



Health IT Standards Committee

2017 Interoperability Standards Advisory Task Force

Final Transcript

July 21, 2016

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 the 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. Kim Nolen?

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

Hi, 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, I'm here.

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

Hi, Christina. Christopher Hills? Clem McDonald? Dale Nordenberg?

Dale Nordenberg, MD – Chief Executive Officer – Novasano Health & Science

Here.

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

Hi, Dale.

Dale Nordenberg, MD – Chief Executive Officer – Novasano Health & Science

Hello.

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

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. David McCallie?

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

Here.

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

Hi, David. Eric Heflin? Kin Wah Fung?

Kin Wah Fung, MD, MSc, 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 D. Buck, PhD – Senior Director Biomedical Informatics – New York City Department of Health and Mental Hygiene

Here.

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

Hi, Michael. Michael Ibara? Robert Irwin? Russ Leftwich?

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

I'm here.

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

Hi, Russ. Susan Matney? Tone Southerland?

Tone Southerland – Director of Implementation – Ready Computing; Co-Chair, eHealth Exchange Testing Workgroup – The Sequoia Project

Here.

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

Hi, Tone. And from ONC we have Brett Andriesen and Nona Hall. Is there anyone else from ONC on the line?

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

No, but I am, Clem is on, I don't know if you could hear me...

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

Hi, Clem.

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

But, anyway, yes, I'm on, anyway, not...

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

Thanks, Clem. Any other members join as well? Okay.

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Hello, it's Eric Heflin...

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

Hi, Eric.

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Is here as well, sorry.

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

And with that I'll turn it back to you Kim.

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

Thanks, Michelle and thanks everybody for joining today. We are just going to jump right in and get started where we left off on labs which I can't remember now was it slide 18 or 19? Twenty, slide 20 and just start the discussion with Section 1 and hopefully get through that, and maybe even get to more. So, Brett I'm going to turn it over to you.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right, thanks, so from the public comments on lab tests there was a recommendation that there is no need to distinguish quantitative from qualitative so we can...there is a suggestion in there that LOINC is appropriate for identifying all lab tests observations regardless of whether it is numeric, categorical, etcetera.

There is a recommendation to remove the comment indicating it is possible to request new LOINC terms as this applies more broadly than just a lab test.

A recommendation to remove the reference to SNOMED in the limitations or to add SNOMED as a second standard which may be addressed by some of the recommendations from Dan's...the structure group.

The next bullet there is kind of similar to some of the earlier ones. A recommendation around the value set of the top 2000 lab tests being too limited and that the full list of LOINC codes should be referenced and available and then a recommendation to add a section around the categorical results referencing SNOMED and then some similar comments from the Task Force that the constraints to numerical should be removed, something around genetic test variables and those observations and then a recommendation around the 2000 lab observation code set being appropriate.

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

Any comments or suggestions?

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

Well, I can explain some of these, I think, you know, this...I think ONC was focusing on very specific subsets of lab tests but that creates a really...a moth-eaten report in terms of utility. So, I think...and I don't personally, but I don't know for sure where the public comment came from, I don't think it is any harder to report, you know, a positive/negative test and a numeric test and this kind of stuff has been sent around in HL7 messages for 20+ years so really we shouldn't distinguish.

And also the 2000 is now four years old too. So, constraint...I didn't mean it was constrained to that, I thought it was just a suggested starting set so depending on what's really in the guidance it would be a different response, but I think it shouldn't be constrained to it.

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 the 2000 top LOINC codes should be listed more appropriately as a starter set rather than the all-inclusive value set. I think therein lies the confusion.

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

Where does the notion that it's limited to numerical come from? I'm trying to find that. That makes no sense whatsoever.

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

It doesn't and maybe it's not really there. I think it was discussed that way in one of the proposals that it would be required that labs would be required to send just numeric tests.

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

Oh, I see what it says, it says...

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

From an interoperability new text, yeah.

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

Well, it says if the value result or answer to a laboratory test and observation is categorical that answer should be represented with SNOMED CT, I don't think that's right what if the answer...

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

Well...

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

Is ++ or +++, right, I mean, are we saying no text results?

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

I hope not, but...

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

I hope not too.

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

The categorical by implication means it's from a fixed list and so I think the idea is the answer should be SNOMED.

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

Well, now, Clem the distinction they say in the ISA says, lab results which may be entered numerically or categorically. So, I don't think +++ is numeric but it's a textual report that no one is suggesting sending that by SNOMED are they?

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

Well, it's down in the details, I don't know, but I guess the question is, are they saying you can't send them in text at all?

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

Well, they're saying...

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

Because there's an awful lot of...

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

Everything is either categorical or numerical and for non-numerical they say use SNOMED so that to me sounds like no text.

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

That's not good.

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

I agree. I mean and it's absurd because it would shut down every lab in the country. I mean, it's...

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

They mostly send them in strings actually.

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

Yeah, exactly. In fact nobody sends them as actual numbers because HL7 v2 doesn't allow that.

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

Well, that's not exactly true but you can send numbers and then you've got the structured numeric in there but I think your point is well taken we ought to just focus on, you know, short text answers are allowed too.

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

Yes.

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

So, this is Dan, I think in general the combination of these comments makes sense and I think we can simplify this a little bit, so one of the confusing things to me is, you know, the interoperability need is stated as representing numerical laboratory test results and I think, you know, just, as we've discussed let's just say, representing laboratory test results and then we can kind of describe the cases in which case, you know, some, you know, if you're going to be using codes for your answers then SNOMED makes sense a lot of the time but as one of the other comments mentions there not always because you have these syntax like HGVS and so forth that are appropriate and the cases that, Dave, you were just talking about.

But in addition, I think one of the other recommendations...so combining the previous recommendation we've talked about in the Task Force the ones from the structure group as far as kind of laying these out as observation standards and observation value standards that will apply here as will, I think, the comments from, you, Kin Wah, about describing more or labeling kind of the intention of the listed value sets so when you would say that the LOINC top 2000 is a starter set, an example set but it's not the set and I think just kind of having that additional clarity would make a lot of sense here because I think the way it is it isn't exactly clear, you know, there's a reference to the top 2000 but it isn't exactly clear what that was meant for and it is probably best thought of as an example, a reasonable starting point but certainly not all of what you would need.

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

So there...this is David, you packed a bunch in there, I think most of which I agree with, but let me ask Clem as a LOINC expert, a higher level question about this SNOMED concern. My understanding Clem is that there is a fair amount of question and answer encoded in LOINC in particular some of the surveys and panels, is it always the case that the question is LOINC and the answer is SNOMED or is that more use case specific?

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

Oh, man, well, Susan are you still on or are you on?

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

Susan couldn't join us today.

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

Okay, I think if you're talking about lab tests that the question is LOINC and the answer, when it's a coded answer, would mostly be SNOMED and Dan brought up these other special cases, you know, in genetics for sure, you know, there's 150 million SNP codes and there's an ID for them and no one is going to want to put them all into SNOMED.

So, there's a number of specialized coding systems that still could apply, but I think, you know, like for organism names and all that kind of stuff that should be SNOMED and the effort would be detected, not detected those things could all be SNOMED.

It's not an easy...there are tricky issues and I don't think we have time to get into them. But we support SNOMED for the answers of that kind but we've still got text and I know that some would like to get rid of text from lab reports but I don't think we'll see it in our days and that's what an awful lot of it is now.

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

So, David, are you talking about like with the PHQ-9 they have the question and the answer with LOINC codes?

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

Yeah, yeah and then there's some survey things I believe that are...

