

Transcript
October 11, 2019
Virtual Meeting

SPEAKERS

Name	Organization	
Kensaku Kawamoto	University of Utah Health	Co-Chair
Steven Lane	Sutter Health	Co-Chair
Andrew Truscott	Accenture	Member
Anil Jain	IBM Watson Health	Member
Arien Malec	Change Healthcare	Member
Clement McDonald	National Library of Medicine	Member
Cynthia Fisher	WaterRev, LLC	Member
David McCallie	Individual	Member
Edward Juhn	Blue Shield of California	Member
Leslie Lenert	Medical University of South Carolina	Member
Ming Jack Po	Google	Member
Raj Ratwani	MedStar Health	Member
Ram Sriram	National Institute of Standards and Technology	Member
Ricky Bloomfield	Apple	Member
Sasha TerMaat	Epic	Member
Scott Weingarten	Cedars-Sinai Health System	Member
Sheryl Turney	Anthem Blue Cross Blue Shield	Member
Tamer Fakhouri	Livongo Health	Member
Terrence O'Malley	Massachusetts General Hospital	Member
Tina Esposito	Advocate Aurora Health	Member
Valerie Grey	New York eHealth Collaborative	Member
Victor Lee	Clinical Architecture	Member
Seth Pazinski	Office of the National Coordinator	Designated Federal Officer

Operator

All lines are now bridged.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Thank you. Good morning, and welcome, everyone, to the Interoperability Standards Priorities Task Force meeting. My name is Seth Pazinski; I'll be serving as the designated federal officer for Lauren Richie for today's task force call. So, we'll officially call the meeting to order. Let's start with roll call. Please say "Here." Steven Lane?

<u>Steven Lane – Sutter Health – Co-Chair</u>

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Ken Kawamoto?

Kensaku Kawamoto – University of Utah Health – Co-Chair

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> <u>Federal Officer</u>

Ricky Bloomfield? Tamer Fakhouri? Valerie Grey? Anil Jain?

Steven Lane - Sutter Health - Co-Chair

Anil is on the meeting, so he's probably almost here.

Anil Jain - IBM Watson Health - Member

I'm here. Sorry, I was on mute.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Thank you. Les Lenert? David McCallie?

David McCallie – Individual – Member

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Terry O'Malley?

<u>Terrence O'Malley – Massachusetts General Hospital – Member</u>

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Raj Ratwani? Sasha TerMaat?

<u>Sasha TerMaat – Epic – Member</u>

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Sheryl Turney? Tina Esposito? Cynthia Fisher? Edward Juhn?

Edward Juhn - Blue Shield of California - Member

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Victor Lee? Arien Malec? Clem McDonald? Ming Jack Po?

Ming Jack Po – Google – Member

Here.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Ram Sriram? Andrew Truscott? And, Scott Weingarten? Okay. Any other participants that need to announce themselves? Did I miss anyone? All right. That completes our roll call. I'll turn things over to Steven and Ken to begin today's meeting.

Steven Lane - Sutter Health - Co-Chair

Thank you so much, Seth. We appreciate your pitching in today for Lauren. So, on the next slide, we have the charge of our task force, which I will not read through. Most of you are familiar with this. Welcome to the members of the public who are with us today. I think we've seen most of you before, so we appreciate your following this work with interest. The next slide is the members of our committee. As a reminder, it's good to have all of you here today who have made it. On the next slide is our schedule, and you can see we are up to our October 11 meeting, so we can put a check mark on that one.

This is our last scheduled task force meeting. We are presenting our recommendation report to the HITAC next week. If there is feedback from that that requires us to come back together to address any key issues, I think we will figure out how to do that, but that is not scheduled at this time. And then, on the next slide is what we're going to be doing today, which is our final pass through our draft report, and we can switch over to that. Again, I want to really thank the people who have spent time providing input to this document. Clem McDonald in particular has been very busy this week, working with his staff member Liz Amos to generate a number of additional suggestions. Clem is not yet here to

represent himself, but I think we've talked through these, and we want to bring them forward with the task force. Others, including Sasha, have provided some recent input.

Our plan, insofar as we can, is to get through the remaining comments. Knowing this is our last day, we are not going to plow any new ground today. We do have a plan to try to finalize our report over the course of today, and then we'll get that distributed to the HITAC, so if there are open items in the parking lot, we're going to try to pull those together, either at the end of the report or in an appendix. We have reassurance from other members of the HITAC that they are enthusiastic to include our recommendations for future attention in the HITAC annual report, so I think there is a good sense that even things we have not been able to completely resolve here will again see the light of day, and we'll have a chance to evaluate them further.

Clement McDonald - National Library of Medicine - Member

Steve, this is Clem. I am on the call, but I haven't been able to get connected electronically yet.

Steven Lane - Sutter Health - Co-Chair

Great. It's good to know you're here, Clem, to represent some of your great ideas. Ken, any other words to kick us off today?

Kensaku Kawamoto – University of Utah Health – Co-Chair

No, let's finish.

Steven Lane - Sutter Health - Co-Chair

All right. Well, maybe we can just jump right in. I think the Excel folks have this pulled up almost as big as they can. They might be able to squeeze another five percent out so that people can see it more clearly, but we are in the section at the very top, where we're discussing cross-domain recommendations. Above this, we've touched on a few items, but here, we are in the section on multiple competing standards, and we've observed that there are many standards, and we're trying to suggest that ONC find a balance between moving too quickly and moving too slowly, and Clem had a recommendation to actually strike some language here and make a certain change, and I think it does refine and sharpen our recommendation and take out some extra verbiage, so I wanted to bring this to the group for consideration.

Kensaku Kawamoto – University of Utah Health – Co-Chair

It does semantically change the meaning because before, we were saying "Some of the things that we want to consider are it may ultimately be better for a problem or a constellation of problems," and Clem's recommendation just changed it to "The only consideration is whether it's an appropriate use, or in widespread use." For example, that would mean a non-FHIR based approach for that particular use case may not be considered, so I just added "...such as those that are." I just wanted to avoid a case where we say "The only consideration for what should ultimately be used in the area is, for example, that it's currently in widespread use."

