

# Cypress™

## Cypress Tech Talk

June 2, 2020



**MITRE**

The Office of the National Coordinator for  
Health Information Technology



# Agenda

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- Software Updates
  - Cypress v5.4.0 Cures Patch Release
    - Cypress v5.4.1
  - Cypress v6 Releases
  - Cypress 6 and Cures Features Demo
- 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 v5.4.0 Cures Patch Release

- **A Cypress v5.4.0 patch release was on May 14, 2020**
- **Cures Features**
  - Live demo on today's Cypress Tech Talk
  - Updates for the 21<sup>st</sup> Century Cures Interoperability Rule
  - CMS Implementation Guide (IG) used to validate QRDA structure, including v1.2 QRDA-I updates from 3/13/2020
  - QRDA-I C3 validation only for EH measures; QRDA-III C3 validation only for EP/EC
- **De-duplication Features**
  - De-duplication updated to add more realism
  - Addresses are randomized, but the same address is used for duplicate patients
  - Birthdate changes in duplicate patients are rare and limited to changes in the day of the month
- **CVU+ Tests**
  - Provide HL7-only tests for full coverage of previous CVU features

# Cypress v5.4.1 2015 Edition Options

- **As packaged, Cypress 5.4.0 is Cure Edition only**
  - Currently 5.3.0 is currently required to test for original 2015 Edition
- **Cypress v5.4.1 will give both options**
  - 2015 Edition, and
  - 2015 Edition Cures Update
- **Cypress v5.4.1 planned**
  - Anticipated June 4<sup>th</sup>, 2020

**Add Product**

Name

Version

Description

**Product Types**

☒ Certification Product

☐ CVU+ Product

**Certification Edition**

☒ 2015 Edition

☐ 2015 Edition Cures Update

Select the certification edition.

**Certification Types**

☐ C1 Test

☐ C2 Test

☐ C3 Test

☐ C4 Test

Select the certification type Cypress should use to certify this product

**Records Options**

☒ Randomize Records

☐ Duplicate Records

Recommended for most robust testing.

**Bundle Options**

☒ Alpha bundle for the 2020 Reporting/Performance period 2020.0.0

Select the measure versions Cypress should use to certify this 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

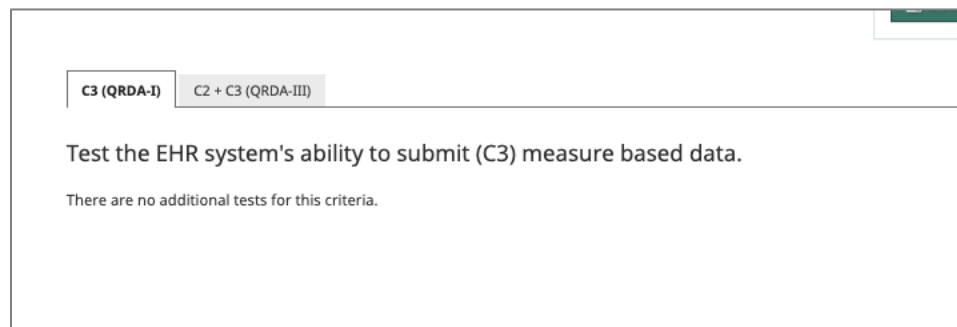
☐ Custom...

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.

## Software Updates

# Cures Features

- **ONC Interoperability Rule released on March 9, 2020 to support the 21<sup>st</sup> Century Cures Act**
- **Cypress updates for C3 certification and schematron validation**
  - CMS IG is used for validation and shows errors for CMS IG validation issues
  - Uses latest CMS schematron, updated on March 13, 2020
  - QRDA-I C3 validation only required for EH measures
  - QRDA-III C3 validation only required for EP/EC measures
  - Example, EP/EC measure with C3 certification will have no QRDA-I tests:



# Software Updates

## De-duplication Features

### ■ Address Changes

- Previously, Cypress created all patients with the same address
- Cypress update creates patients with different addresses, where addresses will not be changed when duplicating patients

### ■ Birthdate Changes

- Previously, birthdate was often changed in duplicate patients to a random date in a range from the original patient birthdate
- Updates make birthdate changes less common
- Birthdate changes only update the \*day\* while keeping the month and year the same

```

▼<recordTarget>
  ▼<patientRole>
    <id extension="5e9bfd19dfe4bd03bdf0fecf" root="1.3.6.1.4.1.115"/>
    ▼<addr use="HP">
      <streetAddressLine>202 Burlington Rd.</streetAddressLine>
      <city>Bedford</city>
      <state>MA</state>
      <postalCode>01730</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1-781-271-3000"/>
  </patient>