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

Well...

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

Some other survey panel questions that have questions...

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

Well, Dave, just I'll give you my perspective, we didn't make an agreement with SNOMED about those things so we don't have an...we, LOINC, doesn't an obligation and are not allowed, yet, we're trying to, to be able to use their codes in our answer list because I think it's really hard not to have a question without the answers nearby...

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

For anybody to use them right.

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

The other problem with some of them they have scores which really tie to the answers and you add them up to get a total score over 10 questions and that's not supported yet in SNOMED, so, I think what Susan would say though shouldn't be in SNOMED but I don't want to say anything negative about SNOMED.

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

Well, this is David, so I think our best advice is that in general, most cases, it appears that it's LOINC for the question, SNOMED for the answer but that there are exceptions...

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

And maybe we're not going to...

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

In the lab you can say that more strongly than outside of the lab.

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

Yeah and I agree with you it makes little sense to have it split up this way, it's a turf battle between, you know, LOINC and SNOMED, but we're stuck with it. So, there you have it.

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

Okay, so our recommendations are somewhat in line with most of the stuff on the slide but in general for labs most cases will be a LOINC, SNOMED question/answer but there may be exceptions with things like surveys that have the question...

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

No, no, no let's not clarify, surveys aren't lab.

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

Yeah, take that out. I was...I shouldn't have brought that in.

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

Okay

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

Yeah, yeah, I think there will be exceptions for the answers for specialized...for some kinds of tests like some genetic testing.

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

And for lab results that are reported as short text strings that have not...

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

Well, yeah, well, I think LOINC is the question SNOMED is the answer when it's coded with exceptions about the coding and I think we ought to try to introduce...they're going to have to allow some text as the answers...

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

Or we're not going to get there.

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

Okay.

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

Yeah no one is going to go retrofit all their systems to, you know, map those text strings to SNOMED that would be...I can't imagine doing that.

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

All right, any other comments on lab tests?

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

Well, one other one is that they...I don't know how to say this but they've been so...they, ONC, you guys are there, right, you're listening, seem to have...you know of all the things that's been done for ancient times it's lab messages in HL7 and there's this hesitation to take a position about requiring that labs send it that way or send it...because there was a proposal in the last round and it was withdrawn and it was in the first draft of the Meaningful Use specifications.

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

To send, Clem could you explain, this is David, to send it in what way?

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

Well, there was a specific proposal in the pre-version 3 Meaningful Use, you know, proposal put out, you know, in the federal register back, you know, six months before it got accepted in that, it said...I think it said to use v2.5.1 to send lab results and use LOINC as the answer, there might have been other stuff in

there and the whole thing was thrown out. And I don't know what the hesitation...maybe there's...it wasn't explained that it really should be v3 or v4, or anything like that it was just...it just was withdrawn and I heard...

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

Hey, Clem, just to keep us focused here, we're in Section 1 which is the terminology so that's where we're talking about LOINC...

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

Oh, okay.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

If you look in Section 2...

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

All right, oh, fair enough.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

...2.5.1.

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

All right, fair enough. But I'd like to encourage ONC to be a little more aggressive on the lab results if we can't do that we can't do much of anything.

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

Okay, all right, any other comments on lab tests before we move to the next slide? All right let's move ahead.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right, so on medications from public comments there is a recommendation to add the American Hospital Formulary Service as a standard for medication classification. A comment around the fact that there are three terminologies listed with comments on the limitations of each but there has not been an advised obvious course of action for a vendor implementing a product.

A comment around UNII only being referenced as a value set and not as a standard and thought that if we're going to list it as a value set it should also be listed as a standard.

From the Task Force there was a recommendation to use RxNorm here and then a recommendation to phase out NDC for the clinical interchange but the fact that it may be needed for pharmacy operations, dispensing history and claims processing, and maybe something to note in the limitations.

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

Well, I think...Dave I don't know if you're real familiar with the hospital formulary but the last time I looked at it it's too broad, it's not very useful, it wasn't...unless it's gotten a lot more specific. Does anyone on the call...Kim you must know about it?

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

Yeah, I was looking at that and at least from my understanding like the compendia all determine what classification system they want to use and they'll actually group their medications in different classification systems. I don't know which one each compendia uses. So, I think you would probably want to get some stakeholder input on that before just naming one because like Medicare uses the USP classification I believe for formulary editions with their criteria around it so...

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

And then I think all the...this is David, I think the content suppliers, you know, like Multum and the others have their own classification.

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

Yeah, that's what I was saying, when I used the word compendia that's what I meant, sorry.

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

Yes, okay, okay, good, I wasn't sure.

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

Yeah.

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

And then the VA has one, right, what's theirs called?

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

Yeah, it...

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

Well, they have the NDF-RT.

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

NDF-RT, yes.

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

Well, what's in there now? Are we taking a position?

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

What's in there now is NDF-RT and again there's not a...it's just listed as a standard. Yeah, okay, NDF-RT allows for representing classes of medications when specific medications are not known, well it allows

for classification for a lot more variety than just that. That should be broadened, but I think there are many medication classifications, I don't think there is a single standard that's accepted...

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

Well...

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

Yeah, there are many that's correct.

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

So...

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

And a lot of them are proprietary so that's the other issue.

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

So, we shouldn't...maybe shouldn't speak to it is that what you're saying?

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

I think...

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

I just...adding the American Hospital Formulary alone doesn't make sense then.

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

Yeah, I mean, I think acknowledge that there are other classifications some of which are proprietary. I mean, again, it's unclear what the purpose of listing it is in the first place...

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

But, okay, here we are.

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

Well, maybe one reason for listing...this is Kin Wah, so maybe one reason for listing NDF-RT for classes is echoing the use of NDF-RT for allergens, for allergy listings, because NDF-RT is used for drug classes that are listed in the allergy section so maybe that's the reason to list it here as well.

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

Yeah, I don't have a problem listing it, I just think there are other ones as well and do we want an exhaustive list including the proprietary ones or...

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

Well...

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

Well, I think...I don't know what this person was thinking but as I'm reading it and I'm thinking through different scenarios that I've seen and trying to get data out of different EHRs that use different content suppliers, like if you're trying to pull data and you're doing it based off their classifications the drugs listed sometimes could be different and so then if you're pulling it from multiple sources and you're trying to get that higher level code to pull everything sometimes your list could be different because the classifications are different.

So, maybe what they're trying to say is it needs to be standardized so if you're pulling data or exchanging data, or doing clinical decision support or something like that where you want a higher level, like let's use opioids as an example, when you're doing that you have the same medications in all the groupings and they...

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

But...

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

They may not vary.

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

The problem with that Kim is I don't think there's any single hierarchy that can capture all the different use cases for classifying drugs. I mean, if you're trying to classify them by their chemical activity pattern, if you're trying to classify them by their allergic overlap, if you're trying to classify them by therapeutic equivalents you get really different classifications.

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

I know, I know it's very...I don't know that we have that answer...

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

I mean...

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

But I think we have identified a gap maybe.

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

Well, I think it maybe not solvable.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I agree.

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

There is just an awful...I mean, like Lasix is included as an allergy against sulfa drugs and it is a sulfa drug but I don't think there has ever been a case reported where there has been a cross reaction, so there are just a lot of issues and judgements made in these hierarchies. So, I don't know that this is a high priority to deal with. I mean, if we could create the perfect world you might want to invent something that's like that but I don't know if you can.

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

I like David's recommendation just to acknowledge that there are multiple classification systems.

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

I do too.

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

Yay.

