CMS QRDA Implementation Guide Changes for CY 2017 Hospital Quality Reporting

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Purpose

This presentation will provide an overview of the changes to the 2017 QRDA Implementation Guide, including changes made from Calendar Year (CY) 2016 to CY 2017. It will also provide a high-level overview of updates to the Health Level Seven (HL7) base standard Quality Reporting Document Architecture (QRDA) Category I Implementation Guide.

Objectives

At the conclusion of this presentation, participants will be able to perform the following:

- Identify changes and updates to the 2017 CMS QRDA Category I Implementation Guide

- Recognize high level changes to the base HL7 QRDA Category I Implementation Guide

- Find resources related to the implementation guides

CMS QRDA Implementation Guide Changes for CY 2017
Hospital Quality Reporting (HQR)

2017 CMS QRDA IG Changes for HQR

2017 CMS QRDA Implementation Guide (IG) for HQR

2017 CMS Implementation Guide for QRDA Category I for Hospital Quality Reporting (HQR) (07/08/2016)

- Direct Link to IG from eCQI Resource Center

  https://ecqi.healthit.gov/qrda

  2017 CMS QRDA Implementation Guide for Hospital Quality Reporting

- Direct Link to IG from CMS eCQM Library

  https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/eCQM_2017QRDA_HQR_CMS_IG.PDF

Accompanying schematron and sample files

- Direct Link to Download from eCQI Resource Center

  https://ecqi.healthit.gov/qrda

  2017 CMS QRDA I Schematrons, and Sample Files for Hospital Quality Reporting

- Direct Link to Download from CMS eCQM Library

  https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/eCQM_2017SchematronsSampleFilesHospital.zip

2017 CMS QRDA IG Changes High-Level

	2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG QRDA Category I
Base HL7 Standard	HL7 Clinical Document Architecture (CDA) R2 Implementation Guide: QRDA I, Release 1, **Standard for Trial Use (STU) Release 3.1** – US Realm **(April 2016)** at: http://www.hl7.org/documentcenter/public/standards/dstu/CDAR2_QRDA_I_R1_S3.1_2016APR.zip (HL7 login required to access standard)	HL7 CDA R2 Implementation Guide: QRDA I, Release 1, **Draft Standard for Trial Use (DSTU) Release 3** – US Realm **(June 2015)**
Reporting Period	The **2017** Reporting Period	The **2016** Reporting Period
eCQM Specifications	To be used with eCQMs Specifications for Eligible Hospitals **April 2016** • https://ecqi.healthit.gov/system/files/ecqm/2016/EH/2014_eCQM_EligibleHospital_April2016.zip • https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/eCQM_2014_EH_April2016.zip	To be used with eCQMs Specifications for Eligible Hospitals Update **June 2015**

2017 CMS QRDA IG Changes High-Level

	2017 CMS QRDA I IG for HQR	**2016 CMS QRDA IG QRDA Category I**

Organization of the IG	Contains QRDA I Implementation Guide for HQR only
	
	• QRDA Category I Requirements
	• QRDA Category I Validations
	   • Document-Level Templates
	   • Section-Level Templates
	   • HQR Validations
	• Appendix
		Part A of the IG contains QRDA I Implementation Guide for HQR and Eligible Professional programs
		
		• Part A
		   • QRDA Category I Requirements
		   • QRDA Category I Validations
		      • Document-Level Templates
		      • Section-Level Templates
		• Appendix

2017 CMS QRDA IG Changes Document-Level Template

The document-level template has a new version. The Correct template version must be used.

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
QRDA Category I Report – CMS (V3) urn:hl7ii:2.16.840.1.113883.10.20.24.1.3:2016-03-01	QRDA Category I Report – CMS Eligible Professional (EP) & HQR (V2) urn:hl7ii:2.16.840.1.113883.10.20.24.1.3:2015-07-01

2017 CMS QRDA IG Changes
Document-Level Template (recordTarget)

	2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
Patient Identifier Number	**HQR:** Patient Identification Number is required for HQR. This patientRole **SHALL** contain exactly one [1..1] **id** (CONF:CMS_0009), such that it: 1. **SHALL** contain exactly one [1..1] **@root** (CONF:CMS_0053). NOTE: This is the provider's organization OID or other non-null value different than the Object Identifier (OID) for the Medicare HIC Number (2.16.840.1.113883.4.572). 2. **SHALL** contain exactly one [1..1] **@extension** (CONF:CMS_0103). NOTE: The value of the @root combined with the @extension is the Patient Identifier Number.	**HQR:** Patient Identification Number is required for HQR. This patientRole **SHALL** contain exactly one [1..1] **id** (CONF:CMS_0009), such that it 1. **SHALL** contain exactly one [1..1] **@root** (CONF:CMS_0053). 2. SHALL contain exactly one Patient Identifier Number (CONF:CMS_0007).

