



Electronic Health Record (EHR) Vendor Summit



2014 EP Submission Data Issues

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Agenda

- 2014 EHR Data Submission Overview
- 2014 QRDA I Data Issues and 2015 Solutions
- 2014 QRDA III Data Issues and 2015 Solutions
- Questions

2014 QRDA SUBMISSION OVERVIEW

2014 QRDA Submission Overview

- Analysis is based on final data received for 2014 submission via the Physician Quality Reporting System (PQRS) EHR reporting option.
- Data may be submitted by a Data Submission Vendor (DSV) submitting on behalf of multiple Taxpayer Identification Numbers (TINs)/National Provider Identifiers (NPIs) or by an individual Eligible Professional (EP).
- Errors were not consistent across measures or across submissions.
 - A particular file may contain valid data for one measure and invalid data for another measure.
 - For the same submitter, a file may contain valid data for the measure in one file and invalid data for the same measure in another file.

2014 QRDA Submission Overview

- 2014 EHR data submission period
 - January 1, 2015 - March 20, 2015
- QRDA I Submissions
 - Total files submitted: 902,695
 - Total unique TIN/NPI: 3,201
 - Approximately 25% of QRDA I files contained errors.
- QRDA III Submissions
 - Total files submitted: 55,159
 - Total unique TIN/NPIs: 78,672
 - Over 93% of QRDA III files contained errors.

2014 QRDA Submission Overview

- Updates in the QRDA Implementation Guide (IG) have addressed many of the errors in this presentation.
 - 2015 CMS QRDA Implementation Guide for Eligible Professional Programs and Hospital Quality Reporting
 - Addendum to 2015 CMS QRDA Implementation Guide for Eligible Professional and Hospital Quality Reporting
- Additional system checks have been put in place for the 2015 receiving system to help catch some of these errors during submission.
- **For 2015 submission, it will be important to test and submit early to make sure the system can accept files.**

2014 QRDA Submission Overview

- CMS will not use the 2014 QRDA I or QRDA III data to determine quality performance or establish benchmarks.
- PQRS Impact
 - Essentially no impact
 - PQRS will use the reporting data received to assess EPs.
- EHR Incentive Program Impact
 - Essentially no impact
 - The Program will use the reporting data received to assess EPs.
- Comprehensive Primary Care (CPC) Initiative Impact
 - CPC will not use QRDA-submitted data to establish benchmarks or determine quality performance.
- Value Modifier (VM) Impact
 - VM will not use QRDA-submitted data to establish benchmarks or determine quality performance.
- Physician Compare Impact
 - 2014 QRDA-submitted data will not be publicly reported.

2014 QRDA Submission Overview

- “Affected TIN/NPIs” refers to the number of TIN/NPIs whose files contained the given error.
- Not all of the “affected TIN/NPIs” will see a VM impact for 2014, because the VM will use other PQRS data where available; i.e., if an EP submitted data through claims and EHR:
 - VM will NOT use the EHR data.
 - VM will use the claims data to assess the EP’s Quality Composite Score.

2014 QRDA I DATA ISSUES AND 2015 SOLUTIONS



QRDA I Submissions

- QRDA I Submissions
 - Total files submitted: 902,695
 - Total unique TIN/NPI: 3,201
- QRDA I Submission Issues
 - Approximately 25% of the QRDA I files contained a Payer Data Section Template Error or an Incorrect Reporting Parameter End Dates error.
 - 1,106 TIN/NPIs were affected.

2014 QRDA I Error

- Payer Data Template Error
 - Payer Data was submitted using the incorrect program year implementation guide; i.e. PY 2013. Due to this error, the payer data could not be located in the file.