<u>Steven Lane – Sutter Health – Co-Chair</u>

That's a really good point, Ken. I had the chance to sit in on the Gravity Project call yesterday with Terry, and certainly, social determinants of health are not yet in widespread use, and yet, they are very important, so that's a really good point.

Clement McDonald - National Library of Medicine - Member

I'm not against what Ken suggested, but it was when there are two that are competing – that's the decision. If there's nothing in use, then of course, it's an open game, but I'm not opposed to what Ken's suggesting.

<u>Steven Lane – Sutter Health – Co-Chair</u>

So, are we comfortable with shortening this up a bit with that caveat? Great.

<u>David McCallie – Individual – Member</u>

This is David. Can you hear me?

Steven Lane - Sutter Health - Co-Chair

Yes, and I can see your hand. I apologize.

David McCallie – Individual – Member

No problem. I think the spirit of what we might want to capture, which I think you've got, now that I look at it more carefully, is the thing that we wrestled with a good bit in the early days of the standards committee. It was picking standards or endorsing standards that had never seen any testing in the real world, and that that was something we really wanted to avoid. Just because something is a standard doesn't mean it's actually any good. But, I think "widespread use" might capture that here. I don't know that it has to be widespread; it just has to be tested in real-world use.

Clement McDonald - National Library of Medicine - Member

I was trying to contrast – if you've got two standards, and one of them has just been invented and the other is in wide use, it shouldn't be a challenge about which one to pick. We could wrestle with this wording for a long time.

Kensaku Kawamoto – University of Utah Health – Co-Chair

So, Clem, just to understand, what you're saying is, for example, in a place where Direct messaging is in more widespread use than FHIR, we should never consider using FHIR. That's sort of what's implied, right?

Clement McDonald – National Library of Medicine – Member

I don't think I meant that, and I don't think I said it. I said when there are competing standards – and, I don't know if Direct would be competing with FHIR anyway as a direct competitor.

Steven Lane - Sutter Health - Co-Chair

No, I think so. I think there's a lot of discussion about changing technologies from existing to future. Terry, you have your hand up. Do you want to jump in?

<u>Terrence O'Malley – Massachusetts General Hospital – Member</u>

We're wrestling with the same issue in USCDI. What does it take to become technically mature, and to what extent does it have to be tested? In a sense, how widespread does it have to be? I'm wondering if we want to somehow use the same language here.

Clement McDonald - National Library of Medicine - Member

Do you have language, Terry?

Terrence O'Malley – Massachusetts General Hospital – Member

We're going to talk about that this afternoon, Clem.

Clement McDonald - National Library of Medicine - Member

Well, whenever we get into these work groups, we're smithing hearings, and I don't know that we're going to get done this morning. I wasn't trying to keep everything out, but rather, I was trying – we've been at this at ONC for 10 years now, and until FHIR came along, the progress was slow. I'd just like to see something happen before I die. We're glacial. We worry so much about doing this exactly right that we don't get anything done. We are getting stuff done now; I should take it back, but some of us have been in this business for 20-30 years, and it's really slow. I don't think we need ways to make it slower.

Steven Lane - Sutter Health - Co-Chair

So, Ken has added some additional language here. David, do you have a comment?

David McCallie – Individual – Member

There was quite a bit of discussion about this topic in the standards advisory task force from a couple of years ago, and I recall that there was some language in there around how to characterize the maturity of standards. One option here is to refer back to that work, maybe to the work that Terry mentioned. This is a huge discussion. We've spent hundreds of hours in various task forces on this topic, so I don't think we're going to capture a single sentence that summarizes it.

Clement McDonald - National Library of Medicine - Member

In ISA – we were both on that committee, and we did the same thing, and we came to some conclusions. Now, it's like we started all over.

David McCallie – Individual – Member

Clem, my memory is we had some categorical ways to describe and capture the essence of the tradeoff issues. I don't have any of it in front of me, but it's not a fresh subject. ONC is deeply familiar with the tradeoffs. I'm not sure we need to obsess on this language anymore, but maybe just reference existing ONC work in this area. USCDI is wrestling with it too. Nothing we write here is going to change the fundamental debate, only time.

Steven Lane - Sutter Health - Co-Chair

Okay. Ken, thank you for attempting to wordsmith that. I think we've captured the spirit of Clem's suggestion here, and I think we've got some language that's going to be acceptable, and, as you say, we're not really going to shift the game here. Any objections to moving on? Hearing none, we have

another subsection that was added down here on patient access to data. This was in response to a long discussion we had when Cynthia was here, and I think this is a simple statement. Ken and I have each contributed to this a little bit – just the notion that a patient's access to their own data is critical across domains. Are there any comments or concerns about adding this language?

Clement McDonald - National Library of Medicine - Member

No. Well, there was a discussion about how fast and all, but is that still captured -

<u>Steven Lane – Sutter Health – Co-Chair</u>

Yeah, that's elsewhere. Okay, the next set of comments – again, largely coming from you, Clem – are down on page 9. Some of this at the top here is simply trying to clarify the distinction between how LOINC and CPT codes are used for the tests versus the values, so I think that that's just clarifying language, so –

Kensaku Kawamoto – University of Utah Health – Co-Chair

And, I'll just make a note that there was a comment from Clem, with Liz transposing, that it should be "values" rather than "results," and that it has been "replaced everywhere." It has not been replaced everywhere, so I just added "results or values" so that we use them synonymously here. If you really think that we should not use the term "results," we have to do pretty massive editing, and I think it's easier just to say we should consider results to be values.

Clement McDonald - National Library of Medicine - Member

I agree.

Steven Lane - Sutter Health - Co-Chair

Great. So, we've got a number of these that we want to just go ahead and accept here. There's the addition of the specific LOINC code, et cetera. We'll just go ahead and accept all of those. The next substantive change comes a little bit lower down. We had talked about the IHTSDO document, which has been published, regarding using LOINC and SNOMED CT. Liz pointed out to us that there is actually an ONC resource on the same topic, which is probably even more worthy of adding here. The question that came up was whether it made sense to list both of these, or just one. Clem, you were suggesting maybe even dropping the IHTSDO reference. Personally, I think having them both there is fine, but I'm curious what others think.

