

Updox Patient Portal CCD Viewer

1. Notes

A. CCD Versions

The viewer supports the C-CDA versions 1.1 and 2.1

B. CCD Sections

The information that displays in the CCD Viewer for a particular section, is controlled by the structure of the xml file, more specifically by the <text> ... </text> portion of the section. See an example in the Appendix.

C. CCD Header

The CCD header contains quite a bit of data. To make it easier to digest, the basic patient information (name, address, demographics) is at the top and the following information from the CCD header displays as sections.

- Care team
- Dates (Component of)
- Documentation (Documentation of)
- Participants
- Contributors
 - Author
 - Legal Authenticator
 - Authenticators
 - Informants
 - Information Recipients
 - Referring Provider
 - Office Contact
- Footer
 - Created date
 - Confidentiality code (Normal, Restricted, Very Restricted)
 - CCD ID
 - CCD Title
 - Version

D. CCD Contents

Since the HL7 C-CDA standard is quite flexible, the presentation method and the data fields that display are dependent on the EHR that created the CCD as well the data that is on file for the patient.

2. Select CCD

Alice Jones Newman (1970-05-01, 55555)
Send Message | My Profile | Sign Out

Home Messages **Records** Forms


My Records

Select date range to filter records

02/26/2017 To 03/28/2017

Records

Date	Message from your doctor
<input checked="" type="radio"/> 2017-02-26 7:48:43 pm	No message
<input type="radio"/> 2017-02-26 7:48:39 pm	No message

View Download text Download data Transmit 

- Enter date range to search for CCDs received (defaults to the last 30 days).
- Select CCD to view.
- Click View button.

3. View CCD

The screenshot shows a web application window titled "CCDViewApp" with a browser address bar at "localhost:3000". The main content area displays patient information for "Alice Jones Newman" (Alternate Names: Jones (Alicia) Newman). The information is organized into sections: "Contact Information", "Date Of Birth", "Language", "Religious Affiliation", "Ethnicity", "Race", "Patient Identifiers", and "Document Created". Below this are sections for "ALLERGIES AND ADVERSE REACTIONS", "MEDICATIONS", "PROBLEMS", and "ENCOUNTERS". Each section has expand/collapse and print icons. The "ALLERGIES AND ADVERSE REACTIONS" section contains a table with columns for Substance, Reaction, Severity, and Status. The "MEDICATIONS" section contains a table with columns for Medication, Directions, Start Date, and End Date. The "PROBLEMS" section contains a list of active concerns with start and end dates.

Substance	Reaction	Severity	Status
Penicillin G	Hives	Moderate	Active
Ampicillin	Hives	Moderate	Active

Medication	Directions	Start Date	End Date
Ceftriaxone 100 MG/ML Injectable Solution [306090]	Two Times Daily	6/22/2015	6/23/2015
Tylenol 500 MG Oral Tablet [209499]	For 10 days As needed	6/22/2015	7/1/2015
1 ML darbepoetin alfa 0.5 MG/ML Prefilled Syringe [73184]	Once a week	6/22/2015	Unknown

Active Concerns Problem #1 Essential hypertension [Start Date: 10/5/2011] [59628000] Problem #2 Severe Hypothyroidism [Start Date: 12/31/2006] [851984005] Problem #3 Chronic rejection of renal transplant [Start Date: 12/31/2011] [236578006] Problem #4 Fever [Start Date: 6/22/2015] [386661006] Resolved Concerns Problem #5 Overweight [Start Date: 12/31/2006] [End Date: 6/1/2007] [25813007]

The screenshot shows a "CARE TEAM" section with a list of providers. Dr. Albert Davis is listed as the Primary Care Physician, with his organization and National Provider Identifier. Tracy Davis is also listed. Below the list is the physical visit address and work place telephone number.

