Health Information Technology Advisory Committee

Interoperability Standards Workgroup 2023 Virtual Meeting

Meeting Notes | March 01, 2023, 10:30 AM – 12 PM ET

Executive Summary

The focus of the Interoperability Standards Workgroup (IS WG) was to review workgroup charges, discuss Draft United States Core Data for Interoperability Version 4 (USCDI v4) data elements with subject matter experts, and review USCDI level 2 data elements. The IS WG discussed these topics and provided feedback. 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
10:40 AM	Physical Activity Assessment
11:00 AM	Medication Instructions and Medication Adherence
11:30 AM	Comments and Recommendations – Level 2 Data Elements
11:45 AM	IS WG Workplan and Timeline
11:55 AM	Public Comment
12:00 PM	Adjourn

Call to Order

Mike Berry, Designated Federal Officer, Office of the National Coordinator for Health IT (ONC), called the meeting to order at 10:30 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
Grace Cordovano, Enlightening Results
Raj Dash, College of American Pathologists
Steven Eichner, Texas Department of State Health Services
Nedra Garrett, Centers for Disease Control and Prevention (CDC)

Rajesh Godavarthi, MCG Health, part of the Hearst Health Network
Bryant Thomas Karras, Washington State Department of Health
Meg Marshall, Department of Veterans Health Affairs
Clem McDonald, National Library of Medicine
Aaron Neinstein, UCSF Health
Steven Lane, Health Gorilla
Hung Luu, Children's Health
Anna McCollister, Individual
Deven McGraw**,** Invitae Corporation
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
Christina Caraballo, HIMSS
Aaron Miri, Baptist Health

ONC Staff
Mike Berry, Designated Federal Officer, ONC
Al Taylor, USCDI Lead, ONC

Key Points of Discussion

Opening Remarks
IS WG co-chairs Sarah DeSilvey and Naresh Rajan welcomed attendees. Sarah reviewed the meeting agenda detailed in the March 1, 2023, meeting presentation slides.

IS WG Charge
Sarah DeSilvey reviewed the IS WG Charge. The charge includes:

- Overarching charge: Review and provide recommendations on the Draft USCDI v4.
- 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.

Sarah presented a tentative schedule review of Draft USCDI v4 new data classes and elements

Discussion:
No comments were received from IS WG members.

Physical Activity Assessment

Sarah DeSilvey introduced guest speakers from the American Heart Association (AHA): Laurie Whitsel, Paul Chase, and Lloyd McKenzie, to present information related to the Physical Activity Assessment data element.

Laurie introduced the AHA and presented on the It's Time to Move project. This project is a multi-prong and multi-year effort to incorporate physical activity assessment prescription referral as a standard of care in the US health care system. AHA is working to develop a Physical Assessment Implementation Guide (IG) and advocates Physical Activity Assessment data element inclusion in USCDI. Laurie presented the core measures and LOINC codes for the Physical Activity Assessment data element, along with examples of health system use.

Discussion:

