# Health Information Technology Advisory Committee U.S. Core Data for Interoperability Task Force 2021 Virtual Meeting

Meeting Notes | March 16, 2021, 10:30 a.m. - 12:00 p.m. ET

# **Executive Summary**

The focus of the U.S. Core Data for Interoperability Task Force 2021 (USCDI TF 2021) meeting was to review comments and feedback submitted by TF members as part of Tasks 1b and 1c of Charge 1 of USCDI TF 2021. TF members discussed the suggestions and updated the TF's working documents with their recommendations, which will be presented to the HITAC at a future meeting.

One public comment was submitted by phone, and several comments were submitted via the chat feature in Adobe Connect.

# **Agenda**

10:30 a.m.	Call to Order/Roll Call
10:40 a.m.	Past Meeting Notes
10:45 a.m.	New Task Force Website
11:00 a.m.	Tasks 1b and 1c
11:50 a.m.	TF Schedule/Next Meeting
11:55 a.m.	Public Comment

12:00 p.m. Adjourn

# Call to Order

Cassandra Hadley, Acting Designated Federal Officer, Office of the National Coordinator for Health I.T. (ONC), called the meeting to order at 10:32 a.m.

# **Roll Call**

# **MEMBERS IN ATTENDANCE**

Steven Lane, Sutter Health, Co-Chair
Leslie Kelly Hall, Engaging Patient Strategy, Co-Chair
Ricky Bloomfield, Apple
Hans Buitendijk, Cerner
Grace Cordovano, Enlightening Results
Ken Kawamoto, University of Utah Health
John Kilbourne, Department of Veteran Affairs
Les Lenert, Medical University of South Carolina
Clem McDonald, National Library of Medicine
Aaron Miri, University of Texas at Austin, Dell Medical School and UT Health Austin
Brett Oliver, Baptist Health
Mark Savage, University of California, San Francisco's Center for Digital Health Innovation

Michelle Schreiber, Centers for Medicare and Medicaid Services (CMS) Sasha TerMaat, Epic Andrew Truscott, Accenture Sheryl Turney, Anthem, Inc. Daniel Vreeman, RTI International Denise Webb, Indiana Hemophilia and Thrombosis Center

# **MEMBERS NOT IN ATTENDANCE**

Jim Jirjis, HCA Healthcare

### **ONC STAFF**

Cassandra Hadley, Acting Designated Federal Officer Al Taylor, Medical Informatics Officer, Office of Technology

# **General Themes**

# **TOPIC: USCDI TF 2021 MEMBER RECOMMENDATIONS**

USCDI 2021 TF members completed a review of recommendations submitted within their shared Google documents and discussed submissions.

# **TOPIC: TASKS 1C**

To provide the HITAC with recommendations, the USCDI TF 2021 worked on Task 1c of Charge 1, which included:

- Evaluate new data classes and elements from draft USCDI Version 2 (draft USCDI v2), including applicable standards
- Evaluate Level 2 data classes and elements not included in draft USCDI v2

# **Key Specific Points of Discussion**

### **TOPIC: USCDI TF 2021 HOUSEKEEPING**

- USCDI TF 2021 meeting materials, past meeting summaries, presentations, audio recordings, and final transcriptions are posted on the new website dedicated to the TF located at https://www.healthit.gov/hitac/committees/us-core-data-interoperability-task-force-2021
- Dr. John Kilbourne, a new member of the USCDI TF 2021 who represents the Veterans Health Administration (VA), introduced himself and discussed his background, including time spent at the National Library of Medicine, and his expertise in terminology.
- Leslie and Steven provided an overview of the presentation the USCDI TF 2021 gave to the HITAC at its March 10, 2021 meeting. Salient points included:
  - O HITAC members were receptive to the TF's schedule and recent work.
  - The HITAC will provide guidance on prioritizing stakeholder needs during future TF work.
  - Some members provided feedback on the TF's recommendation to change the Provider Name data element.
    - Steve Posnack, from ONC, submitted a comment with regard to the TF's recommendations to change the "Provider Name" data element to "Care Team Member" and asked the TF to consider the ramifications of this change in terms of data collection, vendor involvement, and future downstream impacts.
  - O A public comment was submitted that highlighted challenges of using a national provider identifier (NPI), and emphasized the need to include those providers who do not use one.

- O There was a discussion around the meaning of what is included in the "Core" of data interoperability that will inform the TF's work going forward.
- Two shared recommendations documents were created in Google Drive for TF members to submit feedback for discussion during meetings, and they were displayed.
- The TF will continue to meet weekly on Tuesdays at the same times, and any breaks in the meeting schedule will be announced.

