Cures Update Test Data for 170.315 (g)(9) API Access
Ambulatory Setting

**I.      INTRODUCTION**

This document contains sample test data that can be used for the certification towards Cures
Update objective 170.315(g)(9). This section of the Code of Federal Regulations Title 45
documents the required Health IT technology to be able to create, send and receive a summary
care record formatted according to the Consolidated CDA (C-CDA) Release 2.1 and be able to
receive a summary care record formatted according to the C-CDA Release 1.1.

A) Test of 45 CFR 170.315 (g)(9)

The following is the summary of test data presented herein for 170.315(g)(9) criteria.

**Conventions used in the document:**

1. The test data outlined below has both required and optional data that is specified to help the
   vendors create C-CDA's with the appropriate context and follow the HL7 C-CDA best practices.
   The optional data is indicated by enclosing them in [ ]. For e.g. [Medical Record Custodian] or
   [Allergy Substance].

   a. When a narrative or text block is surrounded by [ ] the entire narrative block is optional.
   b. When a column heading is surrounded by [ ] the data represented by the column is
      optional. For e.g. [ Allergy Substance ], the display name is optional.
   c. When the data within a table cell is surrounded by [ ] the data within the cell is optional.
      For e.g. The information recipient Dr Albert Davis is optional from a certification
      standpoint. Vendors can include it in their C-CDA's to comply with HL7 C-CDA IG and
      best practices.

   | [ Information Recipient ] | [ Dr Albert Davis ] |
   | --- | --- |

   d. The C-CDA IG allows display names and text elements to be optionally included in the
      structured entries. Hence the above optional markings designated by [ ] in the test data
      are with respect to the structured entries in the XML. If a certification criteria requires
      visual display of the structured data (for e.g View, Download and Transmit - VDT), then
      the vendors have to display the coded data elements in their English representation. For
      example Medication Name, Problem Name, Vital Sign Name which are English
      representations of the coded data have to be displayed for the VDT criteria even though
      they are marked optional in the test data.

2. Additional clarifications are added with the keyword "**Note**".
3. Data that needs to be visually inspected by the ATL's in the generated C-CDA's are indicated by
   the key word "**Visual Inspection".**

4. Guidance for No Information Sections: When the test data instructions specify "No Information" for certain data elements, vendors are expected to use the HL7 recommended best practices to represent the information. However vendors don't have to include sections and entries not required by the document template to represent "No information".

5. Guidance to Change Test Data: Vendors can work with their ATLs to change the test data specified below. ATLs have been provided a document on how to use the test tools to verify SUT's capabilities when the test data is changed. This document has also been posted as part of ETT Google Group thread: https://groups.google.com/forum/#!topic/edge-test-tool/fDYr_kqp9_g

To exemplify 170.315 (g)(9), the following clinical scenario will be employed.

**Document Narrative:**
[ Ms. Happy Kid is a two year old girl with a Hypo Plastic Left Heart Syndrome visits Neighborhood Physicians Practice on 6/22/2020 at 10am EST. The patient disclosed history of nausea, loose stools and weakness. After initial examination the patient was found to have fever, she was administered necessary medications and after examining the history of the patient and the lab results, the doctor suspected anemia. So the patient was referred to Community Health Hospitals an Inpatient facility to get appropriate treatment and was asked to watch for appropriate changes in body temperature, blood pressure and take nebulizer treatment as needed. ]

**Note**: The test data provided in the document was captured during this encounter including historical data. The contextual data provided is to help the vendors create their C-CDA documents using appropriate data. Vendors can ignore the contextual data if it is not required for C-CDA generation; however the generated C-CDA is expected to contain the data relevant to the criteria as specified in the regulation.

## II. HEADER DATA

**Note**: The following data is part of the medical record header identifying the contextual information necessary when exchanging data.

A) Patient Demographics

| USCDI Data Elements | Contextual Data Elements required for the Medical Record encoding to C-CDA IG | Details | Additional Information |
|---|---|---|---|
| Patient Name | | First Name: Happy<br>Last Name: Kid<br>Middle Name: Always<br>Previous Name: N/A | |
| Sex | | Female (F) | |
| Date of Birth | | 6/1/2018 | |
| Race | | White (2106-3) | |

| USCDI Data Elements | Contextual Data Elements required for the Medical Record encoding to C-CDA IG | Details | Additional Information |
|---|---|---|---|
| More Granular Race Code | | 2108-9(White European) | |
| Ethnicity | | Not Hispanic or Latino (2186-5) | |
| Preferred Language | | English (en) | |
| Current Address | Home Address | 1357, Amber Dr, Beaverton, OR-97006 | |
| Previous Address | Previous Home Address | 1402 Dariy Dr, Beaverton, OR-97006 | |
| Phone Number | | Mobile: 555-777-1234 Home: 555-723-1544 | |
| Email Address | | happykid@gmail.com | |

