



## Health IT Standards Committee

### 2017 Interoperability Standards Advisory Task Force

#### Final Transcript

#### June 28, 2016

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## Presentation

### **Operator**

All lines are now bridged.

### **Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Thank you. Good afternoon everyone, this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Standards Committee's 2017 Interoperability Standards Advisory Task Force. This is a public call and there will be time for public comment at the end of today's call. As a reminder, please state your name before speaking as this meeting is being transcribed and recorded. I'll now take roll. Rich Elmore?

### **Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Hi, Michelle.

### **Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi. Kim Nolen?

### **Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Hey Michelle, I'm here.

### **Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Kim. Christina Caraballo?

### **Christina Caraballo, MBA – Senior Healthcare Strategist – Get Real Health**

Hi, Michelle.

### **Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Christina. Christopher Hills?

### **Christopher J. Hills – Team Lead, Standards Engagement Team – DoD/VA Interagency Program Office**

Hello Michelle, Chris here.

### **Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Chris. Clem McDonald?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Clem. Dale Nordenberg? Dan Vreeman?

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

Here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Dan.

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

Hi.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

David McCallie?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

McCallie's here, if that's what you said, I missed it.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

It is. Thank you David. Eric Heflin?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, good.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Kin Wah Fung?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yes, I'm here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Kin Wah. Mark Roche? Michael Buck? Michael Ibara?

**Michael A. Ibara, Pharm.D. – Private Consultant – Michael Ibara, LLC**

Here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Michael. Robert Irwin? Russ Leftwich?

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

Here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Russ. Susan Matney?

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hi, Susan. Tone Southerland? And from ONC do we have Brett Andriesen?

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

Brett is here.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Hey, Brett. Anyone else from ONC on the line? Okay, with that I'll turn it over to Kim and Rich.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Kim, you want to kick us off?

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Sure. Thanks everybody for joining us today. We have...today we're just going to give a brief overview of the joint committee and then we're going to discuss Section 1 and the comments and task force recommendations that had been made in the Google document that Brett had put together for us. And then talk about next steps for our upcoming meetings and then have our public comment. Rich, do you want me to give the debrief of the joint committee or would you want to?

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Sure, sure go ahead.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay. So Rich and I presented at the joint committee meeting on Thursday and we had some comments that came back to us; we had an Admin call yesterday and we kind of went through those. We were going to, if it's okay with everybody, we were going to go through those in more detail on our next call because there were a couple of follow-up items we wanted to do with what some of the commenters said to make sure we had them captured correctly and that we had as much follow-up as we could before presenting it to the task group.

I think if you all want, we can open it up. I'm not sure who was able to listen in, but if there are any comments that anybody has before we get back together for the next call, we can pause for a minute and have that discussion. There were four people, Jamie, Leslie, Jitin and Larry Wolf who made some comments and we'll be putting those together in a slide for feedback. Any comments from the joint committee meeting at this time; we'll have some more time at the next call.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

No; but Kim, this is Eric, just want to announce that I joined a few minutes ago.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Oh thanks, Eric.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Kim, this is David; I didn't get a chance to listen and I didn't hear any indirect feedback but...and I think your thoughts of going over it in more detail are good. But was anything said that would affect what we're about to sit down and do today? In other words, are there high level concerns that might influence us going forward or were they just different kinds of issues?

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Umm, no, I can give you some of the examples. Like one of them, I don't think so David, I'll let Rich weigh in, too. They were just things like in the improve use and function standard, like we should add the eHealth Exchange. Like Leslie had mentioned, what are we going to do around Precision Medicine? Jitin's comment was more around how is the ISA being used and out in the industry?

And then Larry Wolf is the one that we needed...well, there were two of them that we needed to get a little bit of clarity around, but that's one of the ones because he had mentioned something about data quality and it was outside of like just patient matching, but data quality in general with the exchange of information. So we wanted to make sure we understood that before we brought it up as a topic of discussion. So those were kind of the high level comments that were made. They were all...I thought they were all positive and moved us forward; I didn't...I don't recall hearing anything that was negative towards what we had said so far. Rich, your thoughts?

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Yeah, I think that's a good summary and then in addition to the comments that you referenced, Leslie Kelly Hall referred us back to the Precision Medicine Task Force which had recommended that the ISA be extended to some precision medicine standards; so we've also reached out to her to, you know find out what that task force had come up with. I mean there's some work that's been done by CDISC, there's some work that I think has been going on at HL7 and so on, but we wanted to make sure we had her...or in her case, the Precision Medicine Task Force's feedback as we consider that recommendation.

She had a couple of other points as well that...but, I think the summary is correct that it was seen in a generally supportive of the recommendations that were laid out and the positioning of it including discussion of best available and you know, a bunch of other items that we reviewed together on our last call.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I hadn't understood that precision medicine had formulated enough stuff describing it as standards; I think that's the word you used. I mean I thought they were still trying to figure it out.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

That's why we went back to her, we'll see what they come back with and then we can, you know make a determination about whether it's, you know pending future or there's something to be said now.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So I...this is David; I was on the Precision Medicine Task Force and I can, from memory summarize a little bit of it. Clem, much of the work really focused on the phenotype side of the equation, not the genotype, so it was...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Uh-huh.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...if you're going to upload data to the Precision Medicine Institute from EHRs or from consumer-directed donations via their portal, what should those standards look like? And not surprisingly, we said they should look like Meaningful Use standards, so it's the same CDA and emerging FHIR-based stuff.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, yeah.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

There was also some discussion about the role of HPO, Human Phenotype Ontology as being possibly necessary to capture more precisely the phenotype of the patient and we had Betsy Humphries weigh in with a little bit of her opinion on the status of that integration into NLM's nomenclature system, UMLS. And I don't remember what we formally concluded about HPO, but that was what we discussed. We did not go into the deeper standards around describing the genes, other than to commend the work that the FHIR team was doing to kind of resurrect the clinical genomics group at HL7 and keep an eye on that; I think it was an endorsement that that's a good idea, something to that effect.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Okay. All right.

**Christina Caraballo, MBA – Senior Healthcare Strategist – Get Real Health**

This is Christina. I can table most of the discussion around it for our next call but one thing I wanted to point out that might be relevant to today's discussion is that Leslie Kelly Hall did bring up a request or

kind of a recommendation to possibly add a section mapping how the standards fit into current federal requirements. For example, if it's used in the Meaningful Use program or somewhere else that that could be beneficial.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

There is a flag in there now that says it's...whether it's a requirement or not, so somebody's tracking that; it needs to maybe just be surfaced as a section.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

I think the recommendation, David, I don't know if you remember Robin Raiford; she used to produce these poster-sized, very detailed analysis of Meaningful Use regs...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

...if people are interested you can probably find them through John Halamka's blog; her last name's spelled R-A-I-F-O-R-D and it was the idea of having that kind of all-in-one picture view that I think she was suggesting might be helpful.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Agreed, wall-sized...

