HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) U.S. CORE DATA FOR INTEROPERABILITY TASK FORCE 2021 MEETING

July 27, 2021, 10:30 a.m. – 12:00 p.m. ET

VIRTUAL

Speakers

Name	Organization	Role
Leslie Kelly Hall	**Engaging Patient Strategy**	**Co-Chair**
Steven Lane	**Sutter Health**	**Co-Chair**
Ricky Bloomfield	Apple	Member
Hans Buitendijk	Cerner	Member
Grace Cordovano	Enlightening Results	Member
Jim Jirjis	HCA Healthcare	Member
Ken Kawamoto	University of Utah Health	Member
John Kilbourne	Department of Veterans Health Affairs	Member
Leslie Lenert	Medical University of South Carolina	Member
Clement McDonald	National Library of Medicine	Member
Aaron Miri	The University of Texas at Austin, Dell Medical School and UT Health Austin	Member
Brett Oliver	Baptist Health	Member
Mark Savage	Savage Consulting	Member
Michelle Schreiber	Centers for Medicare and Medicaid Services	Member
Abby Sears	OCHIN	Member
Sasha TerMaat	Epic	Member
Andrew Truscott	Accenture	Member
Sheryl Turney	Anthem, Inc.	Member
Daniel Vreeman	RTI International	Member
Denise Webb	Indiana Hemophilia and Thrombosis Center	Member
Cassandra Hadley	Office of the National Coordinator for Health Information Technology	Acting Designated Federal Officer
Al Taylor	Office of the National Coordinator for Health Information Technology	Staff Lead
Evelyn Gallego	Gravity Project	Presenter

Call to Order/Roll Call (00:00:00)

Operator
All lines are now bridged.

Casandra Hadley Hadley
Great, thank you, good morning, everyone and welcome at welcome to the USCDI Task Force meeting. Let's officially start the meeting beginning with rollcall, starting with your cochairs. Leslie Kelly Hall.

Leslie Kelly Hall
Here.

Casandra Hadley
Steven Lane?

Steven Lane
Good morning.

Casandra Hadley
Ricky Bloomfield?

Ricky Bloomfield
Good morning.

Casandra Hadley
Hans Buitendijk? Grace Cordovano?

Grace Cordovano
Good morning.

Casandra Hadley
Jim Jirjis? Ken Kawamoto? John Kilbourne?

John Kilbourne
Good morning.

Casandra Hadley
Les Lenert? Aaron Miri? Brett Oliver?

Brett Oliver
Good morning.

Casandra Hadley
Mark Savage?

Mark Savage
Good morning.

Casandra Hadley
Michelle Schreiber? Abby Sears?

Abby Sears
Good morning.

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Casandra Hadley
Sasha TerMaat? Andrew Truscott? Sheryl Turney?

Sheryl Turney
Good morning.

Casandra Hadley
Dan Vreeman?

Dan Vreeman
Good morning.

Casandra Hadley
All right, Steven, thank you.

Steven Lane
Thank you, Casandra Hadley.

Denise Webb
Denise Webb is on.

Past Meeting Notes (00:01:35)

Steven Lane
Thank you, Denise. And I don't think we called for Clem. Are you on audio? He may show up yet. Well, wonderful, thank you all for joining us this morning. If we want to go to the next slide. I just want to welcome everybody, reminding you that the past meeting notes are posted to the web as soon as possible. I'm not sure whether the team had a chance to post last week, but I know we had our way with them.

Today's meeting is focused on social determinants and health. I think everyone should be well aware by now that that the ONC determined that four new data elements, reflecting social instruments of health were added to the new version 2 of the OCDI. And we specifically timed today's discussion to dig deeper into the SDOH data class, so as to come after that announcement, so that the community has had a chance to kind of digest a bit the changes that have been made and then to begin to reorient itself toward the future. That is to say how might SDOH continue to play as USCDI expands, into version 3 and beyond. So, recall that we are working on task 3, developing recommendations to the ONC regarding priorities for USCDI version 3, now in full light with what's been done with version 2.

We have with us today, in addition to our Task Force member, Mark Savage who helps to lead the Gravity project, we also have Evelyn Gallego who is here with us today to really give us a deep dive today into Gravity, where they've been, where they are and where they're going, and specifically identifying what aspirations they have with regard to SDOH into USCDI as it continues to move forward. It's not clear to me, at this point, the beginning of the meeting, whether our task force will need to make recommendations about USCDI with regard to version 3, besides saying keep up the good work, ONC. My hope is through our discussion today, that we will see whether, in fact, there are any specific issues that would benefit from the input of the Task Force. Leslie, you want to add to that?

Leslie Kelly Hall
No, I think that sounds great to me. Thank you.

Steven Lane
Wonderful. We do have a number of members of the public and other guests from ONC with us today. We welcome all of you and remind the public that we have a public chat feature within Adobe Connect. You're welcome to jump in there if you have comments. We can sometimes address those kinds of written public

comments during the course of the meeting. Five minutes before we end, we'll open it up to public comment and again really encourage people who, who have an interest in speaking up, in doing so, at that time.

Also, just FYI, I did invite Brett Marquard from HL7 and the U.S. Core Team to join us. he had a couple things early, but maybe joining us within the next 20 minutes or so. And if he does, he may be able to provide some input as we discuss the role of HL7 and the development of the implementation guide with regard to the advancement of the project data classes and use cases. Sort of a lengthy introduction, but Mark, did you want to introduce Evelyn to the group?

Gravity Project and USCDI (00:05:53)

Mark Savage
Yes, happy to do so, thanks, Steven. Evelyn Gallego is the Gravity Project program manager and given all the Gravity Project has been doing these past few years to integrate social determinants of health data across the health and human Services ecosystems, you might think of the Gravity Project is her full-time job. And, indeed, it is a full-time job, but Evelyn does and far more to improve Health Care nationwide. She's also the CEO of EMI Advisors. In that capacity, for example, she's serving as program manager and subject matter expert for ONC's Stars Technical Assistance Program, which is helping HIEs in five states to strengthen health information exchange to support public health priorities, such as COVID-19. She's also the program manager and subject matter expert for NIH's AHRQs Multiple Chronic Care Electronic Care Plan project, which is a FHIR enabled care plan. She seves on the HL7 Policy Advisory Committee, recently served on the long-term post acute care committee. Obviously, a lot of depth, a lot of subject matter expertise. Over 20 years experience working with health, high-tech government health agencies, such as HHS, FDA, NIH, DOD. Evelyn, on behalf of the USCDI Task Force, thanks so much for sharing your thoughts with us today on the Gravity Project and the U.S. Core Data for Interoperability.