2017 CMS QRDA IG Changes
Document-Level Template (recordTarget)

	2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
birthTime	This patient **SHALL** contain exactly one [1..1] **birthTime** (CONF:1198-5298). And, it SHALL be precise to day (CONF:1198-5300_C01). For cases where information about newborn's time of birth needs to be captured And, it **MAY** be precise to the minute (CONF:1198-32418).	This patient **SHALL** contain exactly one [1..1] **birthTime** (CONF:1140-27571). And, it SHALL be precise to day (CONF:1098-5300_C01).

2017 CMS QRDA IG Changes
Document-Level Template (custodian)

The "nullFlavor is not allowed" requirement does not change.

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
[HQR] This representedCustodianOrganization **SHALL** contain exactly one [1..1] **id** (CONF:2228-28241_C01), such that it: a. **[HQR] SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.336" CMS Certification Number (CONF:2228-28244). b. **[HQR] SHALL** contain exactly one [1..1] **@extension** (CONF:2228-28245).	**[HQR]** This representedCustodianOrganization **SHALL** contain exactly one [1..1] **id** (CONF:1140-28241_C01), such that it: a. **[HQR] SHALL NOT** contain [0..0] **@nullFlavor** (CONF:CMS_0034). b. **[HQR] SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.336" CMS Certification Number (CONF:1140-28244). c. **[HQR] SHALL** contain exactly one [1..1] **@extension** (CONF:1140-28245).

2017 CMS QRDA IG Changes Document-Level Template

CMS Certification Identification Number – New requirement to the 2017 CMS QRDA IG

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
CMS Certification Identification Number required for HQR reporting 5.1.5 Participant CMS Certification Identification Number The Certified Health IT Product List (CHPL) is the authoritative and comprehensive listing of Health IT certified through the ONC Health IT Certification Program. A CMS EHR Certification Identification Number is a number generated by the CHPL and used for reporting to CMS. It represents a single product or combination of products in the CHPL. The Eligible Hospital (EH) selects a certified health IT product that meets 100% of the requirements for a complete EHR system, or combines multiple certified health IT products (Modules) to create a complete EHR product suite, chart on the CHPL website https://chpl.healthit.gov	N/A

2017 CMS QRDA IG Changes Document-Level Template

documentationOf/serviceEvent – The constraint for National Provider ID (NPI) is changed from SHALL to SHOULD. This means if NPI is not applicable to your HQR submission, this element no longer needs to be provided with a nullFlavor.

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
[HQR] This assignedEntity **SHOULD contain zero or one [0..1] id** (CONF:2228-16587), such that it **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.6" National Provider ID (CONF:2228-16588).	This assignedEntity **SHALL** contain exactly one [1..1] **id** (CONF:1140-16587_C01), such that it **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.6'" National Provider ID (CONF:1140-16588).

2017 CMS QRDA IG Changes Document-Level Template

documentationOf/serviceEvent – The constraint for Tax Identification Number (TIN) is changed from SHALL to SHOULD. This means if TIN is not applicable to your HQR submission, this element no longer needs to be provided with a nullFlavor.

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
This representedOrganization **SHOULD** contain zero or one [0..1] **id** (CONF:2228-16592). The id, if present, **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.2" Tax ID Number (CONF:2228-16593).	This representedOrganization **SHALL** contain exactly one [1..1] **id** (CONF:1140-16592_C01), such that it **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.2" Tax ID Number (CONF:1182-43).

2017 CMS QRDA IG Changes Section-Level Template

Reporting Parameters Section – CMS

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
Reporting Parameters Section – CMS (identifier: urn:oid:2.16.840.1.113883.10.20.17.2.1.1:2016-03-01) A unique template id is assigned to Reporting Parameters Section – CMS template, which now differs from the parent Reporting Parameters Section template id.	**Reporting Parameters Section – CMS EP & HQR** (identifier: urn:oid:2.16.840.1.113883.10.20.17.2.1:2015-07-01)
Reporting Parameters Act – CMS (identifier: urn:oid:2.16.840.1.113883.10.20.17.3.8.1:2016-03-01) A unique template id is assigned to Reporting Parameters Act – CMS template, which now differs from the parent Reporting Parameters Act template id.	**Reporting Parameters Act – CMS EP & HQR** (identifier: urn:oid:2.16.840.1.113883.10.20.17.3.8:2015-07-01)

2017 CMS QRDA IG Changes Section-Level Template

Patient Data Section QDM (V3) – CMS

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I
Patient Data Section QDM (V3) – CMS identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.2.1.1:2016-03-01 A unique template id is assigned to Reporting Parameters Section – CMS template, which now differs from the parent Patient Data QDM (V3) Section template id.	**Patient Data Section QDM (V2) – CMS EP & HQR** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.2.1:2014-12-01)
Conforms to Patient Data Section QDM (V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.2.1:2016-02-01). The base HL7 QRDA-I IG R3.1 contains a newer version of Patient Data Section QDM, which is V3.	Conforms to Patient Data Section QDM (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.2.1:2014-12-01).