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Well then you all can...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...suitable for framing.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay. So Rich and I are going to be putting those together, we just wanted to follow-up with some of the people who made comments to make sure we represented everything correctly. And so on the next call we'll be doing that. Do we want to go ahead and move forward to the Section 1 comments?

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Sounds good.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

...if we could go to the next slide, please. Umm, yeah, we can go through that about standards. Section 1 Review, okay, next slide. So here are some of the overarching comments. Brett, are you going to go through this in more detail?

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

Yeah, I was going to plan to kind of go through the summaries that had been provided. In this case, for overarching, I just included the one from the task force members that in the subsequent slides I also compiled in summary level public comments that were received this cycle to just help give some

additional framing and background for the task force. So unless anyone has any different suggestions, I will quickly go through summaries of the comments and then we can pause and discuss; does that sound like a good approach?

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Sounds good to me.

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

All right, so overarching comments from the task force for Section 1, there's a recommendation to change the name of one of the boxes in the ISA from Applicable Value Sets to Applicable Value Sets and Starter Sets. A suggestion to add references to VSAC, where appropriate in response to public comments requesting kind of a central repository of value sets. And then where possible, providing direct links to value sets and then the note that this is something that VSAC should consider, because now it's...at this point it's unknown whether there are permalinks available.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

So, and this is Kim; in one of our, I think it was in the ISA document, the structure, we actually add you know was a dynamic document; we put a comment about VSAC in there. Does that cover what this person was suggesting or is there something more?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah I think, this is Kin Wah; I think that would help if we can add a pointer to link to content on the VSAC, which now exists and this will...but VSAC doesn't have all the value sets now that are referenced in the document, so in the future, it may be a direction to go to, but at least pointing out what is available will be very helpful.

And I also would like to make a little point about the first bullet, which I suggested because right now the term value set is applied to things that are, at least there are two kinds of things. So first there's more common usage of the term value set is to have a collection of all the allowable codes that is used for certain field or data element.

But however there's another kind of value set that is also commonly referred to as just value sets, and these are what I call the starter sets, for lack of a better term, and these are usually curated and smaller subsets than the value sets for the same field and they also are quite useful in implementation because they're derived from commonly used codes from real patient data and people have found them useful in implementing, at least as starter set. They're not supposed to be exhaustive, but they come from a very high percentage of usage of certain codes, and I think we need to include those starter sets.

And actually in ISA now, there are some sets that are acting rather of this nature like starter sets rather than comprehensive value sets. And I think it is useful to differentiate the two, maybe by calling them different names.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Kin Wah...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Kin Wah, I think in general that's a good idea but it needs more words around it because in some sense everything's a starter set, you know that as the world keeps growing. And in other senses, you've got a very specific case in mind where it's really intended to be a set people could use to build their own sets. So could...I think if we could get more words around it, I think it would be a good thing...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

And this is Susan Matney and I agree with Kin Wah and I agree with Clem; I mean we're trying to move more and more to using VSAC. I don't know what we mean by permalinks but right now they have OIDs, they don't have URIs but they have OIDs and I'm going to start actually putting, I mean for the clinical sets that should be used as a standard, like skin color, putting them in VSAC. But the starter set, from a vended system and maybe Dave can help me here, is really just it's not exhaustive and comprehensive and I don't even know if we want to make it...put it into a standard.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well it...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So this is David; I think that's a really good question. First, just on the broad principle I agree that this is a good idea. I think these are all value sets and so the changes should be in the names of the value sets like, you know this is the value set which is the complete list of diagnostic codes or this is the value sets that a 5000 most common diagnostic code starter set, so it; they're both value sets.

And then the debate would be over what role do starter sets play in standards work. And, you know it's a little bit of a fuzzy thing. Part of the goal is to facilitate provider entry but since you have to be able to find anything in a value set, in a full value set, your provider entry is not going to be limited to the value set; so, those of us who write these systems for a living end up trying to do things like Bayesian weighting so that the most likely thing comes to the top, based on, for example its presence in the starter set. But you still have to be able to find everything, so it's...it is a little bit of an open question as to what the role of the value of starter sets are. But people seem to like them, so I wouldn't take them away, just identify them as such.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

So I have...this is Kim; I have a question and a comment. So the comment with VSAC, I haven't been on it in a couple of months, but when I have used it in the past, it's based off the measures, the quality measures and so the...actually the measure steward decides what's in that value set. And I've personally run into issues where the value set conflicted with what other people felt from a clinical standpoint should be in there. So do we want to...and so, my question is, those are determined by a measure steward. And then for the starter sets, are those now in the VSAC, and I just haven't seen that or, I don't think I understand the starter set.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, this is Kin Wah; so to answer your question Kim, the VSAC has expanded its coverage...

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...and there are now more value sets that are outside a quality measure use case. So if you go on now you'd find some C-CDA value sets and there are more that are being added. So expanding in scope and there are...the starter sets that I mentioned that I suggest actually in my comment, they are now on VSAC as well.

So to answer David's question, I think this starter sets, they are just empirically identified, useful like...I mean likely to be useful codes and they are not exhaustive. So the usage of them is very different from an exhaustive value set. An exhaustive value set you can just build it in your system and so to validate any codes that are being entered. And obviously starter sets do now...are not supposed to be used that way, but they are, in a way, useful if you're starting from the ground up, if you don't already have a list of codes and you want to start with something, I think they are very useful. So I think the ISA also...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Kin Wah, are these...are you defining them as things that are subset of some of the existing, supported code systems or just any other code system? How are you thinking of them?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

They are subsets, they are subsets.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Okay, we should...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

So one example would be the...like the LOINC 2000 commonly used codes compared to the whole of LOINC.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Okay, well then I think along David's lines, we should make that more explicit; they're just sub...they're subsets for various uses.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I...well I can certainly agree that if you don't want to change the name and add new things, maybe we can make the distinction the theme...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

No, I wasn't suggesting changing names, it's just when you first said it, there was no requirement that they be connected in any way to any of these supported values, you know code systems.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Oh they are, they are generally, I mean if not all of them...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Subsets of code sets.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...they are subsets of like...they are subsets of some proper value set, exhaustive value sets.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

So...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Maybe, this is David; maybe a better name would be you know most commonly used subsets of, because it is a little confusing if you're naive and building systems to think that you could get away with just supporting a value set or the starter set, because you really can't.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, and this is Susan; I, you know with what David says and then Kim beforehand, you get into VSAC and you find fifteen value sets for the same thing, how do we know which one to use?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

That's a different problem. That's another one.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

That's why I think we ought to let the thing shake out better before we require the use of VSAC, I mean, there is some stuff that's tough and some stuff is good and...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah but that's...problem with value sets that are developed by separate groups and they're trying to come up with very similar but not exactly identical value sets. So that's another problem to deal with, but usually in this context, in our context of EHR and the use of value sets for data elements and starter sets, I don't think that is much of an issue because you would not find, for example, many LOINC frequently used codes that are...that could be used as starter sets.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And Clem, I think the value set collection is a little bit like the UMLS, it's a collection curated, but it doesn't imply, necessarily, any particular use. So they're there because somebody's curating them but they may make sense for some use cases and not for others.