Evelyn Gallego
Thank you so much. Just want to make sure my audio is good.

Mark Savage
Yes.

Evelyn Gallego
Good morning, everyone. Thank you, again Mark for such a lovely introduction. Thank you USCDI Task Force members for the invitation to speak to you today on the Gravity project. And to discuss our project's roadmap for your consideration in planning for USCDI version 3. As Mark noted, I'm CEO of EMI Advisors and serve as program manager for the Gravity Project. Next slide? I'll start my discussion today with the Gravity Project's reflections on USCDI version 2, followed by a walk through of our current and upcoming roadmap. I'll then speak about our considerations and recommendations for USCDI version 3. Next slide? Next slide.

Great. So, first, on behalf of the Gravity Project, I want to extend my sincere appreciation to all the USCDI task force members, not only for your diligence and the careful review and consideration of the SDOH data class submissions and letters of support, but also for your leadership and commitment to continuously advance nationwide interoperability for whole-person care. Next, a big thank you to the national coordinator, Micky Tripathi who listened to the recomendaitons and made the final approval. I would be remiss to not acknowledge Micky's role prior to joining ONC in helping establish the Gravity project as an HL7 FHIR accelerator. I thank the ONC team, beginning with Al Taylor and Sam Meckler who have been at the forefront of the vision for SDOH data interoperability and helped inform the Gravity approach since day one. Thank you, Health IT Advisory Committee for listening to the public at large and moving forward with the SDOH recommendation to ONC.

And finally, thank you to our very large, multi-stakeholder public collaborative. I'm here today, because of the commitment and passion of our diverse stakeholder groups and volunteer subject matter experts. Many

who are new to standards and data interoperability but understand the value of data exchange across the health and Human services ecosystem. Next slide.

So, before jumping in to what the gravity movement is and our roadmap, I want to ground us on why this work is so important. I appreciate we're here today because we all fundamentally understand that addressing SDOH or social determinants of health is important for whole-person care. The term SDOH has been a focal point for the health industry for several years. Beginning with the shift from fee for service payment models to value-based care and more-so under the current COVID pandemic where we have witnessed increasing health disparities as a result of unmet social needs. We have growing evidence that food insecurity correlates to higher levels of diabetes, hypertension, and heart failure. We know that housing instability factors into lower treatment adherence, and we know that transportation barriers result in missed appointments, delayed care and lower medical compliance.

COVID has only multiplied the medical, economic, and social crisis across the country and has forced us to take a hard look at social risk factors and health inequities. Health equity, as defined by the Department of Health and Human Services is the attainment of the highest level of health for all people. Addressing SDOH is a primary approach for achieving health equity. Next slide.

So, the inclusion of the SDOH Data Elements and associated domains in USCDI version 2 truly propels nationwide, interoperable Health Information Exchange across the Health and Human Services ecosystem. These data elements speak to the electronic language needed to integrate clinical and social care. The Gravity Project applauds how these SDOH data elements were incorporated into the existing structure of the USCDI data classes. By adding the four SDOH data elements into existing data classes for assessment, problems, procedures, and goals, it signals to the industry that SDOH-related activities should be part of the clinical work flow and not treated as distinct. In other words, a clinical provider should be able to use their certified technology to screen an individual for either health or social-related risks. The structures of the SDOH data elements also facilitate the ongoing addition of new valuesets and domains as they're created through the gravity standards development process. And I will share in the upcoming slides, the Gravity Project has defined to date, 14 SDOH domains. This isn't an exhaustive list of all SDOH list domains available. So, this structure will help incorporate new coded data elements as they become available. Next slide.

So, the USCDI version 2 also supports value-driven connections between the new data elements, in particular, care team members, and sexual orientation, and gender identity or SOGI. The inclusion of all care team members creates flexibility to recognize and document those family members and community-based providers that provide social care for an individual. The reality is that many families and friends provide social care right now and social supports and are not readily recognized for care coordination efforts. The addition of SOGI is also critical. SOGI is often considered an SDOH, especially minority groups that experience ongoing health and social disparities. The ability to connect SOGI with SDOH data elements or activities can further improve and inform care for social risk factors, including partner violence, where there's evidence of differences by sexual orientation and gender identity. Next slide.

All right, our roadmap. Next slide. So, I know this visual is always very hard to see, but it's our timeline and I presented to you as a roadmap for consideration as you think through what gets to include in USCDI as proposed for version 3. The Gravity Project was launched as a public collaborative in May of 2019. As a project, we were encouraged to facilitate two work streams you see here, at the same time. One focused on data elements, or terminology, and the second one focused on the development of FHIR specification to support the terminology work. We completed our first domain of food insecurity in late 2019. And launched our FHIR development work in early 2020. At the same time, we shifted our focus to developing data concepts from multiple SDOH domains at the time. Instead of working on just one domain at a time. You might see a horizontal green line to indicate where we are in the timeline. In 2020, we completed housing instability and homelessness and in early January of this year, we completed the domains of

inadequate housing, transportation insecurity, financial insecurity and demographic status related to unemployment, education and veteran status.

Over the past few weeks, we completed data elements for assessment and diagnosis, within the domains of mature hardship, stress, intimate partner violence, elder abuse, and social isolation. In the fall, we'll complete defining data elements for goals and interventions across these domains. I just want to acknowledge, because we work across the four activities of assessments, diagnosis, goals, and interventions, we started with screening, assessment and diagnosis and move on to goals and intervention. We proposed new domains of food deserts and neighborhood safety for end of this year. On the technical workstream lane, we balloted the HL7 FHIR and implementation guide as a standard for trial use or STU in January of this year, and just completed ballot reconciliation and made our formal submission for publishing this FHIR IG through the HL7 process. We also tested the FHIR implementation guide in all the recent HL7 connect-a-thons and last week, most recently, in the CMS connect-a-thon. We'll continue to update and refine the FHIR IG, based on the upcoming pilot. So, we have a pilot workstream we plan to launch this fall and ongoing connect-a-thon testing. Next slide.