- Lloyd noted that AHA advocates for the inclusion of Physical Activity Assessment USCDI v4. AHA's USCDI submission focused on specific LOINC codes to encourage documentation of primary physical activity measures which correlate with national guidelines.
- Mark Savage inquired if the core physical activity measures capture physical activity attained through occupational methods, such as lifting boxes at work.
    - Laurie and Steven Lane explained that core measures and LOINC codes capture physical activity attributed to both leisure and occupational methods.
    - Steven Lane expressed support for the core Physical Activity Assessment measures and LOINC codes.
- Al Taylor noted differences between AHA's core measurements and ONC's optional set of physical activity certifications criteria developed in 2015.
    - Laurie explained the rationale for AHA's differences in core measurements, specifically its use of a 30-day physical activity measure.
- Ricky Bloomfield inquired about how many EHRs record this structured data in and the scope of application workflow changes if added to USCDI.
    - Laurie explained that about 30% of EHRs have the capability to implement AHA's core measures. AHA continues to provide patient and provider workflows to promote the standardization of data exchange. Multiple health centers have reached out to AHA and expressed interest in implementing AHA's core measures.
- Shelly Spiro, on behalf of the long-term and post-acute care setting, expressed that physical activity plays an important role in the management of frailty. Shelly expressed support for moving forward with this data element and its use of LOINC. Laurie agreed with Shelly and noted AHA's focus on frailty.
- Deven McGraw inquired whether core measurement instructions note that physical activity can be accumulated throughout the day in multiple bouts. Deven also inquired how often AHA's physical activity guidelines are updated.
    - Laurie shared that in 2018, AHA guidelines were updated to state that minutes of physical activity can be accumulated throughout the day. Laurie explained that AHA's physical activity guidelines undergo regular updates with a ten-year timeline.
- Steven Eichner suggested the calculated physical activity core measure is not necessary as it is a product of the first two measures. He discussed the potential for physical activity deviations varying throughout the year, dependent on the environment and varying individual-level standards due to biological reasons.

- Laurie noted the importance of the calculated physical activity measure as it aligns with physical activity guidelines and is used for individual assessment and treatment. She explained that although there is an indication of physical activity seasonality, it is not a significant issue. Paul noted that physical activity guidelines consider individuals with an individual physical activity levels as allowed by chronic conditions.
- Steven Eichner suggested that a statement relating to individuals' physical activity level limited by chronic conditions be explicitly stated in this data element.

- Nedra Garrett, representing the CDC, expressed support for this data element. Nedra inquired if physical activity calculated values are created automatically for population in its corresponding LOINC code.
  - Lloyd explained the calculated value was codified for ease in determining whether an individual has met physical activity guidelines. Health systems are expected to gather the required measurements and determine the calculated value automatically.
- Hans Buitendijk inquired about the scope of AHA's proposal and whether it includes LOINC codes beyond the core set presented. Laurie explained that AHA is focused on the assessment of physical activity with a focus on the LOINC codes presented today. AHA's USCDI submission focuses on core physical activity assessment measurements/codes and a subset of AHA's IG. Al noted the USCDI data element relates only to capturing and sharing physical activity assessment information.
- Bryant Karras expressed support for AHA's submission.

Medication Instructions and Medication Adherence

Sarah DeSilvey introduced guest speaker Scott Robertson, Kaiser Permanente, to discuss the following data elements: Medication Instructions and Medication Adherence. Scott Robertson reviewed last week's IS WG discussion and presented on FHIR mapping instructions, SCRIPT, and Sig components.

Discussion:

- Shelly Spiro explained the importance and use of medication directions by pharmacists. She also discussed the application of medication information in care plans where clinical information is shared with a care team. These elements should be codified to ensure data safety and a clear understanding of coded terms. Shelly inquired about how medical directions are used technically in other types of FHIR resources, such as the electronic care plan.
  - Scott explained the electronic care plan uses the same available structures as presented and noted the importance of codified data elements.
  - Shelly inquired how directions of use are entered in FHIR for medication administration.
    - Scott noted the simplified dosage instructions structure is in the administration and dispense section and medication statement section.
- Hans Buitendijk inquired whether the USDCI v4 recommendation will be limited to items discussed by Scott or include other elements referenced in its submission. Al Taylor explained there are multiple medication instruction formats and that the USCDI data element scope is broader than SCRIPT.
- Sarah noted that an IS subgroup has formed to discuss Medication Instruction and Medication Adherence data elements.
- Bryant Karras inquired whether there has been verification that, once mapped to FHIR, NCPDP can be successfully leveraged in other activities that rely on instructions. Bryant provided an example activity of medication dosage equivalence.

