Agenda

- Software Updates
  - Cypress 5.3.0 Patch Release
  - Cypress v6 Releases
  - Known Issues Dashboard
- Cypress Versions
- Open Discussion
- Contact Information
Software Updates
Cypress 5.3.0 Release

- A 5.3.0 patch release for Cypress is scheduled for March 12, 2020

Cypress Features
- Unit of measure checks for EH eCQMs
- Increased contrast for Expected Results
- C1 Record Sample tests will remain Incomplete until first QRDA upload
- CVU+ will evaluate QRDA Cat I files with unknown demographic information
- All users can download reports in Demo mode
- Installation script for simplified upgrade

Cypress Bugs Addressed
- QRDA Cat I R5.1 schematron updated (CYPRESS-1959)
- CQL Calculation Engine updated to fix CVU+ calculations of Open Boundaries (CYPRESS-1924)
- Submission errors were not being displayed for C1/C3 tests (CYPRESS-1968)
Software Updates

Unit of measure checks for EH eCQMs

- EH Submission systems perform eCQM calculations using the unit of measures stated in the eCQM specification.
- EH Submission system do not perform unit conversion prior to eCQM calculation.
- However, Cypress does perform unit conversion prior to eCQM calculation.
- Cypress 5.3.0 will return warnings when a reported unit of measure does not match what is stated in the eCQM specification.

<table>
<thead>
<tr>
<th>QRDA (0)</th>
<th>Reporting (0)</th>
<th>Submission (0)</th>
<th>CMS Warnings (1)</th>
<th>Other Warnings (0)</th>
</tr>
</thead>
</table>

**Warning message**

Unit 'mg/dLs' for QDM::LaboratoryTestPerformed (LDL-c) does not match expected units (mg/dL). Units must match measure-defined units.

Go To in XML
### Software Updates

Increased contrast for Expected Results

#### Before

<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>DENEX</th>
<th>DENEXCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constance Johnston</td>
<td>Z32 Heart Adult</td>
<td>February 13, 1950</td>
<td>Female</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Rick Gregory</td>
<td>Z12 GP Adult</td>
<td>February 3, 1972</td>
<td>Male</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Laurie Fleming</td>
<td>Z17 GP Adult</td>
<td>March 20, 1969</td>
<td>Female</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### After

<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>DENEX</th>
<th>DENEXCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis Boyd</td>
<td>Z12 GP Adult</td>
<td>February 3, 1972</td>
<td>Male</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Erik Bates</td>
<td>Z13 N GP Adult</td>
<td>February 13, 1972</td>
<td>Male</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Toni Stevenson</td>
<td>B (Independent Risk Factors 4) Cancer Female</td>
<td>September 1, 1965</td>
<td>Female</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Carl Warren</td>
<td>A N BH Adult</td>
<td>January 1, 1978</td>
<td>Male</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Software Updates

C1 Record Sample tests will remain Incomplete until first QRDA upload

- **Before**

<table>
<thead>
<tr>
<th>Data Criteria Verification</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS2v9 Preventive Care and Screening: Screening for Depression and Follow-Up Plan</td>
<td>Failing</td>
</tr>
<tr>
<td>CMS22v8 Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented</td>
<td>Not Started</td>
</tr>
<tr>
<td>CMS69v8 Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan</td>
<td>Not Started</td>
</tr>
</tbody>
</table>

- **After**

<table>
<thead>
<tr>
<th>Data Criteria Verification</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS2v9 Preventive Care and Screening: Screening for Depression and Follow-Up Plan</td>
<td>Incomplete</td>
</tr>
<tr>
<td>CMS22v8 Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented</td>
<td>Not Started</td>
</tr>
<tr>
<td>CMS69v8 Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan</td>
<td>Not Started</td>
</tr>
</tbody>
</table>
Software Updates

CVU+ will evaluate QRDA Cat I files with unknown demographic information

- Previous Cypress/CVU versions would return an “internal error” for QRDA files with unknown demographic information

```
<patient>
  <name>
    <given>Adam</given>
    <family>Austin</family>
  </name>
  <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1" codeSystemName="AdministrativeGender"/>
  <birthTime value="19730826153000"/>
  <raceCode nullFlavor="UNK"/>
  <ethnicGroupCode code="2135-z" codeSystem="2.16.840.1.113883.6.238" codeSystemName="CDCREC"/>
  <languageCommunication>
    <languageCode code="eng"/>
  </languageCommunication>
</patient>
```
Software Updates
All users can download reports in Demo mode

