HL7 C-CDA Implementation-a-Thon #3
Event Summary

Duteau Design Inc.
1 Introduction

One of HL7's first strategies for improving consistency of C-CDA implementations across health IT developers is to directly engage with industry players (vendors, healthcare providers, payers and health information exchanges) to identify existing C-CDA issues and formulate best practices.

Industry participants were invited to two Implementation-a-Thons (IAT). While the IATs are open to all C-CDA implementers, the target audience will be ‘heavy implementers’ such as vendors and providers that perform their own programming. Due to the success of the IATs, it was deemed beneficial to hold a third IAT.

IAT #3 - held at the Accenture Offices in Arlington, Va. on September 15-16, 2016 - was the third such event in the execution of this strategy.

2 IAT #3 Goals

The purpose of IAT #3 was two-fold:

- Work through scenarios and discussion items
- Uncover issues with C-CDA 2.1/MU rules

3 Approach

The philosophy for IAT #3 continued the "observe and document" approach taken in prior IATs where participants capable of creating CDA instances created files for consumption and import by participants capable of consuming CDA Instances. The project team wanted participants to work through pre-defined scenarios at the event so that issues experienced by participants as well as their thought process for addressing issues could be observed and documented as an input for the C-CDA R2.1 Companion Guide project.

There were a few adjustments to the approach for IAT #3:

- There was an equal split of "Homework Scenarios" - where scenarios were provided to participants in advance of the IAT with the expectation that participants would arrive at the IAT with these instances ready for consumption - and - is-session scenarios. This greater split was requested by participants during the pre-IAT prep calls.
- Agenda time was dedicated for discussion topics
Leading up to the IAT, a series of conference calls were held on August 16, August 23, August 30, and September 6. The purpose of these calls was to:

- Gauge participant capabilities - e.g. can they create, can they consume, what document types do they support, etc.
- Socialize the approach and notional agenda for the IAT while soliciting suggestions
- Address participant questions in advance of the IAT

CDA Instances created by participants were saved as XML files and exchanged using Dropbox as opposed to having creating systems connect directly with consuming systems. After participants submitted their CDA instances, these were run through the C-CDA Scorecard. The purpose of this was to identify common issues as well as provide a test of the scorecard itself.

4 Agenda

**Thursday, September 15, 2016**
0900-0930 Introductions/Housekeeping
0930-1200 Homework (Scenario 1)
1200-1300 Lunch
1300-1500 Discussion
  1. C-CDA Scorecard
  2. Narrative Text
1500-1530 Ask the ONC
1530-1700 Homework (Scenario 2)

**Friday, January 8, 2016**
0900-1100 In-Session (Scenario 4)
1100-1200 Discussion
  1. Section/Entry ID population
  2. VSAC presentation
1200-1300 Lunch
1300-1330 Ask the ONC
1330-1630 Discussion
  1. Categorizing Results
  2. Multiple Authors
1630-1700 Wrap Up
5 Participants

- Joginder Madra (Facilitator)
- Jean Duteau (Facilitator)
- Dave Hamill (HL7)
- Karen van Hentenryck (HL7)
- Matt Rahn (ONC)
- Nagesh Bashyam aka Dragon (ONC)
- Dr. Julia Skapic (ONC)
- George Cole (Allscripts)
- Brett Marquard (River Rock)
- Calvin Beebe (Mayo)
- Ben Flessner (Epic)
- Raychelle Fernandez and Ozlem Kurt (Dynamic Health IT)
- Lisa Nelson (Life over Time Solutions)
- Russ Leftwich, Craig Lee, Alok Saldanha (Intersystems)
- Linda Michaelsen (Optum)
- Gina Canonica, SuAnn Svaby, Jiong Mao (NexGen)
- Marie Swall, Rene Kinsey (VA)
- Kim Heermann-Do, Mark H (DOD)
- John D’Amore (Diameter Health)
- Andrew Statler, Gene Beyer, Deb Fang, Michelle Colahan, Haiwin Zhu, Jane Marlatt, Vinayat Kulkarni, Margot Jackson (Cerner)
- Jeff Cutaio, Ed Donaldson, Matthew Lance (Greenway Health)
6 Observations and Findings

6.1 Venue

Accenture staff were a great support and the room was well-suited to the agenda. Participants could easily engage in conversations with each other. However, security procedures required participants to be escorted to and from the bathroom. While this was handled with good humor by all, it meant that sessions had to be conducted so that group bio breaks could occur.

6.2 Participants

Participants were largely drawn from vendor organizations - with many prior participants returning for IAT #3 - along with two teams from Cerner. Two government agencies sent representatives who contributed. Interaction between participants at the event was very good and contributed largely to the collaborative nature of the event. At various points in the agenda, participants would engage in conversations with each other as they worked through issues.

6.3 Findings

More time was spent uncovering questions with respect to CEHRT requirements and proposing consensus recommendations. The IAT produced recommendations with respect to the following guidance:

- For procedures and results (i.e. EKG)
  - All procedures go in the procedures section
  - All results go in the results section
  - Related results and procedures should be linked

- Partial Lab Results (e.g. a full panel is ordered but only 2/4 tests have results)
  - Different approaches:
    - do not handle
    - use result organizer (with status on the organizer)
    - keep in the plan of care/plan of treatment until all results ready
  - Action: The Companion Guide to document the different approaches but stay silent on the recommendation.

- Care Team presentation
  - Forward to the Learning Health workgroup for follow up and consider a new section template for care team members - including attribution, information
routing, etc. This should also be forwarded to the Examples Task Force for consideration.

- **Narrative Text**
  - If you do not understand style codes, ignore them
  - Linking to machine-processable data
  - Text/reference is to the entirety of the text
  - Codes should not be put in the human-readable narrative, unless they are important to the end user (e.g. ICD-9 codes)

- **Intended Recipients and Direct**
  - Documents should be able to be sent to multiple intended recipients and this may or not be related to the document's information recipient

### 6.4 Participant Feedback

Participant reaction to the event was overwhelmingly positive as evidenced by comments during the event. During the event wrap-up, Dave Hamill mentioned that this was the last IAT planned under the current funding arrangement with the ONC. Future events would likely require sponsorship or an increase to registration fees to be self-sustaining. Participants reiterated the value they received from participating in the event(s) but noted that the level of participation may depend on how much of an increase HL7 is contemplating for registration.

### 6.5 Recommendations for Future Implementation-a-Thons

Based the experiences leading up to, during and immediately after IAT #3, the project team makes the following recommendations to be considered during the planning of future IATs:

- HL7 will need to continue considering the purpose of each future IAT (e.g. maximize outreach, provide implementer support for MU certification, etc.) and set the approach accordingly
- While the use of pre-event conference calls with registered participants was helpful - especially once scenario and provider/patient information was published - much of the information conveyed during the conference calls could be moved to Slack or email.
- While there is benefit to having an emphasis on a "show and share" approach, there should be consideration to increasing the ratio of homework scenarios to save on administrative time at the event that could be used for discussion instead