B) Relevant Information regarding the Visit

**Note:** The information in this table is provided for context and to help populate the required elements in the C-CDA Header along with any USCDI data elements.

| USCDI Data Elements | Contextual Data Elements required for medical record encoding to C-CDA | Details | Additional Information |
|---|---|---|---|
| Referring or Transitioning Providers Name | | Full Name: Dr Albert Davis First Name: Albert Last Name: Davis | |
| Office Contact Information | | Full Name: Tracy Davis First Name: Tracy Last Name: Davis Telephone: 555-555-1002 Address: 2472, Rocky place, Beaverton, OR-97006 | |

| USCDI Data Elements | Contextual Data Elements required for medical record encoding to C-CDA | Details | Additional Information |
|---|---|---|---|
| | [ Author/Legal Authenticator/Authenticator of Electronic Medical Record ] | [ Author Name, Dr Albert Davis Autor Timestamp: 6/22/2020, Author Organization: Neighborhood Physicians Practice] | |
| | [ System that generated the document ] | [ Neighborhood Physicians Practice EMR ] | |
| | [ Informants ] | [ Matthew Newman (Father) First Name: Matthew Last Name: Newman ] | |
| | [ Medical Record Custodian ] | [ Neighborhood Physicians Practice ] | |
| | [ Information Recipient ] | [ Dr Albert Davis ] | |
| | [ Visit Date ] | [ 6/22/2020 ] | |
| Care Team Members | Care Team Members | Dr Albert Davis, PCP, PCP Since: 6/1/2020 | |
| | [ Other Participants in event ] | [ Mr Rick Holler (Grand Parent) First Name: Rick Last Name: Holler Mr Matthew Newman (Father) First Name: Matthew Last Name: Newman (Mr Rick and Mr Matthew have the same address as Ms Happy) ] | |
| | [ Event Documentation Details or Documentation of Event ] | [ Dr Albert Davis 30 minute encounter Event Code = Fever ] | [ Code for Fever Finding: 386661006 , Code System: SNOMED-CT ] |

III.     BODY DATA

**Note**: The following data is part of the medical record details identifying the relevant clinical data captured as part of the visit.

A) Provenance Information

The following is the Provenance information that needs to be captured for each of the USCDI Data classes and elements represented by appropriate CCDA Entry templates created using the test data provided in this document.

| USCDI Data Elements | Contextual Data Elements required for medical record encoding to C-CDA | Details | Additional Information |
|---|---|---|---|
| [Author Name] | | [Full Name: Dr Albert Davis]<br>[First Name: Albert]<br>[Last Name: Davis] | |
| Author Organization | | Neighborhood Physicians Practice | |
| Author Timestamp | | 6/22/2020 11:00am ET | |

**Note**: If the provenance timestamp time value cannot be generated please work with your ATL to change the timestamp and demonstrate that an appropriate timestamp is being populated in the provenance template following the guidance to change test data described earlier in the document.

B) Medication Allergies

**Note**: Medication Allergies are to be represented using the Allergies and Intolerances Section. The Start Date is to be represented using the effectiveTime data element of Allergy Intolerance Observation as biologically relevant time.

| Code | CodeSystem | [ Allergy Substance ] | Reaction | Severity | [Timing Information] | Concern Status |
|---|---|---|---|---|---|---|
| **1009148** | RxNorm | Ampicillin | Hives (code-247472004, SNOMED-CT) | Moderate | Start Date – 12/1/2019 | Active |
| 413639003 | SNOMED-CT | [Benzazepine] | Allergic Headache (code – 4448006, SNOMED-CT) | Mild | Start Date – 12/1/2019 | Active |

C) Medications

**Note**: Timing information (Start and End Dates) are to be represented using the effectiveTime data element in the Medication Activity entry.

