Health Information Technology Advisory Committee

Interoperability Standards Workgroup 2023 Virtual Meeting

Meeting Notes | February 15, 2023, 10:30 AM – 12 PM ET

Executive Summary

The focus of the Interoperability Standards Workgroup (IS WG) was to review workgroup charges and Draft United States Core Data for Interoperability Version 4 (USCDI v4) data elements. The IS WG discussed these topics and provided feedback. Public comments were submitted verbally and via the chat feature in Zoom Webinar. There was robust discussion via the chat feature in Zoom Webinar.

Agenda

10:30 AM	Call to Order/Roll Call
10:35 AM	IS WG Charge and Timelines
10:40 AM	Comments and Recommendations – New Draft USCDI v4 data elements
11:45 AM	IS WG Workplan and Timeline
11:55 AM	Public Comment
12:00 PM	Adjourn

Call to Order

Seth Pazinski, Acting Designated Federal Officer, Office of the National Coordinator for Health IT (ONC), called the meeting to order at 10:31 AM.

Roll Call

Members in Attendance

Sarah DeSilvey, Gravity Project, Larner College of Medicine at the University of Vermont, Co-Chair
Naresh Sundar Rajan, CyncHealth, Co-Chair
Pooja Babbrah, Point-of-Care Partners
Shila Blend, North Dakota Health Information Network
Ricky Bloomfield, Apple
Hans Buitendijk, Oracle Health
Christina Caraballo, HIMSS
Grace Cordovano, Enlightening Results
Steven Eichner, Texas Department of State Health Services
Nedra Garrett, Centers for Disease Control and Prevention
Rajesh Godavarthi, MCG Health, part of the Hearst Health Network
Bryant Thomas Karras, Washington State Department of Health

Clem McDonald, National Library of Medicine
Steven Lane, Health Gorilla
Hung Luu, Children's Health
Meg Marshall, Department of Veterans Health Affairs
Anna McCollister, Individual
Aaron Neinstein, UCSF Health
Kikelomo Adedayo Oshunkentan, Pegasystems
Mark Savage, Savage & Savage LLC
Michelle Schreiber, Centers for Medicare and Medicaid Services
Shelly Spiro, Pharmacy HIT Collaborative
Ram Sriram, National Institute of Standards and Technology

Members Not in Attendance

Raj Dash, College of American Pathologists
Deven McGraw, Invitae Corporation
Aaron Miri, Baptist Health

ONC Staff

Seth Pazinski, Acting Designated Federal Officer, ONC
Al Taylor, USCDI Lead, ONC

Key Points of Discussion

Opening Remarks

IS WG co-chairs, Sarah DeSilvey and Naresh Sundar Rajan, welcomed attendees. Sarah reviewed the meeting agenda detailed in February 15, 2023, meeting presentation slides.

IS WG Charge and Timelines

Sarah reviewed the IS WG Charge and Timeline. The charge includes:

- Overarching charge: Review and provide recommendations on the Draft USCDI Version 4.
- Specific charge:
    - Due to the HITAC by April 12, 2023:
        1. Evaluate Draft USCDI v4 and provide HITAC with recommendations for:
            a. New data classes and elements from Draft USCDI v4.
            b. Level 2 data classes and elements not included in Draft USCDI v4.

Discussion:

No comments were received from IS WG members.

Comments and Recommendations – New Draft USCDI v4 data elements

Sarah DeSilvey presented the IS WG Charge, detailed in presentation slides. This presentation included a tentative schedule review of Draft USCDI v4 new data classes and elements. Al Taylor then presented the IS WG disposition working Google document.

IS WG members reviewed the Google document and provided feedback. The following data elements were discussed: Physical Activity, Average Blood Pressure, Result Interpretation, Result Reference Range, Result Unit of Measure, Specimen Source Site, Specimen Identifier, Specimen Condition and Disposition, and Time of Procedure. IS WG members agreed to an initial recommendation of Result Interpretation, Result Reference Range, Result Unit of Measure, Specimen Source Site, Specimen Identifier, Specimen Condition and Disposition incorporation in USCDI v4. IS WG members agreed to revisit Physical Activity, Average Blood Pressure, and Time of Procedure, given the need for further discussion.

