Meeting Notes

Health Information Technology Advisory Committee
U.S. Core Data for Interoperability Task Force
March 11, 2019, 3:00 p.m. – 4:30 p.m. ET
Virtual

The March 11, 2019, meeting of the U.S. Core Data for Interoperability Task Force (USCDITF) of the Health IT Advisory Committee (HITAC) was called to order at 3:00 p.m. ET by Lauren Richie, Designated Federal Officer, Office of the National Coordinator for Health IT (ONC).

Lauren Richie welcomed everyone to the United States Core Data for Interoperability Standard (USCDI) Task Force.

Lauren Richie conducted roll.

Roll Call

Christina Caraballo, Co-Chair, Audacious Inquiry
Terrence O'Malley, Co-Chair, Massachusetts General Hospital
Tina Esposito, Member, Advocate Health Care
Valerie Grey, Member, New York eHealth Collaborative
Steven Lane, member, Sutter Health
Brett Oliver, Baptist Health

MEMBERS NOT IN ATTENDANCE

Kensaku Kawamoto, Member, University of Utah Health
Leslie Lenert, Member, Medical University of South Carolina
Clement McDonald, Member, National Library of Medicine
Steve L. Ready, Norton Healthcare
Sheryl Turney, Member, Anthem

ONC STAFF

Cassandra Hadley, HITAC Back Up/Support
Seth Pazinski, ONC
Stacey Perchem, ONC U.S. Core Data for Interoperability Task Force Lead
Lauren Richie, Branch Chief, Coordination, Designated Federal Officer
Adam Wong, ONC U.S. Core Data for Interoperability Task Force Backup/Support

Call to Order/Roll Call

Lauren Richie turned the meeting over to the co-chairs.

Opening Remarks and Workgroup Schedule

Terry O'Malley, co-chair, welcomed the USCDITF and reviewed the schedule. Noting that by the first week in April the initial draft of recommendations will be due.

The USCDITF transitioned to a shared Google document for review and began the discussion of patient demographics.

Patient Demographics

Terry O'Malley suggested that there likely won't be many changes to the elements that are already in the USCDI, but instead, the focus should be on the proposed new data elements.

Terry O'Malley noted that data sets that already exist should be pointed to as the active standard.
- **Steven Lane** commented that he wasn't sure if there was an address standard from the U.S. postal service (e.g., spell out avenue or abbreviate).

Steven Lane questioned what was decided around current address.
- **Terry O'Malley** commented that the group decided to use the appendix in the American Health Information Management Association (AHIMA) document.

Terry O'Malley suggested coming up with two data sets
1. What are systems currently required to capture under requirements for certification?
2. Next frontier for USCDI

Provenance Data Elements

ONC has proposed the following:
- Author
- Author timestamp
- Author organization

There was a lot of discussion around expanding the definition of an author.
- **Terry O'Malley** suggested that the definition should be defined as the agent that generates the data.
- The USCDITF discussed the different types of authors
    - Who is the author of the laboratory report or image?
    - Clinician (s) who wrote note is the author.
    - The signing radiologist is the author.
    - For laboratory most interested in the person who signed it as the author.

Terry O'Malley questioned whether there is more than one author? Maybe there are different terms needed. Think of the author as the generating agent. There are others involved, but they are not the author of the element.

- **Steven Lane** commented that there needs to be a principal author identified, such as:
    - The medical director of the laboratory.

- o Resulting radiologist.
- o Signing a licensed independent practitioner.
- o For each class of elements, there will need to be a specified permitted author type.
- o For vital signs, it is the nurse or the patient who took it.
- o Perhaps the site is more important than the name?

Terry O'Malley commented that there is a need to think about why the data is important which helps thinking around how to interpret the data and identify where to go back if there is a question about the data.

- Need to know that something is valuable. Provides reassurance that data has been validated.
- How much information is needed to be assured about the data elements in question?