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

This is Dan; I was just going to speak sort of in favor of the general idea of kind of applying a label at the top. So we discussed in the structure subcommittee about this a little bit and to get real technical, in different cases you talk about the binding strength of a value set for a particular purpose in either a message structure or connected to a question code or something. And they can be extensible or not extensible and they could be bound as sort of...and declared to be normative or they can be like preferred lists, which might be a...or example lists. And so there's lots of different ways that that connection between any particular use case and a value set can be established.

And the take-home message kind of from our brief discussion about it was, sort of leave that out of the ISA. But it still, you know meaning that for a particular implementation guide, the purposes you could choose to set that up in whatever way you wanted; but it is still a helpful thing to be able to list and provide links where we know them to VSAC, for example, some of these commonly used value sets. So I think the general idea of at least having some words at the top that describe that there are different flavors of these is a good approach, but getting into the actual binding strength and sort of enumerating what that should be for each of these is kind of overkill.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

This is David, I would agree...certainly agree with the first part of your comment about the many different ways value sets can be used; I think that's a really important point. But I think that there is value in the ISA enumerating the required value set at a minimum, not necessarily everything in the VSAC, but if you know, for example RxNorm is required for a particular standard around medications in Meaningful Use then linking to RxNorm is...would seem to be a reasonable expectation, or when you get to things very specific like the gender stuff that we'll talk about later.

What's very frustrating now, and this maybe is shifting to the next point about permanent URLs is, you can't easily go from those crazy OIDs to the actual place where the value set is displayed. It's very frustrating as a user to try to figure out what the heck that OID corresponds to. And if I had my way, there would never be another OID issued, but at a minimum, they ought to be connected to a hard link to the value set where the OID is actually displayed.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yes, this is Kin Wah; I certainly agree with that comment that there should be a central repository for these OIDs and right now, I mean it's very difficult to find and sometimes the same OID can be used to represent different things and I was lead to like to a different set of codes when I searched a certain OID, so that was kind of surprising to me. I thought OIDs should be universal and unique and apparently some of them are kind of not unique and point to different things.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I mean whoever believed that opaqueness would yield better usability was crazy. Okay, off my soapbox.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

So is there a recommendation here around a centralized repository or some other form of recommendation around this problem that we should capture?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Rich, I think we've all sort of agreed that the VSAC is the place where the value sets are collated and that you need hard links to them from the ISA and that better descriptions to distinguish between you know say a required value set that's exhaustive versus a starter set or a most commonly used, which might not be exhaustive, that descriptions like that should be part of the VSAC, right? Have we all sort of agreed on that?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yes, I think you summed it up...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean it's pretty much what the slide says, I think.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, I...this is Susan; I agree.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay, should we go to the next slide?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

One down, 50 to go.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, could I just make a comment? Yeah, that this...the amount of discussion and maybe this is not feasible probably, it's just...we can try but the amount of discussion the one thing could take and whether it's...it's just extr...

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

We're not going to discuss feasibility right now; we're going to see how far we get. We'll assess after we've gone for a while here, okay?

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

All right, so Section 1-A, Allergies. The public comments; we got some notes that all allergy types should be expressed in one interoperability need that references allergy sources in rows. And then there's kind of an example what that might look like below a little bit, the recommended format by allergen type there. There's a request to clarify the best standard to represent a lack of or unknown allergy as well as to incorporate generic names for medication allergies. And then a recommendation that NDF-RT adoption levels should be at least one bullet. And then on the next slide we have our comments from task force members.

**M**

You there?

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

Can we move to the next slide?

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Next slide, please.

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

So from...oh, one back now.

**M**

I think we're on slide 11.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

I think its slide 9.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Is there a missing slide?

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

It says...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

No it's there; they just keep going by it.

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

There we go, right there. So from the task force, allergy descriptors are described in three different fields in HL7, specifically coded for the kind of reaction, whether it's an adverse reaction or an allergy. There's work needed to reconcile inconsistencies across SDOs for value sets, specifically NCPDP is called out as having very different codes from what's in ISA. The value set for patient allergic reactions is outdated and should be replaced with the EHR Information Model, the specific value set listed there.

For allergens: medications, grouping value sets should replace...should be replaced with the NDF-RT drug class and RxNorm for ingredient. There's a recommendation for the "Big 8" food allergies and a request to see codes defined for those in SNOMED-CT. And then a comment around UNII and how it could be used for both food and environmental allergies...or allergens rather, but SNOMED-CT having been shown to have better coverage than UNII and also simplifies maintenance for developers.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Can we go back and discuss the first slide, number 10? So you know first...this is David, just to get us started here. I mean this is insanely hotly debated anytime allergies comes up in any of the standards groups it goes...a tweet storm rages for a few days before it dies out and nothing is ever resolved so I

don't have a high degree of confidence that we can settle it. But I think this list of things, the generic name notion, number one, doesn't work. I think you have to support brand names, at least at the data capture level. Physicians don't think about multi-ingredient drugs by their ingredient, you know, I'm allergic to Augmentin and that's how it's captured in every EHR that's ever captured it, they don't break it down into the sub-component ingredients; so that is over-specified for what clinicians do.

And then on the UNII stuff, UNII is far too granular for usability. It's really an FDA level tracking...coding system but it's far too granular for food substances or for anything that would face clinicians. So I just think this list needs, I don't like this list, I guess I'm saying. I like the drug class codes, that's fine.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well even saying they should be expressed in one interoperability need, but realistically you know, you don't order food in the doctor's office, you order drugs and so that's a lot of leverage to being able to intercede in the ordering of drugs. So, I think we be...I agree with Dave, this is going to be hard to make decisions. The next slide says you should use SNOMED, and this one says you shouldn't.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, SNOMED I think is better than UNII, I'm not sure that basically you need a value set probably, a subset value set.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well if you look at foods you know, and diabetic's things, what they actually do is deal with brand products but that's a whole other thing.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yeah.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, and this Susan; food is really well done in SNOMED, I mean I just worked...I worked for Canada Health Infoway and we added a lot of food things and so the only thing we really couldn't find...and so was environment well done in SNOMED. Sun, sun we couldn't specify as a substance and there really is a sun allergy; but food and environment, I'm...I would like...I would vote for SNOMED.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And this is Kin Wah; so in the ISA now allergens that are medications and food substance and environmental substance, they are listed separately. So...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, I think that's good actually.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah. That is actually may be clearer for which ones should we use for which and if, you know I also see the difficulty of using just ingredient codes in an allergen...in a medication allergy record because they are just not recorded at that level. And there's another value set in RxNorm that encompasses ingredients, clinical drugs, brand names even...and also some other dose form; maybe that would be more useful in this context for...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well just to clarify though, people say I got a sulfa allergy and or they say they have a Penicillin allergy, that's not a drug code.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But that would be a class wouldn't it, drug class?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

