

Cypress™

Cypress Tech Talk

September 17, 2024



MITRE

The Office of the National Coordinator for
Health Information Technology



Agenda

- Software Updates
 - Cypress 7.3.1
- Recent Issue
 - Cypress Known Issues Dashboard
- Cypress Versions
- Open Discussion
- Contact Information

*See the Glossary at the back for definitions of terms

Software Updates

Cypress 7.3.1 (2025 Annual Update)

- **Cypress 7.3.1 patch released on 8/1/2024**
- **Cypress Features**
 - Support for testing with the 2025 CMS QRDA III Implementation Guide for Eligible Clinicians
- **Cypress Bugs Addressed**
 - Product creation timeouts ([CYPRESS-2674](#))
 - Ratio measure calculations defaulting to 0 when population criteria not met. ([CYPRESS-2669](#))
 - Cypress test patients include unnecessary statusCode element within Encounter Diagnosis template. ([CYPRESS-2671](#))
 - Risk Variable elements missing from QRDA file causing server errors to be returned ([CYPRESS-2666](#))

Product creation timeouts

■ Problem

- Products created with every eCQM and certification type could result in a server timeout resulting in an unusable set of tests.

■ Bug fix

- Move more of product creation to asynchronous processes allowing for navigation through the application as the product is being created.



Ratio measure calculations defaulting to 0 when population criteria not met

■ Problem

- Measure observation calculations for Ratio measures default to 0 even when the population criteria isn't satisfied

	IPOP	DENOM	NUMER	DENEX	DENEXCEP
CMS1017v1 - PopulationSet 1	1	1			
Episode 1 Observations:		2	0		
Get Highlighted Result					
View Risk Variables					

■ Bug fix

- Measure observation calculations for Ratio measures will default to null when the population criteria isn't satisfied

Cypress test patients include unnecessary statusCode element within Encounter Diagnosis template.

- The presence of the statusCode of completed could be interpreted as indicating the diagnosis was resolved prior to the encounter. This elements is being removed from the test patient's QRDA files to clear up ambiguity.

```
<!-- QDM Attribute: Diagnoses -->
<entryRelationship typeCode="REFR">
  <observation classCode="OBS" moodCode="EVN">
    <!-- Encounter Diagnosis QDM -->
    <templateId extension="2021-08-01" root="2.16.840.1.113883.10.20.24.3.168"/>
    <code code="20308-4" codeSystem="2.16.840.1.113883.6.1"/>
    <statusCode code="completed"/>
    <value code="189.006" codeSystem="2.16.840.1.113883.6.90" codeSystemName="ICD10CM" xsi:type="CD"/>
  </observation>
</entryRelationship>
<!-- QDM Attribute: Rank -->
<entryRelationship typeCode="REFR">
  <observation classCode="OBS" moodCode="EVN">
    <templateId extension="2019-12-01" root="2.16.840.1.113883.10.20.24.3.166"/>
    <code code="263486008" codeSystem="2.16.840.1.113883.6.96" displayName="Rank"/>
    <value value="0" xsi:type="INT"/>
  </observation>
</entryRelationship>
<entryRelationship typeCode="REFR">
  <observation classCode="OBS" moodCode="EVN">
    <templateId extension="2021-08-01" root="2.16.840.1.113883.10.20.24.3.169"/>
    <code code="78026-2" codeSystem="2.16.840.1.113883.6.1" displayName="Present on admission"/>
    <value code="N" codeSystem="2.16.840.1.113883.6.301.11" codeSystemName="Unknown" xsi:type="CD"/>
  </observation>
</entryRelationship>
</observation>
</entryRelationship>
```

Risk Variable elements missing from QRDA file causing server errors to be returned

- When validating the reporting of some Risk Variables for CMS1218, Cypress would return an exception when the expected element was not found.