Clement McDonald – National Library of Medicine – Member

I would just clarify that the IHTSDO reference covers a lot of space. It's not just "observations/results." I think it's useful for that, but it may be in the wrong place then. When we're just talking about observations and values, I think it's fairly simple, and the ONC specification is pretty good. It's really more inclusive than just the one from IHTSDO, so I would suggest finding another place for that where there are lots of fields that are relevant to SNOMED.

Steven Lane - Sutter Health - Co-Chair

Well, in this section, we are discussing orders and results, our top priority issues, and the need for consistent encoding of tests and their result values.

Right, but that document isn't targeting that specifically. It's covering the whole standard for where SNOMED should go, so that's why [inaudible] [00:16:52]. Pardon?

David McCallie – Individual – Member

I think it's useful to keep it in. It's not going to – it's a useful reference. It's not authoritative.

Steven Lane - Sutter Health - Co-Chair

I don't think we're harming anything by including the two references.

Clement McDonald - National Library of Medicine - Member

All right.

Steven Lane - Sutter Health - Co-Chair

Great, thank you, Clem. I think we have them in the right order here, highlighting the ONC one first. All right, down on page 11, Ken, you did some rearranging of this section – or, I guess this is on top of Liz's additions and comments. There's a long comment here on this section.

Clement McDonald – National Library of Medicine – Member

Is that from me? We can dispense with that one. I meant to get these either gone or skinnier.

Steven Lane - Sutter Health - Co-Chair

Okay. But, just to be clear, where we are in our document is "Policy levers and recommendations related to this need for consistent encoding," and where we've ended up is with a recommendation to accelerate existing LOINC work to represent new codes that have come into use. There is a new reference to the group tables being developed by LOINC, so I think one of the advantages we have is that Clem is very familiar with the work going on at LOINC and the details of that, so, referencing some of that... And then, there is some changed text recommended here where we had considered introducing a standard approach to developing provisional LOINC codes, and Clem, you and I spoke about this at length yesterday. The challenge of provisional codes versus using local codes — how do we grapple with this whole issue of new tests and methodologies that come online? People want to be able to exchange them before LOINC has done all of their work.

What Clem clarified for me and what we'll discuss here briefly is the fact that LOINC actually has a process in place to develop pre-release of codes, or to pre-release codes that haven't been through the full vetting and finalization process, but are available for use, and I think that's very much what we were talking about. We had referred to them as "provisional," but LOINC is already doing this and referring to them as "pre-release," and there's actually a reference here to that program. So, the proposal was to replace our language about provisional codes with an acknowledgement of the LOINC pre-release process. Ken, you're adding some language above, but the —

Kensaku Kawamoto – University of Utah Health – Co-Chair

We deleted the phrase that said to support using local codes or other standard codes when there isn't an appropriate LOINC code, and you basically deleted saying, "Well, FHIR supports it." I agree that FHIR supports it. I think the key here, then, is to say the CHR and HIT systems that implement those standards need to make sure they really allow that. Even if a standard says it is, if an implementing system treats it as well, we're still going to require LOINC, which has historically been the case, then it defeats the purpose of that being the standard.

<u>Clement McDonald – National Library of Medicine – Member</u>

Well, I'm not sure I'm following, but it is a mess when you get into those systems, and there aren't LOINC codes there, either, and places that have them in their labs and send them to them. So, there's a whole tangle of realities there, but the thing I worry about is if we have mixed code systems and people are not encouraged to ask for a code and discuss it, we won't get to standardization, and the reason I am very negative about people making them up on their own, putting them in, and calling them LOINC is that it'll be a total mess. There will be no motivation for them to submit the details needed to get it right. So, I'm not sure which word you're looking at because I still can't get on the web version, but...

David McCallie – Individual – Member

Technically, this is a namespace problem, and a code includes both the namespace of the code, which should be unique and not duplicated across the industry, and a code itself, which should be unique within the namespace. I think this is a fairly well-understood problem. FHIR deals with it in an internet-style approach of using URIs for namespace identification.

Kensaku Kawamoto – University of Utah Health – Co-Chair

I'm not getting at the standard piece, I'm getting at the standard implementation piece, where even if a standard binding says "extensible" – where the definition of "extensible" is if there isn't an appropriate code in that value set or terminology, you can use something else – that doesn't mean an EHR vendor actually supports that. For example, if you have lab data in your system or some other observation for which there is no actual LOINC code, and you want to map it, it may not actually be supported, for example, to propose it through FHIR. I think what I'm putting here is non-controversial at this point. It's just saying that where the standard says it should be extensible, which it is, it actually provides a full [inaudible] [00:22:48].

Clement McDonald – National Library of Medicine – Member

I'm okay with that.

David McCallie – Individual – Member

Again, in the real world, with EHRs, almost all the codes that are actually in use in the internal transactions are local codes, in some sense. They're off on locally generated codes. Where it matters for interoperability is where they get mapped for interchange between systems. That's when this issue comes up. If there's no mapping for the local code to an appropriate LOINC code because either the LOINC code doesn't exist or people don't understand the right mapping, then they need a consistent way to indicate that they're sending you something that isn't mapped to LOINC; in fact, it's mapped to the local space. But, I think all the companies do that already.

Steven Lane - Sutter Health - Co-Chair

Ken, I don't understand your introduction of this term "in FHIR" here. Help me understand that.

Kensaku Kawamoto – University of Utah Health – Co-Chair

So, realistically, we're just talking about FHIR right now, right? We're not talking about HL7 -

Steven Lane - Sutter Health - Co-Chair

We're talking about need for consistent encoding of tests and result values in standard codes.

Kensaku Kawamoto – University of Utah Health – Co-Chair

So, let me just step back. This discussion came about with the notion of "What do you do when there is not a LOINC code available to represent what you're trying to represent," right?