2017 CMS QRDA IG Changes HQR Validations

2017 CMS QRDA I IG for HQR	2016 CMS QRDA IG: QRDA-I & 2016 CMS QRDA IG Appendix
CMS_0072: QRDA file does not pass XML schema validation (CDA_SDTC.xsd) Same validation but the error message is more explicit	CMS_0072: The document does not conform to QRDA document formats accepted by CMS
CMS_0079: Reporting Period Effective Date Range does not match one of the Program's CY Discharge Quarters	N/A
Validation Rules for CDAC Users: The system SHALL reject QRDA-I files submitted by non-CDAC users when the CMS Program Name within the file is CDAC_HQR_EHR (CONF: CMS_0080)	N/A

2017 CMS QRDA IG Changes NPI and TIN Validations

Conformance numbers are assigned to National Provider Identifier (NPI) and Tax Identification Number (TIN) validation rules.

Table 19: NPI Validation Rules

CONF.#	Rules
CMS_0115	The NPI should have 10 digits.
CMS_0116	The NPI should be composed of all digits.
CMS_0117	The NPI should have a correct checksum, using the Luhn algorithm.
CMS_0118	The NPI should have @extension or @nullFlavor, but not both.

Table 20: TIN Validation Rules

CONF.#	Rules
CMS_0119	When a Tax Identification Number is used, the provided TIN must be in valid format (9 decimal digits).
CMS_0120	The TIN SHALL have either @extension or @nullFlavor, but not both.

2017 CMS QRDA IG Changes Time Zone

Time zone guidance is updated

Table 1: Time Zone Validation Rule

CONF.#	Rules
CMS_0121	A Coordinated Universal Time (UTC time) offset should not be used anywhere in a QRDA Category I file or, if a UTC time offset is needed anywhere, then it *must* be specified *everywhere* a time field is provided.

This time zone validation rule is performed on the following elements:
- effectiveTime/@value
- effectiveTime/low/@value
- effectiveTime/high/@value
- time/@value
- birthTime/@value
- time/low/@value
- time/high/@value

There is one exception to this validation rule. The effectiveTime element of the Reporting Parameters Act - CMS template (CONF:CMS_0027 and CONF:CMS_0028) will not be validated using this time zone validation rule:
- act[@templateId="2.16.840.1.113883.10.20.17.3.8.1"][@extension="2016-03-01"]/effectiveTime/low
- act[@templateId="2.16.840.1.113883.10.20.17.3.8.1"][@extension="2016-03-01"]/effectiveTime/high

CMS QRDA Implementation Guide Changes for CY 2017
Hospital Quality Reporting

HL7 QRDA Category I Release 1 STU R3.1 Changes Overview

HL7 High-Level Changes

- Aligned with Quality Data Model (QDM) specification v4.2

  ## D.1 Changes in QDM 4.2

  The Quality Data Model, Version 4.2 specification contains the following changes from the Quality Data Model, Version 4.1.2 specification:

  - Enhanced support for encounter diagnoses and principal diagnoses
  - Re-specified the *Diagnosis* datatypes
  - Re-specified the *Diagnosis, Family History* datatype (now *Family History*)
  - Re-specified the *Symptom* datatypes
  - Added the *Immunization* category and datatypes
  - Added reference range attributes to *Laboratory Test, Performed*
  - Removed *patient preference* and *provider preference* attributes from all datatypes
  - Removed *negation rationale* from inappropriate datatypes
  - Fixed transposed descriptions of *Transfer From* and *Transfer To* datatypes

- Aligned with Consolidated – Clinical Document Architecture (C-CDA) R2.1 (August, 2015)

- Addressed approved STU comments

HL7 High-Level Changes (2 of 2)

To address the STU comment about the issue that Supply and Encounter act do not allow *negationInd* attribute for specifying "not done" (QDM attribute: negation rationale), the following new templates are created as the act wrapper:

- Device Order Act
- Device Recommended Act
- Encounter Order Act
- Encounter Performed Act
- Encounter Recommended Act
- Transfer To Act
- Transfer From Act

Change Logs

HL7 QRDA Category I STU R3.1

- Volume 1 – Appendix B: High Level Change Log
  - Table 7: High Level Change Log (Summary of changes made to each template are available)

Type of Template	Template	Summary of New Content or Update to Template
Entry	Act Intolerance or Adverse Event Observation (V3) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.104 :2016-02-01)	• Template has been versioned (template was modified). • Changed negationInd constraint to SHALL NOT. • Relaxed the constraint to use ValueSet Allergy and Intolerance Type from SHALL to MAY.
Entry	Care Goal (V3) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.1:2 016-02-01)	• Template has been versioned (template was modified, implied template was versioned, contained template was versioned). • Changed negationInd constraint to SHALL NOT. • Removed QDM attributes: Patient Preference, Provider Preference.

