US Realm), Draft Standard for Trial Use, July 2012 (and its December 2012 and 2014 Errata Updates)
CMS Program Names for QRDA-I	Codes contained in the QRDA-I CMS Program Name Value Set PQRS_MU_INDIVIDUAL PQRS_MU_GROUP CEC HQR_EHR HQR_IQR HQR_EHR_IQR CDAC_HQR_EHR	Codes contained in the QRDA-I CMS Program Name Value Set PQRS_MU_INDIVIDUAL PQRS_MU_GROUP PIONEER_ACO HQR_EHR HQR_IQR HQR_EHR_IQR

Sample High-Level Changes QRDA-III

	2016 CMS QRDA IG	2015 CMS QRDA IG
Submission Rules for QRDA-III	Language is updated to reflect the requirement updates for the 2016 reporting year.	N/A
Performance Rate for Proportion Measures (CMS EP)	<p>Added performance rate submission guidance to the template description:</p> <ul style="list-style-type: none"> • Performance rate must be a value in the range of [0, 1] • If the expression (DENOM – DENOM EXCL– DENOM EXCEP) results in a null, a nullFlavor of “NA” should be submitted • Rounding rules for performance rate 	Guidance provided in the 2015 CMS QRDA IG Addendum.

Where to find more information

- All 2015-2016 QRDA-I changes found in section 14.1 Part A of the 2016 IG
- All 2015-2016 QRDA-III changes found in section 14.2 Part B of the 2016 IG
- Presentation on 2015-2016 changes for Hospital Quality Reporting found at <http://www.qualityreportingcenter.com/inpatient/ecqm-archived-events/>

Common submission errors

Top Five HQR Submission Errors

1. Encounter Performed Admission Date (low value) is after the Encounter Performed Discharge Date (high value)
2. The document does not conform to QRDA document formats accepted by CMS
3. Reporting Period Effective Date Range does not match one of the Program's CY Discharge Quarters
4. This patientRole SHALL contain exactly one [1..1] id such that it SHALL contain exactly one [1..1] Patient Identifier Number
5. Discharge Date is not within the Programs CY discharge quarter

Sample XML – EH error

Error:

Admission Date is after the Discharge Date

```
<low value="20150312090000+0500"/>
<high value="20150306103000+0500"/>
```

Error Message:

The system SHALL reject QRDA-I files if the Encounter Performed Admission Date (effectiveTime/low value) is after the Encounter Performed Discharge Date (effectiveTime/high value) (CONF: CMS_0062).

How to fix (example):

```
<!--Encounter Performed: Inpatient Encounter-->
<encounter classCode="ENC" moodCode="EVN">
  <!-- Confirms to C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49"
    extension="2014-06-09"/>
  <!-- Encounter Performed (V2) templateId-->
  <templateId root="2.16.840.1.113883.10.20.24.3.23"
    extension="2014-12-01"/>
  <id root="dccf424e-18dd-4058-887f-a81514eaaa55"/>
  <code code="32485007" displayName="hospital admission"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
    sdtc:valueSet="2.16.840.1.113883.3.117.1.7.1.424"/>
  <text>Encounter, Performed: hospital admission</text>
  <statusCode code="completed"/>
  <effectiveTime>
    <!-- QDM Attribute: admission datetime -->
    <low value="20150301090000+0500"/>
    <!-- QDM Attribute: discharge datetime -->
    <high value="20150306103000+0500"/>
  </effectiveTime>
</encounter>
```

Top Six Common EP Programs QRDA-I Submission Errors

Error Code	Definition
PQRS_10710	Value Set validation failed. Code, Code System and Value Sets used in the QRDA1 file do not correspond to correct QRDA sections.
PQRS_P0034	Medication Order Date Time is missing or invalid.
CMS_0010	As per CMS IG, the languageCode is always 'en' for English.
PQRS_10705	The effectiveTime element or the value for the effectiveTime is incorrect format in the Patient Characteristic Payer or other sections.
12868	Missing or incorrect root element for Measure Set element in QRDA1.
PQRS_10700	Invalid QRDA template used.

