Cures Update Test Data for 170.315 (b) (1) Transitions of Care

In-patient setting

I.   INTRODUCTION

This document contains sample test data that can be used for the certification towards Cures Update objective 170.315(b)(1). 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 (b) (1)

The following is the summary of test data presented herein for 170.315(b)(1) 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 (b) (1), the following clinical scenario will be employed.

Document Narrative:

[Ms. Jennifer Garner is a two year old girl with a history of Hypertension, Iron deficiency and is a recipient of Renal Allograft is admitted on 6/22/2020 at 10 am EST to Community Health and Hospitals with history of intermittent fever for 2 days. The patient disclosed history of nausea, loose stools and weakness. She was found to have Anemia secondary to iron deficiency and CKD. After conducting multiple tests and administering necessary medications, the patient was discharged to Ambulatory facility to follow up with immunosuppression as an out-patient. The condition of the patient at discharge was stable, with controlled blood sugar levels and a pain score below 3. Additional follow up instructions have been provided to the patient.]

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) USCDI Data Class/Element: 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, Last Name, Previous Name, Middle Name, Suffix)		First Name: Jennifer Last Name: Garner Middle Name: Jane Previous Name: Suffix:	
Birth Sex		Female (F)	
Date of Birth		6/1/2018	
Race		White (2106-3)	
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		jennifergarner@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 Cures Update data elements.

USCDI Data Class/Elements	Contextual Data Elements required for medical record encoding to C-CDA	Details	Additional Information
	Providers Name	Dr Henry Seven First Name: Henry Last Name: Seven	[Dr Seven and his staff work for Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266]
	Office Contact Information	Mary McDonald First Name: Mary Last Name: McDonald Telephone: 555-555-1002	

USCDI Data Class/Elements	Contextual Data Elements required for medical record encoding to C-CDA	Details	Additional Information
	[Author/Legal Authenticator/Authenticator of Electronic Medical Record]	[Dr Henry Seven Date: 6/22/2020]	
	[System that generated the document]	[Community Health Hospitals EMR]	
	[Informants]	[Frank Garner (Father) First Name: Frank Last Name: Garner]	
	[Medical Record Custodian]	[Community Health and Hospitals]	
	[Information Recipient]	[Dr Henry Seven]	
	Admission Date	6/22/2020	
	Discharge Date	6/24/2020	
Care Team Members	Care Team Members	Dr Albert Davis, PCP, PCP Since: 6/1/2020	
	[Other Participants in event]	[Mr Robert Garner (Grand Parent) First Name: Robert Last Name: Garner Mr Frank Garner (Father) – Same Address information as Ms Jennifer Garner.]	
	[Event Documentation Details or Documentation of Event]	[Dr Henry Seven (PCP) 2 day encounter Event Code = Anemia]	[Code for Anemia Finding: **164139008** , 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) USCDI Data Class/Element: 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.

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USCDI Data Elements	Contextual Data Elements required for medical record encoding to C-CDA	Details	Additional Information
[Author Name]		[Full Name: Dr Henry Seven] [First Name: Henry] [Last Name: Seven]	
Author Organization		Community Health Hospitals	
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. All timestamps for provenance are expected to have time zone information.

B) USCDI Data Class/Element: Allergies and Intolerances

Note: Allergies and Intolerances 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
100914 8	RxNorm	[Ampicillin] **Note**: This is a substance of type medication.	Hives (code- 247472004 , SNOMED- CT)	Moderate	Start Date – 12/1/2019	Active
4136390 03	SNOMED-CT	[Benzazepin e] **Note**: This is a substance of type drug class.	Allergic Headache (code – 4448006, SNOMED- CT)	Mild	Start Date – 12/1/2019	Active

C) USCDI Data Class/Element: 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	StartDate: 6/22/2020, End Date 6/30/2020	Injectable	Two times daily	1 unit
209459 (SBD)	RxNorm	Tylenol 500mg	StartDate: 6/22/2020, End Date 7/01/2020	Oral	As needed	1 unit
731241 (SBD)	RxNorm	Aranesp 0.5 MG/ML	StartDate: 6/22/2020,	Injectable	Once a week	1 unit

    D)   USCDI Data Class/Element: 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]	Health concern status
59621000	SNOMED-CT	Essential hypertension (Disorder,)	6/10/2019 - Start Date	Active
87522002	SNOMED-CT	Iron deficiency anemia (disorder)	6/22/2020 – Start Date	Active
64667001	SNOMED-CT	Interstitial pneumonia (disorder)	6/22/2020 – Start Date	Active

    E)   Encounter Diagnoses

Note: Encounter Diagnoses can be represented by either SNOMED-CT or ICD-10. So SUT can choose either the ICD-10 code or the SNOMED-CT code as appropriate from the table below based on the CodeSystem supported.

