**Document Narrative:**

[ Ms. Caroline Helberg 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. ]

**Note**: The test data provided in the document was captured during this encounter including historical data.

**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

|  |  |  |  |
| --- | --- | --- | --- |
| **CCDS Data Elements** | **Contextual Data Elements required for the Medical Record encoding to C-CDA IG** | **Details** | **Additional  Information** |
| Patient Name |  | First Name: Caroline Last Name: Helberg Middle Name: Richard Previous Name: Carrie Suffix: | The Previous Name specified is the Patient’s Birth Name and should be coded accordingly. |
| Sex |  | Female (F) |  |
| Date of Birth |  | 5/1/1970 |  |
| Race |  | White (2106-3) |  |

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| --- | --- | --- | --- |
| **CCDS 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) |  |
|  | Home Address | 1357, Amber Dr, Beaverton, OR-97006 |  |
|  | Telephone Number | Mobile: 555-777-1234 Home: 555-723-1544 |  |

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 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  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 |  |
|  | [ Author/Legal Authenticator/Authe nticator of Electronic Medical Record ] | [ Dr Henry Seven  Date: 6/22/2015 ] |  |
|  | [ System that generated the document ] | [ Community Health Hospitals EMR ] |  |
|  | [ Informants ] | [ Gabriel Helberg (Spouse)  First Name: Gabriel  Last Name: Helberg ] |  |
|  | [ Medical Record Custodian ] | [ Community Health and Hospitals ] |  |

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| --- | --- | --- | --- |
| **CCDS Data Elements** | **Contextual Data Elements required for medical record encoding to C-CDA** | **Details** | **Additional  Information** |
|  | [ Information  Recipient ] | [ Dr Henry Seven ] |  |
|  | Admission Date | 6/22/2015 |  |
|  | Discharge Date | 6/24/2015 |  |
| Care Team Members | Care Team Members | Dr Henry Seven  Mary McDonald |  |
|  | [ Other Participants in event ] | [ Mr Ralph Issac (Grand Parent)  First Name: Ralph Last Name: Issac Mr Gabriel Helberg (Spouse) – Same Address information as Ms Caroline Helberg ] |  |
|  | [ 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) 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** | **Notes** |
| 7980 (IN) | RxNorm | Penicillin G | Hives (code-  247472004, SNOMED-CT) | Moderate | Start Date –  5/10/1980, | Active |  |
| 733  (IN) | RxNorm | Ampicillin |  |  | Start Date – Unknown, End Date – 6/22/2015 | Completed | No Allergies to Ampicillin |

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1. 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** |
| 209459 (SBD) | RxNorm | Tylenol  500mg | StartDate: 6/22/2015, End Date 6/24/2015 | Oral | As needed | 1 unit |
| 731241 (SBD) | RxNorm | Aranesp 0.5 MG/ML | StartDate: 6/22/2015, End Date 6/24/2015 | Injectable | Once a  week | 1 unit |
| 284215 (SCD) | RxNorm | Clindamycin 300mg | StartDate: 6/23/2015, End Date 6/24/2015 | Oral | Three  times  daily | 1 unit |
| 860886 (SCD) | RxNorm | FenoFibric  Acid 35 mg | StartDate: 6/24/2015, End Date: 7/4/2015 | Oral | At the  hour of  sleep | 1 unit |

1. 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** | **Notes** |
| **83986005** | SNOMED-CT | Severe  Hypothyroidism (Disorder) | 12/31/2006 – Start Date | Active |  |
| **64667001** | SNOMED-CT | Interstitial  pneumonia  (disorder) | 6/22/2015 –  Start Date | Active |  |
| 238131007 | SNOMED-CT | Overweight (finding) | 31/12/2006 – Start Date 6/1/2007 – End Date | Completed |  |
| 44054006 | SNOMED-CT | Diabetes Mellitus Type 2 (Disorder) | Start Date –  UNK,  End Date –  6/22/2015 | Completed | No history of diabetes mellitus type 2. |

1. Encounter Diagnoses

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**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 | 6/22/2015 | Community Health and Hospitals  1002, Healthcare Dr,  Portland, OR-97266 |
| 234348004 | SNOMED-CT | Anemia of renal disease | 6/22/2015 | Community Health and Hospitals  1002, Healthcare Dr,  Portland, OR-97266 |

1. 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 ]** |
| **168731009** | SNOMED-CT | Chest X-Ray, PA and Lateral Views | 82094008  (Lower Respiratory Tract Structure) | 6/22/2015 | Communit y 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 | Communit y Health and Hospitals 1002, Healthcare Dr, Portland, OR-97266 |

1. Immunizations

**Note**: Additional Notes represent why the Immunization was cancelled and there are no specific notes applicable to the completed immunizations.

