Agenda

- Software Updates
  - Cypress Validation Utility + Calculation Check (CVU+)
  - Cypress 5 Releases
  - Upcoming Feature: CVU+ Measure Highlighting
  - Recent Updates

- Recent Issues
- Cypress Versions
- Open Discussion
- Contact Information
Software Update
Cypress Validation Utility + Calculation Check (CVU+)

- Cypress v5 will include a new set of features called Cypress Validation Utility + Calculation Check (CVU+)
- CVU+ seeks to address the vendor concern that the ‘certification process does not mirror a production scenario for electronic clinical quality measure (eCQM) reporting’
  - Certification uses a constrained set of test patients
  - Certification does not enforce reporting program requirements (i.e., CMS Implementation Guide)
- CVU+ will supplement the existing certification program
  - Use of the CVU+ is not currently a requirement of the program
CVU+ Features

Perform Tests using Developer-Generated test patients

- CVU+ supports developer-generated test patients, allowing vendors to supplement Cypress test patients with their own test patients to increase eCQM logic/code coverage.
  - Pre-certification tests will no longer be constrained to using Cypress generated tests patients
CVU+ Features

Analyze rigor of Developer-Generated test patients

- CVU+ performs analysis on uploaded developer-generated test patients.
- Statistics include:
  - Measure Coverage
  - Logic Coverage
  - Valuesets used
  - Code Systems used
  - Data Element Types used

### Analysis of Patients

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td># Patients</td>
<td>7</td>
</tr>
<tr>
<td>Measure Coverage</td>
<td>37.3% (22 of 59)</td>
</tr>
<tr>
<td>Population Coverage</td>
<td>44.8% [Missing Populations]</td>
</tr>
<tr>
<td># Data Element Types</td>
<td>20</td>
</tr>
<tr>
<td># Valuesets Used</td>
<td>61</td>
</tr>
<tr>
<td>Valuesets Coverage</td>
<td>8.3%</td>
</tr>
<tr>
<td>Uncovered Valuesets</td>
<td>677 [Uncovered Valuesets]</td>
</tr>
<tr>
<td>Code System per Valueset Coverage</td>
<td>8.2%</td>
</tr>
<tr>
<td>Uncovered Code Systems in each Valueset</td>
<td>1076 [Uncovered Code Systems]</td>
</tr>
<tr>
<td>Average Percent Code Coverage per Valueset</td>
<td>3.0%</td>
</tr>
<tr>
<td>Logic Coverage</td>
<td>Logic Coverage Per Measure</td>
</tr>
<tr>
<td>Least Logic Coverage</td>
<td>CMS190v8 (9.4%)</td>
</tr>
<tr>
<td>Average Logic Coverage</td>
<td>44.2%</td>
</tr>
</tbody>
</table>
CVU+ Features

Verify QRDA Export and eCQM Calculations

- CVU+ performs and displays eCQM calculation for uploaded developer-generated test patients.
- eCQM calculations are displayed for all eCQMs where developer-generated test patients meet the IPP requirements.
CVU+ Features

Upcoming Feature: Measure Highlighting

- In addition to calculation data, CVU+ will show clause highlighting to better understand calculations

- Green: clause criteria is met by patient
- Red: clause criteria is not met by patient
- None: N/A, clause criteria is not evaluated
Software Update
Cypress 5 Releases

- Cypress v5 Alpha
  - Released May 23, 2019
  - Includes CVU+ features and Annual Update Measures posted May 13, 2019
    - Posted on resource center: [https://ecqi.healthit.gov/](https://ecqi.healthit.gov/)
    - Available as a virtual machine (VM) download

- Cypress v5 Beta
  - June 20, 2019
  - Available as a VM download

- Cypress v5 Official Release
  - **July 25, 2019**
  - Available as a VM, AMI, and on the demo server: [cypress.healthit.gov](https://cypress.healthit.gov)
Software Update
Cypress v5 Release

- https://www.healthit.gov/cypress/release.html#5.0.0

Cypress v5.0.0
Cypress v5.0 with the fully integrated Cypress Validation Utility + Calculation Check (CVU+) is now available to support 2015 Edition Certification for the Office of the National Coordinator for Health Information Technology Certification Program for electronic clinical quality measures (eCQM). Cypress v5.0 supports testing the Eligible Hospital/Critical Access Hospital eCQMs and Eligible Professional/Eligible Clinician eCQMs updated for calendar year 2020 reporting.

Cypress v5.0 Features
- Supports the §170.315(c)(1), §170.315(c)(2), §170.315(c)(3), and §170.315(c)(4) certification criteria.
- Supports the eCQMs for eReporting for the 2019 Reporting Period.
- Supports eCQM Value Sets as of 5/10/2019.

Cypress Validation Utility + Calculation Check (CVU+) Features
- Supports multi-measure tests, allowing vendors to test eCQM calculations with a single test deck across multiple measures.
- Supports code system preference, allowing vendors to choose preferences for the code systems to be used in test patients.
- Supports developer-generated test patients, allowing vendors to supplement Cypress test patients with their own test patients to increase eCQM logic/code coverage.
- Evaluates the rigor of a set of test patients.
Software Update
CVU Standalone

- **CVU no longer available as a standalone application**
  - 2020 reporting period measures and moving forward
  - Functionality subsumed by CVU+

- **CVU+**
  - Can utilize validation logic through creating a CVU+ product
  - Tests for CVU+ products include CMS Program Tests which will run program-specific validations

- **Validation for 2019 reporting period**
  - CVU is still available as a standalone application for 2019 reporting period
  - CVU is available with Cypress 4.0.3 as a VM, AMI, or through Chef installation
# Cypress Versions

<table>
<thead>
<tr>
<th>Version</th>
<th>Dates</th>
<th>Measures Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>V4.0.3</td>
<td>May 2, 2019</td>
<td>Latest version supporting eCQMs for the 2019 Reporting/Performance Period and CQL. Fixes record sample and other 4.0.2 bugs.</td>
</tr>
<tr>
<td>V5.0.0</td>
<td>July 25, 2019</td>
<td>Latest version supporting eCQMs for the 2020 Reporting/Performance Period and CQL.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bundle Version</th>
<th>Dates</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019.0.1</td>
<td>July 25, 2019</td>
<td>Cypress v5 only  &lt;br&gt;CQL-based measures released in 2019 for the 2020 reporting year eCQM Value Sets as of 5/10/2019.</td>
</tr>
</tbody>
</table>
OPEN DISCUSSION
Next Cypress Tech Talk

- Tuesday, August 27, 2019 at 1pm ET
- To join online, visit: https://meetings.cms.gov/orion/joinmeeting.do?MTID=98271705d4bc4ad148cf1e39d5c7408
- To join via phone, dial: 1-877-267-1577
- Meeting Number: 998 084 717
- 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