

Cypress™

Cypress Tech Talk

June 4, 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
 - Bring Your Own Patient Feature
 - Multi-measure Feature
 - 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

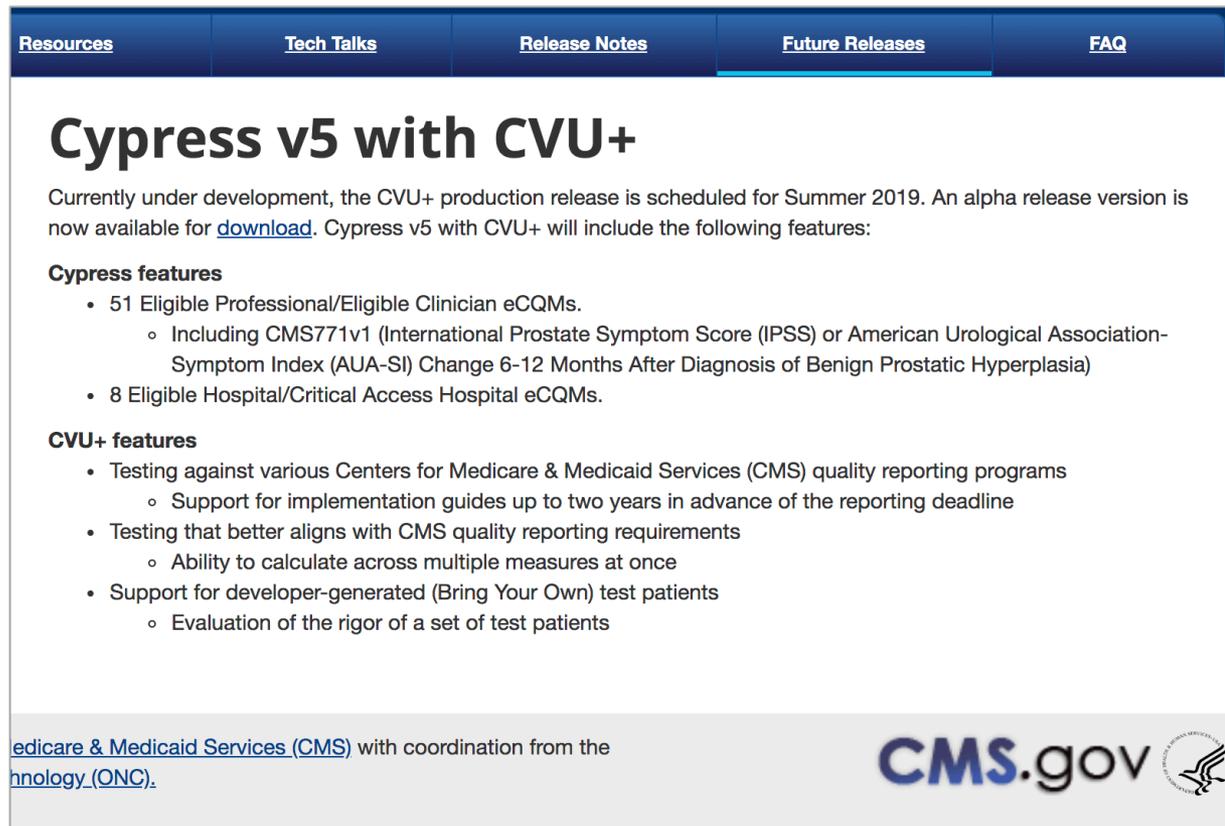
- **Cypress v5 Beta**
 - June 20, 2019
 - Available as a VM download
 - Will be deployed to demo server: cypress.healthit.gov

- **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 version available for download. It lists features for both Cypress and CVU+.

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+ Feature – Bring Your Own Patients

- **Enhanced verification of a Health IT system's eCQM calculations**
 - Using a combination of Cypress-defined patients and “bring your own” (BYO) patients
- **QRDA (Quality Reporting Document Architecture) patient upload**
 - Feature demoed during 3/12/19 Tech Talk
 - A user can upload BYO patient files, specific to a vendor
 - This will allow them to make CVU+ products with those patients
 - CVU+ products allow for more extensive testing

Software Update

CVU+ Feature – BYO Patients Upload Demo

Dashboard Vendor: My Vendor Patient List > Add Patient

Import Patients

Add Patients

Choose File good_patient...oad.xml.zip

Import Patients Cancel

Dashboard Vendor: My Vendor Patient List

i Imported 1 patient ×

Patient List + Import Patients

All Patients

Patient Name	DOB	Gender
John Doe	May 11, 1985	Male

Software Update

CVU+ Feature – Multi-measure Tests

- **Testing that better aligns with CMS quality reporting requirements**
 - Ability to calculate across multiple measures at once
- **Multi-measure Test Creation**
 - Feature demoed during 3/26/19 Tech Talk
 - A user can create a CVU+ tests for their product
 - A user can select which patients they want to draw from for test creation
 - Upon creation, CVU+ tests will include a multi-measure test for all Eligible Hospital (EH) measures and a multi-measure test for all Eligible Professional (EP)/Eligible Clinician (EC) measures selected
 - EH tests will test QRDA Category I reports against CMS guidelines
 - EP/EC tests will test QRDA Category III reports against CMS guidelines

Software Update

CVU+ Feature – Multi-measure Test Creation

Add Product

Name

Version

Description

Product Types

- Certification Product
- CVU+ Product

Records Options

- Randomize Records
- Duplicate Records

Recommended for most robust testing.