The class, yeah.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well they're talk...it all depends I guess.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, class works best, you know class and then brand name, I mean particularly for the combo drugs and more and more of them are combo drugs.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I...but is there any harm in having ingredients in there? Most of the drug allergy checkers will look at ingredients as well, I think.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I would say there's no notion that you wouldn't capture ingredients, but don't say that's the only way you can capture something.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Oh, absolutely, absolutely.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right, so it's, you know if I'm allergic to Augmentin, somebody might assume it's the Ampicillin component, but the doctor doesn't know, I don't know so you have to carry it forward as the combo.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Because it could be something else and frankly, it could be an excipient, it could even be something in the brand itself, so I actually will...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And to clarify, so RxNorm does have like yellow dye and those kind of things, too.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, but doctors don't know that, I mean they have no way of knowing, the patient says I'm allergic to this drug, it makes me...gave me hives; you don't know what it was.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But sometimes the patients do know and then they...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, if again, you know, if they know, granular is fine but don't require granular because most...many times they won't know.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I got it, I'm with you; I'm not disagreeing.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But this is a, you know this is...we're just scratching the surface of this argument.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, we are I agree.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

It goes on and on; I've sat in an AMIA meeting 20, 15 years ago with a room of 300 people trying to figure out what an allergy was, and we didn't come to any conclusion. So, it's not a new problem.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And can we really top the work done by careful standards committee's that are focused on this stuff?

**M**

No.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean, you know I think the HIT Standards Committee came up with UNII and then you know when vendors went and looked at it, they just balked at it and said this is insanely granular; we can't put this in pick lists, physicians would go crazy.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, I don't know that the Standards Committee got it right; I think it was because FDA uses it, we just assumed it was good. But it's good for their purposes, which is you know highly granular lab procedures, but...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But what I was really saying is shouldn't these things go back to another court like NCPDP and HL7. We can't solve these things here with the 10 of us.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems;**

Yeah, I agree; this is Russ.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And if we contradict them, then they get into regulation you know.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

So what...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah I mean maybe we could make some of our high level recommendations just like the little bit of suggestions that we've had, but suggest to ONC that they need to commission the actual SDOs to go deeper than...on these highly specific spaces. I think we're going to run into that with gender and stuff like that; it's...we're not going to resolve it on a task force call.

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Is there, I mean if you look at this one as an example, I mean it seems like there's more than one SDO that would be involved here, maybe look at the list, right?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

It's two; it's NCPDP and HL7, I think.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I think...

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

What about IHTSDO? I mean SNOMEDs in here as well, right?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah. And it's RxNorm, I mean that's the...that's the problem Rich, of course that the Standards Committee faces with a lot of these domains is that vocabularies come from multiple, uncoordinated providers; it's not just allergies where this is true.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah but it's still going to be the Standards Committee to say what goes in a field and there's a vocabulary...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yes.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...standards subcommittee in HL7 and there's a similar one, I think in NCPDP and if they agree, it's done; I mean if it's right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

So this is Kim; I was looking back at the recommendations we made last year and some of the things that we stated is umm, you need to clearly differentiate between standards for allergic reactions versus the allergen; so the allergen would be the medication or the food or environmental thing that caused the allergic reaction. And then we kind of wrote down that substances that cause the allergic reaction, and we put medication as one, where we recommended RxNorm and we had it broken down, similar to what's up on the slide right now.

And then for food and environmental substances, we did not recommend a vocabulary, we just stated that they needed to start somewhere, and there was an article on the Big 8 that contribute to most of the critical food allergens. And so we had thought it would be good to start with those to see how it would work; so just to give a perspective from last year.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I think we were right then, too.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

With the caveat about it's a little bit broader than that particular subset of RxNorm I think, not just ingredients.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yup, yeah you're...well RxNorm has the brand names, yeah you're right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yeah this just...this slide narrows it too much.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Right.

**M**

Maybe the feds...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean there's a practical concern here that the vendors of the software that actually matches the drugs up against these lists have to be in the loop because if you start requiring or using vocabularies that those vendors of allergy checking software don't know about, then you're going to create a lot more harm...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, you're right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...because doctors will assume the system is working because it didn't say anything and when instead it doesn't know anything about it.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

And one thing that I would like to bring up because I see this a lot and we brought this up last year is the way that its captured in the EHR today is as an allergy, but adverse drug events or adverse reactions could be captured in there also; so those actually need a way to be separated out because they're actually two separate types of reactions.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well that's...there's a variable in the HL7 message to distinguish the two, but there in the same list, I believe.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Are you talking about...Kim and Clem, about the patient's reaction to the allergen, is that what you're referring to?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

No, whether it really was an allergy or they got a burning stomach from aspirin.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Oh, yeah; but that's...but wouldn't that be captured in the reaction itself, I mean you code...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Exactly, yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...it was anaphylaxis or it was hives or it was upset stomach or...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well it might be, but I think there's a field to say...I don't know, you're right. But it's...there's a separate dimension in there somewhere.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean the...my concern a little bit in the real world is that many times the doctors and the patients don't know the details, they may be discoverable with appropriate testing, but oftentimes the doctors will just stay away from that, whatever it is, and not ever pursue it. So I come back to my Augmentin example, we don't know what ingredient in Augmentin causes my problems, but they just don't give it to me and that's as far as it'll ever go; so you can't really say what it is, just I got a rash; that's, you know that's all you can say...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yes, no, you're right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...in a practical sense.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But I think it is true that the category is adverse reaction/allergy that gets recorded. And then there's other ways to distinguish, maybe to some degree between the two kinds.

**M**

I think as we're alluding to, the word allergy means different things to different people. To a subspecialist it means a particular type of immunologic reaction, but to a patient and the vast majority of clinicians it means something bad happened when I was exposed to this substance and I think it'll happen again.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Exactly.

**M**

So, I don't think we're going to solve this problem in this group and probably shouldn't try to.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I agree.

**M**

And...

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

So what is our high level statement going back on this section?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well Kim, this is David; what about the notion that the vocab...we suggest that the vocabularies account for the clinician's lev...the clinician's awareness of the granularity of what they're entering rather than requiring overly precise descriptions that the physicians don't know?

**M**

I think that's a good solution or approach.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay.

**M**

And then...

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Is everybody good with that?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Now one place where, I know you guys are going to cringe when I say this, but one place where this is being revisited is in FHIR, in particular the Argonauts are working through the profiles for the allergy and intolerance resource. And I know from some of my colleagues down the hall, they're debating these exact same questions so it is conceivable that something will come out of that, since that's a multi-stakeholder sort of pragmatic group, there might be something that comes out of that that we could reference downstream as an example of, you know carefully thought out profile that vendors can support. It's too early to tell, I don't know if they're going to get consensus or not; I hope they do.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So it's just something to track maybe.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

The future will always bring us better things, we hope.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well that's why we keep doing this, right Clem?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Exactly.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

You and I are close to retirement maybe...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I don't want to think it, but yeah; when we talk about schizophrenia is when you keep doing something that doesn't work.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yeah, yeah.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay, so are we good with the allergy section? Do we want to move on?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

We want to move on.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay, let's move on. I think we probably need to go two slides forward...