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

And I don't think I'd bring UNII in because that's been argued about a long time, we've got one...that really is a drug ingredient kind of thing. I think it is in the standards for environmental ingredients or something like that, I mean, it's there for some things but I don't think we should mix it up any more. Anybody for or against me for that position?

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

I agree, I would not add it here.

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

And I think also for transmission of drug information between the pharmacy and the practitioner RxNorm should remain the main one...

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

Yes.

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

Because otherwise we're back to chaos and NDC isn't terribly useful, it's not harmful if it comes in addition.

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

But is that what's being done today? Because I've worked with several people who can't even figure out in their EHR system where to find the RxNorm codes.

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

Well, I guess that's a good question but it's supposed to be, I thought that's the...it certain...all the drug knowledge vendors I think carry it, the big ones carry it.

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

And it's...

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

Oh, no, they have it but I don't know how well it's integrated into the EHR system.

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

Well, but the message we're talking about I think is...Dave, finish what you were saying there.

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

Oh, I was just going to say the RxNorm is required for interchange but I don't believe that it's required that it be surfaceable in the EHR. I mean, many do, but I don't think that's a requirement anywhere that I'm aware of.

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

Well, they...

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

In other words it needs to happen on exchange.

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

Yeah, yeah I think the focus has always been on exchange and it's still, you know, what people do in the privacy of their own medical record is another story I guess.

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

Yeah, I mean, and this is Interoperability Task Force not, you know, hospital infrastructure or EHR Infrastructure Task Force.

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

But you should be able to get it because no matter what they're doing the knowledge bases typically will have it and they can translate to it.

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

Yeah, it's...I mean, in our system just for one it's available, I don't know if it's surfaced to the end-user but the mappings are in the tables.

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

Yeah.

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

And it's required in Meaningful Use, right?

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

For interchange, for interchange, right.

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

And that's what we're all about on this Task Force and...

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

Yeah, I guess the...and maybe this is out of scope, but like when they're going to build CDS rules, again, not being able to find that or to have that sometimes is a limitation because we're saying use RxNorm, it's publically available and you can figure out a nice classification or a hierarchy with it but then you can't use it for any of the other functionalities. So, it maybe for another...

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

Well, are you suggesting...

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

Task group, but...

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

Maybe you're suggesting it should be surfaceable in any medical record for secondary use.

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

So, again, Kim, I mean, if you're talking about interchange of rules then that's an interchange problem and I think it's applicable there to say, if somewhere in this ISA we talk about, you know, exchanging knowledge artifacts that medications should be encoded with RxNorm that makes total sense, but I don't know how you would require that the EHR do something with it internally. I mean, the real reason is because the proprietary code sets have a lot more knowledge than RxNorm does so you can't really run an EHR off of RxNorm.

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

Yeah, I'm just thinking through different examples that I've experienced and you're right but the other thing that I've noticed is even though the compendia does have that higher knowledge they don't share

it with the end-user, like their code system and how the hierarchy works like the EHR has it but not necessarily the end-user. So, it's like a cat and mouse game to figure out all the code systems because it's proprietary.

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

So, again, this is Eric I agree and I've certainly seen that in the trenches about RxNorm, LOINC as well too and proprietary lab codes which in some cases they actually have less information than LOINC instead of more but, you know, certainly they can have more.

So, maybe what we could do is try to guide the industry towards the best practices at least of perhaps suggesting that as a best practice for those systems that are employing proprietary coding systems of any type behind the scenes, especially those in the context of this discussion, also make available a mapping.

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

Yeah, I don't know any of the major drug vendors who don't do that already.

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

Yeah and we...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

The only thing it may be hard to get at the...you know like being in the trenches I certainly see exactly what Kim was just describing which is that the compendium has been hard to get or, you know, someone had to pull it, you know, together in response to a specific request, you know, and some cases had to interview people to get the data.

So, I'm suggesting as a committee that our...the text we advise ONC to put in the ISA is simply that for systems implementing proprietary codification systems that they also publish freely available, easily obtainable compendiums...

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

Well, are we going to say that to AMA about...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Not being so proprietary.

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

Are we going to say that to the AMA about CPT codes? I mean...

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

Well, no, to put this in another level where this is needed is there is a requirement now in Meaningful Use about pulling data, retrieving data and that's where one could say it should be retrieval by these standard codes. I don't know...I don't remember how exactly that came out but that's where it belongs you know something to say...I don't think you can ask people to give up their whole knowledge base for free.

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...mapping...

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

And so, yeah, this is David, you know, representing a vendor, I mean, I personally agree Eric that it ought to be free but I don't think it's the point of the ISA to wade into that territory because there are lots of proprietary code sets that...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Well, then...

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

You'd have to...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

I understand the concern, well, could we at least make a statement that a best practice would be that the compendiums are available and just leave it at that.

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

Well, but if the compendium is really big, if you just had a mapping from there and the code systems in the medical record to the standard code systems I think we could push that, but when you...

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

But...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Yeah.

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

Eric when you...

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

Whole compendiums a lot of stuff.

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

Yeah, when you say compendium what do you mean in particular? Do you mean every bit of knowledge or do you mean the classification hierarchy or the mapping, or what?

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Really just enough information that allows the data to be interoperable so for example translating proprietary lab result codes to LOINC codes.

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

Well, that's...

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

And the reason...

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

No, go ahead, I'm interrupting, I apologize.

Eric Heflin – Chief Technology Officer – Sequoia Project/HIETexas

Okay, the reason I'm kind of asserting this is because when I formerly worked for a vendor one of the things we often found is that essentially the only source for that information that could be obtained authoritatively was the maintainer of the proprietary system and literally no one else in the world had that knowledge because that individual in some cases for, you know, relatively small organizations would be the only one with the ability to find and map, do that mapping, and that's why I was suggesting that it be done by essentially the curator of that proprietary mapping data because really no one else can do that.

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

Well, you know...

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

But I thought...aren't we effectively there for the interchange requirements. I mean, you know, the CDA, the Consolidated CDA is mapped you don't surface proprietary codes, right?

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

I think, yeah, I think that's right but I think the complaint I'm hearing is that if you want to do a secondary use is that the standard codes don't necessarily come out.

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

But once...

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

And that's not...

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

Once you've mapped it to RxNorm then secondary use should deal with RxNorm relationships.

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

No, I agree, I agree, I agree, but I thought Kim was complaining that this doesn't seem to be as easily doable as we have assumed, right Kim? You're talking about secondary usage.

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

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

But who...

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

Yes.

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

So who's duty is it to go create compendiums that organize RxNorm in interesting ways? I don't...

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

Well, I think we should leave the compendium out of the discussion because it's ill-defined and it's very...it's more than we really need.

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

Yeah, yeah.

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

But...

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

No, I totally agree that the stuff should be surfaceable and externalizable in its mapped form but I thought we had already...I thought that was already true, I guess I'm asking what we'd be changing by this language.

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

I think it's supposed to be true but certainly in the interchange I think it's supposed to be true and it's not crystal clear if it has to be true when you externalize it, when you pull the data. But I think we all think that would be a good thing.

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

At one point the mappings from RxNorm to the vendor codes was part of the NLM's RxNorm database is that not the case or is that...

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

It's not viewable...

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

...

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

It's not viewable by the public. I think they do...

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

...

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

Do that but like I can't go on there and view how it maps to First DataBank or Multum, or...

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

Kin Wah do you know? Because our mapping is inside UMLS but I don't know what's constrained.

