



Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) INTEROPERABILITY STANDARDS PRIORITIES TASK FORCE 2021 MEETING

May 14, 2021, 2:00 p.m. – 3:30 p.m. ET

VIRTUAL



Speakers

Name	Organization	Role
Arien Malec	Change Healthcare	Co-Chair
David McCallie	Individual	Co-Chair
Ricky Bloomfield	Apple	Member
Cynthia Fisher	PatientRightsAdvocate.org	Member
Valerie Grey	New York eHealth Collaborative	Member
Jim Jirjis	HCA Healthcare	Member
Edward Juhn	Blue Shield of California	Member
Ken Kawamoto	University of Utah Health	Member
Victor Lee	Clinical Architecture	Member
Leslie Lenert	Medical University of South Carolina	Member
Clement McDonald	National Library of Medicine	Member
Ming Jack Po	Ansible Health	Member
Raj Ratwani	MedStar Health	Member
Ram Sriram	National Institute of Standards and Technology	Member
Sasha TerMaat	Epic	Member
Andrew Truscott	Accenture	Member
Michael Berry	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Wanda Govan-Jenkins	Office of the National Coordinator for Health Information Technology	Staff Lead
Denise Joseph	Office of the National Coordinator for Health Information Technology	Staff Lead





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

Operator

Thank you. All lines are now bridged.

Michael Berry

All right. Thank you everybody and hello. My name is Mike Berry, I am with ONC and I would like to welcome everybody back to the Interoperability Standards Priorities Task Force. We really appreciate you joining us today. I am going to open up our meeting with roll call and I will start with our co-chairs. Arien Malec.

Arien Malec

Good morning, my time.

Michael Berry

David McCallie. Ricky Bloomfield.

Ricky Bloomfield

Hi, good morning.

Michael Berry

Cynthia Fisher. Valerie Grey. Jim Jirjis. Edward Juhn.

Edward Juhn

Good morning.

Michael Berry

Ken Kawamoto. Victor Lee. Les Lenert. Jack Po. Raj Ratwani. Ram Sriram.

Ram Sriram

Present.

Michael Berry

Sasha TerMaat.

Sasha TerMaat

Good afternoon.

Michael Berry

Andy Truscott. Great, thank you so much. Now I will turn it over to our co-chairs, Arien and David. Take it away.

Introductions & ISP Task Force Work Schedule (00:01:15)

Arien Malec

All right. Yeah, I think we have a little bit of a reduced attendance, or slow attendance. Some folks joining the call. We had a marathon session yesterday of public health testimony. Followed by the ISP Task Force update. So, today we are going to basically redo the, what we did yesterday, at a much more abbreviated session. Then really get into homework and next steps, which is primarily around looking at the draft high-





level recommendations. In the transmittal letter format and putting together a work plan between now and the next high fact meeting. To get to the finalized recommendation. I think we are in relatively good shape. That is, I think we could take the recommendation as they are right now and publish them as recommendations in a transmittal letter with a little bit of spit and polish on them. But it might be nice to go to the next level of more detailed recommendations and take the high-level recommendations and dial them up a notch. So, we will go through a process of assigning some homework. Orienting people to the material in the transmittal letter and get put together a plan between here and the end of the task force, or the end of this incarnation of the task force. So, if we get to the next slide. Clem, you had your hand up? Clem, is your hand up just to say you are here and you missed roll call, or do you have a question?

David McCallie

You are muted, Clem.

Arien Malec

All right. We will keep going and if Clem wants to chime in, Clem feel free. All right. Let us go to the next slide. Again, just to remind everybody, we are lined up for next month to submit our recommendations letter and transmittal letter format. If we go to the next slide.

David McCallie

Arien, just to clarify. That next meeting, the June meeting yeah, you got it right here. That is the final.

Arien Malec

That is the final.

David McCallie

Then we are done.

Arien Malec

We are done, exactly. So, we have today. The 20th, 27th and the 3rd prior to the meeting on the 9th. Where we will be delivering the transmittal. As I said, I think we are in relatively good shape here. I think we could just take the recommendations as they are and deliver them with more recommendation type language. But I am sure that we are going to want to both, put a little more color around the recommendation and get some detail in some cases around recommendation.

David McCallie

Just Arien, to add color to that, in case some members are not familiar with the process, which I had forgotten about. Our deliverable is the transmittal letter. But also, a set of slides that have a particular format that is different than the format we are currently under. So, I think our plan is to craft a transmittal letter and then use that to build the slide deck if they request the format of the slide deck. Is that right?

Arien Malec

That is right. Historically, we have done it a couple of different ways. Making the slides a summary of the transmittal letter or trying to make the slides as close as possible to the transmittal letter. And I found in the past that people get confused, or they go to the slides, rather than the actual recommendations. In many cases, we work really hard to make the recommendations worded just so. My bias is to make the slides, just pour the recommendation letter back into the slide. Which leads to a fairly wordy slide, but at least it solves for the lofty conversion from slides to transmittal letter.

Clem McDonald

Arien, I did not have voice when you were asking and what I would like to do is discuss some of the recommendations. Some of them were not clear to me. But I do not know if this is the right time.





Draft High Level Recommendations Review and Discussion (00:06:20)

Arien Malec

No, we will go through the recommendation and definitely value your input in any additional tuning or cleaning that is required. We are going to make the transmittal letter, basically the main thing that we work on and work off of. So, this will be the last time that the slides themselves are the main content that we work off for the meeting on the 20th, 27th and 3rd. We are going to be primarily working off the middle. And make sure that that represents the sense of the work group. And then on the 3rd, we will work on the transmittal back into a slide presentation for the high-tech meeting on the 9th. All right. If we go on to the next slide. I think everyone knows this. On to the next slide. Here is our recommendation. Again, I guess most folks have been through this a few times. We sent out the recommendations to the full task force. Got some folks providing input. Some of the input came in, I think Ricky's came in a little too late for us to make the update.

So, we just published draft recommendations to the committee. I think we got generally favorable response to those recommendations. No major **[inaudible] [00:07:55]** with maybe a couple of needs to make sure that we have got appropriate clarification around the recommendation and the intent of the recommendation. We will go through this and then review the recommendations letter format at the end of going through the recommendations. So, if you go to the next slide. Ricky, I think this is where you had some comment. I think David did a nice job of this yesterday, but what we tried to do in light of the upfront conversations we had on the ISP Task Force meeting is to pull out recommendations that were more general or foundational. Things that ONC could make progress on that would serve as substrate for a bunch of different use cases before we got into the more subject specific areas. For example, and I think Clem you had a comment on this yesterday.