# **TOPIC: USCDI TF 2021 MEMBER RECOMMENDATIONS DOCUMENTS**

Steven highlighted updates and comments added to the USCDI TF 2021 recommendations documents, and TF members discussed the suggestions, which included:

- Hans submitted a comment on the Tests data element under the Laboratory data class that there was a
  need to clarify the boundary of the Laboratory Test element. During a previous USCDI TF 2021
  discussion, a need was identified to add data element(s) to capture relevant results of procedures, and
  there was a suggestion to level Diagnostic Studies (and Results) to Level 2 of the USCDI.
  - O Hans stated that, while adopting Diagnostic Studies is appropriate in principle, the challenge is to understand the scope of Diagnostic Studies in terms of vocabulary needed to define a clear set of LOINC codes or other encoding. The TF must consider the documentation of Diagnostic Studies and how they are to be represented consistently through supporting standards. He suggested starting with a targeted list of studies and focusing on vocabulary as the first steps in the process.
  - TF members discussed the implications of adding Diagnostic Studies as a new data class in USCDI v2 instead of including it under the Laboratory data class or including it elsewhere.
    - Steven suggested that the TF consider the highest priorities of data elements (e.g., cardiac and EKG results).
    - Clem suggested using the applicable LOINC code, when available, or something else if widely adopted, and he stated that most common studies have existing, rich complements of LOINC codes.
    - John supported limiting the scope, for example, to cardiovascular studies.
    - Clem suggested that the TF consider pulmonary and optical tonometry, as these are readily available.
    - Al Taylor discussed the existing Diagnostic Studies/Exams data class submission submitted by CMS and was included in the Level 2 data class in USCDI v2.
    - Michelle, the submitter of the comment, discussed the CMS's reasoning behind the suggestion and added that they did not promote any specific diagnostic studies.
  - o Following a robust discussion, the TF recommended elevating Diagnostic Studies and Exams with the Results data element in USCDI v2 and, as Andy and Clem discussed, not necessarily as part of the Laboratory data class.
  - O The TF suggested elevating the new Level 2 data class Diagnostic Studies/Exams, as submitted by CMS, for inclusion in USCDI v2. The TF will consider starting with a subset, e.g., cardiovascular studies, but the TF needs to clarify which tests fall under Laboratory (requiring specimens) and others.
- Grace submitted a comment that the USCDI v2 should include the Units of Measure data element under the Laboratory data class because Laboratory values/results must have units of measure included.
  - O Al described ONC's opinion that Unit of Measure is a standard that applies to a data element and should not constitute a data element by itself. The exclusion of an applicable standard was intentional due to concerns regarding the existence of one, so this omission means that any applicable standard is acceptable. When there is a disagreement between Consolidated Clinical Document Architecture (C-CDA) and Fast Healthcare Interoperability Resources (FHIR)/ U.S. Core, ONC does not see it as its role to break the tie.

- o TF members had a rich discussion around which forms result values should take and if an applicable standard unit of measure should be recommended.
  - Clem suggested asserting that the Unified Code for Units of Measurement (UCUM) is acceptable and explained that it is included in CDA, FHIR, DICOM, and IEEE.
     He, along with Andy, Hans, and other TF members emphasized the need for a standard unit of measurement.
  - Al responded that while UCUM is listed as the data standard for vital signs, this is not the only appropriate standard for units of measure.
  - Dan stated that there are also LOINC and SNOMED results values, which may be coded, numeric, or blobs of text. When there are units of measure, these routinely leverage UCUM as the standard.
  - Hans discussed the history of the use of UCUM and cautioned the TF against mixing UCUM with Answers/Values.
- Steven proposed that the TF recommend that when Units of Measure are included, UCUM should be used where available across standards.
- Hans submitted a comment that the scope of diagnoses to be included as Encounter Diagnosis
  data elements under the Encounter Information should be clarified and discussed the justification
  for his recommendation. He suggested that distinctions that should be made between Reason for
  Encounter (typically free text) and the Chief Complaint vs. Diagnosis (typically encoded.)
  - O Steven stated that there is a clear list of diagnosis at the end of an in-patient encounter used for billing purposes. He suggested that the TF clarify which diagnoses this should include (like working, differential, rule-out, billing, etc.) and should consider limiting to billing diagnoses selected in both the Ambulatory and In-patient contexts. Several members shared that the list of problems/diagnosis are more informative than the (often vague) Reason for Visit.
  - O Grace agreed with Steven but stated that the reasons for the visit may be important to patients, even when it cannot be encoded. Many populations would benefit from the capturing of multiple diagnoses, but this may not adequately capture the reason for visit. She advocated for capturing this using free text beyond codes.
  - o Mark stated that Reason for Referral has been shared on the USCDI website and is listed at the Comment level. He cautioned that there may be an overlap with Reason for Visit.
  - Hans added that FHIR U.S. Core standard has already recognized and separated Reason for Visit from Diagnosis.
  - Ricky emphasized the need to have something standardized/coded in this field, adding that U.S. Core clarifies this in detail, though it has not been implemented at scale. This could be refined over time based on feedback.
  - O Les cautioned that it is best to avoid a blank field, and they need to know who collected the data and how. He emphasized that this information should be data captured by a trained medical professional with awareness of proper business processes.
  - The TF recommended leveraging coded billing diagnoses for Encounter Diagnosis and allowing the submission of free text for Reason for Visit. The TF recommends including Reason for Visit for consideration in USCDI v3.