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

It is in the...tables some native like technology vendors codes there are some in RxNorm but then when you get into really...I mean, I recently...I was doing a project to look at commercial vendor's products on drug-drug interaction alerting and I got the native tables and it's not as simple as just mapping one RxNorm code because there are many different levels of extraction...

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

Right.

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

And the drugs may be modeled differently and it would be very complicated to get a full mapping between RxNorm and the native codes of the vendors. There are some ways of mapping but whether they would be sufficient for all use cases I'm doubtful. So, it still needs quite a bit of work if you really want to map and make use of the vendor's knowledge base.

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

I think that's a great point is the systems, since they were all developed independently don't necessarily agree on the same fundamental basis.

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

Even the modeling of the chart can be some tremendous difference.

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

Right.

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

So, it's difficult.

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

Right, right. So, each of the proprietary systems has some kind of a mapping for export usually around products where, you know, they've just figured out how to do it, but it's probably not a simple table in all cases...

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

Yes.

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

I think it is in many but not in all. The point is, I guess, I think that the requirements that we're addressing in this Interoperability Standards Advisory are around the externalization and interoperability points so we've made that...I mean it's already regulatory clear with the CDA, it's clear with the APIs, at least...well, I don't know if that's a requirement yet but the Argonaut work is certainly mapping to RxNorm for the APIs the ones that are going to be based on FHIR anyway. So, are there other use cases that would fall into the interoperability, I mean, exports for research, is that a use case in our interoperability standard guide yet?

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

Well, there is the query tool that they've proposed but I don't know if it specifies coding systems, it's in the current Meaningful Use, you know, that you have to...maybe that's the same as the Argonaut stuff I'm not sure.

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

No Argonaut is just dealing with profiles for the FHIR queries. Oh, I see what you mean, query, yeah, yeah, yeah, no that's patients...one patient at time query. I'm thinking of, you know, dump out a dataset for...

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

Right, right.

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

Lots and lots of patients, those...

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

What we should...I mean, if it's not there we should propose...I mean, ONC will know, but I think we should argue that there should be the same standards used in interchange should be available for pulling out secondary data mapped to the same standards when they pull out secondary data.

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

Yeah. I think that makes sense although I...

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

Well...

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

I do think that researchers will often, you know, have a preference and they may be comfortable with the data in a vendor's proprietary codes because they already know how to do it so I don't really...

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

Well, we wouldn't forbid that we're just saying at least they...

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

They would have options of getting...look at standard codes.

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

Yes.

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

So, maybe we should go to the next slide, we beat this one up pretty good.

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

Okay, are there any comments about that NDC before we move on?

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

I think it's not a strong statement it fades out you know. It doesn't harm anything if it's an extra code so I don't know why it wouldn't be easier to throw it out but I would...we already say we've got to have RxNorm at least and...

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

Aren't there a few cases where you need NDC? I'm not up-to-speed but I thought it was...

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

It could be, it could be, but I think the main point of this is to have one standard that everybody can get at and having an extra NDC as a secondary code wouldn't hurt. Kim, again, you know more about this than most of us.

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

Yeah, I think there are cases where you would need it.

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

And it...doesn't NDC cover a whole spectrum of stuff that's not covered by RxNorm like packaging sizes and, you know, a box of...

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

Yeah, like diabetic supplies and...yeah.

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

Well, and I mean...

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

Well, no...

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

A package of 50 versus a package of 250 is a different NDC code but it's the same RxNorm codes.

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

Well, there are packets in RxNorm a few of them, you know, like the Z-Pak and things like that but you're talking about the inventory.

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

...

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

So, for inventory...

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

Inventory...

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

You definitely need NDC.

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

Well, I think you can phase it out. I mean, I don't...

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

I don't...yeah I think it's a moot kind of question but just...life will be as it is but recommend use of RxNorm in the interchange.

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

For interchange and for clinical purposes.

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

And people will set extra codes along...it's all...that's not a problem.

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

Okay, all right, so I think we're ready to move on unless anybody else has a comment for the medications. All right, next slide.

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

Yikes.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right, on numerical references and values a suggestion to rename this section "units of measure" to align with what UCUM calls itself. A support for UCUM listed as a standard for this interoperability need. A request that additions for the value set as listed here and a recommendation to be made to UCUM around the scientific notation there to eliminate some ambiguity but that's kind of beyond the scope of the ISA but something that could be done to improve the standard.

And then from the Task Force comments around UCUM being adopted by multiple groups and the fact that it does not displace the display text, encouraging use of a value set that consists of the common codes as the doctors may not know how to derive those codes themselves focused on maintaining, expanding and listing value sets, a couple of value sets that are listed and a note that they need to be aligned and made available through VSAC, a comment that the limitation listed around prescriptions or medications is irrelevant here, I think that's what the...

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

Yeah it's not proposed for prescriptions.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

And then a few other comments around the display string aligned with what was proposed sort of best as listed above and then a comment around not industry standard being a misleading statement.

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

Well, some of those comments sound like mine so I agree with them.

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

Clem.

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

And the ones I wrote I agree with, this is Dan.

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

But I don't know the thing about two value sets I think it must be an old one and a new one that they're talking about the 567 and 812. Does anyone know?

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

This is Dan, no I don't know specifically either but I'm guessing that's probably the issue maybe and, you know, Clem, actually we, you know, we just published, just a day or two ago, an updated list so, yeah, but I think that's just a matter of keeping value sets up-to-date in sources like VSAC and not necessarily a problem for the ISA.

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

But one other thing that was, you know, this is not a fixed enumerated set and so it could be these sets are starter sets because it's a syntax and I just worry a little bit about, you know, this, making it a formal value set which sort of makes it sound like that's all there could be, it's different than other codes that have enumerations.

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

Is the...what is the LOINC listing is that a precomputed set of standard combinations of UCUM codes? Is that what that is?

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

It's common codes and variations in some of the common...because UCUM isn't always unique for a given unit of measure it's found in a bunch of lab systems and so it covers lab very well, it covers a lot of physiology but probably not all of it, you know, where you get some different kinds of impedance and this and that units. So, it's kind of...

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

But I...

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

Basically.

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

I don't know much about UCUM but, in fact I know almost nothing about it, it allows for you to specify numerator and denominator independently correct? Like you can say microgram...

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

Correct, it's the same...

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

Or deciliter?

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

Yeah, yeah it's a syntax and products and wears, you know, and...

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

Yeah, so what does the LOINC listing include? Does it include pre-combined things and, you know, like...

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

Yes, yes, it's not the base codes.

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

Okay, so what are people expected to use the LOINC pre-combined or the base codes, or either?

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

They're expected to use a valid syntax construction from the base codes defined in the 30 or 40 page, you know, document and we've actually just recently put up a syntax checker. So, I think, you know, there's another...the syntax...this really need syntax checkers rather than checks against databases.

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

Yeah and the LOINC is...

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

...

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

A shortcut to get you the proper syntax without having to derive it yourself? Is that kind of the use?

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

Well, it's a shortcut to the common ones you really run across.

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

Okay.

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

But it isn't...it can't be used as a validator because there will be things, especially in the wild spaces of physiology and ophthalmology, and things that may or may not be in there. I mean, there is an effort made to get a lot of them, but it gets pretty willy when you get off into magnetic MRIs and things.

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

Yeah, but you're not supposed to send a LOINC code you're supposed to send the proper UCUM syntax?

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

Correct.

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

Right, this is Dan, and just...it is a little confusing, it's actually, you know, LOINC is a vocabulary not an organization. The list of sort of common units of measure strings and their corresponding UCUM syntax is published on the LOINC website by Regenstrief so it is a list that Regenstrief put together but it's not a different coding system of any kind it's still, you know, a list of valid UCUM representations.