Our current SDOH FHIR implementation guide incorporates six components or activities as listed here on the left-hand side and illustrated with the right visual as a cycle. The first activity is screening, or assessing for social risk and defining the associated health concern or diagnosis. The screening question answer pairs and scores are coded in LOINC and the health concern and associated diagnosis in the SNOMED CT and ICD10 value set. Once the social risk is identified, then the social need and associated goals to address that need, or, as we refer to as activity 2 here, is established using LOINC and SNOMED CT code. Next, we plan and track the interventions or actions which can include a referral to community-based organizations to meet those goals identified in the previous steps. These interventions are coded in SNOMED CT. The outcomes of these interventions, activity 4, here, are documented using LOINC codes. The sixth activity is the aggregation of this coded data, for use and reporting to include for population, health, quality reporting and risk adjustment. And last is the ability to capture an individual or patient consent to share this data across all these activities. And again, these are all documented within the existing FHIR IG. Next slide. Thank you, next slide.

So, what do we propose for next year and that can be considered for USCDI version 3? Let's start with acknowledging what is included now in USCDI version 2. This is the block text you see across these four columns, presented here. As I mentioned earlier, we began in May of 2019. We had lessons learned on how to tackle new SDOH domains and apply new terminology across those four activities or data elements of assessment, problems, goals, and intervention. Let me begin with the domain column. The   domains and blocks have been completed or close to completion based on the roadmap I just walked through. The new domains we propose are in red here. I already mentioned food deserts and neighborhood saety are schedule for end of this year. For next year, before June 2022, we propose to have completed the domains of health, literacy and minority and relationship stress. We will also begin work on racism, discrimination and bias. However, we don't anticipate having this very large and sensitive domain completed by mid-next year.

We have learned for collaborative work with the public and the subject matter experts that when we begin to work on an overarching domain, our parent domain, and as we together evidence and discuss with our stakeholders, these domains begin to split into related or child concepts. We've seen this already with the housing domain that was split into three, housing instability, homelessness, and inadequate housing and each one tackled separately. The same happened with financial strain, which then became financial insecurity and material hardship. Next we move on to the second column. I already talked about the four existing data elements. We would like to incorporate what I walked through in the FHIR IG, outcomes. So, we want to have outcomes added, consent, data aggregatin. And then, incorporating existing level 2 domains that have been submitted by other stakeholders around billing and health insurance. Really important to consider that, even as we move through in the clinical system, that a lot of these services need to be approved or authorized by the payer groups. These data elements will be very important.
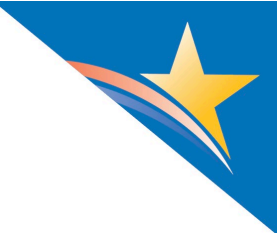
Next, I'll, I'll walk through our supposed use cases and corresponding IGs that are in our current pipeline. Please note that all of this still needs to be approved and funded to our existing Gravity governance structure. However, we are confident that most, if not all of these will be initiated through the Gravity standards development work. Our current FHIR IG incorporates transactions that begin within the health care system. For that reason, we have purposely labelled it the SDOH Clinical Care Implementation Guide. We have heard loud and clear from our community, in particular, community-based organizations and social service technology providers that we need to develop use cases that support specific CBO to CBO data exchange or CBO to state agency data exchange. We are aware of current interoperability activities being initiated by the Administration for Children and Families and Office of Minority Health that speak to these transactions or use cases.

The second important use case and IG will be around SDOH quality measures. The Gravity Project team worked closely with NCQA and NQS and we've had initial discussions on how to develop digital-quality measures based on the work we are completing through Gravity. Our current FHIR IG is also focused on individual patient-level data exchange. We still need to do more work around populating some level data, which is a strong focus as a research community. The CDC has also publicly stated their interest in creating a public-health focused use case through the Gravity process. We will work with the CDC on launching that, hopefully end of this year. Social provider directory standards are not in our current work **[inaudible] [00:24:28]**. Critical for the interoperability of SDOH data. We continue to have ongoing discussions with our Gravity Technical Advisory Committee members on how to ensure the alignment between ongoing national provider directory work, right now facilitated through the DaVinci Project, and the current infrastructure that exists for social or resource-based directory.

And finally, there's an opportunity to work on specific research or patient-centered outcomes research or P Core use cases in IG. We've had initial discussions with the National Academy of Medicine that has been working on this and we'll continue to speak to them on it. Next slide.

All right, to our recommendations. Next slide. So, as you all, USCDI Task Force, consider the next phase of data classes for version 3, I want to pause and reflect on the opportunities and challenges with version 2 and how they can help inform what ends up being proposed for version 3. So, let's start with opportunities. I shared earlier, the SDOH data class in version 2 informs health and industry what SDOH data elements should be collected and what standards should be used to represent and exchange this data electronically. We also have the means now to better-facilitate SDOH data integration at a national level, to meet the growing COVID-19 response need. The addition of the SDOH data class also provides a glide path for moving from creating standards for technical capacity, what we always refer to as the floor, to real-world implementation. So, these are not standards to just sit published and ready for use. This helps create that glide path.

And the envision also creeds a framework for providers and payers to scale the FHIR APIs they are already creating to meet CMS interoperability requirements into social care and health equity focus initiatives. So, again, significant opportunities and a big bravo for having them incorporated in version 2. Next slide?
Even with all these opportunities, we have some challenges and slight barriers to overcome. These are not, I would say, not significant, but they're noteworthy. The first is this learning curve that exists for social care integration and use, especially with clinical settings that don't normally collect or act upon this data or are paid to act on this data. This needs to be addressed with ongoing education and workforce training and accreditation, beyond just incorporating the data collection and payment models to create the right incentives. The CMS rules just came into effect. We still have limited use of CEHRT and FHIR-based solutioned across the country. There still needs to be the ability to scale to settings that are not regulated by CMS. So far, we've worked on 14 domains, but only one, food insecurity, has published code across the three leading terminologies of LOINC, SNOMED and ICD10. We still have to work along side the coding stewards to develop the requested codes and publish them based on their existing publication schedule.

Case in point is ICD10. The Gravity Project submitted the multidomain permission in December of last year so it could be included in the review cycle for March of this year. The codes were approved for publication

in October of 2022. Again, they were reviewed in March 2021 and approved for October 2022. Except for those, the ICD10 committee deemed essential for the COVID response that were then bumped up to the October 2021 release. So again, a very lengthy process. The Gravity Project is at the point of being formally published by HL7 and it has not been tested in the field or implemented by entities to date. Of course, soon that will change. But at this point in time, it is still recently published. We also have proliferation of community referral platforms like M-Berka, Unitus, Naphow. These are new technologies, important technologies, that have emerged to address or to meet the social referral requirements, but they have yet to be fully, all of them, fully implemented into the health ecosystem and they are not regulated as CEHRT.