Discussion:

- IS WG members discussed the following data element: Physical Activity.
    - Sarah noted that members previously suggested inviting the FHIR Physical Activity IG WG to discuss this data element. Sarah elevated Steven Lane's comments regarding IS WG processes. Steven Lane explained that elements included in USCDI v4 must be ready for nationwide implementation and that some data elements can be brought forward with the expectation of additional work at HL7 before USCDI publication. Al explained that a USCDI data element does not need a current US Core representation if the path for FHIR and US Core representation is reasonable.
    - Hans Buitendijk agreed with Steven and Al's comments. Hans inquired what a reasonable path is for FHIR and US Core representation of USCDI data elements. Hans suggested that Physical Activity does not have a reasonable path for FHIR and US Core representation and should not be included in USCDI v4. The IG relating to this data element has not been balloted or published.
    - Nedra Garrett, representing CDC, expressed support for the inclusion of Physical Activity in USCDI v4. The CDC has asked for four LOINC codes relating to this data element. Nedra noted that, if not included in USCDI v4, the CDC will continue to support this data element for inclusion in future USCDI iterations.
    - Anna McCollister inquired about the process by which data element measures are chosen. Nedra explained that the current Physical Activity measure is standardized. Sarah noted that Anna's comments align with other IS WG members. Sarah explained that HL7 is working on measurement standardization for this data element.
    - Al explained that the data element Physical Activity was included in Draft USCDI v4 as it is an area of assessment that is important to capture and exchange. ONC recognizes there are existing assessment instruments that are of sufficient standardization to capture and exchange physical activity assessment data. Instruments include Exercise Vital Signs and an instrument proposed by the American Heart Association. This does not represent the entire scope of the Physical Activity IG and does not portray the only mode of capture by Health IT stakeholders.
    - Shelly Spiro explained that in a long-term post-acute care setting, Physical Activity is an important component for documentation and the assessment of frailty. Care plans are implementing physical activity codes which are FHIR released. Shelly noted that Physical Activity related terminology has been built within value sets in the National Library of Medicine Value Set Authority Center (NLM VSAC). Shelly noted potential confusion within the IS WG regarding a focus on the Physical Activity IG when this data element's

assessment is already being documented using standardized terminology. The inclusion of this data element in USCDI will help vendor systems utilize standardized terminology for data collection.

- Christina Caraballo pointed out that the American Heart Association (AHA) in conjunction with the Physical Activity Alliance has been doing a lot of work in this space. Christina recommends the IS WG speak with these organizations to discuss the Physical Activity IG.
- Ricky Bloomfield suggested meeting with the Its Time to Move Program group, who, along with AHA, created a USCDI submission. Ricky also noted that in an Argonaut Steering Committee meeting, a physical activities related project was chosen as a top three area of focus in the upcoming year.
- Steven Eichner noted that USCDI data elements make a difference in coding information in the context of data collection and purpose. He also noted without an IG, implementors have limited data utility.
- Nedra commented on the importance of Physical Activity and expressed support of inclusion in USCDI v4. Nedra inquired about IG considerations regarding specific LOINC codes. If the FHIR IG utilizes existing LOINC codes, then why not move forward with inclusion in USCDI v4?
- Hans asked the following questions for discussion at future IS WG meetings.
  - Since the submission proposes the FHIR IG, how does the scope change if we only look at specific data element attributes?
  - Is the intent of this data element for patient collected information or patient provided information?
- IS WG members agreed to revisit the topic of Physical Activity, given the need for discussion with key stakeholders at the March IS WG meeting.

- IS WG members discussed the following data element: Average Blood Pressure.
  - Hans requested clarity on average blood pressure calculations and attributes. Han's comments are detailed in the Google document. Guidance for the representation of this data element is dependent on clarifying answers.
  - Grace Cordovano agreed with Hans and inquired clarity of manual vs. digital calculation and remote patient monitoring vs. patient-reported outcome.
  - Al explained the intent of this data element is to allow for its representation through average blood pressure calculations. Average Blood Pressure can use multiple calculations and measurement methods. Steven Lane discussed a previous IS WG presentation which provided context for this data element.
  - Shelly explained that, within pharmacists and care plan stakeholders, providers seek average blood pressure rather than individual values. If terminology for this data element is not standardized, it becomes a problem. Shelly expressed support for the inclusion of this data element in USCDI v4.
  - Nedra noted the CDC's leverage of average blood pressure for surveillance and epidemiological purposes. Nedra expressed support for the inclusion of this data element in USCDI v4. Nedra asked for a change in the descriptor to include "average."
  - Anna requested source documents to reference the average blood pressure measure. Sarah stated that past IS WG materials will be sent to IS WG members for review.
  - Hans requested clarity on additional information to accompany average blood pressure measures.
  - Al noted that sometimes ONC expands USCDI submissions to a broader scope. USCDI submissions include details that may answer IS WG member questions.