FIL_SUBMSN_TYPE	FIL_SUBMSN_ID	FIL_SQNC_NUM	Encounter Data Section	Payer Data Section
QRDA1-2014	XXXXXXXX	24	Encounter Performed	-
QRDA1-2014	XXXXXXXX	69	Encounter Performed	-
QRDA1-2014	XXXXXXXX	75	Encounter Performed	-

 Data Missing

- Files impacted: 24%
- Number of TIN/NPIs affected: 1,097

2015 QRDA Solution

- The 2015 CMS QRDA IG Addendum Part A Table 1 specifies QRDA-I template changes for 2015.
- The PQRS receiving system will validate submitted data against the final QRDA I file specifications that CMS provides.
 - Files not conforming to QRDA I specifications will be rejected.
- The PQRS receiving system will confirm that all data required by the appropriate file specification are populated.
 - Files containing missing required data fields will be rejected.

2014 QRDA I Error

- Incorrect Reporting Parameter End Dates Error
 - Valid Reporting Period for Program Year 2014: January 1, 2014 to December 31, 2014
 - Invalid Reporting Dates were submitted for PY 2014.

FIL_SUBMSN_TYPE	RPTING_PPD_STRT_DT	RPTING_PPD_END_DT	Total Files Submitted	Unique TIN/NPI Counts
QRDA1-2014	02/18/2015	03/20/2015	10,983	17
QRDA1-2014	01/01/2014	12/31/2015	1,044	3
QRDA1-2014	10/01/2014	12/31/2015	377	1
QRDA1-2014	01/01/2014	12/31/2015	283	1
QRDA1-2014	01/01/2015	12/31/2015	94	5
QRDA1-2014	01/01/2015	12/31/2015	21	1
QRDA1-2014	01/01/2013	12/31/2013	1	1
QRDA1-2014	02/17/2015	03/19/2015	1	1

- Files Impacted: 1%
- Number of TIN/NPIs affected: 29

2015 QRDA Solution

- 2015 CMS QRDA IG Part B section 7.3:

“For the PQRS individual EP reporting, CQM populations include all Medicare patients seen by the EP during the reporting period, which is one full year (January 1, 2015 - December 31, 2015). For PQRS GPRO reporting, CQM populations include all unique Medicare patients from all practice sites in the group practice seen by the group during the reporting period (January 1, 2015 - December 31, 2015).”

- 2015 CMS QRDA IG Addendum Part B section 3.4:

“For Program Year 2015, the reporting parameter start date SHALL be "20150101" (i.e. 01/01/2015), and the reporting parameter end date SHALL be "20151231" (i.e., 12/31/2015).”

- The PQRS receiving system will verify that the dates of service fall within the 12-month reporting period.
 - Files containing dates outside the 12-month reporting period will be rejected.

Additional QRDA I Solutions

PQRS will:

- Validate the presence and content of data in the CMS Program Identifier field. (*rejection*)
- Confirm that the required data fields associated with the Program Identifier are populated. (*rejection*)
- Reject QRDA I files if the Program Identifier field is populated with “CPC.” (*rejection*)
- Validate that the eMeasure version included in the test data matches the July 2014 version. (*rejection*)
- Verify that the TIN is not an MSSP ACO Participant TIN. (*rejection*)

Additional QRDA I Solutions (cont.)

- Verify that a submission includes a single TIN or TIN/NPI. (*rejection*)
- Verify that an EP submission does not contain a TIN that has registered for GPRO. (*warning*)
- Verify that the TIN in a group submission is a registered GPRO. (*warning*)
- Verify that the TIN in a group submission is registered for the reporting method. (*warning*)

2014 QRDA III DATA ISSUES AND 2015 SOLUTIONS



QRDA III Submissions

- QRDA III Submissions
 - Total files submitted: 55,159
 - Total unique TIN/NPIs: 78,672
- QRDA III Submission Issues
 - Over 93% of the QRDA III files submitted contained an error of some sort.
 - 68,866 TIN/NPIs were affected.

