Cypress™

Cypress Tech Talk

May 4, 2021
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*
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 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
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.

<table>
<thead>
<tr>
<th>IPOP</th>
<th>DENOM</th>
<th>NUMER</th>
<th>DENEX</th>
<th>DENEXCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS871v1 - PopulationSet 1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Episode 1 Observations:</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Episode 2 Observations:</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Template Name</th>
<th>DOB</th>
<th>Gender</th>
<th>IPOP</th>
<th>DENOM</th>
<th>NUMER</th>
<th>OBSERV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chester Simpson</td>
<td>Z3 N Eye</td>
<td>February 12, 1971</td>
<td>Male</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Debra Collins</td>
<td>1 N performed GP Adult</td>
<td>March 17, 1978</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jessica Taylor</td>
<td>4 Diabetes Adult</td>
<td>March 9, 1967</td>
<td>Female</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Joann Lowe</td>
<td>7 Diabetes Adult</td>
<td>March 9, 1967</td>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

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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)
- **Implementation Guide (CMS or HL7)**: required (string)

Form Parameters
- **file**: required (file)
  Artifact to be tested
```
Recent Issue
Cypress Known Issues Dashboard

- [https://oncprojecttracking.healthit.gov/support/secure/Dashboard.jspa?selectPageId=18000](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

### Cypress Known Issues

<table>
<thead>
<tr>
<th>Filter Results: Cypress Known Bugs 6.0.0</th>
<th>2021 Performance Period EP/EC eCQMs</th>
<th>2021 Reporting Period EH/CAH eCQMs</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS72v9-QRDA1 issue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS134v9 Denominator Exclusion count</td>
<td></td>
<td></td>
<td>CMS134v9/NQFna</td>
</tr>
<tr>
<td>CMS68v10 procedure performed incomplete issue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS-190v6 C1 Sample testing returning Internal Error with code nullFlavor in Facility Location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS-108/190 returning warning when submitting Z29 VTE for C1/C3 testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–5 of 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Cypress Versions

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

<table>
<thead>
<tr>
<th>Bundle Version</th>
<th>Dates</th>
<th>Features</th>
</tr>
</thead>
</table>
| 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. |
OPEN DISCUSSION
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
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
- 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