Steven Lane - Sutter Health - Co-Chair

Right.

Kensaku Kawamoto – University of Utah Health – Co-Chair

One of the informed use cases where we have been focusing – I'm addressing the fact that Clem's counter-argument that there be codes used other than LOINC was that FHIR already allows it. That's why I restricted that part to "in FHIR." I'll say "other than LOINC in a FHIR observation resource." How's that?

Clement McDonald - National Library of Medicine - Member

Actually, the FHIR binding is pretty tight on LOINC, and I think what Ken is specifically worried about – he'd like to get a term in for home blood pressures, and my counter is that there are at least three ways to represent that, and we need a discussion of that before just throwing it out there. Maybe what's needed is a place in FHIR to say "location" so you don't have to make a new, pre-coordinated term for it. In LOINC, there are terms that are not pre-coordinated. They're extra ones you put in with the message that can say things like that, and it goes on and on.

Steven Lane – Sutter Health – Co-Chair

I don't think this is the part of our document where we're addressing that. This is about orders and results, so we're not into pre- and post-coordination of blood pressures. Ken, I also don't think that this is – we're not talking about FHIR here. We're just talking about encoding in this whole section.

Kensaku Kawamoto – University of Utah Health – Co-Chair

Let me just remind everyone that this came from Sasha from Epic as a recommendation to allow this, and she's not here, but –

<u>Steven Lane – Sutter Health – Co-Chair</u>

No, she is.

<u>Sasha TerMaat – Epic – Member</u>

I am here. Our recommendation was a little bit different. We thought it would be helpful to have provisional LOINC codes for the time periods while you're waiting for an appropriate LOINC code to be available. It's been modified somewhat since then. I still think provisional LOINC codes would be helpful for that waiting period. I think in general, the description of supporting coding when an appropriate code is not yet available is reasonable, but it's not quite the same as what we had originally, and it wasn't specific to FHIR in our original suggestion, although I understand FHIR would be one use case.

Steven Lane - Sutter Health - Co-Chair

I just think adding FHIR here unnecessarily confuses this discussion. David, did you have a comment?

David McCallie – Individual – Member

Just a question for Sasha. When you say a "provisional LOINC code," would that be a code issued by some process at LOINC, or a code generated by the vendor and just flagged with the status that they'd submitted it to LOINC? In other words, is there a process point here of saying LOINC needs to be able to generate provisional codes? Is that the point you're trying to make?

Sasha TerMaat – Epic – Member

Yeah, I think we envisioned a standardized method by which provisional codes could be available that were identified as provisional LOINC codes, which would be replaced at some point by more appropriate codes when those became available.

Steven Lane - Sutter Health - Co-Chair

Sasha, is that distinctly different than what LOINC is doing with their pre-release codes?

Sasha TerMaat – Epic – Member

I would have to follow up with colleagues to know. I am not sure offhand.

Clement McDonald – National Library of Medicine – Member

Well, I actually suggested that if LOINC could get some more resources, they could have a pre-prerelease code. It's just that if you don't get any process, it'll be a total mess.

Steven Lane - Sutter Health - Co-Chair

Well, again, this being our last meeting, I don't know that we have time to go back to the people who had concerns. We're trying to acknowledge a number of things here. Where we ended up is that in this situation, where new tests, observations, methodologies, or instruments are introduced, we've suggested to support the EHR and HIT systems in using local codes when needed, to accelerate LOINC's work to move forward new codes, and to acknowledge LOINC's pre-release codes and allow their use. Again, I don't think we've done anything very controversial here, but in the absence of more time to dig deeper, I propose we leave this as is and move on. Does anybody object to that? Hearing none, let's go ahead to the next set of comments, and that is going to be down on page 13. Here, we are discussing semantic interoperability and the requirement for industry consensus around information models, including metadata and associated terminologies — so, clearly a big area. Clem, this is where the whole blood pressure pre- and post-coordinated topic is probably more applicable.

I agree, and I agree we can't solve it today.

Steven Lane - Sutter Health - Co-Chair

Okay. So, we do have some additional language that you've suggested. "LOINC does include panels that present a more post-coordinated approach to blood pressure measurements that specifically calls out cuff size, standing versus sitting, and other attributes – in fact, many such panels. However" – we probably don't need that – "however, expert advice from other sources is needed to create the most useful such panels, and to move beyond semantic interchange of simple results" – I think we're trying to cram a lot in here.

<u>Clement McDonald – National Library of Medicine – Member</u>

I was trying to preserve the original text that came from David, and it didn't work.

<u>David McCallie – Individual – Member</u>

This is David. I'm happy that this captures the treetops of the complexity of this issue, and recognizes that simple results approaches don't necessarily automatically extend to more complex results, that more work is needed, but I think we've got that. I'm okay with it.

Steven Lane - Sutter Health - Co-Chair

I would suggest that we...try to skinny this down a bit. We don't want to make a mess of our fine work here at the last minute as we're getting it out the door.

Clement McDonald – National Library of Medicine – Member

Do what you think is best.

Kensaku Kawamoto - University of Utah Health - Co-Chair

I think everything written is pretty reasonable. The big-picture issue that we're discussing here is that you can only get so much with pre-coordinated terms, which allow the simple stuff, but you need post-coordinated models for appropriately representing some of these things. I think that's totally reasonable. It's just the next phase. It's not where we're at now.

Steven Lane - Sutter Health - Co-Chair

All right. So, everybody, take a look at the language you're seeing. We'll get down to the recommendations in a bit, but in the observations, is anybody uncomfortable with where this ended up? All right. Good. Now, let's scroll down to the recommendations section on the same topic, about the need for consensus around information models. There are quite a number of recommendations that we have here. Sasha, you've chimed in with some of these, as has Clem. So, Sasha, I added language here, I think in response to one of your comments at the top here, about how the long-term goal is to be able to exchange all clinical data with standardized information models and terminologies. In the short term, there is value in identifying and prioritizing the most important data. That was one thing. You called out, "We need to be clear. Are we talking about everything, or just this priorities list?"