We pulled out all the terminology related sections that we heard about in gravity, real world evidence and in the clinical administration burden reduction area and turn them into a set of vocabulary recommendations. We pulled out the foundational standards, the FHIR foundational standards that were the substrate for gravity. Substrate for ePA. Substrate for clinical research and pulled them into this section and then we also have a section on, remind me David, what our third section is, it is foundational vocabulary, this one. We will figure it out. Oh, modeling. So, there is the research modeling. There is the implied model of administrative transaction. Then there is USCDI. So, we pulled that really important work out to make sure that we had a process for ensuring USCDI did not arbitrarily create lofty conversion. Clem, to your point yesterday, in the research section, we are certainly not suggesting that research needs, or administrative needs be the thing that we drive clinical documentation around.

Although, these days we mostly drive clinical documentation around administrative deed. Rather, what we are suggesting is, the interoperability or the interoperability set that we have in USCDI should at least not create arbitrary different to researchers or to administrative use so we can maximize the reuse of clinical documentation for other purposes. So, with that as preamble, this first section addresses the foundational prior specifications that are not already part of certification requirements and that we believe are foundational and substrate for gravity research needs and administrative transactions. In particular, the ePA work that the Da Vinci Group has done. Then Ricky had a comment on triggering offline workloads via Spire subscription. That that can be a broader set of cases, I think he had some suggestive language that I think we are more than happy to drop into the language. Clem, I see you have got your hand up?

Clem McDonald

Yeah, there is a couple parts Yeah. There are a couple parts. First, I love CDS Hooks and I think the idea of subscription is, without paying. I think that should be highlighted. I love Questionnaire, I have been working on it for the last two years. What I worry about is, I am a clinician at heart. I have not seen patients for about 10 years. You have got to do what the computer says. So, if all the sudden the computer is asking you, what you might consider for this patient, dumb questions you have to fill in these fields by questionnaires popping up. I think it could be very destructive to primary care. So, I only wonder if we get





some phrasing in there that might suggest, this is not to assault the physician and ask them for everything anyone ever wanted. Whether it is relevant to that patient or not.

Arien Malec

No, thank you. Again, that is part of the preamble text, which is, CDS Hooks, FHIR subscriptions, FHIR Questionnaires should be configurable. So, they should request from the clinician only what the clinician or the health system is suggesting to request. In the real world, you may have a health system that is requesting information in a context that is maybe disruptive to an individual clinician. But that is ultimately a clinical workflow question that is a last mile configuration question. Now something where ONC or CDC should be plugging work in. That being said, I think the experience of eCR for example, in eCR Now, or the experience of the Zika flavor of eCR Now means that there are cases where health systems in conjunction with public health for example will configure their systems with interruption for clinical workload. Sorry, Clem. Go ahead.

Clem McDonald

I think who gets to decide how a clinician spends his time on. I mean, public health, we worked with them intensely in Indiana. So, we are able to increase, we tripled it, the amount of reports we gave them for gonorrhea and a bunch of disease. But that came directly from the labs, not bothering the physician. Plus, they already knew it was at that level. Anyway, the main point is that once you had some clauses in here that would be cautious about physician consensus, the physician community's consent for these things. The nice thing about subscription is that implies they want it and that is perfect.

Arien Malec

Great point and we will make sure in our preamble that CDS Hooks an FHIR subscription are used by clinicians and systems to configure EHRs with chosen workflows.

Clem McDonald

I think it would be very helpful for research, too.

David McCallie

I mean, one other consideration is that, and maybe there is an overarching workflow notion that we should word into our assumptions. That this data, these alerts and interruptions should be configurable as to who they interrupted. It is not always going to be the clinician in the middle of a primary care encounter. Some of this stuff can be routed and administered by other folks depending on workflow in the system, No. 1. Then No. 2 is, as many of these things will be required one way or the other and the question is, is it more disruptive to have it in the context of the patient's chart open and while you are thinking about the patient or to have it bombard you some other time or force you to go to some other source like logging into the web or going to some website and filling out some prior authorization information, etcetera. So that the net savings and time is probably going to be real if we do this well if systems do this well. But it should not all be configured to the moment of care. The moment of caregiving.

Clem McDonald

The problem is there is enthusiasts on some sides of this.

David McCallie

Sure.

Clem McDonald

In terms of public health reporting, the big deal stuff physicians are pretty good at but these things, gonorrhea is all over the place, chlamydia infection. That is not anything new and they do not report very much of it.

David McCallie





All right. Well, these are tools. They have to be used appropriately and made configurable. I think those are important things to stress. Workflow, configurability and respect for clinicians. Appropriate respect for clinician time. Those are all good points. None of them are the purview of an interoperability standard, but we can mention them anyway.

Clem McDonald

But these general tools I think are very supportive of it.

Arien Malec

Cool. Other comments from the work group? Or task force? I keep forgetting that we switched from work group to task force arbitrarily to make it clear that task forces were task driven.

David McCallie

Just a general question, and maybe Sasha, if you are still on and listening, directed to you and to Ricky. So, our questionnaires in the early design of those, I thought it was a pretty lousy design. But they seem to have been adopted pretty well. Is everybody comfortable that that is a route that we should endorse? Clem, you have been working with them you said? Any reservations about the Farr questionnaire design?

Clem McDonald

It will be different depending on who implements it and how you implement it. But we have questionnaires, we have got some Medicare questionnaires with 700 questions. I hope they do not throw that at a physician during practice.

David McCallie

I meant the actual architecture. So, when I looked at it and I admit, it is quite out of date, but when I last looked at it, it had this unholy mix of semantics and user experience all mangled together in a way that struck me as not a great design. But maybe it has gotten cleaned up or maybe I was wrong.

Clem McDonald

Yeah, I may be too close to it. I remembered your harsh criticism of it when we first talked and the idea that it is [inaudible] [00:19:09] and everything else necessarily together. A lot of that is going to be depending on the system it is embedded in, I think.

Sasha TerMaat

This is Sasha. I am not familiar with it personally. I will ping some colleagues and send an email with follow up if we have concerns. Appreciate the call out, David.

David McCallie

Yeah. I mean, I talked with Graham about it, and he was comfortable. He admitted that there were some flaws, but he was comfortable that it was a useful step. And I think that seems to be the consensus. But I just want to make sure we do not endorse something about which there is a bubbling criticism that we are not aware of. Just make sure we are clear on this one.

Clem McDonald

At least five or six implementations and we have done one in Java Script.

Arien Malec

Again, I think that we are recommending that these are high priority areas. I do not think that we are recommending endorsement of the standard implementation guide, as it currently exists. We are recommending that the organization develop a testing for UC standards and related implementation guides for broader adoption and incorporation in the certification criteria. But I think we are also saying, these are really important foundational standards that underly again, the three chosen areas that we prioritize.