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

1. Vital Signs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | **Code System** | **[ Vitals Name ]** | **Timing Information** | **Value and Units** |
| 8867-4 | LOINC | Heart Rate | 6/22/2015  [ 10:10 EST ] | Value=80 Units=/min |
| **59408-5** | LOINC | O2 % BldC Oximetry | 6/22/2015  [ 10:12 EST ] | Value=95  units=% |

1. Laboratory Test

**Note**: The pending Urinanalysis lab test has no results yet and is a planned future event and has to be coded accordingly. The HL7 best practice to code a pending lab test is to represent it with a planned observation in the Plan of Treatment section.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Code** | **Code System** | **[ Name ]** | **Date** |
| 24357-6 | LOINC | Urinanalysis macro (dipstick) panel | 6/22/2015 |
| 24357-6 | LOINC | Urinanalysis macro (dipstick) panel | 6/29/2015 |

1. Laboratory Values/Results

**Note**: The results below correspond to the CBC (First 4 rows) and the Urinanlysis (Rest of the rows in the table except the first 4 rows) lab tests on 6/22/2015. Reference Ranges such as YELLOW are optional and vendors may or may or may not choose to include them as part of their C-CDA entries. Additionally when units are not present then the result value does not require any specific unit.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Result Code** | **Code System** | **[ Name ]** | **Result Value and units** | **Date** | **[ Reference Range ]** |
| 33765-9 | LOINC | WBC | Value = 12.3 units=10\*3/uL | 6/22/2015 | N/A -  500,000 |
| 50544-6 | LOINC | Everolimus Blood | Value=10 units=ng/mL | 6/22/2015 | 3.0-8.0  ng/ml |

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Result Code** | **Code System** | **[ Name ]** | **Result Value and units** | **Date** | **[ Reference Range ]** |
| 5778-6 | LOINC | Color of Urine | YELLOW | 6/22/2015 | YELLOW |
| 5767-9 | LOINC | Appearance of  Urine | CLEAR | 6/22/2015 | CLEAR |
| 5811-5 | LOINC | Specific gravity of Urine by Test strip | 1.015 | 6/22/2015 | 1.005 –  1.030 |
| 5803-2 | LOINC | pH of Urine by Test strip | Value=5.0 units=[pH] | 6/22/2015 | 5.0-8.0 |
| 5792-7 | LOINC | Glucose  [Mass/volume] in urine by test strip | Value=50 units=mg/dL | 6/22/2015 | Neg |

1. Smoking Status and Tobacco Use

**Note**: The C-CDA IG specifies how Smoking Status has to be represented using a combination of Tobacco Use and Smoking Status templates. Vendors are expected to follow the C-CDA IG to encode these data elements appropriately

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element Description** | **[**  **Description ]** | **Start Date** | **End Date** | **Code** | **Code System** |
| Current  Smoking Status | Current every day | 6/22/2015 | - | 449868002 | SNOMED-CT |

1. 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. Also the implantable device identified below was introduced as part of the procedure documented in the procedure section namely “Introduction of cardiac pacemaker system via vein”.

|  |  |  |  |
| --- | --- | --- | --- |
| **UDI** | **Assigning Authority** | **[ Device Code ]** | **[ Scoping Entity ]** |
| (01)00643169007222(17)160128(21)BLC200461H | FDA | 704708004 - Cardiac resynchronization therapy implantable pacemaker, CodeSystem – SNOMED-CT | FDA |

1. 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 Caroline for Anemia during the 2 day stay at

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Community Health Hospitals. Ms Caroline 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.

M) Goals: **(Visual Inspection** – ATL’s need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**

1. Need to gain more energy to do regular activities.(**Visual Inspection)**
2. Negotiated Goal to keep Body Temperature at 98-99 degrees Fahrenheit with regular monitoring.

**N)** HealthConcerns: **(Visual Inspection** – ATL’s need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**

1. Chronic Sickness exhibited by patient
2. HealthCare Concerns refer to underlying clinical facts
3. Documented HyperTension problem
4. Documented HypoThyroidism problem
5. Watch Weight of patient
6. Documented Anemia problem

O) Discharge Instructions **(Visual Inspection** – ATL’s need to visually inspect the System Under Test (SUT) generated C-CDA for the below narrative content**)**

1. Diet: Diabetic low salt diet
2. Medications: Take prescribed medications as advised.
3. Appointments: Schedule an appointment with Dr Seven after 1 week. Follow up with Outpatient facility for Immunosuppression treatment.
4. For Fever of > 101.5 F, or onset of chest pain/breathlessness contact Emergency.

P) Functional Status **(Visual Inspection** – ATL’s need to visually inspect the System Under Test (SUT) generated C-CDA for the below content**)**

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

Q) Cognitive Status **(Visual Inspection** – ATL’s need to visually inspect the System Under Test (SUT) generated C-CDA for the below content**)**

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

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