



Hospital Inpatient Quality Reporting (IQR) Program

Support Contractor

How to Correct Common Schema Validation Errors for Hospitals QRDA Category I Submissions and Other Guidance

Questions and Answers

Moderator

Artrina Sturges, EdD, MS

Project Lead, Hospital Inpatient Quality Reporting (IQR)-Electronic Health Record (EHR)
Incentive Program Alignment
Hospital Inpatient Value, Incentives, and Quality Reporting (VIQR)
Outreach and Education Support Contractor (SC)

Speaker(s)

Shanna Hartman, MS, RN

Nurse Consultant
Division of Electronic and Clinician Quality
Centers for Medicare & Medicaid Services (CMS)

Michael Holck

Director of Software Engineering
Enterprise Science and Computing (ESAC), Inc.

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Question 1: Will the Pre-Submission Validation Application (PSVA) show the Act Wrapper to be correct or incorrect?

The PSVA assesses the Quality Reporting Document Architecture (QRDA) Category I file structure based on the Schematron in place for the current reporting period. The validation logic for Act Wrapper is not available in the Schematron associated with CY 2017 eCQM reporting and PSVA will not generate an error message if the content is missing or incorrect within QRDA I files. CMS distributed a listserv (available on QualityNet.org) with technical guidance on this issue June 13, 2017 to assist submitters to include the proper information within QRDA I files. The guidance is posted on the [eCQI Resource Center](#).

When the PSVA is updated with the Schematron associated with CY 2018 eCQM reporting this year, the validation logic for Act Wrapper will be incorporated. An error message will generate if the Act Wrapper code is not included or incorrectly coded in QRDA I files associated with CY 2018 eCQM reporting.

Question 2: Has anyone used Bonnie; and how does it stand up to the ones you mentioned, such as Oxygen?

Bonnie is a tool for validating measures, so it does generate QRDA files out of it, but it is not an XML validator per se. It's not equivalent to Oxygen or XML5. It is a good resource for measure developers to test their measures, but it is not something that does schema validation.

Question 3: Did the changes for quarter four (Q4) 2017 solve the rule issues for Act Wrapper and CMS Certification Number (CCN)?

There were no changes to the actual validation logic in the schematron for 2017 for Act Wrapper and CCN. Guidance was provided instead, to educate people on how to do it correctly because there are no rules that will check that. The new changes in Q4 did not change that validation logic.



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Question 4: What if we are using a vendor to submit our electronic clinical quality measures (eCQMs)? Would they be the ones doing or performing the validation activity?

Yes, typically that's true. Most vendors will have performed some level of testing when they completed their QRDA I implementation. There are tools available for vendors and any submitters who are trying to generate QRDA I documents before they make official submissions. The Cypress tool is available, which can be used with test files that do not include Protected Health Information (PHI); and it performs the same kind of validation against the file and returns errors. There's also the PSVA tool through *QualityNet* that you can use for testing QRDA files.

If the vendor is the one generating your QRDA I files, they should have utilized some of those tools to make sure they're generating good QRDA I documents. If errors are still generated, contact your vendor and ask them to research the error. If you receive the CMS_0072 validation error, that means the files are failing that Clinical Document Architecture (CDA) schema and have the vendor investigate the reason. Typically vendors have XML tools to assist them, but if not, they can open tickets through the [Office of the National Coordinator for Health Information Technology \(ONC\) JIRA Issue Tracker](#).

Question 5: One of our customer's EHR system data we observed was that the emergency encounter departure date is greater than the inpatient admission date. In this scenario, it is quite possible, but when we submit the test file to CMS, we are getting an error that it is not included in the initial population for the ED-1 and ED-2 measures (ED-1: Median Time from ED Arrival to ED Departure for Admitted ED Patients and ED-2: Admit Decision Time to ED Departure Time for Admitted Patients). How can we resolve this?

This sounds like something that would need to be resolved with the vendor and how they are capturing the data elements for emergency encounter, departure, and inpatient admission date. It sounds like it could be a workflow issue.



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Question 6: Are there any free tools to perform the schema validation activity?

Although CMS does not endorse a specific product, most of the tools that perform quality schema validations are commercial tools. There is the Oxygen XML that was shown in this presentation, or for the Windows platform, a common one is XML5. Both of those are commercial tools. There are several open sources or, free XML tools out there, but many of them don't perform the schema validation for the user.

Question 7: The presentation stresses these corrections are only for 2017 reporting. So, does that mean that these issues will not exist for 2018 reporting?