  - Table 8: New Templates
  - Table 9: Retired Templates
- Volume 2 – Chapter 10: Changes from Previous Version

Table 8: New Templates

Type of Template	Template	Reason for new template
Entry	Device Order Act (urn:oid:2.16.840.1.113883.10.20.24.3.130)	To support the QDM attribute: Negation Rationale.
Entry	Device Recommended Act (urn:oid:2.16.840.1.113883.10.20.24.3.131)	To support the QDM attribute: Negation Rationale.
Entry	Diagnosis (urn:oid:2.16.840.1.113883.10.20.24.3.135)	The QDM Version 4.2 has consolidated Diagnosis Active/Resolved, and retired Diagnosis Inactive.
Entry	Diagnosis Concern Act (urn:oid:2.16.840.1.113883.10.20.24.3.137)	The QDM Version 4.2 has consolidated Diagnosis Active/Resolved, and retired Diagnosis Inactive.
Entry	Encounter Order Act (urn:oid:2.16.840.1.113883.10.20.24.3.132)	To support the QDM attribute: Negation Rationale.
Entry	Encounter Performed Act (urn:oid:2.16.840.1.113883.10.20.24.3.133)	To support the QDM attribute: Negation Rationale.
Entry	Encounter Recommended Act (urn:oid:2.16.840.1.113883.10.20.24.3.134)	To support the QDM attribute: Negation Rationale.
Entry	Medication Dispensed Act (urn:oid:2.16.840.1.113883.10.20.24.3.139)	To support the QDM attribute: Negation Rationale.
Entry	Immunization Administered (urn:oid:2.16.840.1.113883.10.20.24.3.140)	New data type in QDM Version 4.2.
Entry	Immunization Order (urn:oid:2.16.840.1.113883.10.20.24.3.143)	New data type in QDM Version 4.2.
Entry	Symptom (urn:oid:2.16.840.1.113883.10.20.24.3.136)	The QDM Version 4.2 has consolidated Symptom Active/Resolved, and retired Symptom Inactive/Assessed.
Entry	Symptom Concern Act (urn:oid:2.16.840.1.113883.10.20.24.3.138)	The QDM Version 4.2 has consolidated Symptom Active/Resolved, and retired Symptom Inactive/Assessed.
Entry	Transfer From Act (urn:oid:2.16.840.1.113883.10.20.24.3.141)	To support the QDM attribute: Negation Rationale.
Entry	Transfer To Act (urn:oid:2.16.840.1.113883.10.20.24.3.142)	To support the QDM attribute: Negation Rationale.

Table 9: Retired Templates

Type of Template	Template	Reason for retirement
Entry	Diagnosis Active (V2) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.11:2014-12-01)	The QDM Version 4.2 has consolidated Diagnosis Active/Resolved, and retired Diagnosis Inactive.
Entry	Diagnosis Inactive (V) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.13:2014-12-01)	The QDM Version 4.2 has consolidated Diagnosis Active/Resolved, and retired Diagnosis Inactive.
Entry	Diagnosis Resolved (V2) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.14:2014-12-01)	The QDM Version 4.2 has consolidated Diagnosis Active/Resolved, and retired Diagnosis Inactive.
Entry	Symptom Inactive (V2) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.78:2014-12-01)	The QDM Version 4.2 has consolidated Symptom Active/Resolved, and retired Symptom Inactive/Assessed.
Entry	Patient Preference (V2) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.83:2014-12-01)	The QDM Version 4.2 has removed the QDM attribute Patient Preference.
Entry	Provider Preference (V2) (urn:hl7ii:2.16.840.1.113883.10.20.24.3.84:2014-12-01)	The QDM Version 4.2 has removed the QDM attribute Provider Preference.

References

QualityNet Help Desk – Submitting Test and Production Files
- qnetsupport@hcqis.org
- (866) 288-8912, 7 a.m. – 7 p.m. CT, Monday through Friday

eCQM General Program Information – IQR Policy and Program
- https://cms-ip.custhelp.com
- (866) 800-8765 or (844) 472-4477, 8 a.m. – 8 p.m. ET, Monday through Friday (except holidays)

ONC JIRA QRDA Issue Tracker Project
- https://oncprojectracking.healthit.gov/support/projects/QRDA

eCQI Resource Center
- https://ecqi.healthit.gov/qrda

CMS QRDA Implementation Guide Changes for CY 2017 Hospital Quality Reporting

Questions

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