Clem McDonald





They are anticipating this will be normative by late summer.

Arien Malec

Good. Yeah. Normative I think in the revised HL-7 criteria for FHIR implies production use across multiple systems. So, I mean that at least should [inaudible – crosstalk] [00:20:51].

Clem McDonald

We have had 18,000 downloads of the software, our software.

Arien Malec

Yeah. Cool. All right. Any other task force members? Ricky's note in chat. Okay. We are improving workflow efficiency and timeliness via FHIR subscription. Okay. We will make sure that we get another pass at the language here. I think we agree on the overall intent and just want to make sure the language is nuanced.

Clem McDonald

Well, I think the subscription thing gives it the power it needs.

Arien Malec

Oh, yeah.

Clem McDonald

It gives it the draw it needs to the person.

Arien Malec

David and I are true believers in the initial API Task Force where we called for a parsimonious set of primitive PUBSA folks and PUBSA were two of the primitives we specifically called out as enabling a more advanced set of workflows of a parsimonious set of primitives.

Clem McDonald

I can see these questionnaires popping up on my screen seeing patients, just like these fake phone calls. I have had 30 calls now about renewing my warranty on a 22-year-old car.

Arien Malec

Anyway, let us hope we do not open the EHR systems to arbitrary questionnaire downloads, because that would be a bad thing.

David McCallie

We may have made the trade off that the requirements or ENM codes are now much, much, much less odious, but we just replaced it with a new set of requirements.

Arien Malec

Exactly.

David McCallie

The documentation gets nice and terse, but the interruptions go through the roof and that is probably what is going to happen.

Arien Malec

Let us go to the next section. Common data models and Les helped us get to, I think clearer language here. But our foundational requirement is that modeling is good. USCDI is a foundational set for interoperability and that we should make sure that we are building a roadmap to expand USCDI in ways that include in corporate research and administrative needs. Clem, I definitely heard your comment yesterday, which I completely agree with. The intent here is not to drive clinical documentation standards from the perspective





of research or administrative needs. The intent is to make sure our interoperability set does not drive us in that arbitrary difference.

Clem McDonald

Well, I was not reading it, but the first bullet is good and perfect, I think. The thing I worry about in the research is, I am more interacting with researchers at NIH now than I have been before. They are getting involved with standards. But they want some things that no one has talked about. I mean, a lot of them anyway are pushing for HPI. Phenotype oncology. At least those dealing with genetics. We may not all want what they think they want, that is one issue.

David McCallie

HPO, Clem. HPO, human phenotype ontology, is that what you mean?

Clem McDonald

Yeah, yeah. Are you familiar?

David McCallie

Yeah, and you talk about an invasive nomenclature. There are probably only half a dozen clinicians in the world that understand that.

Arien Malec

Anyway. So, again I think we are all clear that the intent of this recommendation is not to turn the EHR into a research instrument. The intent is to use clinical documentation associated with care for the patient, but make sure that the clinical documentation is maximally useful for research.

Clem McDonald

I get the principal. Right now, of course the predominant use of clinical code research is 98% I think is ICD. It was [inaudible] [00:25:14] or something about that.

David McCallie

Well, let us put a place holder to discuss the item of ICD versus SNOMED in the problem list. I do not think it belongs in this slide.

Arien Malec

That is in our next section. Yeah, that is in the next section.

David McCallie

That will come up and I want to talk about that a little bit when we get there.

Arien Malec

That is in our next section. Okay. I think we are clear here and I guess it is the shooting corporate and administrative needs is the problematic clause here, which we will do another wording path on to make sure that we are clear about what we are asking for.

Clem McDonald

The only thing is, I would be hesitant to force these. For two and a half, three years, there was a project at NIH to get a unified model. Of course, they ended it with a fifth model. I thought it was a pile of crap, but I will not name anything more detailed than that. That is the risk always of trying to get a new thing that combines. I was thinking, you might want to just let life happen and Sonoma and ICD have made a deal, but then it broke apart and what I heard, I will not get into who says what who said. But I think we would be better off letting it work out.

Arien Malec





Okay. Clem, my request to you is, please use the hand raising feature and let us make sure we go through a process to make sure that we are getting all. Yeah, no problem.

Clem McDonald

Yeah, they think no one else is on the call.

Arien Malec

Yeah. Thank you. Okay, cool. I am going to pause, see if anybody else wants to get their point in. Otherwise, we will go on to the vocabulary section.

Clem McDonald

My hand is up now.

Arien Malec

Sure. Okay.

Clem McDonald

I just want to emphasize that I think that any government push on this will not be productive because there is already a merge emerging. I work with the PCORNET and I work with OMOP. But the only one that really, well I do not want to get to far, but they are really not that far apart. But PCORNET and FHIR, I mean HL-7 and OMOP are already engaged. So, I think these things are often best left to the players. They need money to make the conversions, that is what they need.

Arien Malec

I think that the [inaudible – crosstalk] [00:27:58].

David McCallie

That is why we are pulling this to the attention of ONC. That leads to opportunities for funding and research grants.

Clem McDonald

Okay. All right.

David McCallie

The ISA, it is a device to track work that people should be aware of. If you wondered what existed in terms of research data models, you should be able to go to the ISA and find links to all that work that is going on and that is why we are putting it here. That is our job, is to make sure that we are calling out worthy interoperability efforts for monitoring, tracking, funding, etcetera.

Arien Malec

That is exactly right. That is exactly right. We are not calling for ONC to standardize, we are calling on ONC to convene stakeholders. I mean, the critical role that ONC has is, they can pull together CDC, FDA and NIH and say, "Hey, if you want to maximize use of real-world evidence out of EHRs, you better get your act together and not ask for three different things."

Clem McDonald

Well, let me make some careful comments, though. The FDA, they have a lot of, not resistance, but they cannot move fast because of the political forces that apply to them. They still are using a SASS standard from 1994, I think. So, if they have to agree to something, they might agree with it behind the scenes. It might make it very slow.

Arien Malec

Yeah, I am not going to get into how ONC fights political battles internally. But again, I think what we are recommending is that research data models be lifted in the ISA and that ONC prioritize work with





stakeholders to fund the necessary work for harmonization. All right, let us go to terminology. So, I think the only thing that came out of here that was at all, maybe had some hair on it, was the second bullet. Again, we just pulled out all the terminology related things that we heard. One is, I think that we heard from, this has been a persistent issue. I think we heard from the research community. It is very similar to what the ISP heard when we looked at recommendations for lab ordering and resulting, is that we still have too many labs that have not normalized to LOINC.