- Previously, only users with Admin or ATL privileges could download a report on a Cypress instance in Demo mode
- Now, any user (with access to the specified Vendor page) can download a report on a Cypress instance in Demo mode
- Downloading a report will still be restricted to ATL and Admin users for Cypress instances used for certification (ATL mode)
Software Updates
Installation script for simplified upgrade

- Before
  
  Connect to your machine running cypress and run the following commands:

  ```text
  sudo apt-get update
  sudo apt-get install cypress
  sudo apt-get install cqms-execution-service
  sudo systemctl restart cypress
  sudo systemctl restart cqms-execution-service
  ```

- After
  
  Connect to your machine running cypress and run the following command:

  ```text
  curl https://raw.githubusercontent.com/projectcypress/cypress/master/contrib/upgrade
  ```
Software Updates

QRDA Cat I R5.1 schematron updated (CYPRESS-1959)

- Cypress 5.2 was running an outdated schematron for QRDA Cat I R5.1.
- As a result, Cypress would return an error for the following conformance statement.

This conformance statement has now been removed and will not be returned as an error message.
Software Updates

CQL Calculation Engine updated to fix CVU+ calculations of Open Boundaries (CYPRESS-1924)

- A calculation bug in CVU+ impacts the calculation of logic like the following

```
MI.prevalencePeriod ends 3 years or less before day of start of Encounter.relevantPeriod
```

- The CVU+ calculations were not accounting for the “day of” precision and allowed the “MI” to occur on the same day as the “Encounter”

- This impacts CVU+ calculations for the following eCQMs
  - CMS56v8, CMS90v9, CMS125v8, CMS133v8, CMS136v9, CMS137v8, CMS145v8, CMS154v8, CMS161v8
**Software Updates**

Submission errors were not being displayed for C1/C3 tests (CYPRESS-1968)

- When C2 was not selected, Cypress would not show Submission errors in the error table.

**Before**

**After**
Software Updates
Upcoming Cypress v6 Releases

- Cypress 6 Alpha release anticipated mid-May
  - Initial support for QRDA category 1 R5.2
  - Initial support for 2021 reporting/performance period eCQMs
- Final Cypress 6.0.0 release anticipated late July
  - Full support for R5.2 and 2021 measures
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 Versions

<table>
<thead>
<tr>
<th>Version</th>
<th>Dates</th>
<th>Measures Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>V4.0.4</td>
<td>October 3, 2019</td>
<td>Latest version supporting eCQMs for the 2019 Reporting/Performance Period and CQL. Fixes QRDA and other 4.0.3 bugs.</td>
</tr>
<tr>
<td>V5.1.0</td>
<td>November 7, 2019</td>
<td>Support for QRDA Category I R5.1 errata</td>
</tr>
<tr>
<td>V5.2.0</td>
<td>December 19, 2019</td>
<td>Latest version supporting eCQMs for the 2020 Reporting/Performance Period and CQL. Contains feature improvements and fixes for bugs found in Cypress v5.1.0</td>
</tr>
<tr>
<td>V5.3.0</td>
<td>March 12, 2020</td>
<td>Unit checking updates and interval boundary calculation updates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bundle Version</th>
<th>Dates</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018.1.0</td>
<td>October 11, 2018</td>
<td>Cypress v4 only&lt;br&gt;CQL-based measures released in 2018 for the 2019 reporting year&lt;br&gt;eCQM Value Sets as of 9/17/2018.</td>
</tr>
<tr>
<td>2019.1.0</td>
<td>November 7, 2019</td>
<td>Cypress v5 only&lt;br&gt;Precalculated results&lt;br&gt;Updates to Z6 VTE, Z13 N VTE, B GP Peds and 1 BH Infant</td>
</tr>
</tbody>
</table>
OPEN DISCUSSION
Next Cypress Tech Talk

- Tuesday, March 24, 2020 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](https://www.healthit.gov/cypress/techtalks.html)

- Send questions and feedback to the Cypress Talk List at
  - [project-cypress-talk@googlegroups.com](mailto:project-cypress-talk@googlegroups.com)

- Report bugs and issues to the Cypress JIRA at
  - [https://oncprojecttracking.healthit.gov/support/browse/CYPRESS](https://oncprojecttracking.healthit.gov/support/browse/CYPRESS)