Cypress™
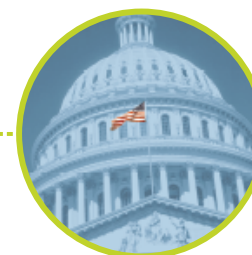
Cypress Tech Talk

February 12, 2019

MITRE

The Office of the National Coordinator for
Health Information Technology

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

Agenda

- Software Updates
  - Overview bugs addressed in 4.0.2 patch release
- Recent Issues
  - CYPRESS-1611: Reason template extension
  - CYPRESS-1612: Diagnostic Study, Performed reason export
  - CYPRESS-1619: Immunization, Administered authorDatetime in Record Sample
- Cypress Versions
- Open Discussion
- Contact Information

Software Updates
Bugs addressed in 4.0.2 patch release

- An "Assessment, Performed" Result should not be reported in a nested Result Template. (CYPRESS-1498, CYPRESS-1544)

- 'Randomized' patient birthdate can cause calculation errors. (CYPRESS-1503)

- Confusing display of Direct Reference Codes in "C4 Filter Tests." (CYPRESS-1533)

- Use updated 'Related To' template instead of 'Fulfills' for C1 Record Sample test. (CYPRESS-1537)

- Strictly enforce the existence of a code-negation pair within the same entry for C1 Record Sample verification. (CYPRESS-1538)

- Do not export patients using the 'Other' code 2131-1. (CYPRESS-1539)

- An id not required in the Encounter Performed Act template in QRDA Category I R5. (CYPRESS-1541)

Software Updates
Bugs addressed in 4.0.2 patch release

Recent Issue
CYPRESS-1611: Reason template extension

- **Precondition:**
  - A Cypress 4.x instance
  - Measure with Reason
    - ex: CMS147v8
- **Issue:**
  - The Reason template uses an outdated extension
  - "2014-12-01" extension should be "2017-08-01"
- **Workaround:**
  - All other components of template are in line with the implementation guide
  - Read template as otherwise expected

Was:

```
▼<entryRelationship typeCode="RSON">
  ▼<observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.24.3.88" extension="2014-12-01"/>
    <id root="1.3.6.1.4.1.115" extension="fb5ae700-053a-0137-9fbb-0e95690c4dba"/>
    <code code="77301-0" codeSystem="2.16.840.1.113883.6.1" displayName="reason" codeSystemName="LOINC"/>
    <statusCode code="completed"/>
    <value code="105480006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" xsi:type="CD"/>
  </observation>
</entryRelationship>
```

Implementation Guide:

3. **SHALL** contain exactly one [1..1] **templateId** (CONF:3343-11359) such that it

   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.24.3.88" (CONF:3343-11360).

   b. **SHALL** contain exactly one [1..1] **@extension**="2017-08-01" (CONF:3343-27027).

Should Be:

```
▼<entryRelationship typeCode="RSON">
  ▼<observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.24.3.88" extension="2017-08-01"/>
    <id root="1.3.6.1.4.1.115" extension="fb5ae700-053a-0137-9fbb-0e95690c4dba"/>
    <code code="77301-0" codeSystem="2.16.840.1.113883.6.1" displayName="reason" codeSystemName="LOINC"/>
    <statusCode code="completed"/>
    <value code="105480006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" xsi:type="CD"/>
  </observation>
</entryRelationship>
```

Recent Issue
CYPRESS-1612: Diagnostic Study, Performed reason export

- **Precondition:**
  - A Cypress 4.x instance
  - Measures with "Diagnostic Study, Performed"
    - Ex: CMS129v8
  - Patient with "Reason"
    - Ex: ONE CANCER MALE template
- **Issue:**
  - Cypress does not export the reason code shown in the html
  - Reason does not show up in the corresponding QRDA template
- **Workaround:**
  - Does not impact calculation because of other population-impacting patient criteria
  - Because reason is not necessary for correct population, it may be ignored in the html patient document

Diagnostic Study Performed HTML:

Exported QRDA (missing reason):

Recent Issue
CYPRESS-1619: Immunization, Administered authorDatetime in Record Sample