We are recommending that ONC use its direct levers to use standardized terminology and working relationships with HHS that have oversight of renal machines and clinical labs. That is FDA and CMS. To make sure that we source originate codes correctly. Clem, I definitely take your point that you raised yesterday, that the analyte machines sometimes do not have all the context that is necessary to translate directly into LOINC. In the past, I think FDA has been somewhat disconnected from the EHR community, in terms of lining up standards and we will see the same thing in RX Storm and really what the request is. Let us make sure that we start to line these things up appropriately and not expect magic to happen. Then the second one, which is the one that has maybe a little more hair on it, but I think it is appropriately worded is related to procedural coding. Again, what we are requesting here is open and freely available standards that are either international or clearly cross mapped to international standards and are optimized for clinical care research and administrative data use.

Clem McDonald

Go back to the middle one first.

Arien Malec

Hold on, Clem. Just request for you to raise your hand and then I am going to call for the full task force to raise their hands. All right. Clem, go ahead.

Clem McDonald

Well, in terms of the first and middle one. I mean, I support it in general, but you should be aware, the orders are much harder than results. Companies change the subsets fairly rapidly. So, how do you define the orderable? One company, Mayo, in their whole order set. They have 80% or 90%. But I think you need a little bit of an escape valve with orders, so maybe if they are available, they should use them. It is just tougher because of the different subsets that they specify in different panels.

David McCallie

I thought we were talking mostly about results here.

Arien Malec

We are talking here mostly about results. Clem, we did put together the ISP transmittal letter, as you remember because I think you and I collaborated on that. On orders and results specifically and I think we got to a pretty good level of nuance there. I spent a good chunk of my career, as I know you did as well, looking at orderable normalization. Our experience was that 95%, 99% harmonization was fine because CBCs do not change, chem panels do not change that much. It is really the exotics that change a ton. But most clinical ordering occurs off a pretty standard set.

Clem McDonald

You are right. You are right.

David McCallie

Clem, let me ask you a LOINC question. In an ideal world, if you had a fully cooperative national lab, what percentage of their outbound results could be LOINC coded today if they wanted to?

Clem McDonald

I think they are probably all at close to 98%, the big ones.





Arien Malec

The big ones absolutely are. Yes.

David McCallie

Okay.

Clem McDonald

They are very active; they are asking for terms all the time. So, maybe even higher.

Arien Malec

Quest and Lab Corp are standardizing LOINC. The big systems are standardizing LOINC. Where you get issues is in community labs and smaller hospital labs that are continuing to use legacy coding.

Clem McDonald

Local labs. They have got two helps now. They have, even if it is not automated, they have cables now from the ophthalmology lab instruments, what the code should become for LOINC code so they can read them and link them up themselves. Then the second thing, most of these smaller labs get most of the stuff from the big labs. Most of the different numbers of tests, not the total volume. If they just would take those codes, it would not be that hard. So, maybe some pressure is needed there. Now, the other part of it is in hospitals, the LOINC code is pretty much varied. I have had researchers complain they cannot find the LOINC code in this Epic system. But I know it is there. They are all through mapping tables and they have same as Cerner. Then you have got thousands of mapping tables, they cannot find them. Apple puts it right in with the results and I think if we push something like that, also they would self-correct, too because people could see them.

Arien Malec

Yeah. I think the mapping codes are an artifact of the fact that all those systems were built before there was such a thing as a LOINC code. So, you do mapping and assign them on export over APIs or FHIR dumps or whatever. I just like to see, I think the spirit of this is that on the inbound side, they should be LOINC encoded as close to 100% as we can.

Clem McDonald

I am not going to argue against that.

Arien Malec

Then the ultimate yield in the regulatory agency could express its regulatory authority more forcefully in this area and do the country a lot of good. Anyway, second bullet is on procedural coding and I think David looked at this again. You and I were talking about this at the front of the call. I think the way that we worded this is appropriate and rational, let me just stop there. So, I do not think we are saying, do not use CPT4. I think what we are saying is, use a procedural coding set that is open and freely available that is either international or clearly cross mapped to international standards. Yes, go ahead.

David McCallie

So, I am raising my hand visually since I have that luxury. Here is some alternate language to consider, and we do not do the word smithing now, but I am going to make this just to make the question that we should be thinking about. You could say, open and/or freely available, because a closed standard can still be made freely available. Closed in, that it is controlled by an entity but freely available means that you could use it. And we could also clarify, open and/or freely available to US clinicians and we could add some constraints about the scope of the freely available, like with SNOMED. So, we should consider language like that I think, without diluting our point.

Arien Malec

That is a great point. So, open and/or freely available to US clinicians. Let us get other folks from the task force on. Clem has his hand raised. Anybody else who wants to get in, please do.





Clem McDonald

Well, they should go ahead of me if they want to get in.

Arien Malec

Yeah. Go ahead, Clem. You are the only one with your hand up right now.

Clem McDonald

Well, I have a lot of problem with this one. Firstly, procedures at least in the US court are defined as things, not tests, they are defined as things that have an effect, an invasion of the patient. They change the patient. Surgeries and stuff. So, that is going to completely confound and confuse things. For example, currently the draft version of the OCDI recommends LOINC codes for X-ray reports. Well, is the procedure code going to be different than the report code? So, I think we should clarify that. Then, I think the idea would be, they should be open.

Arien Malec

Yeah, Clem. I think we have got two bullets here. One is on LOINC codes.

Clem McDonald

I am talking procedure. I am talking in the next one.

Arien Malec

Labs are first and the second is for procedural coding. The intent here is truly for ENM codes and procedures.

Clem McDonald

I thought we were on the third bullet.

Arien Malec

Yeah, we are on the third bullet right now.

Clem McDonald

That is what I was referring to.

Arien Malec

Okay. I got you, I am just confused as to what the LOINC coding for reports is doing.

Clem McDonald

Well, LOINC is required for radiology reports.

Arien Malec

For the report. But the procedure, chest MRI with contrast, the procedure code is, yeah.

Clem McDonald

I mean, we enter the billing code for sure. That is different. But I mean, that is why it is confusing. I mean, prior does not include X-ray images as the procedures. They are not in that resource.

David McCallie

The problem Clem is, in the real world, the billing codes drive a lot of the knowledge about what happened to the patient and that is not going to change. So, what we are calling for is that those billing codes need to be open and/or freely available.

Clem McDonald

Okay, let us call them billing codes then. I think it would be clearer.





Arien Malec

Okay. So, USCDI has a thing called procedures and USCDI and USCDI2 calls for [inaudible] [00:41:09] with optional ICD10PCS. The code on dental procedures and nomenclatures. So, USCDI is consistent in, I see by the way your comment Clem, on the USCDI relative to the term procedure. But USCDI does have the notion of a procedure and it calls for terminology. Some of the terminologies that are called for in USCDI do not meet the test and standards that we are proposing here, which is open and/or freely available for US uses that are clearly mapped to international standards.

