Cypress™

Cypress Tech Talk

May 4, 2021

MITRE

The Office of the National Coordinator for Health Information Technology

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

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Agenda

- Software Updates
  - Cypress 6.x Annual Update
    - Community Suggested Features and Bug Fixes
- Recent Issue
  - Cypress Known Issues Dashboard
- Cypress Versions
- Open Discussion
- Contact Information

*See the Glossary at the back for definitions of terms

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Software Updates

Cypress 6.x (Annual Update)

- **Cypress 6.x**
  - For the 2022 Reporting and Performance Period
  - Release will be 2021 and 2022 compatible
  - 2021 bundle (for the 2022 reporting period) can be loaded alongside the the 2020 bundle (for the 2021 reporting period)

- **Release Schedule**
  - Preview will be available as a VM (Virtual Machine) May 20, 2021
  - Final Release will be available in all release formats Summer 2021

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Software Updates

Community Suggested Features and Bug Fixes

- UI Updates
  - Ability to view calculation results for subpopulations when filtering Vendor and Master Patient Lists (CYPRESS-2218)
  - Ability to view Measure Observation calculations in patient lists, and individual patient calculations (CYPRESS-2236)
  - Removed caching of Vendor Patients which hid updates to uploaded patients (CYPRESS-2212)
  - Validation progress displayed for long running tests
- Validation Updates
  - CVU+ Reporting Period validation updated for CMS529 to reflect CMS Guidance (CYPRESS-2230)
- API Updates
  - Hosting of API Documentation on Cypress Web Server
  - API method to view Cypress Version (CYPRESS-2068)
  - API methods to run CMS/HL7 Schematron validation (CYPRESS-2041, CYPRESS-2133)
- VM Updates
  - VM repackaged without compressed disks to support VMWare users on Windows OS (CYPRESS-2207)

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Software Updates

View Measure Observations

- **Ability to view Measure Observation calculations in patient lists, and individual patient calculations (CYPRESS-2236)**
  - Observed values can be seen in the patient details view. Multiple values from different measurements may be observed in a single episode. The view may also show values from different episodes for the same patient.

	IPOP	DENOM	NUMER	DENEX	DENEXCEP
CMS871v1 - PopulationSet 1	2	2	1		
Episode 1 Observations:		9	1		
Episode 2 Observations:		2			

View Logic Highlighting

  - Similar observed values can also be seen in the patient list summary view.

CMS871v0 - PopulationSet 1 Patients

Patient Name	Template Name	DOB	Gender	IPOP	DENOM	NUMER	OBSERV
Chester Simpson	Z3 N Eye	February 12, 1971	Male				
Debra Collins	1 N performed GP Adult	March 17, 1978	Female				
Jessica Taylor	4 Diabetes Adult	March 9, 1967	Female	2	2	1	
Joann Lowe	7 Diabetes Adult	March 9, 1967	Female	1	1		9

2
9|1 → episodes
observed values

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Software Updates

Validation API

- **API methods to run CMS/HL7 Schematron validation (CYPRESS-2041, CYPRESS-2133)**
  - Adds validation endpoint that can be used to post QRDA artifacts for only program-based schematron validation as was available in the previous CVU tool
  - Provides validation information as a QRDA validation json response

/qrda_validation

QRDA Validations on the system

/qrda_validation	GET
/qrda_validation/{year}/{qrda_type}/{implementation_guide}	POST

URI Parameters

- **Performance Period**: *required (string)*
- **QRDA Types (I or III)**: *required (string)*
- **Implemenation Guide (CMS or HL7)**: *required (string)*

Form Parameters

- **file**: *required (file)*
  Artifact to be tested

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Recent Issue

Cypress Known Issues Dashboard

- https://oncprojectracking.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

Cypress Known Issues

Filter Results: Cypress Known Bugs 6.0.0

Summary	2021 Performance Period EP/EC eCQMs	2021 Reporting Period EH/CAH eCQMs	Solution
CMS72v9-QRDA1 issue			
CMS134v9 Denominator Exclusion count	CMS134v9/NQFna		
CMS68v10 procedure performed incomplete issue			
CMS-190v9 C1 Sample testing returning Internal Error with code nullFlavor in Facility Location			
CMS-108/190 returning warning when submitting Z29 VTE for C1/C3 testing			

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Cypress Versions

Version	Dates	Measures Supported
V5.4.2	**September 17, 2020**	Latest version supporting eCQMs for the 2020 Reporting/Performance Period and CQL. Contains updates to support telehealth checking.
V6.1.1	**January 6, 2021**	Update to CVU+ calculations to fix valueset negations.
V6.1.2	**February 11, 2021**	Updates to support new schematron and MIPS APM Entity for the 2021 reporting/performance period eCQMs.

Bundle Version	Dates	Features
2019.2.0	**September 17, 2020**	**Cypress v5 only** CQL-based measures released in 2019 for the 2020 reporting year. Contains updates for ELM issues found in CMS128v8, CMS146v8, and CMS56v8.
2020.0.4	**October 15, 2020**	**Cypress v6 only** CQL-based measures released in 2020 for the 2021 reporting year. Updated patients to use relevant dateTime or relevant period, as appropriate.
2020.0.5	**February 19, 2021**	**Cypress v6 only** Calculations for Master Patient List updated to reflect updated guidance for Relevant dateTime/Relevant Period and addresses issues with time zone offsets.

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OPEN DISCUSSION

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Next Cypress Tech Talk

- Tuesday, May 18, 2021 at 1pm ET
- To join online, visit: https://global.gotomeeting.com/join/529898157
- To join via phone, dial: 1-646-749-3122
- Meeting Number: 529 898 157
- Meeting link, as well as a calendar event file, available at:
  - https://www.healthit.gov/cypress/techtalks.html

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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://oncprojectracking.healthit.gov/support/browse/CYPRESS

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Glossary

- API – Application Programming Interface
- 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

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