<u>Sasha TerMaat – Epic – Member</u>

I think that resolved my concerns, which we talked about in more depth at the previous meeting.

Steven Lane - Sutter Health - Co-Chair

Okay.

Clement McDonald - National Library of Medicine - Member

I certainly support her idea, but we've got to get to everything.

<u>Steven Lane – Sutter Health – Co-Chair</u>

Yeah. Again, the long-term goal is everything. And then, the next bullet here – this has to do with our discussions with the AMA and/or other professional societies – "Define standards and expectations of collection exchange of structured documentation of key observations that should be included in referral requests."

<u>David McCallie – Individual – Member</u>

Maybe the referral request option is something that's in our closed-loop section. Does it make sense here? It says it's an example, for example.

Steven Lane - Sutter Health - Co-Chair

This is a recommendation regarding semantic interoperability and information models.

Clement McDonald - National Library of Medicine - Member

I thought that specific thing was generated by the need to have lists of what the referred physicians should –

Steven Lane - Sutter Health - Co-Chair

You're right, and we do address that in the closed-loop referral section.

David McCallie – Individual – Member

I'm just suggesting that this referral request is an example of where semantic interchange of structured data may be useful. If there are other uses as well that might be even more useful than just in referral requests, I'd like to see them in the result of the referral. What did the consultant actually capture about the patient? It's not going to incorporate that back into my record. I think as long as you put in there that this is an example and not a target...

Clement McDonald – National Library of Medicine – Member

What I was trying to do – because it was focused on getting experts in from the AMA and other places, I wanted to highlight the fact that there's an activity going on, which I think Epic and other centers are involved with, for defining risks of measures and drugs that are tied to a problem, and I highlighted that below. But, that isn't specifically for referral requests, and it's something that's underway from the University of Wisconsin that we don't have to start all over.

<u>Steven Lane – Sutter Health – Co-Chair</u>

I think that this whole discussion may be in the wrong place. I'm not sure we even need to include this example in this section. Again, we get to this later on. I'm still on bullet 2 here. I'm not sure we need to reference any of this referral stuff in this section. It's really about industry consensus around information models.

David McCallie - Individual - Member

Steven, I think the point is that developing information models requires the support of the clinical community in addition to the standards community. I think that's the point that needs to be captured. The referral part of it is just an example, and could be dropped, in my opinion, because we deal with it later. The point here is that you can't just set these complex data lists without clinical input, which may involve a broader group of people than are typically participating in standards bodies – infrastructure standards like FHIR. I think that was the spirit of point 2. There you go.

<u>Clement McDonald – National Library of Medicine – Member</u>

I just finally broke through my barriers. I'm connecting.

David McCallie – Individual – Member

Two cheers for interoperability.

Steven Lane - Sutter Health - Co-Chair

And then...I like that, Ken. This other sentence that you added here, Clem – "Note: Big new collaborations are not needed to define terminology standards for many simple observations" – again, I don't know that this adds to the...

Clement McDonald – National Library of Medicine – Member

You can take it out. One example was ejection fraction. That's the problem. You don't need to do anything new to the ejection fraction, so if we took that out, we could take out the rest, too, because it's a simple variable.

David McCallie – Individual – Member

The point that was being made about ejection fraction – and, I think I'm the one who brought that up – it's not that we don't have a standard code for ejection fraction, but we don't have a standard assumption that ejection fraction is part of a standard interchange. It's not a question of defining the code, it's of defining the clinical content that should be encoded.

Clement McDonald - National Library of Medicine - Member

Well, that's a good clarification. If we can get that in there, then we can... I didn't pick that up.

David McCallie – Individual – Member

Sorry if I wasn't very clear. There may be a need to specify exactly what we mean by "ejection fraction." Does that have to come from an echo, or can it be a clinician's bedside assessment, or based on –

<u>Clement McDonald – National Library of Medicine – Member</u>

There are a number of ways to do the echo.

David McCallie – Individual – Member

Right, and the point wasn't to define that, the point was to say that if you send me a referral for congestive heart failure, I expect a structured bit of data about the last known ejection fraction, as well as how much pitting edema they have, and what's their...

Clement McDonald – National Library of Medicine – Member

I understand what you're saying, but I didn't read it that way. And, it's to find out what should be sent.

Steven Lane - Sutter Health - Co-Chair

Okay, Ken. Again, you've taken a stab at modifying this. It now reads "For example, ejection fraction already exists in LOINC, but there is not industry consensus that the information will be exchanged if collected in a system, or that a heart failure referral should include that information." I think that captures what you were saying.

Clement McDonald - National Library of Medicine - Member

Yes, right.

David McCallie - Individual - Member

I'm good.

Steven Lane - Sutter Health - Co-Chair

All right! Excellent. Bullet 3 – I think the changes here are largely just editorial, so, Ken, thank you for those. Bullet 4 is clean. Bullet 5 – again, this was an earlier comment from Clem that we incorporated a couple weeks back. Actually, we jumped over bullet 3, but it is new. I'm sorry. Clem pointed out some good work that's being done around – interestingly, by a clinical system that takes advantage of their EHR vendor's functionality to collect relevant data related to problem list items, and they've done a lot of work collecting and specifying what the relevant lab results are, or other data that should be considered in the context of a problem, and Clem suggested incorporating this here. Here again, I do wonder whether this belongs more down in the section on closed-loop referrals and care coordination as opposed to this section here.

Clement McDonald – National Library of Medicine – Member

It's related to that, but the reason – it isn't planning. There was a URL there, but it was sort of a lonely one that didn't make sense, so I kind of elaborated on the URL.

David McCallie – Individual – Member

This is David. I helped get this group launched. I think it's great work, and it is a good example of what we're talking about here, so I'm perfectly happy to leave it here. I don't necessarily think that what they're building will be all that useful in referrals because of the way they are deciding what's in their tables, but it is an example of clinicians deciding on what coded data is important or may be important for a particular clinical situation, as captured in a problem list, so I think it's highly relevant here, but I don't know that it's going to actually be that helpful for referrals.