# TOPIC: TASK 1C - EVALUATE LEVEL 2 DATA CLASSES AND ELEMENTS NOT INCLUDED IN DRAFT USCDI V2

USCDI TF 2021 members reviewed comments submitted through the USCDI public comment website that were classified as being part of the Task 1c of Charge 1 work, which included Level 2 data classes and elements not included in draft USCDI v2.

Steven asked TF members to look to prioritize suggestions by timeliness and reminded them that another round of submissions for the next version of the USCDI is scheduled to begin this year. Aaron requested that TF members consider how to best balance inequities of care across the care continuum via their suggestions, noting that this sentiment was highlighted at the March 10, 2021 HITAC meeting.

- Grace and Leslie recommended that the data element Food and Non-meds under the Allergies and Intolerances data class be moved to USCDI v2. Grace discussed supporting factors, including the likelihood that COVID-19 vaccination allergies/reactions will be sought and detailed as part of the pandemic response, and stated that prioritizing some but not all potential allergies (which are material to care) could endanger patients.
  - O Grace stated that another submission suggested collapsing all substances (medications, foods, non-meds, etc.) into one data element to be referred to as Substance/Allergens. Grace explained that a walnut allergy could be indicative of a latex allergy, for example.
  - USCDI TF 2021 members discussed these suggestions, with Aaron adding that food-related data (including intolerances, allergies, lack of access to food) has been under-represented in COVID-19 Contact Tracing. He noted that there may be ties to other comorbidities.
  - O Ricky agreed that this element should be included because these are already represented in U.S. Core, so the implementation barrier is non-existent.
  - O Clem stated that allergies (even drug allergies) are messy and added that it is important to differentiate allergies from other intolerances. With food allergies, there are fewer than ten foods that are clinically important, and for environmental allergies, latex is the most important. He suggested that checkboxes with a specific list of allergies should be used for clarity.
  - O John stated that it is unclear how useful this data would be and stated that it could introduce confusion. Is there supporting vocabulary to link the data that might be entered here to make it beneficial?
  - Leslie responded that constraints would be useful but emphasized that leaving this element out is problematic, as this can be a considerable worry for patients. Not capturing this information is irresponsible.
  - O Hans explained that this suggestion is easy, from a standards perspective: it is accommodated in FHIR and is part of the U.S. Core already in use. The codes are available in SNOMED and have been referenced by both C-CDA and FHIR. The supporting vocabulary is the last barrier.
  - O Sasha stated that it would be reasonable to accommodate this suggestion, but the Electronic Health Record Association (EHRA) has not discussed it yet. She offered to take a list of the TF's questions/suggestions to EHRA for review.
- Leslie discussed several suggestions she submitted with Grace and Mark to avoid a piecemeal approach/further confusion and to align with HL7 provider details already in use. They included:
  - More detail is needed in the Care Team Members data class, including facility-related information and a patient's primary care partner, advocate, executor of their estate, personal representative, etc. This should be moved to USCDI v2.
    - Suggested data elements included: Provider name, Provider ID, Care team member, Provider Telecom Information, Provider Role, Provider NPI, Provider Name, Provider Location, Provider Identifier, and Provider DEA Number
  - Information included within the Encounter Location data element under the Encounter Information data class should align with HL7 for relevant details, and this class/element should be moved to USCDI v2.
    - Suggested data elements included: Encounter Location Facility Identifier, Facility GPS Coordinates, Facility Contact Information, Facility Name, Facility Managing Organization Identifier, Facility Address, and Facility Type
  - Data elements related to Encounter Time under the Encounter Information data class should align with SNOMED encounter details and should be moved to USCDI v2.