- Steven Lane noted it is important for IS WG members to review USCDI submissions in addition to Draft USCDI v4.
- IS WG members agreed to revisit the topic of Average Blood Pressure later, given the need to review data element materials and further discussion.

- IS WG members discussed the following data element: Result Interpretation, Result Reference Range, Result Unit of Measure, Specimen Source Site, Specimen Identifier, Specimen Condition and Disposition.
  - Sarah noted similar IS WG discussions, recommendations, and legislation requirements for the following data elements: Result Interpretation, Result Reference Range, Result Unit of Measure, Specimen Source Site, Specimen Identifier, Specimen Condition and Disposition.
  - Sarah noted the IS WG conversation regarding the relationship between Results Interpretation and level 2 data element Abnormal Flag.
    - Al explained that Abnormal Flag and Test Interpretation are intended to be the same data element. The Google document was revised to note that this level 2 data element became a data element in Draft USCDI v4.
  - Hung Luu expressed support for the inclusion of these data elements in USCDI v4 and noted its use in legislation requirements.
  - Steven Lane recommended that past IS WG meeting materials are shared with IS WG members for reference. He also expressed support for the inclusion of these data elements in USCDI v4.
  - Hans recommended splitting the Specimen Condition and Disposition data element into two different concepts. Hans explained feedback from HL7 WG discussions that there is the condition of the specimen and the reason for specimen rejection/acceptance in the context of specific tests. Splitting the data element into two different concepts will address and clarify those intentions.
  - Hung agreed with Han's recommendation to split Specimen Condition and Disposition data element. He explained the intent of this submission is to determine if a specimen is suitable for certain tests and the reason for rejection if unacceptable. Hans provided a clinical example to further explain the intent for this data element and the ability to document specimen conditions along with testing information.
  - Steven Lane shared his experience from a provider setting and noted the importance of documenting specimen conditions/dispositions along with testing results.
  - Hans suggested clarification on the intent for documentation when a test is performed while conditions are not ideal.
  - IS WG members agreed to move forward with an initial recommendation of Result Interpretation, Result Reference Range, Result Unit of Measure, Specimen Source Site, Specimen Identifier, Specimen Condition and Disposition incorporation in USCDI v4 considering IS WG feedback.
- IS WG members are requested to insert recommended USCDI level 2 data elements in the Google document below Draft USCDI v4 data elements.
- IS WG members discussed the following data element: Time of Procedure.
  - Hans discussed the need for time/date elements in Laboratory Testing and Procedure data classes.
  - Hung agreed with IS WG member comments and explained the importance of multiple times/dates regarding Laboratory Testing. Multiple points in time can be documented for laboratory testing processes.
  - Steven Lane suggested using a label explaining different times/dates and a set of appropriate responses to lab and other procedure workflows.

- Hans recommended adding a date/time performed in the Procedure data class and one or more date/time elements in the Laboratory Testing data class.
- Al explained that data elements belonging to a certain data class are not restricted for use in the corresponding data class workflow. In this context, is it the right approach for ONC to include one date/time element that can be applied to multiple data classes?
- Steven Eichner noted there are multiple items outside of Laboratory Procedure data class that utilize dates/times. He also recommended further discussion of this data element and relabeling it to align with generic use. Al explained that time of assessment is one area ONC thought would be a candidate for use as a generic timing element.
- Bryant Karras noted that time of procedure, specimen collection, and start/end processes are reused across multiple activities. Are we reusing those same FHIR data elements consistently? Bryant noted reuse of data elements will allow for consistent date/time data collection and reporting.
- Hung discussed the importance of identifying individual times when collecting multiple different time points. Hung asked for clarification on the IS WG recommendation. Is the IS WG recommending the use of a standard date/time format or the same date/time element for all different times collected. Al explained that the ONC-proposal is for a time/date element that can be used across multiple different data classes. Hans suggested that we clarify the applicability of procedure date/time to other data classes.
- Hung noted there needs to be a way to differentiate between different collected times.
- IS WG members agreed to revisit the Time of Procedure data element later with further discussion.