And last, as more and more of this data becomes available, we need to ensure it is used for good, and does not create further health and social disparities in the market. To this end, we have developed the Gravity data principles with our community. But thee principles still need to be consistently reviewed and incorporated as we work towards implementation of the standards. Next slide.

So this brings me to the recommendation for version 3. Again, these are thoughts the model identified for your consideration.They're just for your consideration. So, one consideration is to look at the data elements both at the individual level and in combination. Having more granularity on who the care team members are ensures all individuals who support the patient or the person, including the person themselves, are included in their overall care. It is also good to link functional and cognitive status data elements with SDOH data elements to help identify and help reduce health disparities in vulnerable populations, such as the frail, the elderly, and the disabled. It's also important to consider moving beyond bidirectional data exchange to multidirectional exchange. APIs are a great example as you expose data and it becomes available through a plethora of platforms at any given time.

In this regard, consider the role of patients and their nonclinical providers like family members and community-based organizations that may be the source of SDOH data. So again, it originates from them and the systems they use. We see this already with data collected and owned by the individual using their smart phone. We all collect our wellness data and track our activities. Community-based organizations that often are the initial entity administering the social risk assessment. Next slide.

So in the same vein of keeping data elements connected, and from my own personal viewpoint of working on standardized care plans now for a decade, consider how these elements can support person-centered planning, as required under the Medicaid program and the Administration for Community Living No Wrong Door Program, as well as how you could incorporate an advanced care planning, there's ongoing standards development work through the Patheo project. Again, very critical for Medicare and Medicare Advantage programs. You may also want to consider how these elements advance other use cases for upstream and downstream use, such as those specifics for COVID-19 and pandemic responses, population health, public health, digital quality measurement, and risk adjustment. Next slide.

I think now that concludes my presentation. I think we're open for questions. Okay. I'll pause now.

<u>Steven Lane</u>
Incredible, Evelyn. Thank you so much for that whirlwind tour of Gravity and the phenomenal work that you and the team have been doing. Really appreciate that. And so, as people are getting their act together, I think Dr. McDonald joined us early on. We have a couple of hands up. Bt I think just in terms of informing this discussion more generally, a key question, and I threw it out at the beginning, what, if anything, should our task force consider now as we work through our Task 3 and develop recommendations to HITAC and to ONC about USCDI Version 3? Is there something in particular that you would want to highlight that our task force could help to support, suggest, encourage with regard to planning ahead for Version 3? So, just as you're addressing the questions that come up, we have a very specific deliverable, you know, we write a report that has, you know, A, B, C recommendations. What recommendation if any do you think would be helpful from this group? So I'll put that as a lingering question and then invite Clem McDonald to ask the first question.

Clem, we can't hear you. You might be muted.

Clem McDonald
No, I'm sorry, I wasn't talking yet. I wanted to ask, I was involved a little with the North Carolina group, and they were using pre-care, which is 10 or 12, maybe 15 questions. They were all targeted to actions that you could send off to a social service whatever to do something good. It's harder for me to see the package, is there still a survey instrument in the center of it?

Evelyn Gallego
Yes.

Clem McDonald
What is that name? Where does one find that part of it? Smeared across all the other resources, it makes it hard to get your eyes around, you know. You've got stuff and many, many different resources. But there's still a questionnaire, right?

Evelyn Gallego
Correct, yes. We build off your questionnaire, NLM questionnaire designed using the structured data capture resource, I mean FHIR ID. So, it's all incorporated. I do want to acknowledge that the FHIR ID is agnostic to screening tools, meaning it works across any structured survey. So prepare being one of them, but acknowledging that we incorporate more than one. It can facilitate using different types of surveys.

Clem McDonald
Okay. But if it is a hundred surveys, then how do you ever unify data or unifiy reaction to the data?

Evelyn Gallego
The idea is more to have the questionnaire and when the data elements are coded and the IG specifies how you incorporate that survey into the clinical workflow and again, building off the NLM screening tool.

Clem McDonald
Okay, all right. Well, thank you.

Leslie Kelly Hall
This is Leslie. I have a question and also, I see Ricky has a comment and Grace has a question. Evelyn, we've had a lot of patient education that was done post meaningful use one and two using the info button standard. The info button standard gives us as much demographic information as we had about patients at the time, height, weight, principal diagnosis, the provider and language of the patient, we had also in there language of the provider and language of the patient. And this information is used widely, National Library of Medicine, every content vendor. And it seems that SDOH will also potentially inform the selection of correct patient education. So, how is HL7 reconciling the info button with the SDOH?

Evelyn Gallego
That's a great question. We have not had those discussions, so I can take note and bring that up on how we can connect those. Again, we've just published the FHIR I.D. and we're working with the other FHIRaccelerates, but definitely this is an area of opportunity and we'll put that on our radar.
Thank you.

Leslie Kelly Hall
Okay, thank you. And then Ricky had a comment, too.

Steven Lane
Actually, Grace is up first, I think.

Grace Cordovano

Thank you, Evelyn, for a really invigorative presentation from the patient and care partner perspective. I'm beyond excited by a lot of the different directions that you've presented about. I had a comment on the implementation guide in action, specifically on the concept of consent. A lot of these concepts and data elements in the real world and at point of care from the patient and care partner perspective can be very difficult, embarrassing, stigmatizing, challenging to talk about and there has to be a safe space and trust first. And I feel that consent should be pursued first, rather than in the slide it was depicted as the last step, step 6. I'm wondering your thoughts, from your perspective, on tackling that consent piece up front. And then when you think about these difficult concepts and social components of care, where does personalized privacy and data segmentation fall with sharing this information? I'm thrilled to see that you have data principles for equitable use, but is there a way that we can give something more concrete with respect to protecting privacy and sharing some of these pieces of information?

Evelyn Gallego

Thanks. Yes. So, I apologize if it was not clear. Consent is cross-cutting. So, it's captured across all the activities, beginning with assessment and screening, It's number 6 activity, but it's cross-cutting. I do want to acknowledge consent is captured from the start. I am not a consent expert, but I know there's ongoing discussion. It is very important for the community and to your point around protecting the individual and making sure data that is sensitive to them is not shared and they have a say on what gets shared and how their data is kept secure as well from a data privacy security perspective. So, that is definitely an activity.