CARE TEAM

- Dr. Albert Davis (Primary Care Physician)
Organization: Neighborhood Physicians Practice
United States National Provider Identifier: 999999999
[Contact](#)
- Tracy Davis
[Contact](#)

Physical visit address Address:
2472 Rocky place Beaverton OR 97006 US
Work Place tel:+1(555)-555-1002

- All sections in the CCD are automatically expanded.
- To simplify the display, click **Collapse All** then expand the individual section(s) as needed.
- To re-expand all sections, click **Expand All**.
- To display contact info for the various people/organizations, click the **Contact** buttons.
- To change the order of sections, click the arrow icons to move a section up or down.
- To print a report of the CCD, click **Print CCD**.
- To define your default viewing preferences, click **View Preferences**.
- To return to the selection screen, click your browser's back arrow.

4. Define Viewing Preferences

The screenshot shows a 'View Preferences' interface. At the top, there is a header bar with a hamburger menu icon and the text 'View Preferences'. Below this is a list of 14 medical sections, each with a checked checkbox on the left and two arrows (up and down) on the right. The sections are: Allergies And Adverse Reactions, Assessments, Care Team, Contributors, Dates, Documentation, Encounters, Goals Section, Health Concerns Section, Immunizations, Implants, Medications, and Participants. At the bottom of the list are two large buttons: 'Save Preferences' and 'Reset Preferences'.

- To change which sections automatically display in your default view, click the checkbox before the section name. (When viewing a CCD, you can still access unchecked sections by opening **View Preferences** and clicking the section name).
- To change the default order of sections, use the arrows to move sections up and down in the list.
- To re-select all sections and revert to alphabetical order, click **Reset Preferences**.
- To save, click **Save Preferences**.
- To exit the preferences screen, click the **View Preferences** menu bar.

Appendix - Example C-CDA xml File

Here is an example medication section from a CCD xml file. The yellow highlighted portion defines the method and data that displays.

```
<component>
  <section>
    <templateId root = "2.16.840.1.113883.10.20.22.2.1.1" extension = "2014-06-09"/>
    <templateId root = "2.16.840.1.113883.10.20.22.2.1.1"/>
    <code code = "10160-0" codeSystem = "2.16.840.1.113883.6.1" codeSystemName = "LOINC"
displayName = "HISTORY OF MEDICATION USE"/>
    <title>MEDICATIONS</title>
    <text>
      <table border = "1" width = "100%">
        <thead>
          <tr>
            <th>Medication</th>
            <th>Directions</th>
            <th>Start Date</th>
            <th>End Date</th>
          </tr>
        </thead>
        <tbody>
          <tr>
            <td>Ceftriaxone 100 MG/ML Injectable Solution [309090]</td>
            <td>One Unit Two Times Daily</td>
            <td>6/22/2015</td>
            <td>6/30/2015</td>
          </tr>
          <tr>
            <td>Tylenol 500 MG Oral Tablet [209459]</td>
            <td>One Unit for 10 days as Needed</td>
            <td>6/22/2015</td>
            <td>Unknown</td>
          </tr>
          <tr>
            <td>Aranesp 0.5 MG/ML [731241]</td>
            <td>One Unit Once a Week</td>
            <td>6/22/2015</td>
            <td>Unknown</td>
          </tr>
        </tbody>
      </table>
    </text>
    <entry typeCode = "DRIV">
      <substanceAdministration classCode = "SBADM" moodCode = "EVN">
        <templateId root = "2.16.840.1.113883.10.20.22.4.16" extension = "2014-06-09"/>
        <templateId root = "2.16.840.1.113883.10.20.22.4.16"/>
        <id root = "cddb33f0-6cde-11db-9fe1-0800200c9a66"/>
        <statusCode code = "active"/>
```

```

    <effectiveTime xsi:type = "IVL_TS">
      <low value = "20150622"/>
      <high value = "20150630"/>
    </effectiveTime>
    <effectiveTime xsi:type = "PIVL_TS" institutionSpecified = "true" operator = "A">
      <period value = "12" unit = "h"/>
    </effectiveTime>
    <routeCode code = "C38276" codeSystem = "2.16.840.1.113883.3.26.1.1" codeSystemName =
"NCI Thesaurus" displayName = "INTRAVENOUS"/>
    <doseQuantity value = "1"/>
    <consumable>
      <manufacturedProduct classCode = "MANU">
        <templateId root = "2.16.840.1.113883.10.20.22.4.23" extension = "2014-06-09"/>
        <templateId root = "2.16.840.1.113883.10.20.22.4.23"/>
        <id root = "2a620155-9d11-439e-92b3-5d9815ff4ee8"/>
        <manufacturedMaterial>
          <code code = "309090" codeSystem = "2.16.840.1.113883.6.88" displayName =
"Ceftriaxone 100 MG/ML Injectable Solution"/>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
  </substanceAdministration>
</entry>
<entry typeCode = "DRIV">
  <substanceAdministration classCode = "SBADM" moodCode = "EVN">
    <templateId root = "2.16.840.1.113883.10.20.22.4.16" extension = "2014-06-09"/>
    <templateId root = "2.16.840.1.113883.10.20.22.4.16"/>
    <id root = "6c844c75-aa34-411c-b7bd-5e4a9f206e29"/>
    <statusCode code = "active"/>
    <effectiveTime xsi:type = "IVL_TS">
      <low value = "20150622"/>
      <high value = "20150701"/>
    </effectiveTime>
    <effectiveTime xsi:type = "PIVL_TS" institutionSpecified = "true" operator = "A">
      <period value = "24" unit = "h"/>
    </effectiveTime>
    <routeCode code = "C38288" codeSystem = "2.16.840.1.113883.3.26.1.1" codeSystemName =
"NCI Thesaurus" displayName = "ORAL"/>
    <doseQuantity value = "1"/>
    <consumable>
      <manufacturedProduct classCode = "MANU">
        <templateId root = "2.16.840.1.113883.10.20.22.4.23" extension = "2014-06-09"/>
        <templateId root = "2.16.840.1.113883.10.20.22.4.23"/>
        <id root = "2a620155-9d11-439e-92b3-5d9816ff4ee8"/>
        <manufacturedMaterial>
          <code code = "209459" displayName = "Tylenol 500 MG Oral Tablet" codeSystem =
"2.16.840.1.113883.6.88" codeSystemName = "RxNorm"/>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
  </substanceAdministration>
</entry>