Patient Bundle

- 2020 Alternative Minimal Bundle for QDM 5.4 2020.0.0.1
- Minimal Bundle for QDM 5.4 2019.0.0.1

Select the measure versions Cypress should use to certify this product.

Include bundle patients

Include vendor patients

Choose patient sets to include in product

Shift Records

Selecting Shift Records will move patient data forward into the appropriate reporting period. Otherwise patient data will remain in a previously completed calendar year.

Measures Options

- Eligible Hospital eCQMs
- Eligible Professional eCQMs
- All eCQMs
- Custom...

Indicate the clinical quality measures Cypress should use to certify this product. Testing will be performed on a measure-by-measure basis. Click 'Custom' to specify individual measures.

Add Product

cypress 5.0.x

Dashboard Vendor: Demo Product: CVU+ Test

Dashboard Edit Product Download Report

CVU+ Test

EP Measure Test EH Measure Test

Passing Tests
 Failing Tests
 Not started Tests

Download Full Test Deck

This download contains a folder for each measure selected for this product. Inside these folders are XML documents for each patient associated with that measure.

MultiMeasureTest

Test Name	Measures	Quick Upload	Last Updated
EH Measures	CMS32v8, CMS55v7, CMS111v7	<input type="button" value="upload"/>	🕒 Wednesday at 4:28pm
EP Measures	CMS2v8, CMS66v8, CMS136v8	<input type="button" value="upload"/>	🕒 Wednesday at 4:28pm

Software Update **CVU+ Demo**

Software Update

Other Recent Updates

■ **May 2, 2019 Updates**

- Cypress Validation Utility (CVU) Update
 - Calculations for CQL Measures (2019 Reporting Period)
- 2017 Bundle Retirement
 - Coinciding with the Closing of the Submission Window for the 2018 Reporting Period
- 4.0.3 Patch Release
 - Record Sample Issue Fixes
 - Address “KnownBug4.0.2” Jira Issues

Software Update

4.0.3 Patch Release

- Cypress returning 500 error when trying to view Record Sample Test for CMS105 and CMS145. ([CYPRESS-1672](#), [CYPRESS-1654](#)), [CYPRESS-1629](#))
- "C1 Execution: An internal error occurred" for "Substance, Administered" template in Record Sample Test. ([CYPRESS-1627](#))
- CMS 249v1 exhibited inconsistent calculation for "3 N GP Adult" Patient ([CYPRESS-1624](#))
- Immunization, administered not complete for Record Sample test. ([CYPRESS-1619](#))
- Cypress was including two (unique) patients with the same name in a single test deck. ([CYPRESS-1593](#)), ([CYPRESS-1300](#))
- Cypress was not exporting any test patients with negation of an entire valueset. ([CYPRESS-1653](#))
- Result Template using incorrect templateId extension. ([CYPRESS-1634](#))
- Reason Template using incorrect templateId extension. ([CYPRESS-1611](#))
- Reason Template was not being exported with patient in CMS129. ([CYPRESS-1612](#))

Recent Issue

Bugs in 4.0.2 (Fixed for 4.0.3)

CYPRESS Issue Tracker / CYPRESS-1619

Immunization, administered not complete for Record Sample test

Export

Details

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

Priority: **Moderate** Resolution: Unresolved

Labels: [KnownBug4.0.2](#) [RecordSampleBug](#)

Description

Duplication of issue on [google group](#) for tracking purposes.

Record Sample test for CMS 12/v7 may include an Immunization, Administered data criteria. When this is correctly put into a file with the correct code and time recorded, it does not pass. Cypress is looking for an authorDatetime in an element for which there is no authorDatetime. There **shouldn't** be an authorDatetime because as the implementation guide indicates, the effectiveTime element is used for that the authorDatetime element in question.

People

Assignee: Lauren DiCristofaro

Reporter: Lauren DiCristofaro

Votes: **0** Vote for this issue

Watchers: **1** Start watching this issue

Dates

Created: 02/11/19 9:35 AM

Search Save as Share Export

labels = KnownBug4.0.2 Search

Order by

- CYPRESS-1654 I created a test deck for a ...
- CYPRESS-1653 Negation template getting ...
- CYPRESS-1634 For all result attributes are...
- CYPRESS-1629 500 Server Error when loa...**
- CYPRESS-1627 "C1 Execution: An internal ...
- CYPRESS-1624

CYPRESS Issue Tracker / CYPRESS-1629

500 Server Error when loading C1 Sample including STK-6

Edit Comment Assign More Open In Progress (2) Workflow

Details

Type: Bug/Issue Status: **IN PROGRESS** (View Workflow)

Priority: **Moderate** Resolution: Unresolved

Labels: [KnownBug4.0.2](#) [RecordSampleBug](#)

Impact: Unable to open C1 Sample for CMS 105 (STK-6)

Description

In a local install of Cypress v4.0.2, I am encountering a 500 error when opening a c1 Sample test for CMS105v7. I can create the Product successfully and access c1+c3 and c2+c3 tests. I only get the 500 error when clicking any of the c1

People

Assignee:

Reporter:

Votes:

Watchers:

Dates

Cypress Versions

Version	Dates	Measures Supported
V4.0.2	January 31, 2019	Supports eCQMs for the 2019 Reporting/Performance Period. Fixes for bugs in v4.0.1.
V4.0.3	May 2, 2019	Latest version supporting eCQMs for the 2019 Reporting/Performance Period and CQL. Fixes record sample and other 4.0.2 bugs.

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.

OPEN DISCUSSION

Next Cypress Tech Talk

- Tuesday, June 18, 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>