In regards to the data principle, so I think there does need to be, again, Gravity is a data standards development project. I didn't present here, our pipeline is also education, more education outreach and dissemination. For Prepare, I do know The National Association of Community Health Centers has an excellent toolkit on how to administer the tool, how to be sensitive to an individual situation, and ask the questions in a way that makes the individual not only feel that their data is protected and private, but comfortable answering. So, we still need to do a lot more of that. That is something that we've heard loud and clear again from our community, that as we publish, develop the standard, we need to create more materials that could help clarify the work that we're doing and provide guidance.

I think Ricky had the same question. I see here, if we're providing any guidance or recommendations to health systems? Not right now. Again, for us is getting all these domains and getting the IG out and we need to create more guidance around the activities.

Steven Lane

I think that's a really good point, Evelyn, insofar as I think one of the big challenges, as a provider myself, is really looking at where and how and by whom these data are going to be collected. So, clearly, the structure and standard that Gravity is developing, you need to move forward, as you say, into implementation, into pilot project so that we can see them in the real world. Do we have Hans and/or Sasha? I don't see either of them on. They tend to be our vendor representatives. But I guess I'll just ask you then, what have you seen in terms of EHR and other health IT vendor interest in this work and engagement? There are all these moving pieces. There's doing all the definitions. There's getting them approved by all the standard bodies. And then there's getting them into health IT systems so that they can be collected and subsequently shared. What do you see as the challenging and opportunities for the EHR and other health IT vendors in helping to move this forward?

Evelyn Gallego

That's a great question. Thank you, Steve. So, just acknowledging EHR vendors. They are meeting CMS requirements right now. So, they are engaged. So, in particular on the terminology side, as well on the HL7 side, they voted on the FHIR IG, informed updates to it. Again, they're busy with implementation right now, meeting the requirements of the CMS rules and ONC rules. So, for them, it is more they are tackling that. This is something that, you know, that they are aware of and are interested in, but I know that they're going to focus on what's immediately in front of them before they tackle the next activity. But having it in USCDI is a good signal for them that it is coming. .

Steven Lane

I don't see any other hands up. Grace, you made a comment in the public chat. Do you want to put voice to that?

Grace Cordovano

Thank you, Steven. I'm trying to think of the big picture on how our task force can align and support the work that Gravity Project is doing and is there a role for recommendations regarding USCDI V3 to advocate for more data segmentation, personalized privacy controls, as we think about equity by design.

Evelyn Gallego

I wanted to say that would be great.

Leslie Kelly Hall

This is just Leslie. I'm curious about what your thoughts are on patient-generated health data in the future to help complete some of these questions that are not typically gathered at the front desk or even in the exam room and generally quite intimate and private. How do you see patient-generated health data fitting into this?

Evelyn Gallego

I think it's at the forefront. It's critical. That's why one of the points was really having the patient, person, individual will be the source of the data, right? They're the ones who will be prompted, like we are now, we're prompted to complete questionnaires before we go in to see a provider and we do that on our smartphone on a web-based platform. I think we need to encourage and facilitate more of that. I think there's still a learning curve, even on the clinical side, but I think definitely this is an area that could be that point where individuals feel more comfortable completing and owning that data themselves, and then determining whether or not they share it.

Leslie Kelly Hall

Thank you very much.

Steven Lane

Evelyn, I think Grace raised a question earlier and I'm not sure we explored it fully, this notion that perhaps consent should be at the front end of this process. I appreciate that it's been added, and it's included in the future direction. But I think that that notion that, you know, if we want to be able to collect this data, if we want people to feel comfortable sharing it, whether it's through their smart phone or in response to a question-and-answer with a human being or a bot, that there needs to be some sense of, you know, I agree to share this, I agree with regard to who might be receiving this data, you know, and, of course, that complexity of data segmentation. I'm willing for this to be used by my provider and my social servie provider, but not by others. How do you really see that consent playing out over time as this moves forward? And do you see it as moving to the front end of the process as part of initial data collection or is it really more focused on the sharing of the data between entities?

Evelyn Gallego

That's a great question, Steve. So, we have it as number two data element proposed because we already have it incorporated in our prior IG. So, I think if you think about Version 3, we have outcomes first, and the new data elements and then consent second. So, I think this should be front and center. And I think it's twofold. It begins with the individual, the patient, right? When we talk about, and again acknowledging the lexicon that Dr. Laura Gottlieb, where she defined social risk and social needs. And I think it's really important that the industry, if they haven't, and we can send a link to that lexicon, really understand the nuances between social risk and social need and the role the individual plays. So, you can screen someone and identify a social risk, but you take no action on it until the individual acknowledges it is a social need, that they want to partner with their provider in supporting and therefore establish goals around that.

So, I think thinking of that model throughout this as we think of overall risk factors and social determinants of health is really important and that's where the consent comes in, too. Does the individual consent to

having the social risk being identified from the start? So, even if they don't consent to having the health system take an action, or they don't think it's a social need, at least there's a way that they consent to have that social risk be documented.

Leslie Kelly Hall
Evelyn, this is Leslie again following up on that. So, every social determinant could be a finding or an observation. In itself, it doesn't determine the risk, right? It's something that describes a situation, some have risk and some do not have risk. How are you accommodating that? So, my example is I was building a house and I was technically homeless because I was living in a family member's home, but I wasn't at risk. So, how are you separating a risk value from the actual descriptor?

Evelyn Gallego
So, many of the screening tools do incorporate that, right? It's asking questions that depending on the answer and looking at them holistically and having an overall score, then you determine whether there's a risk or not. So, actually administering of this, again, I'm not an expert on social risk administration and the tools, but these are what I've learned through the Gravity Project, that you can screen someone, and they may, as in your case, they may be homeless for an instant of time but they have no risk, again depending on the score and the answers to the questions. So, I think just like you would for healthcare screeners, as well, is you ask the questions to determine whether there is a problem that needs to be solved or addressed. Does that make sense?

Leslie Kelly Hall
Thank you. Yes that does. Thank you very much.

Evelyn Gallego
Okay.

Steven Lane
So, I've asked the team to help us bring up the public USCDI website because Al Taylor, in response to some feedback, has made a point of trying to display this data in a way that's most helpful. So, I think again, as we heard last week when you go there to the USCDI Version 2 tab, you can see the four data elements that were included in version 2, the SDOH assessments, goals, proposals, health concerns and interventions. We've talked about how they were tucked into existing data classes as opposed to being lumped together in their own data class. And I think that that is maybe something that we want to provide input on with regard to Version 3? When you go to the Level 2 tab, what you again see is those four elements as they were initially submitted plus the additional elements of the outcomes. So outcomes, SDOH outcomes, as was mentioned, is listed as Level 2, and have not yet been included in the Version 2 So, I think that, of all the data elements and, of course, our task force is focused on data elements staying balanced. Of all the data elements, the one that is most on-deck, if you will, excuse the pun, for inclusion in Version 3, would be those SDOH outcomes.