- Suggested data elements included: Encounter Time, Encounter Type, Encounter Location, Encounter Disposition, and Encounter Diagnosis
- O Mark was supportive of including all of these items in USCDI v2. He stated that this data is especially important for shared care planning, new delivery models, security, and access.
- O Andy agreed that the items are all well understood/documented and suggested that the TF consider the addition of the Relationship Type.
- O Al discussed Provider Role data element, which is included in Level 2, and was defined by the Provider Taxonomy value set from NUCC. He stated that this element could be applicable to family members and medical providers and shared the link to the NUCC's website as additional information. https://www.nucc.org/
- O Dan stated that items labeled as Provider could be re-labeled as "Care Team Member" for clarity and suggested that multiple types of identifiers could/should be shared. He stated that the broader element Provider ID/Care Team Member ID is a superset of the components, e.g., DEA, NPI.
- O Hans asked for clarification around what was meant by "Provider Role" and if it should be provider or encounter specific. He stated that many Locations could apply to a given provider. Grace responded that this could be problematic in the context of virtual care.
  - Al clarified that the Provider Location refers to the physical location of the provider/care team member, and a virtual care visit would use a different piece of data. Steven added that the attribute is specific to the provider, not the encounter.

# **Action Items**

As their homework, USCDI TF 2021 members will continue reviewing and submitting comments on existing items in the Recommendations Tracker and the USCDI TF 2021 Recommendations documents.

# **Public Comment**

# QUESTIONS AND COMMENTS RECEIVED VIA PHONE

There was one public comment received via phone.

Tom Bronken, from Trinity Health: Good morning, everyone. My name is Tom Broken, and I'm a physician informaticist who works for Trinity. My background is family medicine and emergency medicine. Currently, I'm a member of the LOINC Document Ontology Subcommittee and the Sequoia Project Data Usability Workgroup. I'm here with Didi Davis of the Sequoia Project. First of all, as a clinician, I need to tell you I'm very happy to see that clinical notes are included in the USCDI versions, and I think they are going to have a huge impact on interoperability and its usefulness. And, I now understand that the five notes you have chosen are exactly the right ones, but at first, I didn't think so. Judging from some of the comments that were on version 1 of USCDI, I wasn't the only one who thought that because there were others that commented that we need an outpatient encounter summary note. The Sequoia Project had a previous task force to the one that I'm on that produced a report concerning those five clinical notes. Within the five, there were two encounter summary notes, including the in-patient encounter summary note, which would be called the Discharge Summary, which makes sense, and they had the outpatient encounter summary note, which has been called the Progress Note. That's where I see a bit of a problem. In the wild, when providers, nurses, and clinicians refer to the progress note, they are mostly talking about notes that go on the in-patient chart, daily, while the patient is hospitalized. I've never heard an outpatient office note (or an ED note) referred to as a progress note. Now HL7 does define the progress note as either an in-patient or outpatient, and LOINC has followed that convention. That's probably where this problem comes from. But again, it goes against the common understanding and usage of an outpatient summary note. So, my comment for the task force is that it should consider changing the name of the outpatient encounter summary note as something that will be recognized as that. Otherwise, we are going to have tons of confusion. The wrong kinds of notes are going to be sent, and the right ones won't be sent. We are going to spend the next several years trying to fix this, and I

don't know if you take or ask questions, but I'm willing to take any question anybody has. Thank you for the opportunity to address you.

# QUESTIONS AND COMMENTS RECEIVED VIA ADOBE CONNECT

Andy Truscott: Lounging in the Lobby. Will be there shortly.

Sasha TerMaat: Hans emailed he's in the process of joining.

Hans Buitendijk: I am on but not yet on voice.

Andy Truscott: Just joined...

Andy Truscott: looks like I missed the Roll Call

Hans Buitendijk: And on voice now as well.

Andy Truscott: Hans and I were enjoying the Lobby too much.

Hans Buitendijk: I was enjoying a reboot.

Andy Truscott: Same difference:)

Hans Buitendijk: :)

Clem McDonald: I am here but missed the role [sic] call -clem

Leslie Kelly Hall: please place in the chat

Leslie Kelly Hall: also not originating in the same systems

Al Taylor, ONC: https://www.healthit.gov/isa/uscdi-data/diagnostic-studiesexams

Leslie Kelly Hall: new data class

Leslie Kelly Hall: everyone, hands up is showing some bugs if we dont [sic] see you right away, have patience.

Andy Truscott: (I'm being patient!)

Grace Cordovano, PhD, BCPA: As we consider a potential new data class, how do we define distinctions between diagnostic studies and procedures?