Top QRDA III Errors

Error	Files Impacted	Unique TIN/NPI
Invalid Performance Rates	83%	53,442
Reported Data Errors	54%	37,734
Performance Rate Calculation errors	7%	6,275
Incorrect Reporting Parameter End Dates	3%	9,090
Error	Number of Records	Unique TIN/NPI
Performance Rate > 1	101,151	-

Top 10 Measures with QRDA III Errors*

Measure	Measure Name	% of files submitted for measure impacted
EP_CMS156v2	Use of High-Risk Medications in the Elderly	76%
EP_CMS182v3	Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control	64%
EP_CMS69v2	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	57%
EP_CMS68v3	Documentation of Current Medications in the Medical Record	55%
EP_CMS155v2	Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents	52%
EP_CMS122v2	Diabetes: Hemoglobin A1c Poor Control	49%
EP_CMS165v2	Controlling High Blood Pressure	49%
EP_CMS138v2	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	48%
EP_CMS130v2	Colorectal Cancer Screening	46%
EP_CMS127v2	Pneumonia Vaccination Status for Older Adults	46%

***Includes all Calculation Errors**

(PR = 0 and PN = 0 and PD = 0) or (PR = 0 and PN > 0 and PD > 0) or (PR is null and PD > 0 and PN > 0) or (PN > PD) or (PR > 0 AND (PN = 0 OR PN IS NULL))

2014 QRDA III Error

- Invalid Performance Rates

- Example 1: Performance rate is **zero**, but the performance numerator and performance denominator are also zero (should be null).
- Example 2: The performance rate is **zero**, but the performance numerator and performance denominator are greater than zero (should be quotient of numerator/denominator).
- Example 3: The performance rate is **null**, but the performance numerator and performance denominator are greater than zero (should be quotient of numerator/denominator).

Example	Measure	Reporting Denominator	Reporting Exclusions	Reporting Exceptions	Performance Numerator	Performance Denominator	Performance Rate
Example 1: (PR = 0 and PN = 0 and PD = 0)	EP_CMS145v2	0	0	0	0	0	0
Example 2: (PR = 0 and PN > 0 and PD > 0)	EP_CMS145v2	3	0	0	2	3	0
		10	0	0	2	10	0
Example 3: (PR is null and PD > 0 and PN > 0)	EP_CMS2v3	1	0	0	1	1	Null

- Files Impacted: 83%
- Number of TIN/NPIs affected: 53,442

2015 QRDA III Solution

- 2015 CMS QRDA IG Addendum Part B Table 10 and section 3.2:

“If the expression $(DENOM - DENOM EXCL - DENOM EXCEP)$ results in a null or a value of 0, then a nullFlavor of "NA" should be provided for the Performance Rate.

If the expression $(DENOM - DENOM EXCL - DENOM EXCEP)$ results in a value greater than or equal to 1 and a Numerator count equal to 0 is provided, then a Performance Rate of "0" should be submitted.”

- The PQRS receiving system will:
 - Verify that there is a performance rate for each proportion measure.
 - Verify that performance rates are not greater than 1.0.
 - Verify that the performance numerator is less than or equal to the denominator for each proportion measure.
 - Reject files not meeting these requirements.

2014 QRDA III Error

- Reported Data Errors

- Example 1: The performance numerator is greater than performance denominator.
- Example 2: The performance numerator is zero or Null and performance rate greater than zero.
- Example 3: The performance denominator is negative.

PR should be Null

Example	Measure	Reporting Denominator	Reporting Exclusions	Reporting Exceptions	Performance Numerator	Performance Denominator	Performance Rate
Example 1: PN > PD	EP_CMS130v2	1000	1000		800	0	0.4651
	EP_CMS182v3	Null	Null	Null	932	Null	Null
Example 2: (PR > 0 and (PN = 0 or PN is NULL))	EP_CMS145v2	0	Null	0	0	0	0.67
Example 3: PD < 0	EP_CMS90v3	0	1		0	-1	0
	EP_CMS22v2	11568	18839	1	2619	-7272	Null

- Files Impacted: 54%
- Number of TIN/NPIs affected: 37,734

2015 QRDA III Solution

- 2015 CMS QRDA IG Addendum Part B Table 10 and section 3.2:

“If the expression (DENOM – DENOM EXCL – DENOM EXCEP) results in a null or a value of 0, then a nullFlavor of "NA" should be provided for the Performance Rate.