And I guess I wanted to hear from Al as well as you, Evelyn, about what it would take to get outcomes over the line, to get SCOH outcomes included in Version 3, and then, again, when we look further on down, at the comment level there are a whole host of SDOH data elements that have been included in the comment. And you mentioned, Evelyn, the importance of consent. So, that one is there, but it's down at the comment level so still quite some ways down the schema. So, I guess I would really be interested in what in particular will it take to get those two, the outcomes and the comment, over the line into Version 3? Is that something that is broadly advocated? Is that something that you would want or would benefit from the input of our task force? I don't know, Al, maybe you can talk about where things are and how they're being displayed and then we can talk about kind of what is the gap, if those two are Evelyn's primary focus to move forward, perhaps in Version 3, how would the task force support that?

Al Taylor

Let me start with outcomes. We felt like outcomes were represented in the same way that problems and assessments were represented, particularly using the same coding. An outcome is really more of a delta rather than a single point in time measurement. So, a repeat assessment that shows change in risk or a change in risk score is one way to represent an outcome. So, you know, risk A minus risk B is an outcome. Also, a change in the problem or change in the severity of the problem or health concern is also another way to represent an outcome. And that was the primary reason why we did not advance outcomes as a unique data element. It can be represented by pairing other data elements over time.

On the comment, the way that the domain, most of the comment level, data elements that were submitted, are unique domains of SDOH. The reason that those were not advanced and the other structure was advanced into Version 2 is that the domains themselves are not data elements. The domains are areas of study, areas of concern and within each of those areas of concern, you have the same structure that we adopted for USCDI V2. So, within child care insecurity, there are concepts of assessment, goals, interventions, and problems. Not necessarily in that order. And then the same thing applies for all of these other domains with the exception of consent, which is the broader concept. And so, because those didn't represent a unique data element, they represented focus areas, sort of like a clinical specialty. If you think about it like a clinical specialty, the way that we attack a clinical problem is the same as the way that we would attack an SDOH concern, by breaking it down into the assessment and the treatment and the outcomes and, you know, the problem list. And so regardless of what domain, it has the same structure. And that's why we adopted that version of the SDOH submissions and not the domain-specific ones.

Steven Lane
And Al, can you comment specifically about the consent data element, which Evelyn highlighted as particularly important to the scheme.

Al Taylor
The idea of developing interoperable consent data is obviously a really important one across every domain of healthcare, really. I think the assessment was that it wasn't as mature as the other domains that are well defined and well specified. If that changes over time, I think there would be a lot of interest in considering a consent data element, whether it's a single data element or if it's something greater than that because there's a lot of moving parts to the concept of a consent. That's something that we would fcertainly consider if there's more a consensus implementation of consent that could apply to more areas than only SDOH care. That's definitely something that we would be interested in looking at.

Steven Lane
Evelyn, do you want to comment on any of what Al just said?

Evelyn Gallego
I hear what Al is saying and agree. I think there does need to be a maturity to this and, as I mentioned, it's one of the existing barriers to this work is that we don't have enough evidence from a standardized, structured way of capturing this data. So, we need to do more. And outcomes have been near and dear to my heart from a care planning perspective. So, when we think about the care plan structure, even as a FHIR resource or as a CTBA document template, it does incorporate all the components and includes outcomes distinct from the assessment. So it's really just, again, how can we do that, continue doing that in a structured and standardized way, mature the ability to collect this data and this format and then have them included in future versions.

Steven Lane
We've got a hand up from Dan Vreeman

Daniel Vreeman
It strikes me **[inaudible] [01:00:28]** think about a recommendation around what to do with the domain-specific references, that still are on the USCDI page as submissions. It seems like there's great support for the idea of including the references in the more general structures, like the approach advanced was a good

one, but it's also slightly confusing to still see all of the individual domain areas as a separate thing. So, we might want to think about what to recommend in that way.

Steven Lane
I think you make a really good point, Dan. I think it's important how we're displaying things. It's important what is posted on the website as we end ONC and the community at large looks forward to how this needs to be advanced. One is left with the feeling, when you look at this long list, that there's all this stuff that's needed, but it's not included. The way Al put it, there's all this stuff that could be supported today using the data elements that have already been added. I think, perhaps, consent being the exception, but most of these others, Al, I think what you're saying is that we've already in Version 2 given the tools to support these various domains.

Al Taylor
Exactly.

Steven Lane
As we and others look at continuing to support SDOH through USCDI, we want to feel like what's really left to be done and that should be displayed on the website and what is completed. So, I think Evelyn, you and I spoke about this the other day. Not only has Gravity made submissions of some of these data elements, but some of these also came from a couple of folks at NHCHC. And one of them actually came from Epic, the HR vendor. I think that there is not only an opportunity, but really a desire that I would see to go through and kind of clean up this list. If, in fact, child care insecurity, and clothing insecurity, and some these others are ready to be supported using the tools that have been added, already in USCDI, maybe they should be withdrawn. If there are some of these that are so close that they could be collapsed into a single one, maybe that should be done, when different submitters came to the same problem with a slightly different perspective. So, I would ask you, since Gravity, or Mark also, is a submitter of the majority of these. Do you buy what Al is saying? That we've given you the tools, you can run with them without adding these individually to future versions? Or do you have a different perspective?

Evelyn Gallego
So just to clarify, I think we had talked about reaching out to these entities, as well, to make sure we're describing or labeling these domains in the same way. And I think also is acknowledging how we've defined them within the Gravity Project is more around the risk, that you are food insecure, right? But when we talk about social determinants of help, they are neither positive or negative, right? They're the conditions in which we live, work, play. So, you know, we need to think through if you want to display them, do you want to track food security, transportation, access, things that are not negative or risk, defined as risk? So, I think we need to do more work there. But as I mentioned, I think the structure aligns and having the level 2 or the activity data elements described in that way and incorporating new data, or what we call the domains, and as we are defining them, makes the most sense to us.