IS WG Workplan and Timeline

Sarah DeSilvey reviewed the upcoming IS WG meeting and Draft USCDI v4 review schedule. To allow for final recommendation review at the April HITAC meeting, IS WG comments should be finalized by the middle to end of March.

Sarah encouraged IS WG members to suggest stakeholders for inclusion into USCDI v4 discussions at the bottom of the disposition Google document.

PUBLIC COMMENT

Seth Pazinski opened the meeting for public comments:

QUESTIONS AND COMMENTS RECEIVED VERBALLY

- Charles Gabrial inquired about a rationale for the facility data element. Al Taylor explained the facility information data element. This data element is important as it details the location of facilities (appointments) as well as availability of resources/services. The original USCDI submission provided rationale of the pandemic to count facility resources, ONC expanded this submission to draft facility information. Charles inquired if Medical Treatment Facilities (MTFs) are part of the facility ID. Al is unsure of unique ID lists available, but facility data should include MTFs.

QUESTIONS AND COMMENTS RECEIVED VIA ZOOM WEBINAR CHAT

Chares Gabrial: what are possible rationales for Facility information?

Pooja Babbrah: I would like to +1 Anna's comment. I'm struggling with this on medication adherence too. Another question is who is assessing physical activity. Who is assessing adherence of a patient related to their medication. There seems to be a lot of factors involved

Shila Blend: It is a good point as clinical assessment versus home assessment of values can affect data quality

Steven Lane: @ Pooja - The “who says?” or Provenance question is relevant to nearly all USCDI data elements.

Steven Lane: Our WG has repeatedly asked ONC to add Author to Provenance, or at least to include the ability to specify that the “author” is the patient/individual themselves.

Sarah DeSilvey: I believe Mark has provenance elevated again

Aaron Neinstein: @Steven… do you think it is equally so across elements? Meaning, yes, provenance is relevant everywhere and influences interpretation of a data element, but something like Lab Specimen collection time I would think is less impacted by Provenance vs “Physical Activity”

Pooja Babbrah: @steven - thanks. And I do think the provenance is an important issue

Hans Buitendijk: If the whole of the Physical Activity is not being proposes (as the submission suggests), what actually is proposed that would be a more limited scope?

Mark Savage: Added Author/Provenance at entry 34 this morning. Related addition at entry 35.

Sarah DeSilvey: Thank you, Mark!

Aaron Neinstein: Thx Mark… provenance so important for many use cases

Steven Lane: @AaronN - Labs specimens can be collected at home, or by a community health worker or visiting nurse. In these settings I do think that “author” is relevant to result interpretation.

Steven Lane: Thank you @Mark. You beat me to it.

Christina Dahlstrom: We are using the same LOINC codes in the IG

Steven Lane: https://www.healthit.gov/isa/taxonomy/term/1391/draft-uscdi-v4#uscdi-proposal-mode-uscdi-data-element-page-display

Steven Lane: Link above is to the submission from AMA.

Grace Cordovano: Here’s an example of a method to calculate avg BP: shouldn’t guidelines be in place guiding how to calculate it? https://www.ama-assn.org/node/27271

Steven Lane: We hosted a presentation from the submitters last year. ONC might go find and mark the recording of that meeting so that WG members can review it.

Grace Cordovano: Thanks Al

Hans Buitendijk: If it is about (re)presenting the data, then it would be a functional capability to calculate an average, not an interoperability capability to share an average with a clear understanding of what that means. Is that in the scope of USCDI?

Albert Taylor: the scope of USCDI is the core set of data that must be exchanged in several functional settings. so Average Blood Pressure would need to be included in an exchange.

Hans Buitendijk: Can you clarify that when communicating there is no need to indicate what it represents? Just that it is an average of sorts?

Pooja Babbrah: +1 Shelly and Ricky's comments

Hans Buitendijk: We would have then to agree on understanding what in addition to the average blood pressure value is minimally required to be communicated with that, as there is no guidance yet on how to express and convey that consistently.

Grace Cordovano: Is it possible to include the AMA's tool as a reference: https://www.ama-assn.org/node/27271

Steven Lane: Interested WG members should review the submission from AMA linked above. It includes all these details.

Christina Dahlstrom: FYI on the PA IG...we would look forward to presenting on our progress and the details of our work. We are still on target to submit for ballot in April.

Sarah DeSilvey: Thank you, Steven

Sarah DeSilvey: Thank you, Christina

Hans Buitendijk: There are two average blood pressures here: http://hl7.org/fhir/us/vitals/STU1/profiles.html. Are both intended to be included?