- Scott explained that other activities should utilize SCRIPT to communicate subtext. SCRIPT can be used as part of medication equivalent dosage reporting to pharmacies. Scott is unsure how providers utilize SCRIPT in the context of medication dosage equivalence.
- Shelly explained that pharmacies utilizing the Prescription Drug Monitoring Program (PDMP) can send text-based directions for use. Regarding Bryant's example, other data elements would lead to the calculation of medication dosage equivalence. Bryant noted the need for the availability of these data elements within a public health use case.

Comments and Recommendations – Level 2 Data Elements

Al Taylor then presented the IS WG disposition working google document for IS WG member review. The following Draft USCDI v4 data element was discussed: Time of Procedure. IS WG members agreed to move forward with the recommendation of the Time of Procedure and two complementary data elements: Laboratory Results Report Time and Specimen Collection Date/Time.

Sarah DeSilvey asked that IS WG members review level 2 data elements in preparation for the next IS WG meeting. In a review of level 2 data elements, IS WG members should note if their comments have been addressed by previous discussions.

Discussion:

- IS WG members discussed the following Draft USCDI v4 data element: Time of Procedure.
  - Hung Luu presented the IS subgroup's recommendation to retain the Time of Procedure and create two new complementary data elements: Laboratory Results Report Time and Specimen Collection Date/Time.
  - Steve Eichner explained, from a public health perspective, there is value in understanding whether the laboratory or testing facility receives the sample in relation to delays in delivery and processing. Steve suggested linguistic guidance defining the Time of Procedure. Sarah asked that Steve add this comment to the working google document. Bryant Karras agreed with Steve's comments.
  - Raj Dash explained that the two most important date/time elements are the specimen collection and final report date/time due to their use in determining the sequence of events. Additional useful date/time elements were put in a second tier of priority by the IS subgroup. Raj noted that most EHR platforms and lab systems use print label date/time as the collection date/time.
  - Al inquired if the IS subgroup intends to recommend USCDI level 2 data elements as the two complementary data elements. Hung explained the IS subgroup's intention is not to revise level 2 data elements and noted that the second complementary data element combines USCDI's two level 2 data elements. Al discussed ONC's ability to modify USCDI level 2 data elements to meet IS subgroup recommendations.
  - Shelly Spiro discussed the need to consider multiple methods of information documentation to ensure interoperable data exchange.
  - IS WG members agreed to move forward with the recommendation of the Time of Procedure and two complementary data elements: Laboratory Results Report Time and Specimen Collection Date/Time. Sarah requested IS WG members add their comments to the working google document for inclusion in the recommendation.
- Sarah listed level 2 data elements for discussion at the next IS WG meeting.
  - IS WG members were asked to review level 2 data elements in preparation for the discussion. IS WG members should also note if their comments have been addressed.

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.

PUBLIC COMMENT

Mike Berry opened the meeting for public comments.

QUESTIONS AND COMMENTS RECEIVED VERBALLY

- Maria Moen, Use Case Project Lead, Advance Directive Interoperability FHIR Project, HL7, advocated for the Advance Directives data element. Maria suggested a focus on advance directives that enable data exchange to have a specific container of data elements. Maria noted the inclusion of Care Experience and Treatment Intervention advance directive elements as a part of goals in Draft USCDI v4. Maria also inquired about clarity regarding the placement of Care Experience and Treatment Intervention.
    - Al Taylor explained that Care Experience and Treatment Intervention were placed in goals to align with PACIO's model.

QUESTIONS AND COMMENTS RECEIVED VIA ZOOM WEBINAR CHAT

Mike Berry (ONC): Welcome to the Interoperability Standards Workgroup. We will be starting soon. Please remember to tag "Everyone" so that we all can see your chat.

Pooja Babbrah: Welcome to all our guests. Excited to have you on today!

Laurie Whitsel: We are grateful for the opportunity to be here!

Ram Sriram: Wearables will play an important role in the future. I think we will need to capture information from various sensors, e.g., Logical Sensors (calendar information, etc.), Fitness Tracking Sensors (for Physical activity), and Physiological Sensors (ECG, etc.). Further, nutrition information should also be included into Health Persona.

