

## 2015 S&CC Test Data for 170.315 (b) (4) – CCDS Create

### In-Patient Setting

#### **I. INTRODUCTION**

This document contains sample test data that can be used for the certification towards 2015 objective 170.315(b)(4). This section of the Code of Federal Regulations Title 45 documents the required Health IT technology to be able to create a summary care record formatted according to the Consolidated CDA (C-CDA) Release 2.1

##### A) Test of 45 CFR 170.315 (b) (4)

<Include text of 45 CFR 170.315 (b) (4) here for reference>

##### B) Summary of test data presented herein

To exemplify 170.315 (b) (4), the following clinical scenario will be employed.

#### **Document Narrative:**

Ms. Alice Newman is a 45 year old female with a history of Hypertension, Hypothyroidism, Iron deficiency and is a recipient of Renal Allograft is admitted on 6/22/2015 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.

#### **II. HEADER DATA**

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

##### A) Patient Demographics

| <b>CCDS Data Elements</b> | <b>Contextual Data Elements required for the Medical Record encoding to C-CDA IG</b> | <b>Details</b> | <b>Additional Information</b> |
|---------------------------|--------------------------------------------------------------------------------------|----------------|-------------------------------|
|                           |                                                                                      |                |                               |

| CCDS Data Elements      | Contextual Data Elements required for the Medical Record encoding to C-CDA IG | Details                                                                                          | Additional Information |
|-------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------|
| Patient Name            |                                                                               | First Name: Alice<br>Last Name: Newman<br>Middle Name: Jones<br>Previous Name: Alicia<br>Suffix: |                        |
| Sex                     |                                                                               | Female (F)                                                                                       |                        |
| Date of Birth           |                                                                               | 5/1/1970                                                                                         |                        |
| Race                    |                                                                               | White (2106-3)                                                                                   |                        |
| More Granular Race Code |                                                                               | 2108-9(White European)                                                                           |                        |
| Ethnicity               |                                                                               | Not Hispanic or Latino (2186-5)                                                                  |                        |
| Preferred Language      |                                                                               | English (eng)                                                                                    |                        |
|                         | Home Address                                                                  | 1357, Amber Dr,<br>Beaverton, OR-97006                                                           |                        |
|                         | Telephone Number                                                              | Mobile: 555-777-1234<br>Home: 555-723-1544                                                       |                        |

B) Relevant Information regarding the Visit

The information in this table is provided for context and to help populate the required elements in the C-CDA Header along with any 2015 S&CC data elements.

| CCDS Data Elements         | Contextual Data Elements required for medical record encoding to C-CDA | Details                                                                             | Additional Information                                                                                 |
|----------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Providers Name             |                                                                        | Dr Henry Seven<br>First Name: Henry<br>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<br>First Name: Mary<br>Last Name: McDonald<br>Telephone: 555-555-1002 |                                                                                                        |
|                            | Author/Legal Authenticator/Authenticator of Electronic Medical Record  | Dr Henry Seven<br><br>Time: 6/22/2015                                               |                                                                                                        |

| CCDS Data Elements | Contextual Data Elements required for medical record encoding to C-CDA | Details                                                                                                                                         | Additional Information                                             |
|--------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|                    | System that generated the document                                     | Community Health Hospitals EMR                                                                                                                  |                                                                    |
|                    | Informants                                                             | Frank Jones (Spouse)<br>First Name: Frank<br>Last Name: Jones                                                                                   |                                                                    |
|                    | Medical Record Custodian                                               | Community Health and Hospitals                                                                                                                  |                                                                    |
|                    | Information Recipient                                                  | Dr Henry Seven                                                                                                                                  |                                                                    |
|                    | Admission Date                                                         | 6/22/2015                                                                                                                                       |                                                                    |
|                    | Discharge Date                                                         | 6/24/2015                                                                                                                                       |                                                                    |
|                    | Care Team Members                                                      | Dr Henry Seven<br>Mary McDonald                                                                                                                 |                                                                    |
|                    | Other Participants in event                                            | Mr Ralph Issac (Grand Parent)<br>First Name: Ralph<br>Last Name: Issac<br>Mr Frank Jones(Spouse) – Same Address information as Ms Alice Newman. |                                                                    |
|                    | Event Documentation Details or Documentation of Event                  | Dr Henry Seven (PCP)<br>2 day encounter<br>Event Code = Anemia                                                                                  | Code for Anemia Finding: <b>164139008</b> , Code System: SNOMED-CT |