Clem McDonald

Well, I think you are designing that to be a SNOMED code.

Arien Malec

That is not what USCDI says. USCDI allows for SNOMED. USCDI allows for [inaudible] [00:42:08] CPT and SNOMED and CMS, which is where ONC is directly in coordination with CMS harmonizing procedural coding standards for both administrative and clinical use. That is what this is. Optimized for clinical care, research and administrative data use. The nomenclature used there do not meet the test.

David McCallie

Whichever one of those. We are not weighing in on which code to use to codify a procedure. We are just saying, they should be open and freely available.

Arien Malec

Clem, do you disagree with that, that recommendation?

Clem McDonald

I disagree with the full spec, that it must be open and/or freely available to US people and international. All those combinations.

Arien Malec

Okay, so the clarification, this is David's clarification, is that freely available to US nationals, or freely available within the US. Second clause is that those standards are either international or clearly cross mapped to international standards.

Clem McDonald

Okay. Well, I would suggest that either the international does not count or they should be freely available everywhere, really be open.

Arien Malec

Yeah. I think we are agreeing and maybe we are not. I am having a hard time thinking through the objection that you are coming up with. Right now, CPT is a US local administrative code. Although apparently there is some CPT use outside the US. CPT does not meet the test that we are proposing. There are a couple of [inaudible] [00:43:51] CPT could meet the tests that we are proposing. One would be that the AMA licenses through MLM. CPT for US use. The CPT is clearly cross mapped to SNOMED. So, that would be a perfectly acceptable way to meet the proposed test. Now, let me just pause there Clem and see if that makes sense to you.

Clem McDonald

Well, I think your criteria are too limited. I mean, I think what we should try to get to is open vocabulary standards.

David McCallie

Yeah. If this does not say this, then let us work on word smithing because I think we agree that the code sets that standards that should be used would be open vocabulary standards.





Clem McDonald

Yeah, but when you get to the international, it gets really complicated. France does not use SNOMED for example, and it is not like it would be very soon. China does not use SNOMED.

Arien Malec

The point here is that SNOMED is an international standard. Yeah.

Clem McDonald

Well, so is CPT in the sense that they have some other countries. LOINC has lots of countries. I mean, I just think it is a confounded one when they do not get it free and we put international. I think we should just say open and leave the international stuff out of it because I think that biases it. Open is an important point.

David McCallie

It is mapped to international. Clem, it is mapped to international. It is not saying that it is an international standard. It is saying, which we heard from our research testimonials that there was a big limit in the COVID research because of the mapping to procedures used internationally. So, they have been calling for mapping.

Arien Malec

Sasha has her hand up.

Sasha TerMaat

Hey, this is Sasha. I had, I guess first to clarify, I think I am philosophically in agreement, but I had two questions. One was, whether it makes sense to narrow this specifically to procedures or I guess, questioning why it is a recommendation about procedural coding only. Is that just because that is the only current example? I think philosophically, we would want to make this recommendation about any USCDI code.

David McCallie

Agreed.

Clem McDonald

Agree.

Sasha TerMaat

The other question that I guess I had was just, maybe a mindfulness. While I think I agree this would be an ideal state, the short-term consequences of removing a code set from USCDI could be significant. So, I would hate to see them implement this by saying okay, we will take CPT out of USCDI. For example, for procedures and I feel like that would have a significant negative impact on current interoperability.

Arien Malec

Yep. Be mindful about any vocabulary transitions is a good point, Sasha. The way I would think about this would be, one of two outcomes. Again, among the outcomes, let me just put it this way, among the outcomes that could resolve this would be, A.) For the AMA to negotiate with NLM in the same way that [inaudible] [00:47:20] has negotiated with NLM on broad usage rights for US uses for CPT. To engage with NLM to cross map CPT to SNOMED so that we have a single vocabulary standard. That would be a perfectly appropriate way to address the philosophical notion that I think I agree with you, should be a broad philosophical notion. Then the second, or we could transition to SNOMED as our procedure coding for both clinical and administrative use. Sasha, to your point, that would not be an inconsequential transition and would require a long, slow and coordinated rollout.

Clem McDonald





Another comment on the CPT. Physicians have memorized those codes and they know them all. I mean, I think you will have an uprising or very painful experience.

David McCallie

I mean, realistically the chance of changing CPT is zero. The question is, can it be made free to use to US clinicians, which is very realistic and attainable policy that is disruptive to few.

Clem McDonald

Well, NLM is, I believe. I cannot swear to it, but I think they have got a budget situation which would not let them repeat the last one.

David McCallie

We are not solving budget problems. We are just saying what makes sense as a recommendation. Bureaucrats have to figure out how to address it.

Clem

[Inaudible – crosstalk] [00:49:06] government agency.

Arien Malec

Wait a minute. Let us go on.

David McCallie

[Inaudible – crosstalk] [00:49:15] of this decision.

Arien Malec

Let us go on to the next slide unless there is other comments on this one. Okay. As we think about transitioning to ICD-11, ONC should work with CMS and NLM to ensure that the SNOMED, CT and ICD-11 harmonization will allow people to capture clinical data for clinical care research and administrative workflows. Again, just making sure that we appropriately cross map our administrative and our clinical coding systems.

Clem McDonald

I hate to bring this up, but if ICD is used for morbidity or no, we had at our committee. Were you guys listening on the last committee? We were talking about adding CPT to problems. Did you hear some of the comments?

David McCallie

Yes. Yes.

Clem McDonald

The truth is, Physicians do not use SNOMED, they map it. The object system maps it to SNOMED, so it is not deeply embedded in US systems except for three that I can tell. Nebraska VA and [inaudible] [00:50:24].

Arien Malec

Yeah. Right. This is a typical experience that everyone documents to administrative standard and clinical uses are an afterthought, which is exactly what the research community was noting. The problem was most particular for procedural coding. Secondarily, problematic for problem coding. But the intent here is, let us just assume that clinicians are going to document an ICD-11, when ICD-11 comes down. Let us just also make sure that we have consistent nomenclature so that we can do the cross maps.

Clem McDonald

Well, the question is going to be, will SNOMED be needed for clinical findings and problems when ICD-11 comes, because it will be flexible. Then, I do not think we should prejudge what the market is going to do.





Arien Malec

I do not think we are prejudging in this recommendation at all.

Clem McDonald

Well, you are using SNOMED as a specified requirement.

Arien Malec

Where am I saying that in this recommendation? Where are we saying this in this recommendation?

Clem McDonald

Ensure that SNOMED, CT and ICD-11 harmonization will happen.