Pooja Babbrah: I agree with utilizing loinc codes, but I'm hoping we can address the question brought up about capturing this information in the EHR and the provider workflow. It sounds like this is being captured in LTPAC settings but how about ambulatory?

Rita Torkzadeh: Seems like including wearables, as Ram mentions, would facilitate capturing physical activity data throughout a day/week without the added burden of a person tracking/recording discrete instances of exercise. Is that part of what is being considered/in the IG?

Lloyd McKenzie: The IG absolutely includes gathering wearable information both to support these measures as well as to provide deeper insight on how the patient is performing their physical activity, to better understand how to help them. We simply didn't propose them as part of USCDI because there isn't yet consensus on which ones are most useful/relevant.

Bryant Thomas Karras: is that using the Personal Health Device (PHD) IG - standards for sharing information from personal healthcare devices (heart rate monitors, step trackers, etc.) using FHIR?

Bryant Thomas Karras: http://hl7.org/fhir/uv/phd/

Kikelomo (Dayo) Oshunkentan: I certainly think that we are headed towards integrating wearables in our data captures, however, there are a number of concerns that still exist in regards to the reliability and security of the healthcare consumers. No doubt that the devices will provide personal analytics that can contribute to health. Also wearables are likely to be purchased by those who already have a healthy lifestyle and want to track their progress - given the issues with health equity we have to ensure that we are able to capture these data elements for those without.

Lloyd McKenzie: We are referencing the PHD IG where appropriate and yes, all content in the IG is defined using FHIR

Steven Lane: My comment: Suggest that we consider modifying the name of the data element to “Muscle RESISTANCE/Strengthening Activity” so as to more clearly accommodate occupational and other life activity in addition to activity performed with the intention of strengthening the muscles, which would typically be recreationall.

Sarah DeSilvey: Thank you, Steven

Hans Buitendijk: Is the USCDI proposal to only support the recording of physical activity for the 3 LOINC codes referenced in the submission? Or are other elements of the IG referenced here (https://build.fhir.org/ig/HL7/physical-activity/artifacts.html) as well such as Task and Questionnaire related capabilities, the Care Plan, Goals, and Condition elements or some submit?

Steven Lane: Thank you @Paul Chase, but we have the opportunity in our recommendations (and ONC in USCDI) to incorporate more expansive language while still pointing to specific codes.

Albert Taylor: The definition of Physical Activity data element in Draft USCDI v4 is: Evaluation of a patient's current or usual exercise. Examples include but are not limited to Exercise Vital Sign.

Albert Taylor: @Hans, the data element is only the evaluation of physical activity.

Lloyd McKenzie: The portion of the IG that applies to the USDCI proposal is this piece: https://build.fhir.org/ig/HL7/physical-activity/measures.html#base-measure

Lloyd McKenzie: It covers the primary measures (days/week, minutes/day, minutes/week and strength activity.

Sarah DeSilvey: Thank you, Lloyd!

Lloyd McKenzie: @kikelomo - the IG definitely is designed to support manual capturing of measures and does not presume that everyone has access to devices.

Hans Buitendijk: Thank you Lloyd as that helps clarify the subset of the discussion that we actually have to look at for this submission request.

Steven Lane: Thank you. Great discussion!

Laurie Whitsel: Thank you all so much! We are glad to follow up in any way and so appreciate the conversation this morning!

Naresh Sundar Rajan: Thank you, much appreciated.

Kikelomo (Dayo) Oshunkentan: Thank you both @lloyd and @bryant!

Lloyd McKenzie: There are links in the IG for those interested in reaching out to the project or exploring further.

Lloyd McKenzie: Thanks for the great conversation.

Hans Buitendijk: Thank you for the clarification as to what part of the NCPDP structured SIG is the scope of this USCDI Medication Instruction request.