If the expression (DENOM – DENOM EXCL – DENOM EXCEP) results in a value greater than or equal to 1 and a Numerator count equal to 0 is provided, then a Performance Rate of "0" should be submitted.”

- The PQRS receiving system will verify that the performance numerator is less than or equal to the performance denominator for each proportion measure.
 - Files containing proportion measures with a performance denominator less than the performance numerator will be rejected.

2014 QRDA III Error

- Invalid Performance Rate Ratio: PR Calculation errors
 - Example: Performance Rate is not equal to (Performance Numerator/Performance Denominator*)

Measure	Reporting Denominator	Reporting Exclusions	Reporting Exceptions	Performance Numerator	Performance Denominator	Performance Rate
EP_CMS166v3	8	3		5	5	0.63
EP_CMS125v2	111	0	0	1	111	0.9

Should be 1.0



Should be 0.01

- Files Impacted: 6%
- Number of TIN/NPIs affected: 6,275

*Performance Denominator = (Reporting Denominator-Reporting Exclusion-Reporting Exclusion)

2015 QRDA III Solution

- 2015 CMS QRDA IG Part B section 8.3.7:

“The performance rate is a ratio of patients that meet the numerator criteria divided by patients in the denominator (after accounting for exclusions and exceptions). Performance Rate is calculated using this formula: Performance Rate = (NUMER) / (DENOM – DENOM EXCL – DENOM EXCEP).”

- 2015 CMS QRDA IG Addendum Part B Table 10 and section 3.2:

“Based on the Performance Rate calculation, a Performance Rate must not exceed 1 (e.g., 100, 1.5), since a value of 1 indicates 100%. The Performance Rate value that is provided in a QRDA-III file should not be the Performance Rate times 100, but instead should be the value obtained from the calculation of NUMER/(DENOM– DENOM EXCL – DENOM EXCEP)”

- For 2015, CMS is assessing the feasibility of recalculating performance rate data submitted by QRDA III.

2014 QRDA III Error

- Incorrect Reporting Parameter End Dates were submitted for PY 2014.
 - Valid Reporting Period for Program Year 2014: January 1, 2014 to December 31, 2014
 - Files impacted: 3%
 - Number of TIN/NPIs affected: 9,090
- Performance Rates Inflated by 100%
 - Example: The performance rates were off by two decimal places.
 - Records impacted: 9%
 - Number of TIN/NPIs affected: Not available*

* No TIN/NPIs were affected, because the receiving system fixed this error.

2015 QRDA III Solution

- 2015 CMS QRDA IG Addendum Part B section 3.4:

“For Program Year 2015, the reporting parameter start date SHALL be “20150101” (i.e. 01/01/2015), and the reporting parameter end date SHALL be “20151231” (i.e., 12/31/2015).”

- 2015 CMS QRDA IG Addendum Part B section 3.2:

“Based on the Performance Rate calculation, a Performance Rate must not exceed 1 (e.g., 100, 1.5), since a value of 1 indicates 100%. The Performance Rate value that is provided in a QRDA-III file should not be the Performance Rate times 100, but instead should be the value obtained from the calculation of $\text{NUMER}/(\text{DENOM} - \text{DENOM EXCL} - \text{DENOM EXCEP})$ ”

- The PQRS will:

- Verify that the dates of service fall only within the 12-month reporting period.
- Verify that performance rates are not greater than 1.0.
- Reject files not meeting these requirements.

2014 QRDA III Error

- File Structure Issues* - This issue was noticed primarily for multiple performance rate measures.
 - Example 1: The same measure was submitted more than once in the same file.
 - Example 2: The same population was submitted more than once for the same measure in the same file.
 - Example 3: The same strata was submitted more than once for the same population in the same file.