### III. BODY DATA

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

#### A) Medication Allergies

| Code | CodeSystem | Allergy Substance       | Reaction                          | Severity | Date/Time                                 | Concern Status | Notes |
|------|------------|-------------------------|-----------------------------------|----------|-------------------------------------------|----------------|-------|
| 7982 | RxNorm     | Penicillin G benzathine | Hives (code-247472004, SNOMED-CT) | Moderate | Start – 5/10/1980<br>End – Not applicable | Active         |       |

| Code  | CodeSystem | Allergy Substance         | Reaction                          | Severity | Date/Time                          | Concern Status | Notes                                     |
|-------|------------|---------------------------|-----------------------------------|----------|------------------------------------|----------------|-------------------------------------------|
| 81953 | RxNorm     | Ampicillin Sodium         | Hives (code-247472004, SNOMED-CT) | Moderate | Start – 5/10/1980<br>End - Unknown | Active         |                                           |
| 81982 | RxNorm     | Clindamycin Hydrochloride |                                   |          |                                    | Completed      | No Allergies to Clindamycin Hydrochloride |

B) Medications Administered during stay (These medications were administered during the stay at the hospital), End Dates for Medications is the same as the Encounter End Date.

| Code   | CodeSystem | Medication                  | Start Date | Route      | Frequency   | Dose      |
|--------|------------|-----------------------------|------------|------------|-------------|-----------|
| 309090 | RxNorm     | Ceftriaxone 100 MG/ML       | 6/22/2015  | Injectable | BID         | 100 MG/ML |
| 47835  | RxNorm     | Vantin (cefepodoxime 100mg) | 6/22/2015  | Oral       | BID         | 100mg     |
| 209459 | RxNorm     | Tylenol 500mg               | 6/22/2015  | Oral       | As needed   | 500 mg    |
| 576586 | RxNorm     | Darbepoetin Alfa 0.5 MG/ML  | 6/22/2015  | Injectable | Once a week | 0.5 MG/ML |
| 748747 | RxNorm     | Clindamycin 300mg           | 6/23/2015  | Oral       | TID         | 300 mg    |
| 568809 | RxNorm     | Torsemide 20mg              | 6/23/2015  | Oral       | Qd          | 20 mg     |
| 40144  | RxNorm     | Levothyroxine Sodium        | 6/23/2015  | Oral       | QD          | -         |
| 668657 | RxNorm     | Prednisolone 10mg           | 6/23/2015  | Oral       | QD          | 10mg      |
| 860887 | RxNorm     | FenoFibric Acid 35 mg       | 6/24/2015  | Oral       | QHS         | 35mg      |

| Code   | CodeSystem | Medication               | Start Date | Route | Frequency | Dose   |
|--------|------------|--------------------------|------------|-------|-----------|--------|
| 541585 | RxNorm     | Mycophenolic Acid 360 mg | 6/24/2015  | Oral  | BID       | 360 mg |
| 977435 | RxNorm     | Everolimus 0.5 mg        | 6/24/2015  | Oral  | BID       | 0.5 mg |
| 848958 | RxNorm     | Ciprofloxacin 2mg/ml     | 6/25/2015  | Oral  | TID       | 2mg/ml |

C) Medications to continue after the encounter. (These medications are to be continued after the stay).

| Code   | CodeSystem | Medication               | Timing Information                                | Route | Frequency | Dose   |
|--------|------------|--------------------------|---------------------------------------------------|-------|-----------|--------|
| 209459 | RxNorm     | Tylenol 500mg            | 6/24/2015,<br>No End Date                         | Oral  | As needed | 500 mg |
| 668657 | RxNorm     | Prednisolone 10mg        | StartDate:<br>6/24/2015<br>End Date:<br>7/4/2015  | Oral  | QD        | 10mg   |
| 860887 | RxNorm     | FenoFibric Acid 35 mg    | StartDate:<br>6/24/2015<br>End Date:<br>7/4/2015  | Oral  | QHS       | 35mg   |
| 541585 | RxNorm     | Mycophenolic Acid 360 mg | StartDate:<br>6/24/2015<br>End Date:<br>6/27/2015 | Oral  | BID       | 360 mg |
| 977435 | RxNorm     | Everolimus 0.5 mg        | StartDate:<br>6/24/2015<br>End Date:<br>7/20/2015 | Oral  | BID       | 0.5 mg |
| 848958 | RxNorm     | Ciprofloxacin 2mg/ml     | StartDate:<br>6/24/2015<br>End Date:<br>7/24/2015 | Oral  | TID       | 2mg/ml |