Bryant Thomas Karras: has there been a cross walk of impacts on secondary uses of these NCPDP mappings that might be leveraged for other use cases such as Opioid PDMP reporting

Steven Lane: The challenge with embracing definitions in USCDI that are broader than the established technical standards is that it can sow confusion amongst implementers and users.

Albert Taylor: From Draft USCDI v4:

Albert Taylor: Medication Instructions Directions for administering or taking a medication. Examples include but are not limited to prescription directions for taking a medication, and package instructions for over-the-counter medications.

Steven Lane: As such we may want to include language like “including but not limited to…"

Hans Buitendijk: @Al: Thank you! It is the "but not limited to" part that prompts the question on what is intended.

Kim Boyd: https://www.ncpdp.org/Resources/STChealth-Joins-Forces-with-NCPDP-on-Interoperable

Kim Boyd: https://www.ncpdp.org/NCPDP/media/pdf/PressRelease/NCPDP-National-Facilitator-Model.pdf?ext=.pdf

Albert Taylor: USCDI is "exchange standard agnostic" meaning USCDI doesn't specify how data elements are exchanged, but that the ability to exchange data elements using the exchange standards CCDA and FHIR US Core. How these standards design these data elements into future IG versions is up to the designers. ONC does consult with these IG designers both before and after publishing a version of USCDI.

Bryant Thomas Karras: thanks @Kim , pre COVID i was very active in the NCPDP world will follow up if i have additional questions

Steven Lane: Thank you Dr. Luu for leading a fruitful subcommittee discussion yesterday.

Bridget Calvert: Even in small portion of draw the label and sample collection can have large time gaps. With the debate of time it is processed versus label printed, etc., it should be when the sample is collected, especially if it is critical to the patient state at the time of collection.

Steven Lane: Comment: Reiterating the need to separately capture procedure time and specimen collection time. Blood may be collected through a central line placed minutes to days earlier; pathologic specimens may be collected at various timepoints during the course of a procedure that itself has start and stop times.

Bryant Thomas Karras: thank you will try to comment as well... sorry i wasn't available for small group

Albert Taylor: To date, there have not been any submissions in ONDEC representing Lab specimen receipt date/time, so there is no data element to elevate.

Steven Lane: There are definitely some systems that allow providers to specify specimen collection time separate from the label printing process, which may occur the day before. I am thinking of Pap smears where, in my system, we require the entry of a collection time at the time of order.

Raj Dash (CAP): @Steven, yes EHR does allow but most users will not update the actual collection date/time.

Hans Buitendijk: Specimen receipt date/time is definitely captured by the LIS, but not necessarily communicated back to the ordering provider. The EHR would not be the primary source for that element, so a good example to be cautious to consider in USCDI (without diminishing it importance elsewhere) if all HIT to be certified needs to support all of USCDI.

Raj Dash (CAP): Is renaming easier?

Raj Dash (CAP): (I think ONC has to guide us)

Raj Dash (CAP): If we rename, and redefine?

Hans Buitendijk: Report and collection data time are well established concepts and widely communicated already.

Albert Taylor: Raj, I would say yes, it's easier with a clearer, more transparent path to getting a new data element added to USCDI to change a definition, name, examples, or even adding potential use cases than what was originally submitted.

Hans Buitendijk: Would it be possible to populate Column F for the Level 2 proposals as well?

Hans Buitendijk: A link to the submission that is.

Steven Lane: That would save all of us a lot of time, Hans. :-)

Albert Taylor: @Hans,, I will update column f with links

Maria Moen: Love those two additions!!! It is just seating them under GOALS that we question.

Mark Savage: Will repeat my comment on care and treatment preferences, that Advance Directives will not be the only source of these data.

Maria Moen: Good point, thank you Mark.

QUESTIONS AND COMMENTS RECEIVED VIA EMAIL

No comments were received via email.

Resources

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

Adjournment

The meeting was adjourned at 12:01 PM.