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

All right, so for care team member; for the public comments we got a note that adoption is likely much higher than indicated. NPIs are currently issued to more than 3.2 million individuals and 1 million organizations; suggest increasing the adoption level to 3 or 4 bullets. Suggested adding LOINC observation identifiers for communicating care team member identities and then the suggestion to use HL7 V3 value sets and encourage them for ONC to work with HL7 on a single, harmonized value set for this purpose.

And then from the task force, concurring comments about adoption level needing to be higher. A...that NCI does not communicate other information such as specialty or state in which a provider might practice, and that is not required in all cases. And the fact that it's a side use...NPI, should not reflect a low adoption of NPI overall.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I mean the one about LOINC, you wouldn't want to hear it from me, I'm not sure that makes sense because there's usually a special fields for these...the provider and...

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

Hi Clem, this Dan; I suggested this because we know of at least four, three/four sort of registry projects and even like the CMS instruments where they want everything as observations and they actually send it as an OBX, so they need something there.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

All right, never mind.

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

So the results, you know the OBX 5 is the NPI, but they still need an OBX 3.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So I'm...this is David; I lost the train of that. Are we saying that LOINC does have a good list and that we like that or it doesn't?

**Daniel J. Vreeman, PT, DPT, MSc – Research Scientist – Regenstrief Institute**

No, Dave what I was saying is there is a code or a handful of codes that might represent like provider type as the question and then the result value, the answer to that question is the actual NPI. And despite the fact that in HL7 you might...you have obviously structures for putting in provider identities and so forth, the way that these systems are set up, they're sending those bits of data as OBXs, as observations. And so it's just sort of a comment that if you need a structure where you have a name/value pair sort of paradigm, there is a generic LOINC code you could use for that purpose.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

So to answer your question Dave, there are no codes for individual providers in LOINC, but this is just a handle.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah. Oh I think we probably need these codes for role that you play on the care team. Wouldn't we want to try to codify the role...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I don't know if it's not already there. NPI has, well that's a big subject isn't it?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

No, yeah not...NPI is an identity thing, but I'm talking about care team...oh, so maybe that comes in a later slide, I'm probably just jumping ahead, so we're talking now about how to identify individual team members.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, how the care team got into it in the earlier discussion was that somebody inquired of what is there to identify an individual instance of a care team member who's not a part...a provider who bills. And it says that NPI will allow that, they can register, but many don't.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right. Yeah and I...

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

But...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And that's separate from categorizing...that's separate from categorizing them.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

...but...that is part of it is what is their role like if something comes over, you know was it their mother? Was it the nurse? Was it the counsellor? You know, who was it that was taking care of on that when sending that message?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

You know this is along the s...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...along the same lines of getting too granular for a physician to put stuff in; you know every time we think one of these thoughts we add another 20 questions on what do providers have to put in and whether it's always needed or not is another question because you can infer a lot of it. But you could say cardiologist notes, it's probably a cardiologist writing, etcetera.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But I think, I mean I think the NPI is fine for people that are qualified to get an NPI, but the care team itself is going to involve a whole bunch of people critical to the patient's long term care that will never and should never have an NPI. So...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

No, that's not true. David, it's not true; they may never have them, but they can have one ad lib, they just have to ask for it.

**M**

Yeah...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, but there's no way I'm going to ask for an NPI to take care of my father, right? I mean I may be the responsible person for an incapacitated, live-in parent, I'm not going to get an NPI, but I'm a critical member of the care team.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But you're going to take care of it no matter who knows what you're identified as.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

No, we do it with an email address, I mean we coordinate the care team with emails.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Okay.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And the members of the care team are invited with an email and that's how we know who they are.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, okay. But how does this have to do with the NPI comment?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I think that's the confusion of...this slide is talking about care teams and the NPI and I'm saying, those are unrelated.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

No, I agree. And it can because care team members who don't always get NPIs want to know if they could in a very first thing last year.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

So with or without the NPI, there's an enormous gap that there is no value set to codify what a care team member's relationship to this particular patient or individual as a patient is meaning, is this a cardiologist who actually sees the patient regularly or is this a cardiologist who saw them once three years ago on an ad hoc basis? And there's no value set to define whether this is the family member son of the patient who's a caregiver or another son who really doesn't participate in the care.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

So that's a gap that there is no value set to solve. I think it would be...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And I would call that role rather than relationship, but I think you know, it's either way I agree.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

Sure. And I think it would be fair to say that the NPI is...has the deficiency that the roles are self-declared and they are not hierarchical or not, they're exclusive when they shouldn't be. So in the NPI you can be a hand surgeon which would mean you're also an orthopedic surgeon usually, but you can't be both. So...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, no, I would never suggest...I totally agree Russ, I would never suggest that the NPI's role has anything to do with care team roles, right?

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

Exactly.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

The cardiologist could be the neighbor...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So this is...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...I mean, we don't know.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So this is Eric Heflin. We actually are looking at this issue right now on the FHIR Argonaut Provider Directory Workgroup, specifically about how to identify a person's role and also their specialties. And our current working decision, and this is working, I certainly don't want to speak for the full Argonaut FHIR Provider Directory Workgroup, because this is not final yet. But one code set that we're intrigued by, including the associated taxonomy is the National Uniform Claim Committee. It seems to meet a lot of the requirements related to the identification of an individual and his or her specialties and roles. And so one thing I would suggest is...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

That's what the...isn't that what the NPI links to, the NUCC? Look up services I...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

**Well I think the difference here is that, as you said correctly I believe, the NPI probably incorrectly in their data model associate more to that value than just an ID and a claimed identity, which I personally would think is all that is really practical with that data model, that they should just assert the individuals identity and then a number.**

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

And the reason being because one person may have privileges as a surgeon in one facility, perhaps has, you know have a different role within a different facility. And so it's overly simplified and so...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

... the provider directory data model in FHIR is designed to accommodate that by saying that this person is a unique identity and then this person also has relationships to others, such as hospitals, clinics and so on and that relationship is where attributes such as that person's role and specialty and so on potentially could exist. Or they could...that person, but they're not single-valued, they're multi-valued.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And are you guys on the workgroup comfortable with the content of the NUCC? When I looked at it, it looked pretty good, too, but that was six months ago.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

We found, I'm sorry, we found a few gaps in the current, again I don't want to speak for the workgroup but my impression is that we are relatively comfortable with it and are probably going to go back to NUCC where there look like there were, for example, some missing fields in the spreadsheet with the taxonomy expressed and that we're going to I think go back and ask them to remediate what may be errors in the data model.