D) Problems

| Code      | CodeSystem | Problem Name                                     | Timing Information                             | Health concern status | Notes                                   |
|-----------|------------|--------------------------------------------------|------------------------------------------------|-----------------------|-----------------------------------------|
| 59621000  | SNOMED-CT  | Essential hypertension (Disorder, )              | 10/5/2015                                      | Active                |                                         |
| 83986005  | SNOMED-CT  | Severe Hypothyroidism (Disorder)                 | 31/12/2006                                     | Active                |                                         |
| 236578006 | SNOMED-CT  | Chronic rejection of renal transplant (disorder) | 31/12/2011                                     | Active                |                                         |
| 87522002  | SNOMED-CT  | Iron deficiency anemia (disorder)                | 6/22/2015                                      | Active                |                                         |
| 64667001  | SNOMED-CT  | Interstitial pneumonia (disorder)                | 6/22/2015                                      | Active                |                                         |
| 238131007 | SNOMED-CT  | Overweight (finding)                             | 31/12/2006 – Start Date<br>6/1/2007 – End Date | Completed             |                                         |
| 44054006  | SNOMED-CT  | Diabetes Mellitus Type 2 (Disorder)              |                                                | Completed             | No history of diabetes mellitus type 2. |

#### E) Encounter Diagnoses

| Code  | CodeSystem | Description                      | Start Date | Service Delivery Location                                                          |
|-------|------------|----------------------------------|------------|------------------------------------------------------------------------------------|
| D63.1 | ICD-10     | Anemia in Chronic Kidney Disease | 6/22/2015  | Community Health and Hospitals<br>1002,<br>Healthcare Dr,<br>Portland,<br>OR-97266 |

#### F) Procedures

**Note:** Target Site is provided for context, vendors may or may not choose to include this as part of the C-CDA entries.

| Code      | CodeSystem | Procedure Name                                    | Target Site                                                     | Start Date | End Date  | Performer                                                              |
|-----------|------------|---------------------------------------------------|-----------------------------------------------------------------|------------|-----------|------------------------------------------------------------------------|
| 10847001  | SNOMED-CT  | Bronchoscopy                                      | 91724006 (Tracheobronchial structure (body structure))          | 6/22/2015  | 6/22/2015 | 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)                    | 6/22/2015  | 6/22/2015 | 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 | 10/5/2011  | 10/5/2011 | Community Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266 |

G) Immunizations or Immunizations Administered during visit

| Vaccine Code | CodeSystem | Vaccine Name                                            | Date      | Status    | Lot Number | Manufacturer Name | Additional Notes                                           |
|--------------|------------|---------------------------------------------------------|-----------|-----------|------------|-------------------|------------------------------------------------------------|
| 88           | CVX        | Influenza Virus Vaccine                                 | 5/10/2014 | Completed | 1          | Immuno Inc.       |                                                            |
| 106          | CVX        | Tetanus and diphtheria toxoids                          | 1/4/2012  | Completed | 2          | Immuno Inc.       |                                                            |
| 166          | CVX        | influenza, intradermal, quadrivalent, preservative free | 6/22/2015 | Cancelled | 1          | Immuno Inc.       | Immunization was not given - Patient rejected immunization |

H) Vital Signs

| Code                                       | Code System | Vitals                | Date                   | Value                    |
|--------------------------------------------|-------------|-----------------------|------------------------|--------------------------|
| 8302-2                                     | LOINC       | Height                | 6/22/2015<br>10:05 EST | 177 cm                   |
| 3141-9                                     | LOINC       | Weight                | 6/22/2015<br>10:05 EST | 88 kg                    |
| 8462-4<br>(Diastolic)<br>8480-6 (Systolic) | LOINC       | Blood Pressure        | 6/22/2015<br>10:08 EST | 145/88 mmHg              |
| 8867-4                                     | LOINC       | Heart Rate            | 6/22/2015<br>10:10 EST | 80 per minute            |
| 2710-2                                     | LOINC       | O2 % BldC<br>Oximetry | 6/22/2015<br>10:12 EST | 95%                      |
| 8310-5                                     | LOINC       | Body<br>Temperature   | 6/22/2015<br>10:15 EST | 38 degree Celsius        |
| 9279-1                                     | LOINC       | Respiratory<br>Rate   | 6/22/2015<br>10:15 EST | 18 breaths per<br>minute |