Terry O'Malley shared that an accepted authors list needs to be generated, but will need to be amended as processes change. He suggested there may be a simpler way to designate that won't be as impacted by process changes in the future.

Steven Lane questioned if someone changes the data, does it make a next author? Author version 2? There are cases when the second author would be the definitive reader.

Terry O'Malley commented that there is a need to specify the organization at the time the content was created because the author might have changed organizations.

The USCDITF noticed a large number of comments in the public chat; therefore, they opened for public comment to hear from the commenters (these comments can be found in the Public Comment Section below).

After public comment, **Terry O'Malley** transitioned to the discussion of Clinical Notes.

Clinical Notes

ONC proposed new data elements:
- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- Progress Note

The USCDITF noted that clinical notes are notes types, not data elements (The language needs to be changed).

Steven Lane questioned if this is taken as a subset of the consolidated clinical document architecture (C-CDA) template, or is this a random list?

- **Matt Rahn, ONC** noted that this came from the Argonaut project.
- **Steven Lane** commented that rather than take a subset of C-CDA, he suggested taking them all and the USCDITF agreed.

As additional comments were made in the public chat, the public lines were opened again in regards to clinical notes (these comments can be found below in the Public Comment section).

Public Comment
DATA PROVENANCE COMMENTS

Brett Marquard, WaveOne Associates

- There are a variety of provenance activities
- When you look at lab results, do you know it was sent to a reference lab, or do you see the lab only?
- Reconciliation of an allergy list, what do you see?
- When I place an order, might be in our organization, or the reference lab
- Interested in the reference lab
- If it went through a chain, not the same as the author; the author should be the lab who performed the test
- For the reconciliation of allergy list, see who sent the data, when looking deeper in the metadata, might see who administered, might not
- Focus on reconciliation is good
- Recognize when items are duplicative and track back to the original author when receiving it from multiple places

Emma

- Commenting on reconciliation
- When nurses do reconciliation, they are looking for a prescriber.
  - When did the patient start on medication?
  - Validate that the patient isn't double-dosing.
  - It is important to capture the prescriber in case the nurse needs to get into contact with the prescriber with issues.
- To streamline reconciliation, keep the identification (ID) that came with the data element, to trace back
  - Check the attributes of the data element and identify if it has changed.
- Has it been seen before?
- For clinical decision support identify who is the author for each element.
  - Are there are other elements needed to reconcile the data element?
- For the multi-column spreadsheet, "Author Type: Prescription," the Author is the prescriber

- Medication is its own data element
- Need to consider problems that have a transition (e.g., starts as a cough and becomes pneumonia).

Lisa Nelson MaxMD:

- When it comes to digital technology, what we have done in the past doesn't always give us a good roadmap for the future. Digital technology can change reality (e.g., how we think about things working). Many roles besides the author. If you go into a table, collect from standards organizations (CDA, FHIR) to understand the roles that exist like a performer, custodian, authenticator, and participant. The author can be in addition to other roles a person plays.
- De-duplication is one of the use-cases; reconciliation may be a "flavor" of this.
- Three elements around unique, supplement identifier. They play a fundamental role.
- HCC scoring has to do with risk adjustment for patients based on active diagnoses. Patient diagnosis can go away if it has not been re-attested within a certain period.
- Authorship and timestamp are important, another dependency around the use of the data.
- Timestamp paired with authorship and IDs, need to be considered together.

Gary Dickinson - CentriHealth/United Health Group

- Data is captured in conjunction with the action being taken or activity. Need to think about who, what, where, when, why?
- Who is multidimensional?
  - Subject of care
  - Performer [roles]
  - Author [may not be performer]
- What
  - What action is being taken?
  - Where is the data being captured?
- When
  - When did it occur?
  - When was it documented?
- Where
  - Where did it happen?
  - Where is it documented?
  - Could be a physical location or device ID
- Why
  - What was the rationale?
  - Also, we need to think about data as it flows from source to use
- There might be multiple points of provenance (authorship [source system]
  - Exchange adds artifacts, transformation, provenance associated with the exchange artifact
  - Provenance associated with exchange artifact
  - Creating artifact internally for the receiving system with own provenance
- To relate to where the data is captured and all the associated items, should consider all dimensions.