I don't, either. I didn't bring it in for referrals, just related to the clinicians' – I agree with what you just said.

David McCallie – Individual – Member

They're taking an inclusive, expansive, high-recall, low-precision approach to coach their tables for referrals. You want a high-precision, low-recall approach, so different tables are needed for different use cases. But, it's really good work, and I helped. Carl Dvorak and I meet with them at HIMSS and helped launch it.

Steven Lane - Sutter Health - Co-Chair

Okay, so, we've massaged that one a little bit, and feel comfortable that it's in a reasonable spot. There are a couple bullets down, where you see the yellow text. This is something that Clem has pointed out to us a number of times in the past, that there are some large files of aggregated test results.

Clement McDonald – National Library of Medicine – Member

The question of what's equivalent is always arguable. This is a classic common reality.

Steven Lane - Sutter Health - Co-Chair

Again, the question for us is how this adds to what we are attempting to cover here. I'm just cleaning out some of the –

Clement McDonald - National Library of Medicine - Member

Actually, now that I've seen it, I don't think it does, but there was another comment about saying there's a lot of difficulty in figuring out which codes to use. That's what I was responding to. I think that sentence is gone.

Kensaku Kawamoto – University of Utah Health – Co-Chair

We have a separate one above this on "Level of granularity of standard codes differ according to use," so I think we can delete this section.

David McCallie – Individual – Member

This might be a good example of that.

Clement McDonald - National Library of Medicine - Member

Yeah, maybe we could pull it into that section, but I agree with everyone. We don't need it here. Don't kill it yet, in case we...

Kensaku Kawamoto – University of Utah Health – Co-Chair

I think we already covered this consideration. We just don't have that specific example. I think we can delete this one. We talk about how, in some cases, you do care about the specific **[inaudible] [00:44:45]**; in others, you don't, and the level of granularity that is appropriate may differ according to use case, and we recommend things like "Consider industry consensus on the appropriate approach

when there are inconsistent levels of granularity" and "Facilitate the creation of code groupers." I think it's well-covered. I think we can delete it.

Clement McDonald - National Library of Medicine - Member

All right. Let's move on.

Steven Lane - Sutter Health - Co-Chair

Okay. And then, there was an introduction a little lower down — "Unified code for units of measure" was added. We had simply said "units" here as a standardized metadata. Here, we're actually calling out a specific standard for units — which, again, is fine, if we all agree that that is the right standard for units. I personally wasn't aware of UCUM before this.

Clement McDonald - National Library of Medicine - Member

It's required in FHIR already, and I think in some laboratory in version 2.

<u>David McCallie – Individual – Member</u>

It seems like more of a USCDI problem than what we should be diving into that detail here.

Clement McDonald – National Library of Medicine – Member

Well, maybe the whole thing should go, then.

Steven Lane - Sutter Health - Co-Chair

The point we were trying to make was that "units" was a key piece of metadata. We're not taking it upon ourselves to specify the standard, but again, that's certainly within our charge. So, I'm asking if anyone has any objection to identifying UCUM as the standard or a standard for capturing units.

Kensaku Kawamoto - University of Utah Health - Co-Chair

That's fine, but Clem, you're the one who suggested adding it. If you want to delete it, that's fine, too.

Clement McDonald - National Library of Medicine - Member

No, I don't, and it actually only says "EG," so... But, it's what's in the current FHIR standards, and has been for a while.

Steven Lane - Sutter Health - Co-Chair

How's that?

Clement McDonald – National Library of Medicine – Member

Yeah.

Steven Lane - Sutter Health - Co-Chair

Are you good with that, everybody? Ken?

Kensaku Kawamoto – University of Utah Health – Co-Chair

Yeah, let's go.

Steven Lane - Sutter Health - Co-Chair

Let's move on. All right. Ken, this is where you captured the order result status. Again, previously, we'd had a separate section for this. Slide up a little bit there. I'm on page 14 – yeah, there we go. So, we had had a separate section for result status, and here, we've called it out as a key piece of metadata, so I wanted to be sure people understood where that ended up.

Clement McDonald – National Library of Medicine – Member

Yeah, that's been essential for all of time.

Steven Lane - Sutter Health - Co-Chair

Well, and yet –

Kensaku Kawamoto – University of Utah Health – Co-Chair

[Inaudible] [00:47:55] simply because there was a concern that it was buried here, but if you want to unbold it, that's fine, too.

Steven Lane - Sutter Health - Co-Chair

We just don't use bolding that way in most of the documents. I'm not sure it has specific meaning. Okay. Down to the larger section on non-medication orderables needing to be standardized between systems with mapping to standard terminologies. Under our recommendations – scroll down a little bit – in the section on "Support the harmonization advancement and consensus development of standards-based catalogs of orderable tests, with mappings to associated code systems and codes, with special emphasis on the following domains." We have lab orders – here, we're talking about orderable tests, lab order details, radiology orders, and here, again, it looks like this whole discussion of pre- and post-coordination, and the acknowledgement that LOINC, RSNA, and RadLex have done some work on this. So, again, the question is does this example add value to our document? I don't have any objection to it.

Terrence O'Malley - Massachusetts General Hospital - Member

Steven, this is Terry. Again, I hate to be sidetracking, but USCDI is also wrestling with this issue of large data sets, of which these are great examples, and what's going to be required to move those through USCDI. So, I think this section is really relevant to the next step, which is how you package these together in a way that allows them to be implemented as easily as possible.

Clement McDonald - National Library of Medicine - Member

The other background on this – CDA has always required this set of LOINC codes for radiology reports, and I think FHIR does too, now, so we may be behind the wave.

Terrence O'Malley – Massachusetts General Hospital – Member

So, just cite the wave and move on. Okay.

Steven Lane - Sutter Health - Co-Chair

Okay. So, we addressed the orderable tests in bullet 2. We talk about order panels in bullet 3.