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

Yeah and it's not assigned a LOINC code per se.

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

No.

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

It's a LOINC maintained lists of valid UCUM strings.

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

Correct.

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

Got it, good, that makes sense.

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

And it's a subset of the whole world of all the strings for sure.

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

Yeah. So, is anything...

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

That might be what...

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

Is there anything in here...

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

And my...

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

That needs to change?

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

Well...

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

...

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

I think we should emphasize that it's a syntax rather than an enumerated fixed set of codes and the...

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

This is Dan, yeah, I would totally agree with that. I mean that's probably the most common confusion point around UCUM is thinking that it is just a list of codes I can download and install somewhere, so I think in the descriptive text around naming UCUM in this context, a simple statement around that would be quite helpful.

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

And we could reference the syntax checker. For those who are genes we found, we didn't make it, there is a syntax checker for the HGVS which is the syntax for describing a mutation, which is pretty good, we've tested it, it's called Mutalyzer, kind of a cute name.

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

Very cute.

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

Last year they said, from the committee, the Unix string version to use is the case sensitive version, is that an accurate statement or do we need to modify that?

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

Yes, yes, there's three versions, there's case incident sensitive, there is case sensitive and the ones with special characters.

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

Okay.

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

And they're all allowed?

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

Well, they're not recommended. I mean the problem with special characters even today they don't always display right in web browsers and, you know, that's eight bytes and it gets some of the messaging and HL7 is not happy with it.

The problem with the...it started out, the mixed case one has funny names and so anyway the committee...this is not...there is a committee and this is the thing that now is involved with the...there is an ISO drug group and it's the ISO medication specification that's been adopted by all the big drug manufacturers and FDA, and the European equivalent and this is what they came up with I think...the UCUM spec I think describes three of them.

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

Okay.

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

If the recommendation is the mixed case one.

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

Any other comments on this section?

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

Is the...and there's a couple of places where there the exponentiation operator is mentioned, do we care about that or was that just discussed?

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

Well, we can explore it, I don't know...I mean, there's a couple of ways to do exponentiation already in UCUM and I don't know enough about it to know whether this would collide...oh, I know the problem is it collides with the HL7 field delimiters.

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

Oh.

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

Yeah, they had to...it's a section delimiter in the field.

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

You can't escape them in HL7?

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

Well, you could. Let me look it up, I'm not positive it's even forbidden, but there is a website that has...you can do stars and you can do something else to get exponentiation. I mean, it would have to be tested to see it doesn't collide somehow with something. I'm not finding it. This may take a minute, we can go onto something else and I'll break in when I find it.

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

Okay. So, why don't we go to the next slide.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right so for patient clinical problems or conditions there is a fair amount of public comment and workgroup discussion here. But from the public comments a recommendation to remove the i.e., conditions note in the interoperability need and some description there around that conditions may not be problems and problems that may not be conditions. And a comment that the implication of the ISA here is that SNOMED is required for EHR certification and it's not and that the ISA should list ICD-10 as an alternative standard for clinical problems because it's primarily used or used for documenting the problem list as well.

A suggestion that other standards be recognized for current use or as part of historical use for example ICD-9 and then there are ther standards listed there, a note to consider expanding the list of acceptable terminologies to include mapping to SNOMED. Consider requesting additional metadata be captured along with the code, for instance, whether it was selected directed by the provider or generated as a result of a mapping...and this is an example of a use case that doesn't represent a user need but rather a technology approach was another comment.

And then on the next slide from the Task Force there was a note to specify the axis from which these should be chosen that one of the limitations listed is not a limitation of SNOMED per se, that there is not a widely supported post-coordination system in use for SNOMED and that needs to be addressed.

A recommendation to replace the value set listed by the core problem list subset as a starter set and then when core set doesn't contain SNOMED code it can lead to post-coordination problems and variability that leads to inconsistencies and then the suggestion related there around keeping the problem value sets and advising adopters to superimpose the core value set and use that whenever it's possible.

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

So, if I can interrupt, the hat is allowed in UCUM but it comments that there are potential collisions in HL7. So, I think the reason we probably have it included in our example list because of that and you're right it can be escaped out but, you know, that's just one more thing to remember and have to do. But it is not...it is allowed so they could express things that way with the UCUM syntax.

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

So, this problem, condition thing we could spend the next couple of weeks on this one.

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

But, well, this is Kin Wah, so I just want to look at it pragmatically so what people actually put on the problem list and this generally includes things like diagnosis or symptoms, or abnormal findings and also they include things like family history of certain disease or personal history of some cancer, or sometimes even just some like a traffic accident or a fall and so on.

So, if you want to capture all of that information using SNOMED...so we at least need to use three axis from SNOMED so the biggest one is the clinical findings that captures all the diseases, diagnosis, symptoms and so on and the other two would be, one is called events, which captures the traffic

accidents or the falls, or dog bites or other things and another axis if what we call the situation with explicit context so those would capture the family history, the personal history of disease and so on.

So, if you want to spell out the axis I would recommend then we use those three axes in SNOMED and say that with those are the most likely places where you can find SNOMED codes for the problem list.

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

Why would we...this is David, why would we want to limit it to just those three axes?

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

Well, the reason is because there are other things in SNOMED that would never occur on the problem list like there would be organisms, there may be drugs, there may be like physical...

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

Well...

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

Objects, and so on.

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

So, the real problem I think is that...well there's two big problems, one is there's a lot of things you can't say without post-coordinating the SNOMED but there is no widely accepted way to do that so you get that, you know, weird category like what did you call a pre-existing or conditions in pre-existing context that's just a pre-coordination hack, right, to include things like family history of myocardial infarction, which, you know, in any proper use of SNOMED would be multiple codes together.

So, I'm just, you know...I mean, I think practically, yeah, those three axes are the ones that are most commonly used, but technically any SNOMED code could be combined in a proper syntax to express some of these conditions and then there...well, anyway I'll stop with that.

So, I don't know, I mean, maybe we could list those as the most commonly useful axes?

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

Well, I think...let me take the other side of this, I mean, when you look...when people say SNOMED and then, you know, there's 300,000 codes it doesn't give many guidance so I think we should give them guidance. It would be different...and we don't have a syntax to combine them so those three cover it pretty well. So, we wouldn't necessarily have to say "use these and only these" we could say "these are the ones that should be used for problem list" and not speak to whether they could wander elsewhere. But the problem is implementers or users, you know, they get lost trying to find stuff.

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

Well and that's why all the vendors for the most part use IMO and other or HLI instead of SNOMED for the user interaction and then they map behind the scenes to SNOMED because the SNOMED isn't very

friendly for user interaction. So, again, I'm not sure we gain a lot by saying you could only use these three axes, I think maybe say...

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

Well, I would...I think we can phrase it differently and say these are the axes that are the best for problems without saying "only" I mean...

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

Yeah, that's where I'm headed is I just...the most common, they're kind of a starter set of a sort.

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

Well, it's a starter set of probably 100,000 so it's not...

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

No...

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

Maybe...I wouldn't call it a starter set I just call it this is the place you should look and maybe have...once you get into letting them do anything else though you're going to get this commentarial stuff that no one is going to understand but I...

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

Well, they understand it if it's a single SNOMED code because it's by definition a SNOMED code and everybody...

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

But...

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

Prediction area.

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

Right, well, what I'm saying is though that if we say it in a way without being totally exclusionary but point them...this is a reaction that contains 99% of the problems...