Sample XML – QRDA-I EP Error

Error: Value Set Validation Failed

Validation fails because Diabetes value set (OID: 2.16.840.1.113883.3.464.1003.103.12.1001), a diagnosis value set, is in the Encounter Performed template where a valid Encounter value set is expected.

```
<encounter classCode="ENC" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09"/>
  <!-- Encounter Performed (V2) templateId-->
  <templateId root="2.16.840.1.113883.10.20.24.3.23" extension="2014-12-01"/>
  <id root="12345678-9d11-439e-92b3-5d9815ff4de1"/>
  <code code="190389009" displayName="Type II diabetes mellitus with ulcer (disorder)"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
    sdtc:valueSet="2.16.840.1.113883.3.464.1003.103.12.1001"/>
  <text>Encounter, Performed: Type II diabetes mellitus with ulcer (disorder)</text>
  <statusCode code="completed"/>
  <effectiveTime>
    <low value="20150301090000+0500"/>
  </effectiveTime>
</encounter>
```

1. Value set OID provided in the @sdtc:valueSet attribute must be from the proper QDM Category that the patient data entry template belongs to.
2. Code and code system provided in the @code and @codeSystem attributes must be a valid code and code system from the value set provided in the @sdtc:valueSet attribute

How to fix:

Top Five Common EP Programs QRDA-III Submission Errors

Error Code	Definition
10763	Incorrect UUID values for the reported data element for the related measure as specified in the CMS IG.
PQRS_10727	The Performance Numerator should be less than or equal to reporting denominator.
10765	Invalid number of population templates have been found in the submitted data for various measures.
PQRS_10705	The required number of performance rates, in a QRDA-III file submission, are not included for a multi-performance rate measure.
26992	In the measure data section, the Version Neutral Identifier GUID should be identified for the submitted measure. Note: This is a different GUID than that of the version specific identifier. (CONF:21159).

Sample XML – QRDA-III EP Error

Error: Incorrect UUID

Use a QRDA-III file for eCQM CMS165v3 as an example:

The correct population GUID for the Numerator Population as specified in CMS165v3.xml (HQMF file) is:
0899a359-0cd8-4977-aa29-666892aa3ad4

How to fix:



1. Use the correct Annual Update eCQM specifications for the CMS reporting period. Use the correct version specific measure identifier of an eCQM.

2. Use the correct UUIDs for populations and reporting stratifications (if applicable) .

```
...
<externalObservation classCode="OBS" moodCode="EVN">
  <id root="WRONG_UUID_VALUE"/>
  <code code="NUMER" ... />
...

```

Does NOT match the expected
0899a359-0cd8-4977-aa29-666892aa3ad4

```
<!--Performance Rate-->
<component>
  <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.27.3.14"/>
    <templateId root="2.16.840.1.113883.10.20.27.3.25"/>
    <code code="72510-1"
      codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC"
      displayName="Performance Rate"/>
    <statusCode code="completed"/>
    <value xsi:type="REAL" value="0.842105"/>
    <reference typeCode="REFR">
      <externalObservation classCode="OBS" moodCode="EVN">
        <id root="0899a359-0cd8-4977-aa29-666892aa3ad4"/>
        <code code="NUMER"
          codeSystem="2.16.840.1.113883.5.1063"
          codeSystemName="ObservationValue"
          displayName="Numerator"/>
      </externalObservation>
    </reference>
  </observation>
</component>

```

New Tools to Help Reduce Submission Errors

- For eligible hospitals
 - Pre-Submission Validation Application (PSVA)
 - CMS Secure Portal
- For eligible professionals
 - Submission Engine Validation Tools (SEVT)
- For HIT vendors
 - Cypress QRDA Validation Utility

For more information about these tools

Demo Resource Center

<https://ecqi.healthit.gov/>

<https://ecqi.healthit.gov/ecqm-tools-key-resources>

Cypress Validation Utility

Cypress Validation Utility

- Web based QRDA validator
 - <https://validator.projectcypress.org>
- Supports Base & CMS QRDA Implementation Guides
- Synthetic patients/data only
- Intended audience is developers building test QRDA documents for certification and submission

Screenshot

 cypress validation utility

WARNING: This utility is meant for synthetic patient records only. **DO NOT** upload documents containing Protected Health Information (PHI) or Personally Identifiable Information (PII).

The Cypress QRDA Validation Utility is intended as a development tool for EHR vendors who are testing synthetic QRDA Category I and Category III documents for conformance to CMS submission requirements. Files submitted for validation must not contain PHI or PII.

Document

Reporting Program Year

Reporting Program

Document Type

PHI Confirmation

Please check the box to acknowledge that you've read and understand the warning, and to the best of your knowledge, the submitted files will contain neither PII nor PHI:

Validation Support

- QRDA Base IG
 - QRDA Category I R2
 - QRDA Category I R3
 - QRDA Category III
- CMS IG
 - 2015 (support retired 3/11/16)
 - 2016
- Additional validations
 - Reporting Period
 - Performance Rate (QRDA Cat III)
 - Value Sets

Questions

Thank you for your attention

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