Arien Malec

Yep. That is right. Is that a bad thing? Clem, are you disagreeing with the notion that ICD-11 and SNOMED should be harmonized?

Clem McDonald

Well, that is not my job.

Arien Malec

Yes, it is. It is your job. On this task force, it is your job.

Clem McDonald

Okay. No, it would be nice if it were harmonized, but I would not make it a pre-requisite.

Arien Malec

Where in these recommendations is anybody saying that is a pre-requisite?

Clem McDonald

To ensure, the word ensure.

Arien Malec

Ensure that SNOMED, CT and ICD-11 harmonization.

Clem McDonald

Yeah. It might turn out that if they were threatened, they were supposed to be doing that. They are supposed to be joined together.

David McCallie

Yes. Exactly, Clem. All right. Let us keep moving. The last one is NDC and RX-NORM, this is a case where FDA regulates use of NDC codes. NLM, RX-NORM is our general standard for medications and one of the consequences, it may be better because the cross maps may be better. But one of the consequences is that administrative codes use NDC. So, if I send any prescription over to a pharmacy, I send over a representer, I often send over a representative of NDC, resident RX-NORM code. So, there is a lofty translation backwards and forward. I think we are recommending that FDA, CMS and OMC continue to harmonize with NDC and RX-NORM and harmonizing clinical and electronic prescribing standards.

Clem McDonald

Sorry, I have always got some fusses. But one of the fusses is, NDC is not harmonizable to RX-NORM completely because it is unruly, there is not central list of all NDC codes. The closest it comes, some of the [inaudible] [00:53:49] have some that come close. That is one problem. But it would be nice if you did not have to do both.





David McCallie

I agree.

Clem McDonald

FDA actually requires the World Health Organization codes for researchers. I do not know if you were aware of that.

Arien Malec

For research use, but not in practice, NDC is the terminology that is used for NCPDB script transactions.

Clem McDonald

[Inaudible – crosstalk] [00:54:17] they are not allowed to use RX-NORM in their clinical trials. So, it would be nice to make a pitch for RX-NORM.

Arien Malec

Yeah. So, what I think we are saying here again, if we read the text, that ONC should work with FDA and CMST to harmonize NDC to RX-NORM, treating RX-NORM as a source terminology set and to harmonize administrative and electronic prescribing track standards. To use RX-NORM as a single source for clinical data, for clinical care research and administrative workflow. I think you and I are agreeing on that statement.

Clem McDonald

Yeah. So, what you are really saying, I do not know if you want to say it out loud, is they should allow it in their clinical trials, which they have not.

Arien Malec

Yeah. I think we are generally staying out, except for the research uses and the research uses that we are trying to say is not FDA regulated clinical trials, but pragmatic clinical trials. I think what we are saying here is focusing on removing NDC and normalizing to RX-NORM.

Clem McDonald

Okay. Well, if they can do it, I would be glad to see it happen.

Arien Malec

Good. Perfect. Good.

Clem McDonald

I think we need one more bullet. I would like to compose one more bullet, though.

Arien Malec

Okay.

Clem McDonald

This is another area is to encourage the use of UCUM because if you are going to get numeric data and you want to do analyses. Everybody is using raw strains to do their units of measure; it is not going to work. It does not work. We found 66 different for red blood cell counts, naming that.

Arien Malec

I think we did hear from our researchers about positive requests for that, I would have to go back and look at my notes. I thought it was already required.

David McCallie

It was back in the standard committee days.

Clem McDonald





It is required by all the standards. Not ICD, but the LOINC, HO-7, the DICOM. I think from the previous innings, I think it is going to get into USCDI. But I think it should be highlighted because I am now looking at 4 billion tests in [inaudible] [00:56:34] trying to make sense out of them, or measurements of various kinds. The only handle I have on them that is half decent is the units, I have to convert them all.

Arien Malec

I am going to call a pause to this. I think we need to get through the rest of this and get to our homework. So, we have got to move more expeditiously through the recommendations here. So, apologize for short circuiting the conversation, but we have a half an hour left, of which we need to reserve five minutes for public comment. So, let us go into the next slide. Again, this should all be review because these are basically the same things we talked about last week and also sent out Monday and reviewed on Tuesday and also reviewed on the HITAC meeting.

So, for health equity, we endorsed use of Gravity. We believe that existing USCDI terminology is appropriate. We recommend that associated interoperability standards and the EHR certification requirements are prioritized to capture any change in the status for multiple purposes. Then we encouraged the further standardization of address information to allow better geolocating. We heard yesterday in the public health testimony that occupation and occupation coding was a useful thing. I think this probably should be a future item, as opposed to something we make recommendations on here. I am going to pause quickly to see if there are any quick comments on this slide.

Leslie Lenert

This is Les. I would agree with the occupation coding needing more development. There are great coding systems, they are just too detailed to be relevant to clinicians. There is not a good conceptualizing, what people do that is risky. Running a chainsaw through a cow, there is not a good description for that.

Arien Malec

Yeah. Sasha has her hand up.

Sasha TerMaat

Oh, just the minor wording. I think philosophically I agree, but I want to be cautious that we do not set an expectation that EHR certification implies anything about data capture. So, I am nervous about saying it prioritizes data capture. The certification has the capability, but there would have to be other mechanisms that actually enforce capture.

Arien Malec

Fair point. So, EHR prioritization requirements prioritizing exchanges of data for multiple purposes. Fair point, thank you.

Leslie Lenert

Representation and exchange?

Arien Malec

Yeah.

Sasha TerMaat

That works.

Leslie Lenert

The other interesting comment, I think we are going to differ on the occupation thing. But the suggestion that somebody made during the meeting that it is better to think of it as, usual work. It occurs to me that at least in this epidemic year, pandemic year, it is the ZIP code where you usually work that is more interesting than what you do. But anyway, that is a debate about race and ethnicities.





Arien Malec

The particular issue where this came up was, for example, a meat packing plant or poultry packing plant where there were large numbers of co-located [inaudible – crosstalk] [01:00:13].

Leslie Lenert

Right, but it is the co-location that is going to be more useful.

Arien Malec

Than the actual [inaudible – crosstalk] [01:00:19]. Right.

Leslie Lenert

That is not being captured. I work on an assembly line. Well, where? That is what matters.

Arien Malec

Yeah. So, I think we have agreed this is future work and not current recommendation. Clem, you have got your hand up.

Clem McDonald

Yeah, but there are good codes. I agree and I think we should defer because of all the complexities. But I would also caution that all the occupations have a [inaudible] [01:00:42] and a sense of deaths. I mean, the death rates, they were so dominated by age and race that the rest of it was just noise. There were people wanting to get taxi drivers, they had the same death rate as the average person. Compared to Blacks over 80 or Whites, even Whites over 85, you know what I mean?