CLINICAL NOTES

Lisa Nelson

Under consolidated clinical document architecture (CDA) there are three artifacts already created

1. Document (history and physical)
2. Templates in CDA
   a. They defined how to make a clinical note section with clinical narrative in a structured document
3. Note activity
   a. Template to build out narrative that may be relevant to a procedure or encounter.

Comments in the public chat

John Bender: https://docs.google.com/document/d/1x77fw7YGPDRR3X4i-0a9ArHlzxJ2tBYV7RtslRHgBPk/edit?usp=sharing

Lisa Nelson: As long as the standard is readily available --like NLM can get it digitally and it is free of charge.

Lisa Nelson: Dr. Lane - are you addressing a "content style" issue? The AHDI has a Book of Style for Clinical Documentation.

Lisa Nelson: I believe the AHDI Book of Style addresses style for Addresses.

Lisa Nelson: You can reference their 2019 Edition. Presentation about it available on Health Story Project.

Brett Marquard: Association for Healthcare Documentation Integrityhttps://www.ahdionline.org/.

Lisa Nelson: If you are addressing "multiplicity" then getting into "cardinality" means you should comment that multiplicity for Race and Ethnicity.

Lisa Nelson: Need to specify that Race and Ethnicity both allow multiples.

John Moehrke: https://sequoiaproject.org/resources/patient-matching/

Lisa Nelson: Can you note that patients may have Direct Addresses. This is another type of telecom info AND IT HELPS IDENTIFY the individual where backed by the DirectTrust framework for the Direct Address.

Lisa Nelson: New Element for Patient Matching - can you add the patient's DirectTrust address -- in the same category as Driver's License.

John Moehrke: Why are state/fed issued identify not collected and used (Drivers License?) where available?

Lisa Nelson: Primary Use case: Quality Measurement - you need to know the Practitioner.

Lisa Nelson: You need the Person or the Device and then for what organization.

John Moehrke: author - role... in what respect was this identity involved in authoring

John Moehrke: X-Ray is authored by a device

John Moehrke: authoring participating type -- enterer, performer, author, verifier, attester, informant, custodian, assembler, composer

John Moehrke: What situations require a Provenance? What is the use-cases that are in-scope, what are not in-scope?

Mark: could there be a created by - category item - machine, professional, patient perhaps

John Moehrke: can we agree that a professional organization is minimally needed (except where not created in an org - patient generated)? Going deeper brings up the question of how deep.

Brett Marquard: Would love to hear about existing implementation

Lisa Nelson: Yes - multiple authors are relevant.

Mark: author vs editor vs updater

Lisa Nelson: They stack on top of each other. You need to track 1: original, 2: the author before you (who you got the information from), 3: You if you are including this in a document you are writing.

Lisa Nelson: Keeping JUST the person who authored the info you are re-using means the chain of custody only needs to point to the guy before you. We can chase the chain later --if needed.

John Moehrke: How far back must you report? It is possible to infinitely track, but is that reasonable or expected 100%?

Brett Marquard: please no, just prior hop.

John Moehrke: I agree, one hop back... but I'm not hearing a scope/no-scope discussion

Lisa Nelson: Implementers have commented on this and agreed - just keep track of the original--everyone keeps that, and then the author before you. That keep the max chain to 3.

John Moehrke: 1 - origin, 2 - who you got it from, 3 - you

Mark: will there be a change count? to understand how far back you would have to go to find original?

Lisa Nelson: I am including in my documentation, information I got from Dr. Smith which was originally authored by Dr. Jones.

John Moehrke: what use-case analysis ends up with that conclusion?

Lisa Nelson: Big discussion at HL7 over 2 working group sessions.

John Moehrke: I expect that origin is the problematic one.