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

And then leave it at that...

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

Yes, no, I think...

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

Just so people have some guidance.

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

I'm okay with saying, you know, most commonly used.

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

But in fact, you know, the SNOMED is so un-navigable there is a thriving industry of user interface terminology companies...from SNOMED, right, so...

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

So, yeah, just because it's so big and quite complicated so you do need very simple instructions like if you are not looking to post-coordination and you were looking to these three axes and these are the codes that you need, I mean, if you're just using single SNOMED codes I think that would be a piece of sound advice.

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

Could we ask that maybe Kin Wah you could turn that into text and send it to Kim and the leaders, and...

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

Yeah.

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

You know they can do something with it or discuss it again?

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

Yes, certainly I can and also, one other related issue is that this very often...this value set that's called a problem value set that is often referred to in the existing ISA document it is just taken from one of the axis just the clinical findings. So, it might not be...and it is referred everywhere when SNOMED is referred almost. So, I would say, I mean, we probably need two of these value sets one is just the clinical findings axis and this has...this will be applicable in cases for example when you document allergic reactions. So, in that case we would not need the events or we would not need these situations with explicit context we just need the signs and symptoms.

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

Well, could you add that to your write up so that...

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

Well, let me...let me question that a little bit, I'm not quite sure I follow you, but in practice people don't use that starter set they use these commercial terminologies.

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

Yeah, but eventually...but in the back end if you want to generate a SNOMED code those SNOMED codes all come from this hierarchy, if it's just referring to like symptoms and signs or allergic reactions.

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

No, understand but in terms of what's the value of the starter set if everybody is actually using a...are we talking about the problem list subset? Maybe I misunderstood what you were talking about.

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

Yes, yes, we are, I mean, so there is some confusion here. So, the so called problem list subset listed in the ISA document now is referring to the whole hierarchy of clinical findings, there are about 100,000 codes there so it's not a starter set but it can be seen as the universal set for things that are like allergic reactions but definitely not enough if you are talking about problem lists because people put other things on there as well.

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

Well...

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

So, I would say...

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

Right, so what about the core? I was talking about the core...what I think they call the core starter set, the 5000 or so that came from Kaiser and a bunch of other places.

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

Yes, yes, the core subset is a frequently used subset about 6000 codes that is like gleaned from real datasets, so this will be a good starter set for vendors.

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

And my point is that vendors don't actually use it for that...

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

But you could...

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

They either...I mean, just practically...I mean, I have no problem listing it but I don't think it's terribly useful, it's not kept up-to-date number one, number two, vendors almost all use these commercially collated sets which are much friendly to navigate and/or they use Bayesian weighting of what's actually used so it's dynamic to the local institution.

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

So, but David, you're talking about institutions or organizations that have the resources to employ terminology vendors but there are also smaller places, smaller hospitals, that they need to build their own systems and they would need some kind of a pointer as to okay which are the most commonly used terms in the problem list and a core subset would probably be a good candidate for that.

And also core is used in other ways as well. So, even if you have everything SNOMED in your system then core would also point you to the things that are more alike, because SNOMED...I mean, because it's so big and there are things that are quite nuanced and the casual user may not be able to tell the difference between one from the other and the core subset will focus uses on the most likely correct concept to use.

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

So...

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

So, there are definite ways of using core.

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

Yeah, I mean it has the same fault as all these starter sets which is it looks like it's making things easier but in fact you can't stop with a starter set so you actually have to implement it all. So, it's a poor man's Bayesian weighting, if you want, and you can filter those to the top of your pick lists, but there's plenty or things in medicine that aren't in core that you've got to document otherwise medicine would be a lot easier.

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

Well...

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

So...

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

Well, Dave, you're describing a big space and a big problem. Would you be okay with saying if you...if you want a starter set here's the best one or a good one.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I'm...like I say, I don't mind listing a starter set I just think that we have to be very careful to avoid implying that that's adequate for encoding the range of medical problems, it's not.

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

Yes.

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

Yes, it's just saying...

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

And in practice people actually use third-party starter sets that are much more friendly than core.

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

Yes.

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

I mean, in the real world 85% or 90% of our customers purchase one of these third-party starter sets and I think, you know, for the other large vendors it's the same way because core isn't friendly enough.

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

How many are there Dave?

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

Two.

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

Oh, IMO, who else, because I only know of them.

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

HLL, Health Language.

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

Health Language.

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

I mean, there may be others, but...and what we're doing increasingly is actually building a Bayesian weighting based on the institution's own use of SNOMED...

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

And of, in fact that doctor's own use of SNOMED so the things they commonly use come to the top of the list and it makes it even easier.

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

True.

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

My only point again is just core is a fine starter set but just make sure that people don't think that's an adequate spanning set...

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

But that's...

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

For the problem list it's not.

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

So, that's why we need to make the distinction between the value set which is all inclusive and the starter set.

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

Yes, agree totally, thank you.

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

Are we going to address this problem versus condition thing or can we just that lie?

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

Is that the thing where it's a whole new problem list?

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

No that was...somebody made the suggestion...

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

A concern.

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

I think it's on the previous slide where they shouldn't call it problems, i.e., conditions that's what they were...somebody was objecting to saying, applying synonymy there is wrong that they're not the same.

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

I think...

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

And I'm suggesting we should stay away from that.

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

I agree but I wish they never created this new list called the concerns either but...

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

Yeah, yeah, yeah and then I have one other off the wall suggestion here, if you don't mind, when we tried to take our clients problem lists, which didn't...do not enforce or did not enforce a strict code, in other words we allowed for free text problems, we found many, many very valuable things in free text that just simply could not be coded in SNOMED...

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

And so they were serving very valuable purposes in patient care and yet we had to delete them from the problem list to be compliant for Meaningful Use which was one of those...one of the many irritating things that Meaningful Use didn't get right. So, I'm wondering if there's some approach that says occasionally we may need to encode the fact that this particular problem is a free text problem.

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

I thought we already agreed to that? I like...

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

Did we do that?

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

I thought that came up before. I don't know if we agree to it...got...

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

Maybe I...

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

I thought...

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

I was on that soapbox already, sorry.

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

Well, I agree with it and I thought we might have...Kim or all can you guys...is this something already on the list? I mean, there's stuff like "my car broke down and I can't get to the doctor." I mean, there's all kinds of stuff like that in the problem list.

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

Or, you know, children do not know, you know, or patient does not...whatever, there's just tons of things that are...you know they're important things to share about the patient and they...

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

But you also...

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

End up in the problem list maybe they shouldn't but that's where they end up.

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

But David are these all very like special or idiosyncratic comments or is there a common theme, or just a limited set of things that are generally reported by patients that are common?

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

I didn't do the aggregation and analysis my bet is that there's a fair...there's a subset of them that are fairly commonly seen that could in fact eventually maybe be codified, but that there are some that are just idiosyncratic to actual details of this particular patient including names and, you know, family members and things like that. And again, you could argue they don't belong in the problem list but in fact there isn't a good widely accepted alternate place to put them and sometimes they do need to be interchanged. They need to go with the patient to the next setting of care. And if you have to throw it away, as we did, because it's not SNOMED, you're actually, you know, harming care.

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

We always had free text in our problem list Dave at Regenstrief.

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

Yeah, I mean, it's hard to...

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

Not a lot of it but...and that also made it more acceptable to clinicians because...

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

Yes.

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

If they couldn't find what they wanted to find they could just say it.

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

I mean, there was a huge brouhaha when the Meaningful Use 2 requirements were being settled and our clients became aware that they would have to throw all that stuff out in order to be compliant and it generated intense dissatisfaction.