So, I need to explain this one a little bit. The table of laboratory order panels is about six years old now, and it only has 300 tests in it. Now, there are 1,100 or so, so I just thought the number wasn't helpful by saying 2,000. It was wrong for laboratory; it was right for all panels. So, I took off that reference to the older one, which would be sort of setting the bar pretty low.

Steven Lane - Sutter Health - Co-Chair

So, we're looking at the order panels – this is the third bullet under "recommendations."

Clement McDonald – National Library of Medicine – Member

I actually thought referencing – there is a list of 300 lab orders, which I thought was not an appropriate list anymore because there are a lot more lab panels, and there are still a lot of other panels as well, but it just didn't help to tie it to a number, especially since it wasn't right.

Steven Lane - Sutter Health - Co-Chair

So, I think we may be mixing up orderables and panels here, so I think that –

Clement McDonald - National Library of Medicine - Member

Well, it's very entwined because with regular tests, the orderables are the same as the resultables for most tests. Only the panels create stress.

Steven Lane - Sutter Health - Co-Chair

Right. I just think we can move this highlighted text up as a sub-bullet just above. That's all I'm thinking, grabbing that...

Clement McDonald - National Library of Medicine - Member

Okay.

Steven Lane - Sutter Health - Co-Chair

Let me try that again, and move it up here. That's all I was thinking. How does that look?

Kensaku Kawamoto - University of Utah Health - Co-Chair

Good.

Steven Lane - Sutter Health - Co-Chair

All right. And then...

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

There's something wrong up here. It should be 61%.

<u>Steven Lane – Sutter Health – Co-Chair</u>

Oops.

It's 61%, yeah.

Kensaku Kawamoto – University of Utah Health – Co-Chair

What was the correct number? Was it 8,003?

Clement McDonald - National Library of Medicine - Member

Whatever it is, it's not 655%. There are 8,003 records.

Terrence O'Malley - Massachusetts General Hospital - Member

Just back up.

Steven Lane - Sutter Health - Co-Chair

The specific numbers are probably not critical.

<u>Clement McDonald – National Library of Medicine – Member</u>

It's just sort of interesting. Maybe it's not necessary, but they're mapping a lot of codes.

Steven Lane – Sutter Health – Co-Chair

The one large referral lab has already request LOINC codes for 61% of its over 8,000 orderable tests, so the gap for LOINC coding...

Clement McDonald - National Library of Medicine - Member

It really has gotten them, so it requested a bunch more.

Steven Lane - Sutter Health - Co-Chair

Okay. Hopefully, people are following along here and can provide comments. Again, we don't want to mess things up in our work to get done. All right, I think that's fine, Ken. Thank you for that. Then, we mentioned order panels. That's now a brief statement. And then, we go on to talk about harmonization of multiple existing code sets for orderable tests, consider terminologies such as CPT, PLA, and LOINC codes. We took out SNOMED CT. Is that because someone determined that they do not address issues of orderable tests? I would think that was true.

Clement McDonald – National Library of Medicine – Member

No, it's because we don't want to have multiple code systems if we can avoid it.

Steven Lane - Sutter Health - Co-Chair

No, the point here is we're supporting harmonization of multiple code systems. That's exactly the point, and we identified SNOMED CT and HCPCS as examples of existing code sets. I'm just asking if SNOMED CT and/or HCPCS – I believe HCPCS includes orderable tests.

<u>Clement McDonald – National Library of Medicine – Member</u>

They do.

Steven Lane – Sutter Health – Co-Chair

Yeah, so I would tend to leave this in, because they are examples.

Clement McDonald - National Library of Medicine - Member

All right.

Steven Lane - Sutter Health - Co-Chair

We're sort of trying to say there are all these different code sets that require harmonization. Thank you, Ken.

Kensaku Kawamoto – University of Utah Health – Co-Chair

The non-panel LOINC codes thing has to go higher. I'm putting it up.

Steven Lane - Sutter Health - Co-Chair

I think we addressed that – higher up. I think we're being a little perseverative here.

Clement McDonald – National Library of Medicine – Member

That's not a rare phenomenon.

Steven Lane – Sutter Health – Co-Chair

When you feel strongly about something... I do the same thing. I think this pink text could probably go, because I think we've addressed it already, if that's okay.

Kensaku Kawamoto - University of Utah Health - Co-Chair

I just took that non-panel thing and put it up a little higher to clarify the view.

Steven Lane - Sutter Health - Co-Chair

Do you still want to keep the pink text down here, Ken?

Kensaku Kawamoto - University of Utah Health - Co-Chair

I don't see the pink text.

Steven Lane - Sutter Health - Co-Chair

Sorry, it's blue on the public screen; it's pink in the Google doc.

[Crosstalk]

<u>Steven Lane – Sutter Health – Co-Chair</u>

I don't think we need it. All I'm saying is I think it's redundant from what we have above.

Kensaku Kawamoto - University of Utah Health - Co-Chair

We talk about how LOINC should be used – Clem, are you okay with deleting it, or do you want to keep it?

I'm not obsessed by it, but I sometimes think people don't realize that there are panels which are challenging because there are so damn many of them, but there's always a way to order the non-panel test. Maybe it belongs up higher than it's placed. You guys are amazing with your ability to edit on the fly, so it'd be an interesting challenge if you could find the right place for it.

Kensaku Kawamoto - University of Utah Health - Co-Chair

I think we could move it higher if we wanted. I don't think it hurts to say that LOINC has a growing number of LOINC tests.

Steven Lane - Sutter Health - Co-Chair

I'll just move it up above. That's all. It has a nice spot up above.

<u>Clement McDonald – National Library of Medicine – Member</u>

I think you have a unique talent. It actually works if you can do this.

Kensaku Kawamoto – University of Utah Health – Co-Chair

I don't think it's under "orderable tests." I think it's under "panels."

Steven Lane – Sutter Health – Co-Chair

Okay, got it. You're right. It goes in the next bullet down.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

It's a sub-bullet under that one, actually.