Lisa Nelson: We could try it in a FHIR Connectathon Track to prove it out.....Just an idea.

John Moehrke: unless we say Origin organization, not human/device/system

John Moehrke: All this has been proven theoretical in FHIR Connectathons. Theory is easy... it is reality that needs input

John Moehrke: especially theory is easy with FHIR.

Lisa Nelson: It is a historical problem but solves itself once we implement a rule. any new information that Dr. Brown adds which is new and contributed by him during his care --that is originated by Dr. Brown....the rest takes care of itself.

Lisa Nelson: For old stuff we could permit an "unknown" author as the original author if that really isn't known.

Lisa Nelson: Or the first person becomes the origin of the information, just because they are the first to document with explicit authorship.

Gary Dickinson - CentriHealth/United Health Group: I prefer "chain of trust", from point of health data/record origination to each ultimate point of access/use (and all points in between).. "Chain of custody" is used to track lab (or other) specimens, from collection to analysis (and beyond).

Lisa Nelson: Sure....I like Chain of Trust too--or simply "provenance"

John Moehrke: depth of origination is not just a historical problem that will resolve... (device author, tech author, clinician oversite, clinician second opinion, clinician diagnosis, CDS diagnosis, etc...)

Lisa Nelson: The big issue, I think is this question: Who is asserting this information to be true?

Lisa Nelson: The author is stating what "true information" is relevant and pertinent to this encounter.

Gary Dickinson - CentriHealth/United Health Group: We need to think about provenance to make sure we can account for "who did what when, where and why). What = action or action taken.

Mark: code set information would be important for semantic interoperability

John Moehrke: important to set scope... is the scope inclusive of all the workflows prior to an organization publishing the data externally? Or is the act of publishing externally the beginning of scope?

Lisa Nelson: Performers and Authors are not the same role

Lisa Nelson: Dr. Jones can author that Dr. Smither Performed a procedure on a certain date.

Brett Marquard: What does CommonWell and eHealth exchange say on Provenance? What do EHRs display today during reconciliation?

Didi Davis (The Sequoia Project): Great question Brett, Commonwell and eHealth Exchange have not tackled Provenance and are looking for what USCDI specifies to update the jointly published Content IG.

Gary Dickinson - CentriHealth/United Health Group: In other words, provenance allow us to account for data in the context of an action taken: WHO (took the action,,, documented the action (may be different)), WHAT (action was taken), WHEN (was action taken, was action documented), WHERE (was action taken, was action documented), WHY (was action taken, was action documented).

John Moehrke: Sorry, I can't comment. I must step away for another call... Please define scope and not-scope... I would prefer Cross-Org as the scope, thus author is authoring org only.

Didi Davis (The Sequoia Project): One thing to add - my answer to Brett was regarding the clinical content specifically. Commonwell, Carequality and eHealth Exchange can leverage the transport metadata for provenance separately from the payload.

Brett Marquard: Understood, thanks Didi!

Lisa Nelson: Attestation or re-attestation

Lisa Nelson: Make sure the additional roles are consistent with the definitions within the standards.

Lisa Nelson: Author is different from Performer even though the same person may play both roles

Brett Marquard: The Argonaut project team developed this initial list after surveying the participants in Argonaut and the US Veterans Administration (VA). ...

Brett Marquard: https://argonautproject.github.io/clinicalnotes/guidance.html

Brett Marquard: hey, not special, we surveyed several vendors and VA :)

Lisa Nelson: ABSOLUTELY map these concepts to the C-CDA Clinical Note types defined in C-CDA and in the FHIR IG called C-CDA on FHIR

Lisa Nelson: All C-CDA Document types have been profiled in FHIR in an IG called C-CDA on FHIR for these clinical note types

Next Steps and Adjourn

The next meeting of the USCDITF is on Monday, March 25, 2019 at 1:30 p.m. ET

Cassandra Hadley adjourned the meeting at 4:27 p.m. ET