* As part of Final Action Process (FAP), the receiving system fixed these errors and they were marked as Not-Final.

2015 QRDA III Solution

- 2015 CMS QRDA IG Addendum Part B section 3.3:
“A measure may not be submitted more than once in the same file. The same population may not be submitted more than once in the same measure. Uniqueness of a measure is determined based on the UUID provided for it in the associated reference/externalDocument/id. This id SHALL equal the version specific identifier that comes from the applicable HQMF file. Uniqueness of a population is determined based on the UUID provided for it in the associated reference/externalObservation/id. This id SHALL equal the respective population identifier that comes from the applicable HQMF file.

Each stratum may only be reported once for a specific population.”

- The PQRS will:
 - Verify that each strata of a measure has a single numerator and denominator
 - Verify that a single instance of each measure or measure strata per TIN, TIN/NPI, or CPC Practice Site is included in the submission

2014 QRDA III Error

- Performance Rate rounding:
 - Example: Vendors submitted a calculated performance rate of 0.41395348837209302325581395348837 as:
 - Vendor A: 0.41395348837209302325581395348837
 - Vendor B: 0.4139535
 - Vendor C: 0.413953
 - Vendor D: 0.41395
 - Vendor E: 0.4140

2015 QRDA III Solution

- 2015 CMS QRDA IG Addendum Part B section 3.2:

“The following rounding rules must be used when submitting performance rates:

- *For a raw calculated performance rate that has ≥ 7 digits after the decimal point, round the decimal number to the millionth.*
- *For a raw calculated performance rate that has ≤ 6 digits after the decimal point, rounding is not permitted for the performance rate.”*

Additional QRDA III Solutions

PQRS will:

- Validate the presence and content of data in the CMS Program Identifier field. (*rejection*)
- Confirm that the required data fields associated with the Program Identifier are populated. (*rejection*)
- Verify that the Practice Site ID is populated when there is CPC Program Identifier. (*rejection*)
- Verify that files with a CPC Program Identifier include a valid CPC Practice Site ID. (*rejection*)
- Validate that the eMeasure version included in the data matches the July 2014 version. (*rejection*)
- Validate that the TIN in an EP submission is not a registered group practice. (*warning*)
- Verify that the TIN is not an MSSP ACO Participant TIN. (*rejection*)

Additional QRDA III Solutions (cont.)

- Verify that a QRDA submission includes a single TIN, TIN/NPI, or CPC Practice Site ID. (*rejection*)
- Verify that the file(s) contain a performance rate for each proportion measure. (*rejection*)
- Verify that each strata of a measure has a single numerator and denominator. (*rejection*)
- Verify that the performance numerator is less than or equal to the denominator for each proportion measure. (*rejection*)
- Verify that there is a single instance of each measure or measure strata per TIN, TIN/NPI, or CPC Practice. (*rejection*)
- Verify that the TIN in a group submission is a registered GPRO. (*warning*)
- Verify that the TIN in a group submission is registered for the reporting method. (*warning*)

QUESTIONS

Resources

- Questions regarding the PQRS:
 - QualityNet Help Desk
 - Monday - Friday; 7:00 a.m. - 7:00 p.m. CST
 - Phone: 1-866-288-8912
 - TTY: 1-877-715-6222
 - Email: Qnetsupport@hcqis.org
- Questions regarding the Value Modifier:
 - Physician Value Help Desk
 - Monday - Friday; 7:00 a.m. - 7:00 p.m. CST
 - Phone: 1-888-734-6433 (select option 3)
 - Email: pvhelpdesk@cms.hhs.gov
- JIRA:
 - <http://oncprojecttracking.org/>

Resources

- eCQM Library - QRDA Resources:
 - https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html
- 2015 CMS QRDA IG Addendum:
 - https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA_2015_CMS_IG_Addendum.pdf
- 2015 CMS QRDA IG:
 - https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA_EP_HQR_Guide_2015.pdf