```



```

▼<recordTarget>
  ▼<patientRole>
    <id extension="5e9bfd19dfe4bd03bdf0fecf" root="1.3.6.1.4.1.115"/>
    ▼<addr use="HP">
      <streetAddressLine>7478 Riverview Lane</streetAddressLine>
      <city>Massapequa</city>
      <state>NY</state>
      <postalCode>11758</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1-202-555-0165"/>
  </patient>

```

## Software Updates

# CVU+ HL7 Tests

- **HL7-only tests provided as CVU+ functionality**
  - Previously, the Cypress Validation Utility provided simple validation with the HL7 schematron
  - Users have expressed continued interest in HL7 validation
  - HL7 Cat I and HL7 Cat III tests are both provided as options in CVU+

MultiMeasureTest

CMSProgramTest

Test Name	Quick Upload	Last Updated
MIPS_GROUP Test	<div><div></div>start</div> <div>upload</div>	🕒 6 minutes ago
MIPS_INDIV Test	<div><div></div>start</div> <div>upload</div>	🕒 6 minutes ago
MIPS_VIRTUALGROUP Test	<div><div></div>start</div> <div>upload</div>	🕒 6 minutes ago
CPCPLUS Test	<div><div></div>start</div> <div>upload</div>	🕒 6 minutes ago
HL7 Cat I Test	<div><div></div>retry</div> <div>upload</div>	🕒 4 minutes ago
HL7 Cat III Test	<div><div></div>start</div> <div>upload</div>	🕒 6 minutes ago

## *Software Updates*

# Cypress v6 Releases

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- **Cypress v6 Alpha release May 21, 2020**
  - HL7 QRDA category 1 R5.2
  - 2021 CMS QRDA Implementation Guide for Hospital Quality Reporting
  - Initial support for 2021 reporting/performance period eCQMs
    - 9 EH/CAH eCQMs
    - 47 EP/EC eCQMs
    - 1 Hybrid eCQM (CMS529)
- **Final Cypress v6 release anticipated late July 2020**



# Cypress 6 and Cures Features Demo

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- **Demo**

## Recent Issue

# Cypress Known Issues Dashboard

- <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			
<p>Cypress Known Issues</p> <p>Below are tables that list known issues for the most recent Cypress Versions</p> <p>Release Notes for Cypress Versions can be found <a href="#">here</a></p>			
Filter Results: Cypress Known Bugs 5.2.0			
Summary	2020 Performance Period EP/EC eCQMs	2020 Reporting Period EH eCQMs	Solution
CMS 145 Denominator Issue			...
QRDA III giving C3 Execution: An internal error occurred			
QRDA-I Validation Error			
1-3 of 3			

# Cypress Versions

Version	Dates	Measures Supported
<b>V5.3.0</b>	<b>March 12, 2020</b>	Latest version supporting eCQMs for the 2020 Reporting/Performance Period and CQL. Contains feature improvements and fixes for bugs found in Cypress v5.2.0.
<b>V5.4.0</b>	<b>May 14, 2020</b>	Support for certification changes due to regulation updates in the Cures Interoperability Rule. Adds more de-duplication realism.
<b>V6 Alpha</b>	<b>May 21, 2020</b>	Initial support for QRDA category 1 R5.2 and 2021 reporting/performance period eCQMs.
<b><i>V5.4.1</i></b>	<b><i>Anticipated June 4, 2020</i></b>	Support for 2015 Certification Edition OR 2015 Certification Cures Updated Edition

Bundle Version	Dates	Features
<b>2019.1.1</b>	<b>December 19, 2019</b>	<b>Cypress v5 only</b> CQL-based measures released in 2019 for the 2020 reporting year. Removed retired measures as announced on November 19, 2019.

\*Cypress v4 and the 2018 bundle are moving into retirement due to the end of the 2019 reporting period.

Reporting end dates: April 30 for EP (source: [QPP](#)). May 1st for EH (source: [QualityNet](#)).

# OPEN DISCUSSION

# Next Cypress Tech Talk

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- Tuesday, June 16, 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

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- **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](mailto:project-cypress-talk@googlegroups.com)
- **Report bugs and issues to the Cypress JIRA at**
  - <https://oncprojecttracking.healthit.gov/support/browse/CYPRESS>

# Glossary

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- **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**