| Code | CodeSystem | [Medication Name ] | [Timing Information] | Route | Frequency | Dose |
|---|---|---|---|---|---|---|
| 309090 (SCD) | RxNorm | Ceftriaxone 100 MG/ML | 6/22/2020 – Start Date 6/30/2020 – End Date | Injectable | Two times daily | 1 unit |
| 209459 (SBD) | RxNorm | Tylenol 500mg | For 10 days, starting from 6/22/2020 | Oral | As needed | 1 unit |
| 731241 (SBD) | RxNorm | Aranesp 0.5 MG/ML | 6/22/2020 – Start Date (No End Date) | Injectable | Once a week | 1 unit |

D) Problems

**Note**: Timing information is to be represented using the effectiveTime data element in the Problem Observation. Start Date is to be used as Onset Date and End Date as Resolution Date.

| Code | CodeSystem | [ Problem Name ] | [Timing Information] | Concern Status |
|---|---|---|---|---|
| 62067003 | SNOMED-CT | Hypo Plastic Left Heart Syndrome | Start Date 6/1/2018 | Active |

E) Immunizations

**No Information.**

F) Vital Signs

| Code | Code System | [ Vitals Name ] | Timing Information | Value and Units |
|---|---|---|---|---|
| 8462-4 (Diastolic) | LOINC | Blood Pressure-Diastolic | 6/22/2020, [ 10:08 EST ] | Value=88 units=mm[Hg] |
| 8480-6 (Systolic) | LOINC | Blood Pressure-Systolic | 6/22/2020, [ 10:08 EST ] | Value=145 units=mm[Hg] |
| 8867-4 | LOINC | Heart Rate | 6/22/2020 [ 10:10 EST ] | Value=80 Units=/min |
| 59408-5 | LOINC | O2 % BldC Oximetry | 6/22/2020 [ 10:12 EST ] | Value=95 units=% |
| 3150-0 | LOINC | Inhaled Oxygen Concentration | 6/22/2020 [10:12 EST] | Value=36 units=% |
| 8310-5 | LOINC | Body Temperature | 6/22/2020 [ 10:15 EST ] | Value=38 units=Cel |
| 9279-1 | LOINC | Respiratory Rate | 6/22/2020 [ 10:15 EST ] | Value=18 units=/min |

| Code | Code System | [ Vitals Name ] | Timing Information | Value and Units |
|------|-------------|-----------------|--------------------|-----------------|
| 8302-2 | LOINC | Height | 6/22/2020, [ 10:15 EST ] | Value=84 units=cm |
| 29463-7 | LOINC | Weight | 6/22/2020, [ 10:15 EST ] | Value=10.97 units=kg |
| **59576-9** | LOINC | BMI Percentile | 6/22/2020 [10:15 EST] | Value=50 units=% |
| **77606-2** | LOINC | Weight for Length Percentile | 6/22/2020 [10:15 EST] | Value=50 Units=% |
| **8289-1** | LOINC | Head Occipital-frontal Circumference Percentile **Note**: For the head occipital frontal circumference percentile of 25, the actual head circumference value would be 46.24 cm | 6/22/2020 [10:15 EST] | Value=25 Units=% |

G) Smoking Status and Tobacco Use

**No Information on Smoking Status and Tobacco Use.**

H) Procedures

**No Information.**

I) Laboratory Tests

**No Information**

J) Laboratory Values/Results

**No Information**

K) UDI:

**No Information**

L) Assessment and Plan of Treatment:
- a. **Assessment (Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
  - i. The patient was found to have fever and Dr Davis is suspecting Anemia based on the patient history. So Dr Davis asked the patient to closely monitor the temperature and blood pressure and get admitted to Community Health Hospitals if the fever does not subside within a day.

      b. **Plan of Treatment (Visual Inspection**– ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
- i. Get an EKG done on 6/23/2020.
- ii. Get a Chest X-ray done on 6/23/2020 showing the Lower Respiratory Tract Structure.
- iii. Take Clindamycin 300mg three times a day as needed if pain does not subside/
- iv. Schedule follow on visit with Neighborhood Physicians Practice on 7/1/2020.

M) Goals **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
- a. Get rid of intermittent fever that is occurring every few weeks.
- b. Need to gain more energy to do regular activities

N) HealthConcerns **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
- a. Chronic Sickness exhibited by patient
- b. HealthCare Concerns refer to underlying clinical facts
  - i. Documented HyperTension problem


O) Notes **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the text content**,** the validator will validate the presence of the notes section and entry. Only the text content needs to be visually inspected.)

## O.1 Consultation Note:

Dr Albert Davis diagnosed Ms Happy Kid to be suffering from Fever and suspected Pneumonia and recommended admission to the Community Health Hospitals. The note was captured on June 22nd 2020 at 11:00 am ET.