Yes, that is correct. The guidance given for the Act Wrapper and CCN didn't have checks in the schematron and the validation rules as part of the submission for 2017. If the Act Wrapper is not included in 2017, you do not receive an error message, but you will have data that is not recognized by the receiving system. In 2018, if the Act Wrapper is not included, you will receive an error message that will tell you a specific element needs to be wrapped by an Act Wrapper.

This is also correct for the CCN. The issue in 2017 is that all IDs are being validated to be six to 10 characters in length. That's why it is recommended to only use the CCN. But for 2018, there is a change in the validation rule to check the specific root of that identifier and ensure that it's only checking six to 10 characters for CCNs. A check will not be performed against other IDs. You may still receive CMS_0072 errors in 2018 because this is a more general schema validation error and the same process would be applied to address the error.



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Question 8: If we have an issue with a generated QRDA I file and we manually correct it, is that still valid for CMS reporting?

If you manually correct the error and it passes the schematron, it may be acceptable however more information on what you are manually fixing is needed. It is not recommended to manually manipulate data that came out of the EHR, because that data would have to come from a certified EHR technology to meet program requirements. If you're fixing something that was an error that was covered in this session or through a JIRA ticket, then if you manually correct it, that's probably okay. Other manual edits may not be. If you are unclear on the nature of the correction, contact the QualityNet Help Desk for additional assistance: qnetsupport@hcqis.org; 866.288.8912.

Question 9: For the value element, you said it must have an xsi:type and that determines the attribute. Is there somewhere that lists all the valid types and their attributes?

Yes. QRDA is an implementation of the Clinical Document Architecture (CDA). On the Health Level Seven International (HL7) site you can find the Clinical Document Architecture Implementation Guide. Included in that guide is a document that has all the xsi:type that are valid for the value element. It also includes all the elements that are valid in a CDA document and what attributes are allowed on each of those. To locate the Clinical Document Architecture Implementation Guide go to www.HL7.org.

Question 10: Where can we obtain an XSD file?

You can obtain the QRDA I, HL7 base standard from www.HL7.org. You can also go to the eCQI Resource Center at <https://ecqi.healthit.gov/qrda>. When you download the QRDA I, HL7 base standard, it includes the Implementation Guide, the schematron, a sample file and it also includes that schema as a zip file.



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Question 11: The resources that have been shared with us on errors have been very helpful, but I have multiple warnings that don't appear in any of those resources. Is there a separate resource available anywhere that have the warning conformance goals or CONF codes listed and how to correct them?

The CMS QRDA I HQR and Base HL7 Implementation Guides contain all the rules that are being validated. If it's a conformance statement that says, "shall," that indicates an error needs to be fixed to make a successful submission. If a conformance statement includes "should," then that is a warning and acts as best practice guidance. It won't fail validation and it won't fail submission, you'll just receive the warning. You may not be able to remove all your warnings and it is not a requirement that data is submitted without any warnings. Errors must be fixed to have a successful submission and validation.

Question 12: Will *QualityNet* evaluate the QRDA I CMS Program name; so, for example HQR_EHR, HQR_IQR or HQR_EHR_IQR to determine if the submission was for IQR, meaningful use or both or does the electronic submission automatically count for both IQR and meaningful use regardless of the program name in the QRDA I file?

The program name for calendar year 2017 is not being validated at this time. The successfully submitted QRDA I files will be processed for IQR and any aligned credit for 15 of the 16 eCQMs will be fulfilled for the EHR Incentive Program no matter which category is chosen for submission. It is recommended that hospitals institute the best practice of submitting QRDA I files under the intended program name so that when CMS begins validating the field, the habit is established. If you have additional questions, please contact the *QualityNet* Help Desk: qnetsupport@hcqis.org; 866.288.8912.

Question 13: Is our EHR vendor permitted to do this reporting on our behalf?

Yes, hospitals may authorize a vendor to submit QRDA Category I files on their behalf. Contact the *QualityNet* Help Desk at qnetsupport@hcqis.org or (866) 288-8912 to have the EHR Data Upload Role assigned. Once assigned, hospitals can visit the *QualityNet Secure Portal* and access the vendor authorization screen to permit the vendor to report on their behalf.



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Question 14: Which is the right program to select for QRDA to count for both IQR and meaningful use (MU)?

Hospitals should select the program name: HQR_EHR_IQR for the QRDA Category I file submissions to count for both the Hospital IQR Program and the EHR Incentive Program (meaningful use).