```

```

    </substanceAdministration>
  </entry>
  <entry typeCode = "DRIV">
    <substanceAdministration classCode = "SBADM" moodCode = "EVN">
      <templateId root = "2.16.840.1.113883.10.20.22.4.16" extension = "2014-06-09"/>
      <templateId root = "2.16.840.1.113883.10.20.22.4.16"/>
      <id root = "cdbc33f0-6cde-11db-9fe1-0800200c9a67"/>
      <statusCode code = "active"/>
      <effectiveTime xsi:type = "IVL_TS">
        <low value = "20150622"/>
        <high nullFlavor = "UNK"/>
      </effectiveTime>
      <effectiveTime xsi:type = "PIVL_TS" institutionSpecified = "true" operator = "A">
        <period value = "7" unit = "d"/>
      </effectiveTime>
      <routeCode code = "C38276" codeSystem = "2.16.840.1.113883.3.26.1.1" codeSystemName =
"NCI Thesaurus" displayName = "INTRAVENOUS"/>
      <doseQuantity value = "1"/>
      <consumable>
        <manufacturedProduct classCode = "MANU">
          <templateId root = "2.16.840.1.113883.10.20.22.4.23" extension = "2014-06-09"/>
          <templateId root = "2.16.840.1.113883.10.20.22.4.23"/>
          <id root = "2a620155-9d11-439e-92b3-5d9817ff4ee8"/>
          <manufacturedMaterial>
            <code code = "731241" codeSystem = "2.16.840.1.113883.6.88" displayName =
"Aranesp 0.5 MG/ML"/>
          </manufacturedMaterial>
        </manufacturedProduct>
      </consumable>
    </substanceAdministration>
  </entry>
</section>
</component>

```

Here is how that medication section displays in the CCD Viewer:

Medications			
Medication	Directions	Start Date	End Date
Ceftriaxone 100 MG/ML Injectable Solution [309090]	One Unit Two Times Daily	6/22/2015	6/30/2015
Tylenol 500 MG Oral Tablet [209459]	One Unit for 10 days as Needed	6/22/2015	Unknown
Aranesp 0.5 MG/ML [731241]	One Unit Once a Week	6/22/2015	Unknown