Al Taylor, ONC: USCDI v1 data element definition for Laboratory/Tests: TestsExaminations of specimensderived from humans to provide information for the diagnosis, prevention, treatment of disease, or impairment of, or assessment of health. [sic]

Leslie Kelly Hall: clem isn't [sic] there further complications as the LAB provides its specific values and ranges?

Hans Buitendijk: UCUM is not an answer.

Hans Buitendijk: Only SNOMED and LOINC can be an answer. UCUM is only a qualifier of a numeric "answer".

Hans Buitendijk: Unit of measure has been separate since ASTM/HL7 OBX. Unfortunately in the beginning there was a lot of text rather than structure

Andy Truscott: ... and different Labs have different values and ranges depending upon a whole host of other factors (calibrations, reagents etc.)

Ricky Bloomfield: UCUM is that Argonaut and US Core already recommend for units.

Ricky Bloomfield: \*what

Hans Buitendijk: UCUM should be used where available across standards. It's referenced in v2, CDA, C-CDA, FHIR including in the various guides for a long time.

Daniel Vreeman: Units recommendation sound good to me

Andy Truscott: Concur.

Leslie Kelly Hall: for transparency for all, anything billed should be visible

Mark Savage: ONC has been listing "reason for referral" as a candidate data element.

Mark Savage: Maybe a subset or example of reason for visit?

Leslie Kelly Hall: agreed on biling [sic] diagnosis

Hans Buitendijk: While US Core 3.1.0 is not yet widely available, that plus USCDI v1 are both being adopted in parallel, so having data already addressed in standards that are targeted for adoption by end of 2022 being included in USCDI would be reasonable.

Hans Buitendijk: Correction, US Core 3.1.1

Leslie Kelly Hall: data underserved need to be prioritized?

Aaron Miri: @LKH - my 2 cents: It would tremendously help if we can first identify quickly the underserved and at risk elements (lack of food, etc.) and then yes, id say there's a prioritization

Denise Webb: I apologize but I need to drop off.

Leslie Kelly Hall: Thanks @ Aaron

Clem McDonald: lost conntection [sic]

Sasha TerMaat: @Hans, are you familiar with environmental allergies in FHIR?

Shelly Spiro (Pharmacy HIT Collaborative): The categories for allergies should be medications, food and environment allergies

Hans Buitendijk: FHIR would not be the restriction, US Core alreday [sic] has them though as Ricky just indicated.

Sasha TerMaat: Thanks!

Ricky Bloomfield: I agree this should also apply to CDA, but the reality is that the bulk of implementation work moving forward will be FHIR/US Core.

Hans Buitendijk: Pretty sure that the value set for allergies in FHIR US Core and C-CDA is the same. Checking as we type.

Ricky Bloomfield: We should acknowledge that reality!

Ricky Bloomfield: Re: Clem's comment, we should distinguish between implementation guidance and actual implementation. We need a framework for vendors to use - they will ultimately decide what workflow makes sense for them.

Grace Cordovano, PhD, BCPA: It's even messier for patients when it is not captured.

Mark Savage: + 1 Grace!

Sasha TerMaat: What's the difference between "Provider Identifier" and NPI, is Identifier a superset of NPI?

Hans Buitendijk: In HL7 FHIR US Core CareTeam includes participant.role as Must Support, required.

Sasha TerMaat: Also Provider ID.

Mark Savage: As we discuss "provider", do we mean "care team member" per earlier conversation?

Hans Buitendijk: Is the NUCC vocabulary a billing role, or a role in a care team?

Mark Savage: https://www.nucc.org/

Andy Truscott: In case anyone is interested. Here's what the NHS built out: https://digital.nhs.uk/developer/api-catalogue/legitimate-relationship-service-hl7-v3

michelle schreiber: for the record, the current speaker is Tom Bronken (last name incorrect in transcription) from Trinity Health

Didi Davis (The Sequoia Project): Tom is discussing the comment found here: https://www.healthit.gov/isa/uscdi-data/progress-note#comment-4741

Mark Savage: Thank you for the public comment and contribution!

Aaron Miri: Thanks all!

# Resources

USCDI TF 2021 Website

USCDI TF 2021 - March 16, 2021 Meeting Agenda

USCDI TF 2021 - March 16, 2021 Meeting Slides

USCDI TF 2021 - March 16, 2021 Webpage

HITAC Calendar Webpage

# **Adjournment**

Steven thanked everyone for their work at the current meeting. The next USCDI TF 2021 meeting will be held on Tuesday, March 23, 2021.

The meeting was adjourned at 11:59 a.m. E.T.