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

And it seems to be that...

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

We could...

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

Sorry.

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

Go ahead?

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

No, I mean, it seems to me that we may need a better definition of what the problem list is and if the definition turns out to be not able to include the things that Dave you said are valuable in communication then we may need an additional way of communicating that rather than just cramming it in the problem list.

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

Yeah and you could in fact do it with a code that says "this is a free text problem" and then have space for the actual free text so that somebody could recognize, you know, hey that's what's going on here. That's what we had recommended to ONC but they rejected it. I can't remember the reasons.

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

Well, there is a belief structure about the world that may or may not be real.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I'm so tempted to make a political comment but I'm not going to.

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

You want me to save you and interrupt? Any other comments on this section? I'll make one while David is thinking about whether he wants to speak or not. So, again, my views are usually from the data extraction stand-point in trying to figure these out, but just last week I was talking to a system analyst that was pulling data and she said "why do you want to get it from the problem list let's go into the practice manager and get it where we bill." So, we were going back to the claims even though the problem list was supposed to be that longitudinal history because in her eyes the problem list was not sufficient to really capture everything that was going on with the patient because different people could input different things.

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

Yeah, well, that's for sure, I mean, that's absolutely true but that's not a shock or a disappointment, you know, if you can't get a glucose value or hemoglobin A1c level out of the problem list per se you don't know how high it is. But, go ahead?

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

Yeah, so, I think maybe what Kin Wah said was a definition around the problem list could be really helpful because I don't think people know how to use it.

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

Well, I mean, you know, we're talking about a medical school problem not an interoperability problem Kim, you know, the fact that in the US you have to separate problems from billing codes is a weird artifact of our billing system, the fact that medical students aren't trained on how to do billing or how to manage a problem list is not something you're going to address with a standards advisory.

I just...it's just a fact of life that some of the data is in one and some of it's in another. ICD-10 changes the equation a little bit because it has more granularity and billing codes tend to actually be pretty accurate maybe now compared to ICD-9. But we've got to live in that world as they're both out there.

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

Okay.

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

I don't...I mean, I wish...

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

Yeah and you don't get timeframes with the problem list necessarily and I think the problems named by...to say it's a place where you can see everything about the patient and whatever you consider a problem, there was no big constraints on it and that's how it's been used and it is handy, but they didn't always keep it up, you know, it's horrible when 10 doctors are putting in problems because it gets all trashy, there's a lot of issues.

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

This is Dan, my one question or comment sort of directed towards Kin Wah is whether there is already sort of a central place sort of through NLM or somewhere that kind of lays out some of these issues going back a little bit to the, well, if you're going to do post-coordination, you know, here are the set of things you should draw from versus if all you've got is sort a pre-coordinated list and core is that and some of these other issues, is there some sort of discussion, recommendation place that we could include as a reference here?

I feel like if we wanted to try to address a lot of these things this particular interoperability need would have like a page of discussion and I wonder if there is maybe a different way we could accommodate it.

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

Well, so far we have talked a lot about post-coordination and there are actually places not necessarily here, but internationally, that are using post-coordination but they always...the push back is always that there are different ways of doing post-coordination but people's notion of asking the physician or the clinician to do multiple clicks just to get multiple fragments of the meaning is not going to work because they always prefer just clicking a single code. So that is the kind of default argument against using post-coordination.

So, there is no...well, post-coordination the rules itself are quite well defined and it is basically just following the model concept in SNOMED. So, there is no need to include extensions to that.

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

The problem is...

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

I guess...

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

Nobody is...I don't think it's been widely implemented or even narrowly implemented outside of, you know, test cases, the post-coordination. And it would be difficult for users to deal with.

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

So, very often when post-coordination is used it is just used at the back end. So, still the vendors or the implementers of the terminology would add their own codes and define them by post-coordination and then generate a local code which can exist just locally or can exist more openly or shared in like an extension and in that way the users can always have a single thing to click on they don't need to do on the fly post-coordination.

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

Well, that's actually...I mean, so that was the exact kind of paragraph I was looking for sort of like a reference that we could point people towards, you know, essentially just sort of laying those things, because I think, I mean, those folks who are in this area, you know, probably know that and could explain and sort of think, well, yeah, you know, post-coordination typically that's a back end thing versus

a front end thing and so forth, but, if there's like a reference in there, rather than like including several of those paragraphs where it's laying all that out about, well, here's these three axes, but you really only need them if you're going to do this, it seems like that would get very bulky and I'm wondering if there's a better sort of pointer place that we could sort of direct people towards to get the sort of high-level summary as you just described it.

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

This is David, I think it's really complicated and, I mean, you know, the so called combinatorial explosion is what prohibits SNOMED from listing, you know, a single code value that accommodates every possible combination of the SNOMED axes, what happens is the common combinations end up getting their own SNOMED codes and that's just the way world works it's not, you know, from an informatics point-of-view ideal but it's just very difficult to imagine clinicians interacting with a user-interface that doesn't allow them a simple look up of a simple pre-coordinated expression that captures what they want, even getting laterality is difficult.

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

Yeah, so in a way...

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

Yeah, so...

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

Sorry, go ahead, Kim.

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

I was just wondering if you would be able to type up what you just stated earlier that could help point people in the direction.

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

Yeah, that would be helpful, yeah.

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

Okay.

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

Yeah, I think that would be helpful where we're running out of time so if it's okay do y'all mind if we move onto the next slide and then we can...

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

That's...

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

Review Kin Wah's summary and then Brett and I are meeting on Friday afternoon to work on these too, so we'll have some summaries for people to review and recommend on.

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

Thank you.

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

Sure, will do.

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

Thank you. Okay, next slide.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right, so the next slide hopefully will go pretty quick here. So, originally from the public comments a recommendation to consider including language at birth and then also having present or preferred language so potentially expanding out interoperability maybe there having multiple as well as consideration for including dialect as in some regions that can be extremely important for easy communication and then from the Task Force there was support for the existing value set that was listed.

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

Well, I would suggest forgetting most of this. I mean, we keep asking more and more questions. I thought there is one already, preferred language and that makes sense. I thought that's somewhere. But, I mean, these things split forever, you know, southern drawl, North Carolina drawl, I mean, I think that's a very slippery slope.

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

Georgia drawl.

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

Yeah, I mean, come on, you know, you'll figure it out if they can't understand them, but, you know, what am I going to talk in a Georgia drawl if they say that's the preferred dialect you know.

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

But I think there's some countries where those dialects are much less common.

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

We have a list of 900 languages including Latin and 10 other dead languages already on the list, you know, I think this has gotten silly.

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

So, last year we recommended that they do have a smaller value set of the language codes.

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

Yeah, I don't know if it affected anything. But I do think there...I think there already is a requirement in...maybe in somebody's world, in America, that you have to ask the preferred language somewhere, but if, you know, if they're born, you know, they didn't have a language when you're born, you know, you don't have a preferred...you're not talking when you're born. So, a language at birth almost doesn't make sense.

So, I mean, I think we should make sure there's not already a preferred language and that's something that I think...I think it's already checked...the registry system has already checked that and I thought it is required somewhere already in Meaningful Use but I'm not sure.

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

Again, we're about interoperability not about requirements.

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

Right, right.

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

But it's about the value, more about the value set than exchanging it...

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

Yeah.

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

At this point.

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

Yeah and I would re-emphasize let's get that skimpier language value set where people sit and argue for days about trying to decide whether it's Southern Latin or Northern Latin.