Arien Malec

Thank you. Let us go on to the next slide. So, this is one. Thank you Les for helping us work through the language here. Two slides on this. We put a preamble in place for why we are making these recommendations. Our findings are that most systems use multiple research models and often perform lofty translation. We found a lack of source normalization and administrative standard diversions create a burden for EHR data used for research. We are recommending that ONC catalog common research model and work with stakeholders to evaluate, develop and harmonize. Map to the USCDI and cross mapped to FHIR. Pause quickly there.

Clem McDonald

I have got to respond to that one.

Arien Malec

Go ahead.

Clem McDonald

These three, there is a thing developed called bridge, which was a result of a three- or four-year investment from NIH, or maybe it was PCOR model. It is what always happens. You get three kings together; you make a fourth one. You make four, you make a fifth one. I think what is really moving, the core and OMOP, it is just a matter of finding funding so they could bring the users over. They are not usually that different. He just is the odd man out.

Arien Malec

Okay. If you have alternative wording. I agree with the exact sentiment, which is in the real world, OMOP and PCORNET should figure out how to harmonize and get to a single common and get funded to do the work. So, if you have got an alternative way of wording this, I am all ears.

Clem McDonald





What if we could say that we should find support so that, you do not want to name standards. Some support so that the standards are willing to change and to become more unified. Could bring their users over. I think that is the main problem.

Arien Malec

Okay. Good. Okay. Yeah. Okay, cool. Thank you. Any other comments here?

Leslie Lenert

Just so you understand, this is about money, not about the quality of the coding, right?

Clem McDonald

Well, you have to separate. The model is not coding. The fact that they do care about coding is very important, too because certainly, PCORNET and OMOP do.

Arien Malec

I think Clem's point, which is well taken, is that we do not want to create one meta model that meta models the existing model and then now you have five models. I think Clem's point is hey, for the people who are actually willing to do the translation work, let us fund them to harmonize and translate to a single model. But not that the expectation that what we are asking for is a meta model and then a meta-meta model and then a meta-meta-meta model.

Leslie Lenert

That is why I suggested this notion of a staging model, where it is just upstream of these downstream models. But well mapped, so that it is easy to know what you got in that staging model. It is an intermediate. But I got downvoted on that. So, I will just register that I think there is other language that we could consider still.

Arien Malec

We will get to, because I think that we all agree, we will get to harmonize language. I have got two Doug Prisma quotes. One is, "Standards are like toothbrushes. Everybody wants one but nobody wants yours." The second is, "Anything you can do, I can do meta."

Leslie Lenert

I will have to remember those.

Arien Malec

Yeah. Let us go to the next slide. All right. So, this one is relative to standards for representation and implementation of pragmatic research studies within EHRs. Priority areas include consent in the cross-referenced FHIR recommendations, perspective randomization and enrollment in D-Enrollment. Separation of research and clinical data, terminology for pre-approval stuff and other EHR gaps relative to research. Then we recommend that ONC should work with the federal actors who are sometimes creating needless divergence to harmonize to the common research model. Again, we can word smith that. Clem, if you have your hand up, we will get to you when I summarize the rest of this and we cross reference our terminology standards. Okay. Go ahead, Clem.

Clem McDonald

The main thing I would add here is, Medicare now can-do pragmatic trials. They have got all this data. What they allow in their big risk database, they allow researchers to come with consented patients, or consented people to send data up into the thing and analyze it all together. So, I think I would at least mention them. It is a pretty impressive database now because they have connected to vital status and they have all the drugs. So, now you have a treatment, and you have outcome.

Arien Malec

Yeah, yeah.





Clem McDonald

So, it is not so fine and granular.

Arien Malec

Yeah, yeah. So, we will cross reference CMS as well.

Clem McDonald

Yeah. Oh, and one other one. The many billions of dollars that public health is getting. I do not know what it is, it is some huge amount. I think, is there any way that we could avoid a brand-new divergence. With the amount of resource they have, I think it is all cashed, the money is all cashed or specified already. But if there be some way because there would be a temptation. Deep pockets, that is better.

Arien Malec

That is the intent of Bullet 2 on this slide, is that ONC should work with FDA. We will include CMS, CDC. We probably should include INH as well and etcetera, to make sure that we get to a common research data model. Harmonize is probably the wrong word. We want to get to a common research data model. So, then it will harmonize with meta models, which is not all that useful. Okay. Sasha.

Sasha TerMaat

Could we call these, EHR Opportunities, rather than gaps?

Arien Malec

That is a good point. Thank you [inaudible] [01:08:20] so EHR opportunities, relative research. Thank you.

Leslie Lenert

Okay. Is the sense that these would not become expected capabilities of EHRs?

Arien Malec

I think Sasha is trying to make sure that EHRs were created for clinical care and not created as research instruments. So, let us not call it a gap when it was never intended to be a research instrument.

Leslie Lenert

Okay, that makes sense. But are we, not that it is our remit to make a decision like this, but would we envision that these capabilities would develop and become certifiable at some point?

Arien Malec

We are not saying that. We are not saying this right now. So, none of our recommendations mention certification. At this point, I would be inclined to be silent on it unless there are strong feelings from the task force that we should be non-silent on it.

David McCallie

We are certifiable, perhaps. But it is not our remit to recommend things to people.

Arien Malec

We are certainly certifiable, that is a true statement. All right. We have not much time to go over the draft transmittal and the homework. I think we only have a couple more slides to go. Let us try to keep it fast. Go to the next slide. This is the clinical administrative burden reduction. Two recommendations, one is to add sections to the ISA to track relevant interoperability priorities and track items for the associated standards and implementation guides. The second is, harmonizing and providing an administrative data model to USCDI. To ensure, and again, I think we get the right vector here to ensure that EHR clinical data capture is maximally available to address administrative needs at low patient and clinician burden. We probably should borrow this language for the research points. Our intent here is the clinical use case, the clinical





care of the patient. The data captured as a consequence of that should be maximally available for clinical care research and administrative use.

All right. Comments here? Seeing no comments, let us go onto the next slide. In situational awareness, we are recommending that ONC should list the situational awareness priorities in the ISA, SANER, as well as related standards. As you work with stakeholders and pilots in early implementation, evaluate in mature standard. Yada, yada. Then I think we heard pretty clearly from the SANER team that part of the issue here is not standards as much as it is incentives and systems and policy alignment. I think we heard yesterday a good deal of stovepipes procurement, stove piped funding opportunities that are also impeding some of the progress here. So, I think all we are recommending here is that ONC should work with HHS to clean some of this stuff up. Easier said than done, but important and needed work. Any comments here? Okay. Clem?

