Overview

- The Issue
  Specific third parties and others were trying to use existing structures within C-CDA modeling to post-coordinate terms in a way that did not communicate that correctly.

- The Request Steps
  - Introducing the issue on the HL7 Zulip Channel
  - Discussion in Structured Documents
  - Solution proposed by the community
  - Voted to accept the proposed solution

- The Example
  - Created new example usage
  - Brought to Examples Task Force for review and vote
  - Accepted as a listed example

- Going Forward
  - Communicating this back to the 3rd party
  - Working with ONC to get this new usage into validation schemas

The Initial Issue

In my case, I noted that IMO (Intelligent Medical Objects) provides a service where they have their own database of very precise condition descriptions for physician Problem Lists.

In their examples for how to communicate it within C-CDA, they appeared to have incorrect usage of coding values, especially surrounding the grouping of ICD-10 codes.
Example Output From Tool

<?xml version="1.0" encoding="utf-16"?>
<CODE orgid="e17142266bb3f386" userid="" patient_age="66" patient_gender="M">
  <fromCODE statusCode="1" statusText="CHANGE">
    <fromCODE_items>
      <fromCODE_item statusIndicator="migrated" inCodeSystem="3PC" inCode="65167828" display_title="Chronic pain of both knees">
        <CODEPayload code="65167828" title="Chronic pain of both knees">
          <dg_code>719.46</dg_code>
          <dg_title>Pain in joint, lower leg</dg_title>
          <ICD10CM_CODE>"M25.561"</ICD10CM_CODE> <ICD10CM_TITLE>"Pain in right knee"</ICD10CM_TITLE>
          <SCT_CONCEPT_ID>1003722009</SCT_CONCEPT_ID> <SNOMED_DESCRIPTION>"Pain of knee region"</SNOMED_DESCRIPTION>
          <GENDER_FLAG>""</GENDER_FLAG> <AGE_FLAG>""</AGE_FLAG> <NON_SPECIFIC_CODE>0</NON_SPECIFIC_CODE> <HCC_MODEL_CAT>""</HCC_MODEL_CAT> <HCC_COMMUNITY_FACTORS>""</HCC_COMMUNITY_FACTORS> <HCC_INSTITUTION_FACTORS>""</HCC_INSTITUTION_FACTORS> <SECONDARY_ICD9_CODE1>338.29</SECONDARY_ICD9_CODE1> <SECONDARY_ICD9_TEXT1>"Other chronic pain"</SECONDARY_ICD9_TEXT1>
          <SECONDARY_ICD9_CODE2>""</SECONDARY_ICD9_CODE2> <SECONDARY_ICD9_TEXT2>""</SECONDARY_ICD9_TEXT2>
          <SECONDARY_ICD9_CODE3>""</SECONDARY_ICD9_CODE3> <SECONDARY_ICD9_TEXT3>""</SECONDARY_ICD9_TEXT3>
          <SECONDARY_ICD9_CODE4>""</SECONDARY_ICD9_CODE4> <SECONDARY_ICD9_TEXT4>""</SECONDARY_ICD9_TEXT4>
        </CODEPayload>
      </fromCODE_item>
    </fromCODE_items>
  </fromCODE>
</CODE>

Example Suggested C-CDA (Incorrect)

/value xml:lang="en" code="30989003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Knee pain">
  <originalText>Chronic pain of both knees</originalText>
  <translation code="65167828" displayName="Chronic pain of both knees" codeSystem="2.16.840.1.113883.3.247.1.1" codeSystemName="3rdPartyID"/>
  <translation code="82423001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Chronic pain"/>
  <translation code="M25.561" codeSystem="2.16.840.1.113883.6.90" codeSystemName="ICD-10-CM" displayName="Pain in right knee"/>
  <translation code="M25.562" codeSystem="2.16.840.1.113883.6.90" codeSystemName="ICD-10-CM" displayName="Pain in left knee"/>
  <translation code="G89.29" codeSystem="2.16.840.1.113883.6.90" codeSystemName="ICD-10-CM" displayName="Other chronic pain"/>
</value>® Health Level Seven and HL7 are registered trademarks of Health Level Seven International, registered with the United States

Reach out to the HL7 C-CDA Community

- Discussed with the 3rd party and determined that their documentation was from an old employee who has left and that they don’t have anyone on staff who is a point person familiar with HL7-C-CDA to discuss their documentation.
- Asked the question about the example from the 3rd party to the HL7 Zulip Community.
CCDA Community Picks up Discussion

- The topic got presented at C-CDA Examples Workgroup meetings in early April 2021 by
- Presented at a Structured Documents Workgroup meeting on April 22.
- After some conversation we arrived at a proposed solution that got approved in Jira ticket.

C-CDA Example Created and Approved

- I took the example and discussion points and worked on some sample sections to bring to the C-CDA examples WG.
- After discussion and edits to the example during the meeting, the example was approved on June 10.
- On June 22, the example was added into the publicly accessible C-CDA examples.

Follow Up Steps

- Contacting the vendor with the updated C-CDA content so they could update their documentation.
  - Still awaiting feedback
- Further discussion happening on the solution.
  - Back and forth on the email list in the past week from Matt S. and Robert McClure on proper way to codify the
Follow Up Steps

- Possible follow up to get any changes necessary into C-CDA validator
  - Should it test for multiple codes in the same codeset at the same level of translation nodes? (maybe not an "error", but a "warning"?)
  - Should we test for proper usage if it does see qualifier nodes under a translation code? What is considered "proper usage" other than being correct syntax (which I’d think would already be being checked since these aren’t new node types?).

- Discussion on venues such as this meeting to “get the word out”.

Conclusion

- There are a number of steps to go through within the HL7 C-CDA community to get a problem solved and a solution in place.
- Don’t be daunted… it will take time, but as you can see, solutions can be worked out and followed through on.
- Lots of people willing to help you along the way.

Team CDA vs Team FHIR