Al Taylor
Steven, I wanted to add something to that, as well. When USCDI V2 came out, there were a lot of things that didn't get added to V2 that I think a lot of folks wanted or thought ought to be added to V2 and we acknowledged that. We also want to be able to communicate that there are other things, not only the ONC and others can do, not only to support the implementation of V2, but also to support other things that might not have made it into V2. So particularly, around defining value sets because value sets, there's discrete value sets that are being developed right now that go a long way towards helping implementing some of these concepts. The USCDI is not as well set up to support discrete value sets. We do have some value sets that are defined by regulation, and other ways of getting those implemented. We also have available, and we can actually use that as a reference, the interoperability standards advisory, which is able to put together these more functional packages rather than discrete data elements that don't necessarily have a function assigned to them. But we can create, like we have started to do this work and still have some work to, is do building out an SDOH page or function within the interoperability standards advisory where we can

support multiple value sets, multiple domains, and multiple activities all in the same place to be a sort of one-stop shop about how to implement these things that are added to V2.

Leslie Kelly Hall
Did we lose Evelyn?

Evelyn Gallego
I'm here.

Leslie Kelly Hall
Okay.

Evelyn Gallego
I'm like whatever Al said.

Leslie Kelly Hall
We often say that. Steven, Abby had some comments in the chat and also, her hand up.

Abby Sears
This is Abby. There's a lot of us in the field that are already collecting very comprehensive data through the screening tools. We happened to build a very broad tool that encompassed, I think, three of the major ones that are out there Prepare, the National Academy of Medicine, and maybe CMS, I think. We have almost a million screens already. So, our patient population, many of the community health centers have to capture very sensitive data already to be part of their certification process for the funding that they get and the enhanced Medicaid payments that they get. So the screening tools are an "and" is, I guess what I would say, not necessarily outside of what they're used to asking. I think it's really intriguing and very interesting to think about patient-entered data. And we've been talking a lot about this. We've had some very interesting learnings around the pandemic and some of our most at-risk patient populations and their computer literacy and/or educational literacy and/or interests. So, our over, I think, 60 population will only use audio. There's almost no video visits that they will even entertain using. So, the question about patient-entered data, I think we're going to have a hard time. I think the point that care givers or care partners would help I think is really good. I think that some of the most at risk patients that have some of the biggest social factors and limitations and challenges may or may not have the same level of support as a commercial population might have. So, I just think those are things to remember.

And I guess the one point I really want to make that is really important, we have data out there. And the providers and the people collecting the data are losing their interest in collecting the data because they don't know what to do with the data once they've collected in the primary care setting. So, if they're collecting it, it needs to go somewhere. If you're a clinician or a provider, you want to know something important is happening with the work that you're doing and they don't know what to do with the transportation issue. They don't know what to do about the fact that they're in a food desert. They don't know what to do about their education level. And they're not necessarily part of the system that maybe is creating that care coordination. I think primary care is doing more and more care coordination, but sometimes, the Medicaid payers are the ones doing that, but they can't get the data because we can't move the data. There's no seamless, streamlined way to move the data.

So I guess as I'm listening to the conversation about when and how and we advance what's going on in Version 3 and we think about how to get it in there, I don't want to lose the momentum in the field because we have momentum, people really care about the equity issue. But if they can't, I've actually had providers stop collecting it and organizations stop collecting it because they can't do anything with it. And I just want to make sure that's on everybody's radar and that we're conscious of the fact that in the field, people want to actually do this, and they need to know something's happening with the data they're collecting.

Leslie Kelly Hall

Evelyn, to that end, is there anything in the Gravity Project or beyond that talks about best practices and also interventions that can take place outside of a care setting?

Evelyn Gallego

I just want to acknowledge, Abby, you're on point and we are very aware of that. And something I struggled, too, as the Gravity Project manager, is acknowledging what the scope of the Gravity Project is. We are developing data standards for exchange and use, right? We want this. But we are a standards initiative; we are not poised to develop guidance right now and we're not, unless that is something that our governance structure asks us to do, but it is definitely needed. I recognize, so I am aware there 's lots of legislation, pending legislation, out there for use, right? What guidance needs to be developed on the Medicaid and Medicare side to inform the use of this data. So, I think that's something that is important and understood across the industry. I do applaud again ONC. They have a cooperative agreement for public health-related education, you know, for workforce training. So, I think there's lots of opportunity right now and we do definitely need to keep acknowledging that there needs to be more work on we can develop the standards and have the systems, be able to capture this data, but we need to move beyond to implementation and use.

Steven Lane

With that, in the absence of hands up, I would like to circle back to Mark if possible. You've been very close to this work. Can you give us some high-level summary of this discussion and what you see as potentially valuable for this task force as we look at crafting recommendations around V3?

Mark Savage

Thanks, Steven. This has been a really rich conversation. Much appreciated. To your point about high-level, what might be on the task force's workload going forward? I think you've heard from Evelyn two things, that the Gravity Project will come back with a submission for V3 for outcomes and consent, mindful of the suggestions and input that we've heard today and before today. But that will be a consideration I think in the future. We also heard that in the task force's consideration to think not just about the individual data elements, but how they work together. So. Evelyn raised some examples that illustrate how that can work, so care team members, for example. When you think about how care team members work, as a data element, works with SDOH data elements, you get an even bigger bang for the buck. And that's not the only example. I mean, there are ways in which this may happen in future submissions for V3 that might work with SDOH data elements to provide even more help for the ecosystem. So I think that was another overarching suggestion for the task force's consideration.

And then lastly, I think the recommendations for consideration around V3 suggest some ways to think about the priority issues that we as a task force have been discussing and may help inform that, as well. For example, are there data elements that may help with incorporating patient-generated health data? I'm not sure what the answer might be, but there's a broader set of priorities in addition to maturity that we've been thinking about. The Gravity Project's recommendations highlight some of the ways to think about that. I hope that's helpful.

Steven Lane

Thank you, Mark. There's been a lot of discussion in the public chat by task force members primarily. Grace, Jim, Abby, was there anything that you wanted to put voice to here?

Grace Cordovano

Steven, this is Grace. I appreciate Abby's point and it's a powerful point. I can see that mirror of that in the patient perspective, that many patients may be disheartened or reluctant to share some of these details because they don't see actionable change in the short term and they feel desperate and they may feel their story is so complex and their life is so complicated, that sharing this info, nobody can help or have the time to help. I see that as an opportunity in the consent process, how we refresh and maybe rethink how we collect this information. We can't solve it all. But incrementally, if we can make one thing actionable, to Abby's point, where the provider and care giver that's collecting this information and the patient, and the

care partner that are sharing these details can see some sort of actionable change, I think we've made some great progress.

Steven Lane
That makes sense. All right. Other thoughts from the task force?