But my recommendation for this workgroup is essentially to acknowledge that this work is occurring in the HL7 Argonaut FHIR Provider Directory Workgroup and to keep track of that as an emerging standard.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

That's a good idea.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But by the way, there is a value set that relates to this in FHIR already, it's got 120 concepts including parent, owner, guarantor, caregiver, family member, child, blah, blah, blah it goes on and on.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Very good. And the advice that we were looking at was more related to the individual's specialty, not their relationship in a care team to a given patient, and that's where the NUCC, National Uniform Claim Committee taxonomy seemed to be germane.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I think we should do what you said.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So...but the...things...I'm sorry Clem, go ahead.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I just said I think we should do what he said about keeping track of that workgroup.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Oh, well maybe I'm saying the same thing, hopefully which is, first I think it might be worth mentioning the NUCC, because I don't think that's listed anywhere in the current ISA.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

I don't believe so either and we actually discovered it on the fly during one of our workgroup meetings where we're doing a survey of existing potential value sets and taxonomies to express this concept.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, and it's actually in the NPI documentation, because I linked it in as a demo that I built for provider look-ups, you could look up by their NUCC categories. So I think NUCC needs to be added to the ISA and then the distinction between you know position; and in our world in Cerner we call this what your credential is your position, you're a cardiologist or you're a hand surgeon. That's very different from the role you play on a care team and it may or may not be the same, it may or may not be linked to what your position or your credential is. So they need to make sure they're clear about the proper orthogonalization of these data...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

This is Eric; I like what Clem said, too, that there is a specific value set that's gone through a standards process in HL7 to reflect that as well. So my recommendation would be to...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well it may not be exactly the right one, I'm going to send it to Dave because I got his address handy and you guys can decide, but...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Okay, so my recommendation is we at least consider suggesting that, depending on its maturity and its stature.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I have no objection. I haven't looked at it, but it sounds right.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Is everybody...any other comments on that? All right, let's go to the next slide.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Kim, before we move on, can we move back briefly to the previous slide, yeah, one before that. There's just one point, yeah. We kind of skipped over most of this slide, but there's...that is because of the uncertainty in the terminology aspect, but then there's a point...that is bullet point three, that maybe we can make some recommendations on.

So right now in the ISA there is a section about recording allergic reactions and the value set that is listed there is a very broad value set and...over 110,000 concepts and most of them are not suitable for this use case of recording allergic reaction. On the other hand, there's a lot of work done by the Federal Health Information Model Standards Workgroup and have collated real patient data about adverse reactions to drugs mostly from large institutions like Kaiser, VA and Intermountain. And they came up with this about 600...concepts that are very commonly used in the documentation of allergic or other adverse reactions. And I think this should be listed as a good starter set in ISA as well.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So this is Eric; one question about that interesting concept is, FHIM, is that actually an open standards based group, recognized by ISO?

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

So this is Susan Matney and it's the Federal Health Information Model group that does modeling for 14...the 14 government agencies. They're not a standards body, we work...I'm a Co-Chair of the Terminology Group with Rob McClure. We work with the different organizations and come out with a model, but they are very involved with HL7 and FHIR and submit to SNOMED and LOINC and all of their value sets are being put into VSAC.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So my recommendation is, just kind of building on both of those, my kind of further recommendation on top of that would be not that we adopt FHIM, instead we do what you were just alluding to, and state that we recommend the FHIM liaise or continue to liaise with standards bodies, submit their work into ISA recognized standards bodies and then we recognize those code sets under...curated under standards bodies.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah. And we could curate this one into VSAC, well I think right now it's in the fe...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

It's already in...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

...we were using it in PHIN VADS...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Right. It's also...Susan, it's also in VSAC now.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Oh good. Good. Yeah, that's what we want to recommend is we use this adverse clinical reaction subset, the steward is PHIN but we don't need to say that, but here's the OID.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

So I...there is ongoing work in HL7 collating sets of allergy lists from the VA, the DoD and Cerner and a couple of other sources that sounds very much like this, but it is not complete and I...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Russ, this is Susan; these are the reactions not...and not...what we sent from Intermountain was allergies not reaction.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

Right.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

These are the types of reactions, right Susan?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

It's like hives and a rash.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yes, yes.

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

I understand.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Six hundred sounds big.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Well, we sent them actual patient data, you know vomiting, nausea as common reactions that may...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But what cut-off

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

...be considered allergies or not.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

In the frequency of distribution, what was the cut-off?

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

I don't know that answer.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Does it also include severity of the reaction?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well, most of them did.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Okay.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

They do not include severity.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I think there's already a code set...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Okay, well I think...this is Eric and I'm not really hearing anything or anybody disagreeing with that idea, does that...do we have consensus? I'm just kind of curious about my recommendation.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I like your recommendation.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Okay.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Sorry, can you state your recommendation again, I think that you're saying that we should not...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Sure that we...right, that...say recognizing FHIM directly here that since FHIM is already working with standards bodies that what we do is we recognize the appropriate work under the standards bodies that FHIM is contributing to them.

(Multiple speakers talking over one another)

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

And what I'm thinking is that gives us a lot of benefits such as, you know broader transparency; FHIM it sounds like by definition is targeted towards an important portion of the market, the federal agencies, but standards bodies target that plus a wider market as well and therefore there could be a wider

dialogue and to make sure it meets the needs of everybody in the industry. And since the FHIM is already collaborating with standards bodies, my proposal is we recognize the work being done by the SDOs.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But do we need...this is David; I mean I certainly agree with the spirit of that, but I'm not sure we need to enumerate it, because there's probably a half a dozen or a dozen other groups that fit that exact same category, meaning they contribute to the standards bodies, but aren't in and of themselves SDOs.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Yeah, I think that's a good principle. This is Eric, I agree. David I think that's a good general principle; I concur.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah and I don't even know if we need...this is Susan again, if we even need to say the FHIM, is that what we want to use for a value set for...as a starter set and it's coded with extensions would be the adverse clinical reaction subset in VSAC.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But that's...isn't that just the same thing in a different...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, but we didn't put the FHIM in the words, I didn't say FHIM, I said that we want to use adverse clinical reaction set, we recommend to use the adverse clinical reaction subset and, you know if you need to extend it, it's...that's the type of set...value set that it is.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

How do people feel about that?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I think the idea of the previous thing was to be sure that it gets all the process that you get in a standards organization. You know and there is a federal rule that says, federal agencies should participate in standards organization, but not dominate them. And if it's only federal organizations, it doesn't seem like it's ide...perfect, you know.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So to answer the question just asked about what we thought about the idea, I actually have a follow-up kind of question, before answering. What's the process for curating and changing and evolving the values curated under VSAC? Is that based on the ISO process...approved process or is that again tied to federal agencies and a subset of the community?

