

Cypress™

Cypress Tech Talk

July 2, 2019



MITRE

The Office of the National Coordinator for
Health Information Technology



CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Agenda

- Software Updates
 - Cypress Validation Utility + Calculation Check (CVU+)
 - Cypress 5 Releases
 - CVU+ Demo
 - Recent Updates
- Recent Issues
- Cypress Versions
- Open Discussion
- Contact Information

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

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/>
 - Available as a virtual machine (VM) download

- **Cypress v5 Beta**
 - June 20, 2019
 - Available as a VM download
 - Will be deployed to demo server: cypress.healthit.gov

- **Cypress v5 Official Release**
 - Late July 2019

Software Update

Future Releases

- <https://www.healthit.gov/cypress/futurerelease.html>

The screenshot shows a navigation menu with five items: Resources, Tech Talks, Release Notes, Future Releases (highlighted), and FAQ. The main content area features the title 'Cypress v5 with CVU+' and a paragraph stating that the CVU+ production release is scheduled for Summer 2019, with an alpha release version available for download. Below this, there are two sections: 'Cypress features' and 'CVU+ features', each with a bulleted list of details. At the bottom, there is a footer with a link to 'Medicare & Medicaid Services (CMS) with coordination from the Health Information Technology (ONC)' and the CMS.gov logo.

Resources **Tech Talks** **Release Notes** **Future Releases** **FAQ**

Cypress v5 with CVU+

Currently under development, the CVU+ production release is scheduled for Summer 2019. An alpha release version is now available for [download](#). Cypress v5 with CVU+ will include the following features:

Cypress features

- 51 Eligible Professional/Eligible Clinician eQMs.
 - Including CMS771v1 (International Prostate Symptom Score (IPSS) or American Urological Association-Symptom Index (AUA-SI) Change 6-12 Months After Diagnosis of Benign Prostatic Hyperplasia)
- 8 Eligible Hospital/Critical Access Hospital eQMs.

CVU+ features

- Testing against various Centers for Medicare & Medicaid Services (CMS) quality reporting programs
 - Support for implementation guides up to two years in advance of the reporting deadline
- Testing that better aligns with CMS quality reporting requirements
 - Ability to calculate across multiple measures at once
- Support for developer-generated (Bring Your Own) test patients
 - Evaluation of the rigor of a set of test patients

[Medicare & Medicaid Services \(CMS\)](#) with coordination from the [Health Information Technology \(ONC\)](#).

CMS.gov 

Software Update **CVU+ Demo**

Recent Issue

Known Bugs in 4.0.3 Patch Release

CYPRESS Issue Tracker / CYPRESS-1741

Cypress Validation Utility seems to be rounding down for DECIMAL in CMS 108

Edit Comment Assign More Open In Progress (2) Workflow Share Export

Details

Type: Bug/Issue Status: **IN PROGRESS**

Priority: **Moderate** (View Workflow)

Resolution: Unresolved

Labels: [KnownBug4.0.3](#)

Impact: Lab Results between 3.1 and 3.9 not considered in Numerator inclusion within Cypress Validation Utility

2019 Reporting Period: CMS108v7/1QF371

EH eCQMs:

People

Assignee: Lauren DiCristofaro

Reporter: Jonathan LaDeau

Votes: [1](#) Vote for this issue

Watchers: [3](#) Stop watching this issue

Dates

Created: 5 days ago

Updated: 5 days ago

Description

Search Save as Share Export Tools

labels = KnownBug4.0.3 ORDER BY created DESC Search Basic Filter

Order by Created Order

- [CYPRESS-1741](#) Cypress Validation Utility s...
- [CYPRESS-1724](#) Error while uploading QRD...
- [CYPRESS-1716](#) fulfills entry extension look...
- [CYPRESS-1708](#) PC-01 does not show outc...
- [CYPRESS-1687](#) Measure Validation engine...

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Watchers:

Recent Issue

4.0.3 Known Issues

- [CYPRESS-1708](#): Uniqueness of elements determined based on uniqueness of extension rather than extension and root together
 - `<id extension="ABCD" root="12345" />`
 - `<id extension="ABCD" root="678910" />`
- [CYPRESS-1724](#): Cypress requires a low value in a range (does not import/perform validations on a time range without low values)
 - `<low nullflavour=UNK>`
- [CYPRESS-1741](#): Cypress does not calculate against decimal values correctly, imports decimal values as integers
 - May cause calculation issues for measures with value comparisons such as CMS108

Is In Low Risk for VTE or On Anticoagulant

```
( ["Assessment, Performed": "Risk for venous thromboembolism"] VTERiskAssessment
  where VTERiskAssessment.result in "Low Risk"
)
union ( ["Laboratory Test, Performed": "INR"] INRLabTest
  where INRLabTest.result > 3.0
  return "Assessment, Performed" { id: INRLabTest.id, authorDatetime: INRLabTest.resultDatetime }
)
union ( ( ["Medication, Administered": "Unfractionated Heparin"] UnfractionatedHeparin
  where UnfractionatedHeparin.route in "Intravenous route"
```

- **Workaround:**
 - All of these issues are not part of Cypress provided test files, but may come up when using vendor-created files
 - Use unique extensions, defined low values, and integer measurement values
 - Search with [labels = KnownBug4.0.3](#) to find relevant bugs

Cypress Versions

Version	Dates	Measures Supported
V4.0.2	January 31, 2019	Supports eQMs for the 2019 Reporting/Performance Period. Fixes for bugs in v4.0.1.
V4.0.3	May 2, 2019	Latest version supporting eQMs for the 2019 Reporting/Performance Period and CQL. Fixes record sample and other 4.0.2 bugs.
V5.0.0-beta	June 20, 2019	Beta version supporting eQMs for the 2020 Reporting/Performance Period and CQL.

Bundle Version	Dates	Features
2018.1.0	October 11, 2018	Cypress v4 only CQL-based measures released in 2018 for the 2019 reporting year eCQM Value Sets as of 9/17/2018.
Cypress 5.0.0 Beta Bundle	June 20, 2019	Cypress v5 only Beta version of CQL-based measures released in 2019 for the 2020 reporting year eCQM Value Sets as of 5/10/2019.

OPEN DISCUSSION

Next Cypress Tech Talk

- Tuesday, July 16, 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>