Leslie Kelly Hall
This has been really, really helpful.

Clem McDonald
Steve, I've got my hand up, but I didn't want to talk out of turn.

Steven Lane
For some reason, I'm not seeing all the hands. I apologize.

Leslie Kelly Hall
Neither am I.

Clem McDonald
If it's my turn, I'd just like to make a comment.

Steven Lane
Yes, go for it.

Clem McDonald
In an inner city hospital in Indianapolis, we developed a survey for collecting some coarse symptom data and what was bothering patients. It couldn't be done without nursing actually helping the patient through it. These are paper documents. It's not much different. And these were old, often undereducated people, and it was not workable. So, I think the idea of patient-entered data may be ambitious. And the second thing is when I looked at the Prepare project and how it was being used in North Carolina, it seemed like a lot of the questions had actions they could follow. Like transport, they could refer them to some taxi company that could be paid. If it was food, they could refer them to a number of places. Am I wrong about that? Or are there some other questions that aren't actionable? And if there are, those, I think, I would downplay until they were.

Steven Lane
I think you're raising a really important point, Clem, and I think a number of people have made this point. It's clear that social determinants impact health. It's less clear how we can act on that data, So, collecting the data is key, and it's really been the focus of USCDI and Gravity, but we're hearing that patients may be less enthusiastic about sharing, that providers may be less enthusiastic about asking and documenting until such time that we can A., exchange the data and B., act on the data. Clearly, the exchange is what's going to come as USCDI is leveraged to support this effort. But the actions, we live in a society full of need and often with fewer services than would be required to meet those needs. We've raised some really philosophical, social questions here, which we're certainly not going to answer. So before we go to public comment --

Leslie Kelly Hall
Steven, before we go to public comment, I do want to talk about Clem's comment. Just as in health care, as in any other industry, there's no single way of gathering person information. It could be audio, it can be interview, it can be patient generated or person generated. The key is that you have all options available to address all the populations. It's not one or the other. So that's just my comment on your patient-generated comments. With that, I give it back.

Steven Lane

Yes, that makes sense. Again, I want to circle us back to the key question, which is what can or should our task force do as we are preparing recommendations around Version 3 to support the ongoing development of this area? Mark, I think you put it well. Gravity, itself, is planning for updated submissions during this cycle which will specifically address needs related to outcomes and consent. And Evelyn, you highlighted those two are kind of the next up in your priority list. And again, that's wonderful. I don't specifically know what role, if any, our task force will have in that besides just sticking a pin in that and saying we think this is great stuff and please keep it moving. Maybe Mark, as you are noodling on this both from the Gravity perspective and the task force perspective, perhaps you could come back to us when we meet next week to discuss how we see this potentially fitting in.

So with that, we'll ask you to bring up the public comment slide and we will pause to see if any of the various members of the public who have been with us today want to speak up.

Public Comment (01:22:15)

Casandra Hadley
Operator, can you open the line for public comment, please?

Operator
Yes, if you would like to make a comment, please press *1 on your telephone keypad. A confirmation tone will indicate your line is in the queue. You may press *2 if you would like to remove your line from the queue and for participants using speaker equipment, it may be necessary to pick up the hand set before pressing the star key. One moment while we poll for comments.

Steven Lane
I know Brett Marquard has been with us for much of the meeting today. He works closely with HL7 and US Core, in particular. I know Brett's been on and off the phone. If he's not in the public comment queue, maybe we can get you the mike after we poll for public comments.

Operator
There are no comments at this time.

Steven Lane
Great. And Brett, are you on audio? Apparently, not. Okay.

Al Taylor
The comment chat says that he's trying.

Steven Lane
He's trying. Okay. I've got too many chats open at once. It's hard to check them all. It would be great if we could get Brett in there. Leslie, you are making a comment here?

Leslie Kelly Hall
I just think as we go through these evolutions of USCDI, it would be wonderful if within it there were opportunities for people to indicate lessons learned, best practices, so it can evolve and help others as they implement more of these challenging collection opportunities.

Steven Lane
And Bob Dieterle who is also very much involved in Gravity in terms of helping to move the IGs forward just submitted a public chat that one of the most significant changes supported by Gravity's implementation guide is the ability to refer patients to community services. I think that's absolutely key. This is that action step that I think we would all like to see based on the data that we're going to be able to collect and exchange. All right, well, I don't see any hands. Does anybody think they have their hand up that I can't see? I see a hand now. Brett Marquard has a hand up. Does that mean that you have audio?

Brett Marquard
Can you hear me, Dr. Lane?

Steven Lane
We can hear you.

Brett Marquard
All right. I get the final few minutes to share. Thank you. I caught the end of Evelyn's presentation, and it's so fantastic to see the Gravity work. Just a few updates for folks, there's so many activities going on it's impossible to keep track of everything. But at HL7, the current plan is that the U.S. FHIR Core will be valid this winter to be updated to include the new USCDI Version 2 data elements and classes. To jump start that effort, it looks like Argonot has been instrumental in guiding some of the definitions of APIs and the content profiles. Argonot's steering committee met last week and agreed to do kind of quick start effort to kind of start the design and plans to collaborate with Gravity and make sure we have the experience of the S2H for the S2H element and with the idea that happens from August to September, and then it moves into the HL7 formal process, potentially connect-a-thon, depending on how far we get, and on from there. Again, this is all for Version 2.

Steven Lane
That's great. Very exciting to hear that there's a well defined path to move these forward now that they've been included in Version 2. Brett does any of that depend on version 2 being added to the standards version advancement process or is that an independent process?

Brett Marquard
Great question. No, at this point, it's independent. We see the value of the elements and hoping they will be in the standards version advancement process, but we plan to proceed either way.

Steven Lane
Great. Well, we are at the top of the hour. I really want to thank everyone for your participation and we look forward to meeting again next week. Next week, we are going to pick up our work on the prior recommendations that the task force has brought forward, going back to the Google doc that we've been working on. I invite all of you to refresh your memory on that and add comments, especially you Mark, as we think about how to continue to support SDOH going forward. We are scheduled to meet the 3rd of August, take a week off, meet the 17th of August. There's another industry meetings on the 24th, so we haven't currently planned to meet that day. And then meeting for the final time on the 31st of August, hopefully, to prepare our final recommendations for presentation to the HITAC on the 9th of September. That's our plan. And again, thank you all for your continuing participation and helping move this forward.

Leslie Kelly Hall
Great work everyone. Thank you.

Adjourn (01:28:40)