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

I think Kin Wah probably...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I think it's...isn't it tied to whoever contributed them; the VSAC doesn't create value sets, it just catalogues...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I think NLM is pretty set...is a receptacle.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

The data...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Right so is there...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

...you have to contact the data steward.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

So, I think I'd have to oppose this; if I'm understanding correctly, it doesn't sound like there's a process associated with it, it's just a catalogue whereas I think the standards bodies provide a very important value add, which they debate and they criticize and analyze and shed light on the artifacts they curate, whether it's value sets or other types of documents or artifacts. And it doesn't seem like that process is part of the VSAC, so I think I'd have to oppose that suggestion because I think we do need a healthy analysis, dialogue and transparency with a well-defined governance process for something we recognize without that.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

This is Susan again. Interest...so we can take this set to HL7 to get it as the value set for FHIR allergy reactions and then...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

This is Eric, that sounds great...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, yeah.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

I like where you're headed with that idea because then it becomes subject to that process.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But I'm...Eric I'm...I think that VSAC is an en...is a librarian's role, it's collating and making available in a single place all these complex value sets.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

It sounds like it...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And there's nothing wrong with that, I mean that's what we're doing with this ISA, right, this isn't a standards organization, we're just cataloging.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Agreed there's nothing wrong with...agree, I think there's intrinsic value in the catalogue, but if there's an op...if the SDOs are in fact looking at a value set maintained by VSAC, I think there's more value in ISA to point to the SDO work and let them, the SDO recognize VSAC or, you know other potential sources as well, too within ISA rather than us pointing directly to the, you know our catalogue pointing to another catalogue if you will, that way there's a critical inspection, analysis and debate and a well-defined transparent process for curating things over time.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, I mean I think there's value in the VSAC. It's also designed to support run-time queries, I don't know how many people actually use that, but there's more there than just a library function and it...

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah, but I...this is...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...from all of the rigmarole of having to get accounts and logins and all of that other stuff that gets in the way of going to the SDOs directly; some of them require fees before you can see the content, I mean it's...I think it plays a role.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Yeah...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Go ahead, Susan.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Well I agr...it has its place but HL7 is also a steward in VSAC as well and so I agree that we want this to be vetted through the SDOs and we can't make this decision right now that it is. I mean it is the best value set out there for...because I know how it was developed through many institutions and from a bottom up approach. But, I mean we can take it...Russ and I are...we can both take it to HL7 and have it be evaluated.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

And this is Eric; I would support that Susan, highly.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Are we ready to move on?

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, I think we ought to vote to have this committee go on for another year so we can get this all...let's move on.

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

All right, so let's jump to slide 1-C, encounter diagnosis. From public comments we heard the...a suggestion to replace SNOMED-CT with SNODENT for dentistry procedures and the cost category should reflect that SNODENT is free. A value set for ICD-10 should be provided. The ISA should do a better job of showing relationship...the relationship across federally required standards; so for example are both required or is it either/or. A suggestion to remove SNOMED-CT as it does not contain patient diagnosis. And then a request to add ICD-9 for analysis, decision support and quality measurement needs for conducting some kind of retroactive analysis as that may often be required.

And then from the task force a note that SNOMED-CT and ICD-10 CM mapping has been done by NLM, which helps link those two together. Another suggestion to add ICD-9 for kind of historical purposes and then the value set listed on the medical side is outdated and should replace with the CORE list subset. And then some additional discussion occurred through the comments between Kin Wah and David; maybe you guys can give a little bit more light to that. And then a suggestion to include CDT-2 and provide transcoding from CDT-2 to SNODENT for dental encounters.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Can I just get a clarification? Is SNODENT really SNOMED codes but it's a subset?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

It's been taken out of SNOMED, Clem, so it's...

**Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology**

Yeah, there was some activity around SNOMED having...SNODENT becoming a subset of SNOMED, but as I understand it that is no longer the case. Other folks might have more insight.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I guess this...Kin Wah, is this a good, the first one a good suggestion or a bad suggestion?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Umm, I think it depends on...I don't have in-depth knowledge about SNODENT now, so I think I need to...I cannot make any recommendation right now, so I think I need to do more digging.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

This is David, I was distracted for a minute, what's the question?

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

So I think the question that Clem asked is whether bullet point number 1 among the public comments, that is to replace SNOMED with SNODENT is good or not. But I think really SNOMED is not appropriate for dentistry diagnosis, but whether SNODENT as it is now is more appropriate, I don't know.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah. I don't...I don't know either.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

This is Susan, I...when I was working with Russ in the HIMSS Interoperability Committee, I sent an email to Mark Jurkovich, who is over the dentistry SIG and SNOMED and asked him what the standard was for dentistry diagnoses. And this comment came from him that it should be SNODENT, and that's still what the dentists are recommending for diagnosing.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Sounds like a good idea then.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

And one point I would like to make on this slide is about the problem value set being outdated; that's my comment. But I'm...and I apologize because I was misled to think that the problem list...the value set that is referenced, that is a problem Eric and I referred to earlier that when you try and look up value sets, sometimes you come up...you encounter some things that are already like obsolete and I looked up that value set and I saw there are two versions that I can find on the web, which I was not aware of in the beginning.

So...and I looked up the older one, which has about 16,000 codes and which from the look of it seems to be derived from the previous Kaiser and VA's problem list subset, and that is not being maintained and it is outdated and so on. But when I looked again on the OID in ISA, I found another version of it with exactly the same OID, but then it points to something with 110,000 codes and that is the union of all SNOMED clinical findings and also situations with explicit context codes. And that is a more...much more comprehensive value set and I think that that should...that is appropriate as a comprehensive value set for problems or encounter diagnosis.

But just another point I would like to make is about the CORE Problem List Subset, which has been available for a while. And that can also be listed as a starter set, too for problem lists and also encounter diagnosis. But how it's used, I mean I think Dave had some and also Mark Roche had some suggestions how it can be used to float more commonly used problems to the top; I think that is up to how the implementers would like to use the set. But I think it...the problem list I think is quite commonly used in implementation of problem list vocabulary.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

And this is Susan; to add to that, there's the nursing problem list subset that aligns with this as well. So there's a CORE Problem List Subset and a Nursing Problem List Subset that has all the nursing diagnoses.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So are we, I mean this is...the category of this slide says encounter diagnosis which in my world usually means the presenting diagnosis, not a problem list, right?

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

Oh yes, yeah.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean we live in this ridiculous split where billing requires ICD-10 and problems require SNOMED; just an unfortunate reality.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, but I think encounter diagnosis allows two vocabularies, so it's either SNOMED or ICD-10; I think that's how I remember it to be in the Meaningful Use 2 specifications.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I didn't...I thought it had to be ICD...SNOMED. I mean...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

I can check.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...ICD-10 is more complex than most problem lists can deal with because it has multiple axes and most problem lists don't do that, so I think the sad fact is that for problem lists, the vast majority of vendors actually go to third party companies to build clinician-friendly pick lists because SNOMED is so hard to do.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

It is SNOMED or ICD-10, it is, I just looked it up.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay.

**Susan Matney, PhD, RNC-OB, FAAN – Senior Medical Informaticist – Intermountain Healthcare**

In Meaningful Use 2.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And unfortunately they don't allow a free text, which is a big mistake, but that's a different discussion.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

But I think David your point is that there's a lot terminology vendors providing big sets of...but eventually I think they all, at least map back to SNOMED and ICD-10. So still, you do need some kind of a standard, despite the fact that you may expand it with your list of synonyms or commonly used terms.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well I wonder if we could get...I think there's a lot of good ideas percolating here if we could get somebody to maybe to kind of do a sub...make a proposal on paper for the next call or something because it sounds like SNODENT is an issue and there are some things here seem like the wrong ICD...SNOMED should be removed and ICD-10 should be added. It seems like that's reasonable. But it's...there's a lot of work to get the details. Is that possible in this structure to get a short report? I mean just kind of puts it all together, what's up and what's down?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well and I think doing it in conjunction with the problem list at the same time because it overlaps between diagnosis and problem list.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Right, I agree, I agree. I mean, Kin Wah would you be willing to sort of take some positions and...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, I'll just...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...and deliver us so when we're keying this list up, what are we...and what do we...