- **Precondition:**
  - A Cypress 4.x instance
  - Measures with "Immunization, Administered"
    - Uses "authorDatetime" attribute
    - Ex: CMS127v7
  - Record Sample Test with Immunization, Administered data criteria selected
- **Issue:**
  - Cypress is looking for an authorDatetime in an element for which there is no authorDatetime
  - Implementation guide indicates effectiveTime element is used for that the authorDatetime (Cypress looking for wrong attribute)
- **Workaround:**
  - Only necessary if Record Sample Test is generated with a "Immunization, Administered" and authorDatetime attribute
  - That data criteria may be swapped out for any other available data criteria option
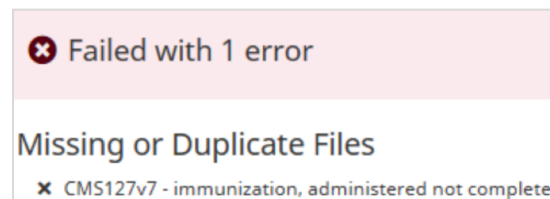 - May reach out to ATL to edit the test and swap this criteria

Immunization, Administered Criteria:

Proper Immunization, Administered:

```
▼<entry>
  ▼<substanceAdministration classCode="SBADM" moodCode="EVN">
    <!--  Immunization Activity template  -->
    <templateId root="2.16.840.1.113883.10.20.22.4.52" extension="2014-06-09"/>
    <!--  Immunization, Administered template  -->
    <templateId root="2.16.840.1.113883.10.20.24.3.140" extension="2017-08-01"/>
    <id root="1.3.6.1.4.1.115" extension="5be052db63623903f95940ea"/>
    <code code="416118004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Administration"/>
    <statusCode code="completed"/>
    <effectiveTime value="20170201160000"/>
    <doseQuantity value="1" unit="{dose(s)}"/>
    ▼<consumable>
      ▼<manufacturedProduct classCode="MANU">
        <!--  Immunization Information (consolidation) template  -->
        <templateId root="2.16.840.1.113883.10.20.22.4.54" extension="2014-06-09"/>
        <id root="8aedd8e0-0dd3-0137-0cde-080027cf1095"/>
        ▼<manufacturedMaterial>
          <code code="33" codeSystem="2.16.840.1.113883.12.292" codeSystemName="CVX"/>
          <lotNumberText>1</lotNumberText>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
  </substanceAdministration>
</entry>
```

Cypress Fail Results:

Cypress Versions

Version	Dates	Measures Supported
V 3.2.3	December 14, 2017	Support for the eCQMs for the 2018 Reporting/Performance Period ***will be supported alongside Cypress v4**
V4.0.1	**October 11, 2018**	Support for the eCQMs for the 2019 Reporting/Performance Period Support for Clinical Quality Language (CQL) calculation
V4.0.2	*January 31, 2019*	

Bundle Version	Dates	Features
2017.0.3	April 24, 2018	**Cypress v3 only** "Z1 BH Adult" updated for CMS128v6
2017.0.4	September 25, 2018	**Cypress v3 only** Errata update to fix 'Download All Patients' feature when 2017.0.3 and 2017.0.2 are installed simultaneously
2018.0.1	July 26, 2018	**Cypress v4 only** CQL-based measures released in 2018 for the 2019 reporting year eCQM Value Sets as of 5/4/2018.
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.

HIMSS 2019 Conference Sessions

- We invite those attending the Health Information and Management Systems Society (HIMSS) Conference in Orlando, FL, to join us:

Cypress Office Hours by Appointment			FHIR's Impact on eCQM Development and Testing	Balancing Value & Burden: CMS Electronic Quality Reporting	Collaborative Measure Development Workspace Feedback Session
2/12/19	2/13/19	2/14/19	2/13/19	2/14/19	2/14/19
1-2:30pm ET	12-1:30pm ET	1-3pm ET	10-11am ET	8:30-9:30am ET	11am-12pm ET
Booth 701	Booth 701	Booth 701	W310A MITRE Government Relations Room	W307A	W310A MITRE Government Relations Room

OPEN DISCUSSION

Next Cypress Tech Talk

- Tuesday, February 26, 2019 at 1pm ET
- To join online, visit: https://meetings.cms.gov/orion/joinmeeting.do?MTID=98271705d4bcc4ad148cf1e39d5c7408
- 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 Timeline 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://oncprojectracking.healthit.gov/support/browse/CYPRESS