Mark Savage: + 1 @Steven! ISWG and HITAC recommendations may or may not be precisely same as original submission.

Aaron Neinstein: Thx @Steven. Agree, these are must have. +1 to inclusion. Lab results cannot be interpreted without having reference range, units of measurement.

Crystal Snare: I'll second Steven's comment about the need for lab elements to be included including specimen, labs, etc. These are needed by public health as well as providers.

Aaron Neinstein: 👍

Crystal Snare: Yes!

Crystal Snare: Thank you @steven!

Bryant Thomas Karras: Agree collection and processed are the two that public health really needs

Crystal Snare: Agree with @Hans -- specimen datetime of collection is critical and is already in practice.

Steven Lane: I think it is a fools errand to attempt to pre-specify all the various times associated with the lab, surgery, or other procedural workflows as a prerequisite to adding Procedure Time to USCDI.

Sarah DeSilvey: Noted, steven

Hans Buitendijk: At the same time, without some level of clarity which times are of interest now helps reduce ambiguity as to which ones to ensure are part of C-CDA and FHIR US Core. The workflow related standards

typically already have various dates and times included on the different information objects needed. Ultimately we need all in USCDI (including all the objects they belong to), but which ones are the next ones to add now?

Steven Lane: +1 @Ike - Hence the need for multiple times, each with the option of a label clarifying the meaning of the specific time documented.

Hans Buitendijk: Considering the criticality of ensuring the right date times are on the right information objects to manage workflows and interactions would need more specificity of which times rather than any time with a label.

Sarah DeSilvey: Wondering if a subgroup could craft these definitions then present back to the group?

Mark Savage: Merging comments above, can one pre-specify the common time needs, with an "other" field for the remainder by text?

Hans Buitendijk: For purposes of clarity, I would suggest to be very specific on which date/times are relevant for each data class as the meaning changes.

Hans Buitendijk: There are many times needed as part of workflow management, while USCDI is more about which EHI needs to be commonly shared beyond the immediate systems managing that data. Thus not all data times captured are as relevant for USCDI. Hence the question to be more specific.

Anna McCollister: Plus one to Hans comment above.

Steven Lane: Encounters also have many relevant times (time of scheduling, scheduled appointment time, patient arrival, staff assessment, clinician start/ed timeS, documentation start/end timeS, chart review time) many of which are used increasingly in analyses and programs to address clinician burden, patient experience, operational efficiency, etc. Again, the more flexibly we can specify this the more useful it will be to support a multitude of specific use cases.

Grace Cordovano: +1 Steven

Hans Buitendijk: Completely agreed with Ike that IGs would further specify. However, USCDI needs to scope what the IGs intend to cover at a minimum for purposes of USCDI. Without that USCDI clarity it is not clear as to what a specific IG may not have addressed. Less likely in a workflow supporting IG, but more likely to be unclear for a general purpose EHI data access IG such as FHIR US Core.

Hans Buitendijk: Happy to work with Hung and others as well.

Steven Lane: @Hans - Could the IGs be written to specify Time Types applicable to each specific use case?

Albert Taylor: @steven Encounter Time data element already exists and includes the range of times relevant to encounters

Sarah DeSilvey: Thank you, all. We will gather names and assist in facilitating that conversation prior to the next ISWG

Carmela Couderc: https://www.healthit.gov/isa/uscdi-data-class/facility-information Select each data element to read the submission.

Steven Lane: Encounter Time data element: https://www.healthit.gov/isa/taxonomy/term/1191/uscdi-v2 is defined on the web site as “Represents a date/time related to an encounter (e.g., scheduled appointment time, check in time, start and stop times).” Here again, it would be best to be able to capture multiple times

associated with a given encounter and to label each of them with their meaning, ideally with a list of available answers, which might be use case specific AND the ability to enter free text to support novel/emerging use cases.

Hans Buitendijk: Would a generic approach to date/time have a data time on Procedure and then one has to figure out how that applies to CareTeam, Health Insurance, Health Status, Pateint, etc.? Certain date/times are relevant at the class level, others are needed at individual data elements.

QUESTIONS AND COMMENTS RECEIVED VIA EMAIL

No comments were received via email.

Resources

IS WG Webpage
IS WG – February 1, 2023, Meeting Webpage
HITAC Calendar Webpage

Adjournment

The meeting was adjourned at 12:01 PM.