The screenshot displays a web-based test results interface. At the top, a brown header bar contains the word "Results" on the left and a dropdown menu on the right showing "Most Recent - Upload 1 of 1 (internal error)" with a "Refresh View" button. Below the header, a light orange box contains a red information icon followed by the text: "C1 Execution: An internal error occurred (Errored validating M_Barker.xml: undefined method `values' for nil:NilClass on /lib/ext/cqm/individual_result.rb:272:in `hash_values_match?')". Below this, a light green box features a green checkmark icon and the text "C3 Execution: Passed". To the right of the green box, a light blue box displays test metadata: "Test Date: June 25, 2024 4:50pm", "Files Uploaded: CMS1218v1_QRDA1_1719334119.zip", and "Total Test Executions: 1". At the bottom, two sets of links are provided: "Try the associated QRDA Category I Measure Test" and "Try a different Measure Test", with a "Try a Record Sample" link below the second set.

Results Most Recent - Upload 1 of 1 (internal error) Refresh View

❗ C1 Execution: An internal error occurred (Errored validating M_Barker.xml: undefined method `values' for nil:NilClass on /lib/ext/cqm/individual_result.rb:272:in `hash_values_match?')

✅ C3 Execution: Passed

Test Date: June 25, 2024 4:50pm
Files Uploaded: CMS1218v1_QRDA1_1719334119.zip
Total Test Executions: 1

☰ Try the associated QRDA Category I Measure Test ☰ Try a different Measure Test
👁 Try a Record Sample

Recent Issue

Cypress Known Issues Dashboard

- <https://oncprojecttracking.healthit.gov/support/secure/Dashboard.jspa?selectPageId=18000>
- The dashboard collects all labeled known issues in one place, sorted by Cypress version
- Easily navigate to the dashboard from the Cypress summary page

Filter Results: Cypress Known Bugs 7.0.2			
Summary	2023 Performance Period EC eCQMs	2023 Reporting Period EH/CAH eCQMs	Solution
CQM129v11 - PSA score of 0 not qualifying for denominator			
"undefined method `collect' for nil:NilClass" Error when creating CVU+ product for CMS69v10	CMS69v11		see possible workaround below
Error of CMS_0084 encountered while testing Hybrid Measure	The error "CMS_0084 - QRDA files for hybrid measure/CCDE submissions must contain a HICN or MBI" should be treated as a Warning and not an Error.		
1-3 of 3			

Cypress Versions

Version	Dates	Release Note
V7.2.2	February 8, 2024	Removed references to certification editions
V7.3.0	June 20, 2024	Support for the 2025 performance/reporting period eQMs
V7.3.1	August 1, 2023	Support for the 2025 CMS Implementation Guides for QRDA Category III

Bundle Version	Dates	Features
2023.0.0	June 22, 2023	Measures and patients released in 2023 for the 2024 reporting year.
2024.0.0	June 20, 2024	Support for the 2025 performance/reporting period eQMs

OPEN DISCUSSION

Next Cypress Tech Talk

- Tuesday, October 15, 2024 at 1pm ET
- To join online, visit: <https://mitre.zoomgov.com/j/1605680758>
- To join via phone, dial: 1-551-285-1373
- Meeting Number: 160 568 0758
- Meeting link, as well as a calendar event file, available at:
 - <https://www.healthit.gov/cypress/techtalks.html>

Notes

- **Completed Webinars will be posted on the Cypress website on the Tech Talks tab**
 - <https://www.healthit.gov/cypress/techtalks.html>
- **Send questions and feedback to the Cypress Talk List at**
 - project-cypress-talk@googlegroups.com
- **Report bugs and issues to the Cypress JIRA at**
 - <https://oncprojecttracking.healthit.gov/support/browse/CYPRESS>

Glossary

- **API – Application Programming Interface**
- **CCDE – Core Clinical Data Elements**
- **CQL – Clinical Quality Language**
- **CVU – Cypress Validation Utility**
- **CVU+ – Cypress Validation Utility Plus Calculation Check**
- **EC – Eligible Clinician**
- **eCQM – Electronic Clinical Quality Measure**
- **EH – Eligible Hospital**
- **EP – Eligible Professional**
- **HL7 – Health Level Seven International**
- **IG – Implementation Guide**
- **QPP – Quality Payment Program**
- **QRDA – Quality Reporting Document Architecture**
- **UMLS – Unified Medical Language System**