Code	CodeSystem	[Description]	Start Date	[Service Delivery Location]
D63.1	ICD-10	Anemia in Chronic Kidney Disease	6/22/2020	Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266

F) USCDI Data Class/Element: Procedures

Note: Target Site is provided for context, vendors may or may not choose to include this as part of the C-CDA entries. Date is to be represented using the effectiveTime data element in the Procedure Activity Procedure entry.

Code	CodeSystem	[Procedure Name]	[Target Site]	[Date]	[Service Delivery Location]
10847001	SNOMED-CT	Bronchoscopy	91724006 (Tracheobronchial structure (body structure)	6/22/2020	Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266
168731009	SNOMED-CT	Chest X-Ray, PA and Lateral Views	82094008 (Lower Respiratory Tract Structure)	6/22/2020	Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266
175135009	SNOMED-CT	Introduction of cardiac pacemaker system via vein	9454009 – Structure of subclavian vein, Code System - SNOMED-CT	6/12/2019	Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266

G) USCDI Data Class/Element: Immunizations

No Information.

H) USCDI Data Class/Element: 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
8302-2	LOINC	Height	6/22/2020, [10:15 EST]	Value=85 units=cm
29463-7	LOINC	Weight	6/22/2020, [10:15 EST]	Value=12 units=kg
59576-9	LOINC	BMI Percentile	6/22/2020 [10:15 EST]	Value=56 units=%
77606-2	LOINC	Weight for Length Percentile	6/22/2020 [10:15 EST]	Value=51 Units=%
8289-1	LOINC	Head Occipital-frontal Circumference Percentile **Note**: For the head occipital frontal circumference percentile of 18, the actual head circumference value would be 46.24 cm	6/22/2020 [10:15 EST]	Value=18 Units=%

    I)   USCDI Data Class/Element: Laboratory Test

No Information

    J)   USCDI Data Class/Element: Laboratory Values/Results

No Information

    K) USCDI Data Class/Element: Smoking Status

No Information

    L) USCDI Data Class/Element: Unique Device Identifiers for a Patient's Implantable Device(s)

No Information

    M) USCDI Data Class/Element: 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 Anemia and Dr Seven and his staff diagnosed the condition and treated Ms Garner for Anemia during the 2 day stay at Community Health Hospitals. Ms Garner recovered from Anemia during the stay and is being discharged in a stable condition. If there is fever greater than 101.5 F or onset of chest pain/breathlessness the patient is advised to contact emergency.
        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. Schedule an appointment with Dr Seven after 1 week for Follow up with Outpatient facility for Immunosuppressive therapy.
    N) USCDI Data Class/Element: Goals: **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
        a. Need to gain more energy to do regular activities.(**Visual Inspection)**
        b. Negotiated Goal to keep Body Temperature at 98-99 degrees Fahrenheit with regular monitoring.
    O) USCDI Data Class/Element: HealthConcerns: **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
        a. Sickness exhibited by patient
        b. HealthCare Concerns refer to underlying clinical facts
            i. Documented HyperTension problem
            ii. Watch Weight of patient
            iii. Documented Anemia problem
    P) Discharge Instructions **(Visual Inspection** – ATL's need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**
        a. Diet: Low salt diet
        b. Medications: Take prescribed medications as advised.
        c. Appointments: Schedule an appointment with Dr Seven after 1 week. Follow up with Outpatient facility for Immunosuppression treatment.
        d. For Fever of > 101.5 F, or onset of chest pain/breathlessness contact Emergency.

    Q) Functional Status

No Information.

    R)   Cognitive Status

No Information

    S)   USCDI Data Class/Element: Clinical 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.)

S.1 Progress Note:

Dr Henry Seven after treating Ms Jennifer Garner has seen considerable progress in her health in the two days that she was admitted to the hospital. The note was captured on June 24th 2020 at 11am ET.

S.1 Discharge Summary Note:

Dr Henry Seven has successfully discharged Ms Jennifer Garner and has advised her to follow the diet recommendations. The patient was found to have Anemia and Dr Seven and his staff diagnosed the condition and treated Ms Garner for Anemia during the 2 day stay at Community Health Hospitals. Ms Garner recovered from Anemia during the stay and is being discharged in a stable condition. If there is fever greater than 101.5 F or onset of chest pain/breathlessness the patient is advised to contact emergency. The note was captured on June 24th 2020 at 11am ET.