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

...put out there, said okay.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

I think we're getting some feedback...

**Richard Elmore, MA – President, Strategic Initiatives – Allscripts**

Where are they at, are they...?

**Russell Leftwich, MD – Senior Clinical Advisor, Interoperability – InterSystems**

Not me, I'm using...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Clem, I can take a stab at it and, so the main contention really here is about...is around SNODENT, right and is there any discussion necessary around ICD-10 and SNOMED-CT because they are kind of required or they're...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well saying it should be removed, I don't think that makes sense in this bullet and...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

No it's...

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...having distinction, meaning what's required or what are...this both or is it either/or I think is probably a good idea. And sometimes it's because one's the question and one's an answer and its confused.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Maybe we need some discussion around ICD-9 whether that should be listed, I mean, or not.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well the question is, can we...I think I submitted that. The question is, there's 10...there's 30 years of ICD-9 and if you're doing quality assurance or research or we're leaving research off of it, on looking at trends, can you...are they all translatable into the new codes so that you don't have problems? I don't know.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I don't think so, but I don't know if we need to list...I don't think the ISA has any power that it matters that you list retrospective codes.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Okay, all right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean, you could list it, but anybody who's going to use it already knows about it, they're not going to find out about it.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Let it go, we've got enough to discuss so...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Well actually this is Eric. One thing where I think maybe this could provide value, especially dealing with potentially a surprising issue is many even somewhat sophisticated implementers often do not realize that they can't just adopt the most recent standard and be done with their implementations because legacy content will exist for probably many years in older formats potentially for the patient's lifetime in older formats.

And so it might be nice for us to help provide a service and avoid that surprise by at least mentioning in the ISA that implementers would be cautioned to make sure that they do have awareness of older value sets, such as ICD-9, including the ability to map back and forth between those and the most recent value sets as imperfectly as it is possible. We know it won't be perfect, but they should not, for example, just

expect to turn on the lights on a new system and expect to only see ICD-10 moving forward; legacy content will have older formats.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Well, if we can find a place to say that...

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah, but I'm afraid that's a slippery slope because there are other systems that are even older...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Kin Wah Fung, MD, MS, MA – Staff Scientist, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

...you know, code ICD-8...

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Yeah and I would suggest, this is Eric; I agree, it's just as a principle, that was just one example, but I entirely agree Kin, with your assertion that this is not just limited to ICD-9 and 10, as we're posing as a general principle.

**Christina Caraballo, MBA – Senior Healthcare Strategist – Get Real Health**

This is Christina; I would agree with Eric on that. I think it's important to note so that people that are trying to implement will know the roadblocks they're going to create as a consumer-facing application if I stick my...if I try to get data from the EHR and am only getting stuff from ICD-10 and not ICD-9, then that's a huge gap in information coming to me that I'm not supporting; just as an example.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

It's 3:26 so, I think we should probably wrap up our discussion on this section and...so we can get the public comment.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Sounds good.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

So...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I want to add just one thought that maybe we can pick up at the beginning of the next one when we review...if we come back and review this one which is this...the question about why we have all this work with SNOMED and ICD-10 and yet there's still need for third party helper vocabularies. Is that a gap that we should ask the SDOs to address with their raw content?

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

This...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Because what happens is the intermediaries content becomes a de facto coding system in the EMR and then at the final point where you have to produce a bill or transmit it, it gets mapped, hopefully accurately but maybe not with the same sense that the clinician saw it. I think it's an issue.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

This is Eric, I would think that's a very wise comment and I agree that we should...on.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Dave I agree it's a big issue, but I still worry that, you know, we have like...we only did three pages of this thing or something like that. I like it, but could we first get through a lot of this stuff?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

We'll get better at it.

**Clement J. McDonald, MD, FACMI – Director, Lister Hill National Center for Biomedical Communications – National Library of Medicine**

Yeah I hope. We're having too much fun with it.

**Kim Nolen, PharmD – Clinical Informatics Medical Outcomes Specialist – Pfizer, Inc.**

Okay, we will pick up here next time. I'm going to turn it over to Michelle so we can get the public comment.

**Public Comment:**

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

Thanks Kim. Marcus, can you please open the lines?

**Marcus Hudson, MS – Project Coordinator of Virtual Hearings – Altarum Institute**

Sure. If you are listening via your computer speakers, you may dial 1-877-705-2976 and press \*1 to be placed in the comment queue. If you are on the phone and would like to make a public comment, please press \*1 at this time. Thank you.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

While we wait to see if there's any public comment, there were lots of comments in the chat, so we will share that with all of you all after today's meeting as well.

**Eric Heflin – Chief Technology Officer –Sequoia Project/HIETexas**

Great, thank you.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

It's good to know that we're entertaining people.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**

They're listening. And it looks like we have no public comment. Thank you all.

**Public Comment received during the meeting:**

1. Tom Bizzaro: In listing drug allergies the most specific information available should be used. To avoid false CDS alerts a single ingredient is most useful. Certainly when the individual ingredient within a combination product is unknown using the branded name is acceptable. The ingredient code is behind the scene and does not place a burden on the user. Class is least helpful as it gives very broad alerts, but again if it is all that is available it has value. FDB has links behind the scenes to numerous code sets and the codes are never exposed to the user. Tom Bizzaro, FDB.
2. From Gary Dickinson: Following discussion with ISA TF leaders at the ONC Annual Meeting, I forwarded a slide set with additional information regarding the ISO/HL7 EHR and PHR System Functional Models. HL7 and various other organizations have recommended that the 2017 ISA should include the FMs. As Co-Chairs of the HL7 EHR WG, we have been monitoring ISA TF meetings over the past several weeks and have heard no discussion of the FMs. Is there a planned session for this discussion? Thanks!!
3. From Steven Waldren: There are NO roles in NPPES (NPI) they are SPECIALTIES
4. From Steven Waldren: I am a Family Physician (specialty) and may be a primary care physician (role) for one patient and an emergency room physician (role) for another patient.
5. From Steven Waldren: Roles, Specialties, and Relationships are different concepts and should have different value sets
6. Tom Bronken, MD MPH: Independent Consultant working with Trinity Health. An important interoperable need is exchange of documents, yet Section I does not include a vocabulary for document types. While the set of CCDAs-compliant templates is extremely useful for organizing and exchanging discrete clinical elements in specific situations, it is difficult to parse all the nuances of the patient's story, put the pieces into a CCDAs-compliant document, and then recompile them at the other end. Document LOINC is a fairly mature vocabulary that nicely describes the content of documents regardless of format (including CDA), and is increasingly in use. It should be included as a vocabulary to meet the interoperable need of document exchange.