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

Okay, any other comments?

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

I don't...

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

Oh, go ahead?

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

Oh, I'm just...I mean, in a computer system that's got smart look ups it shouldn't matter if there's 900 or 90, I'm not sure that it matters.

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

Well, you might...yeah, you might...auto-complete, but, you know, you start getting...

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

Exactly.

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

Gray lines, you've got to decide which one you really mean there's more choices to make.

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

Well, you ask the person and you pick what's closest and then you move on. I don't know...I don't think the size of the pick list should be a function of our concern usually. I mean, that's where our starter set construct comes in. If you need a smaller pick list create a starter set.

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

Well, the problem with the rules are that they tend to induce the inclusion of the biggest ones and everyone doesn't give a gracious way to get at them.

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

Yeah, so maybe we should suggest a starter set of the, you know, 50 most common languages would be appreciated to somebody but...

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

Yeah, yeah, right.

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

You know if it's a valid language by somebody's definition I don't think it matters...

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

But, I mean, how many...we can only...how many translators do we really have, we've got like 10 or 20 languages that we can find translators for...

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

But, Clem...

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

And it gets limited pretty quickly.

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

These are computers though we can capture specificity and then you map...

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

All right, well...

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

That's somebody else's job to map to, you know, best available translator.

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

Okay, all right, I'm happy to move on.

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

Okay, let's move on.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

All right so for procedures some public comments a recommendation to replace SNOMED-CT with CDT for dental procedures it's a named HIPAA code set and used in every dental system in the US and adoption level should be reflected...suggestion to add ICD-9-PCS for medical procedures for analysis, decision support and quality measurement purposes while clarifying new documentation uses to add ICD-10 standards. A limitation on ICD-10-PCS is only for inpatient procedures and then explore development of value sets for observational, interventional and other procedures.

And then from the Task Force for dental procedures there is a need for transcoding from CPT-2 to SNOMED CT and note that SNOMED is not used as much as CPT-4 and should recognize that in the ratings of adoption. A note around some of the HCPC codes used in association with CPT being important, especially in clinic drugs SNOMED may have too many to choose from. ICD-10-PCS contains too many codes as a note.

And then on the next slide a few more comments from the Task Force core problem being ICD-10 is used for billing, public health, statistical purposes. CPT-4 developed for billing in US only. SNOMED CT is better for personalized and individual care. A note that SNOMED CT most explicitly describes what is done for a specific patient, completely separate procedure codes based on "intended use" for clinical care requiring SNOMED CT, providers using CPT-4 for reimbursement.

Problems around CPT codes for uses other than billing and a need to distinguish better surgical procedures versus tests and that they not be specified enough in SNOMED.

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

Well, the real challenge there is it's the procedures versus the tests, I mean, there's a duality, you know, there's a bill for the procedure but they don't often report it by that name and so it's that issue that conflicts between test names and procedure names.

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

And I think those comments about the frustration of the restrictions on the use of CPT probably came from me, you know, if you want to offer helpful explanatory text to a consumer as to why their bill charged them x-dollars for a certain procedure you have to go through a very expensive licensing process that just seems counterproductive to what we like to do in healthcare. So, I don't why we keep using them but that's...

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

Well, it's because of what everybody is used to but that's an ongoing issue.

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

Yeah, I mean, it's required, I mean, it's a legal monopoly.

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

Are there alternative codes that would work fine?

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

Well, I gather that most of the procedures are available in SNOMED, you know, for billing purposes right now you couldn't use a SNOMED but I think many of the procedures at least in terms of just spanning them are in SNOMED. I don't know what the overlap is but it's high.

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

It's still...

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

I mean, it's not the space of this Task Force to address it it's just a frustration that something so important as understanding why your healthcare costs what it does is not viewable without an expensive license.

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

Well you think you could carve out those kinds of uses, the three for licensing in some future world?

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

We've tried.

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

Yeah. Kin Wah is CPT in NLM?

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

Yes.

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

I think it is.

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

Yes, it is and so is ICD-10-PCS. I think this is probably not for this Task Force to address, it's just to reflect the unfortunate reality that there are multiple code sets and some are better than others for some purposes but they are necessary for historic reasons to be present in the EHR.

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

This is Dan, I do think the Task Force could make a recommendation that helped address one of the public comments which was to design these value sets or starter sets for things like radiology tests and lab tests with this one that we're looking at from the Task Force, I think it was Clem's comment, the last bullet there which the public comment was a reflection of what Clem was talking about meaning there's still some sort of lingering confusion when we say procedure what are we talking about and it's...because some people would lump lab tests in that category which we're dealing with separately. So, I think kind of having a clear articulation of what's meant by a procedure would be helpful.

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

Well, at one time HL7 actually, you know, focused procedures and body invasive things and I don't know if they still do. And the other things were described differently. I mean, the problem is it's a word that means a lot of things and certainly a lab test is a procedure, but if we're talking about the coding forum you could use the LOINC codes for the billing procedure too. There are different use cases, it's complicated.

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

Yeah, I guess my point is that it would be nice if there was some greater clarity around the interoperability need that's meant to be represented by just sort of saying procedures.

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

I think that would be...I think it would be great if ONC would actually say we should use LOINC codes for x-rays and for lots of other testing put them in an HL7 message and get them physicians. Right now there's just nothing in any of it that says anything about getting ordered tests back to physicians or providers of any kind.

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

This is Kim, I just realized I was taking notes and wasn't paying attention to the time it's 2:29 so Clem and Dan would y'all want to put together a couple of points, and David for this procedure section and send them in and then Brett and I can work on them? Would that be okay?

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

Okay with me. Dave?

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

Well, I already put my comments in on the online thing, but, I'm frustrated that we can't make much traction here, I don't know that we...I don't have a lot to offer frankly that's relevant to ISA.

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

Okay.

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

I mean, there's a broader problem that CMS should deal with in terms of the requirement of CPT codes, they should pay for those so that the rest of us can use them just like they do with SNOMED if you're going to require them, but that's not an ISA, that's my opinion not an ISA issue I don't think.

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

I like that for a suggestion though Dave.

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

Okay, well, I think we have to pause and go to public comment so I'm going to turn it over to Michelle.

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

Thanks, Kim.

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

And also Brett had sent out the e-mail for us to send in comments for two and three by Monday. So, if you have a chance to get that in that would be great. Michelle, sorry.

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

No, thank you, Kim. Lonnie, can you please open the lines?

Public Comment

Lonnie Moore – Virtual Meetings Specialist – Altarum Institute

Most certainly. If you are listening via your computer speakers, you may dial 1-877-705-2976 and press *1 to be placed in the queue. If you are on the telephone 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 was public comment there were just a couple of comments left in the chat which we'll send around as well. So, we have follow-up items that we'll follow-up with the group on.

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

Thanks.

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

And it looks like we have no public comment. So, thank you, all, we'll regroup next week. In the meantime have a wonderful weekend and thank you guys.

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

Thank you.

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

Thanks.

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

Bye.

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

Bye.

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

Bye.

Brett Andriesen – Project Officer – Office of the National Coordinator for Health Information Technology

Thanks, all.

Public Comments received during the meeting

1. Dani Przychodzin: Have you considered using the classes used in Structured Product Labeling - MOA, PE and CS?
2. Dani Przychodzin: Isn't NDC used to convey information about excipients in clinical exchange?
3. Vojtech Huser: the same as for conditions: There should be OID provided to point people to an axis in Snomed to draw Procedures from
4. Vojtech Huser: (we provide one for dental and none for non-dental general medicine)