Clem McDonald

Just a question. I do not know what SANER stands for.

Arien Malec

Situational awareness, something-something- response. Emergency response. Situational awareness, something, emergency response. It is a FHIR workgroup.

David McCallie

Yeah, there is a slide deck from them in one of our early meetings if you kept those around. It goes deep into what they do.

Clem McDonald

Okay, thank you.

David McCallie

They are on the web.

Arien Malec

Yep. Yep. All right. Novel, thank you.

David McCallie

Novel.

Arien Malec

Thank you. You had to add it in just to make the acronym work. So, Wanda put together a draft transmittal letter. Maybe if the Excel team could, if you have got it, put the draft transmittal up in the presentation. If you do not have it.

David McCallie

I do not think they are going to have it.

Arien Malec

If you do not have it then, no big.

David McCallie

We could run the risk of the share screen thing and I could put it up. Why do not [inaudible – crosstalk] [01:13:36] so let us not. We can circulate it.

Leslie Lenert

I can send it to the cell and display it if you like.





Arien Malec

That is okay, let us not make this complicated because we do not have that much time. Thank you and apologies for causing confusion. So, we put together, and by we, I mean Wanda, and thank you Wanda who is not here. Put together a draft transmittal letter that follows the ONC format for transmittal letters. It has got the worker's charge. We have got some work to do in terms of summarizing the hearings that we heard. Then we basically poured these recommendations into that transmittal. So, we have got some work to do with respect to the transmittal. In particular, we need to beef up the section on the hearings that we conducted and who we heard from. Then, we need to turn the draft recommendations into finalized recommendation. I have got a format that I like to follow, which is task force found, X,Y and Z. Task force recommends that ONC and then, what are we recommending that ONC does. I think the recommendations we already wrote are pretty close. They just need a wording path.

But I would like to get volunteers from the task force to help us work on each of the sections. So, just as a reminder, we have got foundational leads. Foundational FHIR standards, foundational model and foundational vocabulary standards. Then we have got sections on each of social determinates of health. Research use, administrative burden reduction and situational awareness. So, a way that we can do this is assign or get volunteers from the task force to help us summarize the hearings and then get to draft recommendations and text that we can propose to word smith in the full task force for each of those sections. So, what I would like for homework, unless other folks have a better idea is, we will assign those sections out. We will send out the draft transmittal. We will assign those sections. So, we will ascribe those sections and then ask for volunteer who can help us draft the recommendations and assign out those sections to the folks who volunteered for those sections and collect the input back for consideration by the full task force. Let me pause there and see if that overall flow makes sense to the task force members.

Clem McDonald

What is the time frame?

Arien Malec

Clem, we presented the timeframe earlier back, but we have this meeting and then we have three other meetings. Our final recommendations are for the June 9th full HITAC.

Clem McDonald

Okay. I volunteer for some of it.

Arien Malec

Cool. We will send out the sections and you can sign up for those sections and we will parcel that out. Thank you.

Clem McDonald

On the research, do you have materials for research discussion? I did not get to that.

Arien Malec

Sure. We had three presentations.

David McCallie

We had intensive slides from that.

Arien Malec

There are slides Clem, for that, that section. Again, it should be in your email box because we actually did a good job for that section of getting all the slides in advance and out to task force members.

Clem McDonald

Do you remember when it was? What the date was?





David McCallie

About our third or fourth meeting. I can send you the slides, although it is a big chunk.

Arien Malec

It was the meeting on the 15th. No, not 15th.

David McCallie

No, that was the HITAC meeting.

Arien Malec

The 16th.

Clem McDonald

Dave, if you could ship them to me. It just fits in the pipe and I will definitely be able to look at that the easiest, to find it.

Arien Malec

It was the meeting the 16th. Anyway.

David McCallie

Right. Yeah, I have got them **[inaudible – crosstalk] [01:18:46]**.

Arien Malec

So, Katherine give me points here. It was the 16th and she linked in the presenter chat the actual task force meeting and all of the materials Clem, are available in the calendar. So, if you go to the calendar for the 16th, you will see all of the presentation material there. Thanks, Katherine. I think we are good. I think Clem, actually if you could, sorry. I am speaking to the presenter chat. If you could drop that link in the public chat so that everybody has access to it. But it is, if you go to the HITAC task force calendar for that day, you will see all of the presentations there that you can download and look at, at your leisure. It was a very impressive presentation. I think it was recorded. So, the recording is also available for that meeting. So, if you want to go back and refresh everything, it is all right there.

David McCallie

Bring a cup of coffee because it was dense.

Arien Malec

It was dense and awesome. It was fantastic. Okay, we are coming at five minutes before the end. Anybody else in the task force who thinks we should do something completely different in terms of homework and assignments. Going once. Going twice. All right, Mike. If we can open it up for public comment.

Public Comment (01:20:26)

Michael Berry

We sure can. Operator, can we open up the line for public comments?

Operator

Yes. If you would like to make a public comment, please press star one on your telephone keypad and a confirmation tone will indicate your line is in the que. If you would like to remove your comment from the que, please press star two. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. One moment please while we poll for comments.

Michael Berry

Okay, thank you. While we are waiting, I just wanted to remind everybody that our call next week, we will go back to our normal day, Thursday at 2:00 p.m. Eastern Time. Do we have any comments?





Arien Malec

There is a public comment in the chat from John Travis on the USCDI and refactoring USCDI so that it is not a monolith. My comment back to John is that probably should be a cross recommendation to the USCDI task force. I am happy to drop a note to the task force chairs for USCDI but that also might be a good recommendation to bring to them, John. Mike, I do not think we have any other public comment coming in through the voice chat, or voice line.

Operator

No public comments.

Arien Malec

Okay, thank you.

Michael Berry

Thank you so much.

Arien Malec

Okay. Again, just to summarize, we have got three more meetings to get to final-final recommendations. We are going to be working off the recommendation's transmittal letter as our primary document. David and I will send out an email today posting or looking at the sections that we intend to work heavily on and looking for volunteers for each other's sections. Then we will come back for subsequent meetings to pour the updated recommendation in and get to final agreement on the recommendation pack.

Michael Berry

With three minutes left, any other comments from the task force members? All right. Well, David's hope that we were going to end early today was predictably misplaced. We will give people three, or maybe two, depending on when we end this up, extra minutes. Thanks everybody for your feedback and input and I think we are in really good shape for the final recommendation on the 9th. So, we have a lot of good, hard and exciting work left to go. Thank you.

David McCallie

Bye-bye, everybody.

Arien Malec

Bye-bye.

Adjourn (01:23:32)