I) Laboratory Test

| Test Code | Code System | Name                                 | Date      |
|-----------|-------------|--------------------------------------|-----------|
| 24357-6   | LOINC       | Urinalysis macro<br>(dipstick) panel | 6/22/2015 |
| 58410-2   | LOINC       | CBC                                  | 6/22/2015 |

J) Laboratory Values/Results

| Test Code | Code System | Name                                               | Actual Result  | Date      | Reference<br>Range |
|-----------|-------------|----------------------------------------------------|----------------|-----------|--------------------|
| 30313-1   | LOINC       | HGB                                                | 10.2 g/dl      | 6/22/2015 |                    |
| 33765-9   | LOINC       | WBC                                                | 12.3 (10+3/ul) | 6/22/2015 | N/A -<br>500,000   |
| 26515-7   | LOINC       | PLT                                                | 123 (10+3/ul)  | 6/22/2015 |                    |
| 50544-6   | LOINC       | Everolimus Blood                                   | 10 ng/ml       | 6/22/2015 | 3.0-8.0<br>ng/ml   |
| 5778-6    | LOINC       | Color of Urine                                     | YELLOW         | 6/22/2015 | YELLOW             |
| 5767-9    | LOINC       | Appearance of<br>Urine                             | CLEAR          | 6/22/2015 | CLEAR              |
| 5811-5    | LOINC       | Specific gravity of<br>Urine by Test strip         | 1.015          | 6/22/2015 | 1.005 –<br>1.030   |
| 5803-2    | LOINC       | pH of Urine by Test<br>strip                       | 5.0 pH         | 6/22/2015 | 5.0-8.0            |
| 5792-7    | LOINC       | Glucose<br>[Mass/volume] in<br>urine by test strip | 50mg/dl        | 6/22/2015 | Neg                |



| Test Code | Code System | Name                                         | Actual Result | Date      | Reference Range |
|-----------|-------------|----------------------------------------------|---------------|-----------|-----------------|
| 5797-6    | LOINC       | Ketones [Mass/Volume] in urine by test strip | Negative      | 6/22/2015 | Negative        |
| 5804-0    | LOINC       | Protein[Mass/Volume] in urine by test strip  | 100mg/dl      | 6/22/2015 | negative        |

K) Smoking Status and Tobacco Use

| Element Description    | Description              | Start Date | End Date  | Code            | Code System |
|------------------------|--------------------------|------------|-----------|-----------------|-------------|
| Smoking Status         | Heavy tobacco smoker     | 5/1/2005   | 2/27/2011 | 428071000124103 | SNOMED-CT   |
| Smoking Status         | Current every day smoker | 2/27/2011  | -         | 449868002       | SNOMED-CT   |
| Current Smoking Status | Current every day        | 6/22/2015  | -         | 449868002       | SNOMED-CT   |

L) UDI List

**Note:** Device Code is provided for context, vendors may or may not choose to include this as part of the C-CDA entries.

| UDI            | Assigning Authority | Device Code                                                                                 | Scoping Entity |
|----------------|---------------------|---------------------------------------------------------------------------------------------|----------------|
| 00643169007222 | FDA                 | 704708004 - Cardiac resynchronization therapy implantable pacemaker, CodeSystem – SNOMED-CT | FDA            |

M) 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 Alice for Anemia during the 2 day stay at Community Health Hospitals. Ms Alice 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) **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) **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
    - ii. Documented HypoThyroidism problem
    - iii. Watch Weight of patient
    - iv. 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: Diabetic 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

| Functional Condition | Code      | Code System | Start Date |
|----------------------|-----------|-------------|------------|
| Dependence on Cane   | 105504002 | SNOMED-CT   | 5/1/2005   |

R) Cognitive Status

| Cognitive Status | Code     | Code System | Start Date |
|------------------|----------|-------------|------------|
| Amnesia          | 48167000 | SNOMED-CT   | 5/1/2005   |