Steven Lane - Sutter Health - Co-Chair

Yup. Sorry, we're doing the same thing.

Clement McDonald – National Library of Medicine – Member

Like dueling banjos.

Steven Lane - Sutter Health - Co-Chair

Something like that. All right. So, this section has morphed a bit, but I think it's held together. I think we can scroll down to –

Clement McDonald - National Library of Medicine - Member

Could I just –

Kensaku Kawamoto - University of Utah Health - Co-Chair

There was a deletion that I'm not sure was intentional, Steven. I think you deleted "aLOINC." That was actually –

Steven Lane – Sutter Health – Co-Chair

No, it's caught up above. It's under "orderable tests" – the aLOINC stuff up there.

Kensaku Kawamoto - University of Utah Health - Co-Chair

On page 15...let's see...

Steven Lane - Sutter Health - Co-Chair

Here, I'm highlighting where we have the reference to aLOINC. It was taken out, and then moved. It's toward the bottom of page 15.

Kensaku Kawamoto - University of Utah Health - Co-Chair

And then, there was something about a LOINC S&I – ONC LOINC order code S&I. Is that right? It's not an aLOINC order code S&I?

Clement McDonald - National Library of Medicine - Member

I think the S&I thing relates to the set of 300 order codes that now has six or seven results. That wasn't the best thing to highlight, since there are a lot more panels, orders, and everything else in there.

Kensaku Kawamoto - University of Utah Health - Co-Chair

Then, we should delete it.

Clement McDonald - National Library of Medicine - Member

I think the S&I one was mostly dealing with panels.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

If not entirely.

Clement McDonald - National Library of Medicine - Member

This thing. "The common order code value sets" – there's a list of about 300 panels, and it's old, and there's a lot more in there now.

Kensaku Kawamoto - University of Utah Health - Co-Chair

So, what do you want to do? Should we just say "Lab orders using LOINC universal lab orders"? Should we just remove the reference like that?

<u>Clement McDonald – National Library of Medicine – Member</u>

I think you could.

Kensaku Kawamoto - University of Utah Health - Co-Chair

You're the expert, so you tell us whether you'd prefer to have this or not.

Clement McDonald – National Library of Medicine – Member

I'd prefer not to reference that thing, which should be updated, because if you go to the full LOINC file, you'll find a whole lot more lab panels –

<u>Steven Lane – Sutter Health – Co-Chair</u>

I think that's fine. Again, somebody suggested we put it in. If nobody's here to defend it, it seems fine to take it out.

Clement McDonald – National Library of Medicine – Member

Now, there's one thing that I didn't comment on, but I worry about. Down lower on the page, it said that you can't have fee panels, but then, you say something about CPT. I don't know which one is right, but just be aware that it would be contradictory. I'm not taking a side.

Steven Lane - Sutter Health - Co-Chair

Again, the statement is that we want to support and ensure the harmonization of multiple existing code sets for orderable tests.

Clement McDonald - National Library of Medicine - Member

No. Further down, though, it says "not fee-based," and I think CPT is already in FHIR as an opt — as meaningful use as an option. So, I'm just highlighting the contradiction. Maybe we should soften the "not fee-based," or "prefer not" —

Kensaku Kawamoto – University of Utah Health – Co-Chair

I think if there isn't something already written, we just need to move on. We only have a half hour to finish.

<u>Clement McDonald – National Library of Medicine – Member</u>

I'm happy. Go ahead.

Steven Lane - Sutter Health - Co-Chair

And actually, I think we have public comments at the quarter hour, so we need to remember that. We should be moving down to page 17, where Ken added a bullet of recommendation: "Enable an opt-in approach to earlier results release" — ah, this is the notion — we had a lively discussion about this — "such as results release as soon as final results are available. For example, if the patient specifies their preference to immediately receive results regardless of the content, e.g. a pathology report which may indicate cancer and should be reviewed with a physician to properly interpret, work toward enabling such preferences to be honored."

Kensaku Kawamoto – University of Utah Health – Co-Chair

We discussed it pretty extensively, so I just put it in writing that we discussed it and didn't have time to put it in writing during the meeting.

<u>Steven Lane – Sutter Health – Co-Chair</u>

I like that, and I think it definitely expresses what a number of folks were stating. We're not going to convince the industry that immediate release is right for everybody, but the idea of giving patient control over that...because the concern is we don't want patients to be complaining that they got informed of something prematurely. All right. We can scroll down to page 18. We are now into our tier 2 issues and recommendations, and we were talking about needing a standard way to differentiate the type of results within CCDAs. I think that was as opposed to "for," it's "within CCDA documents."

Again, a lot of our focus here has been on FHIR, but we all still live in a world largely populated by data that comes in CCDAs, but this did – so, we sort of added a comment, Ken, about FHIR within this section on the CCDA challenge. "Consider using the diagnostic report category codes" – these are the codes themselves – "or an expanded version of the same." This is sort of saying that some work has been done on this in the FHIR world, and perhaps this could be brought back in to CCDA.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

It seems reasonable.

Clement McDonald – National Library of Medicine – Member

It would be good to do them the same way. I think both of them would still work, but as separate...

Steven Lane - Sutter Health - Co-Chair

Good. Okay, that's uncontroversial. We can now scroll down to the very top of page 20, where Sasha had a comment that I attempted to address in some new language. Are you comfortable with that? You can expand Sasha's comment. She can see the full context there. Thanks.

Sasha TerMaat – Epic – Member

Yeah, I think this is fine. This is related to my other comment that there were two sections on prior auth, and the other section was specific to meds, if I recall correctly, and so, I just wanted to be clear in each context what we were referring to, so I think this helpful to keep everyone on the same page as to the scope.

Clement McDonald – National Library of Medicine – Member

Agreed. It's important.

Steven Lane - Sutter Health - Co-Chair

Super. All right. Scrolling down just a bit, we are in the section where result data exchanged between HIT systems may not include sufficient provenance. Yes, we spent a lot of time talking about provenance, and through Liz, Clem added some observations here. We had talked about how result data may not include sufficient provenance data, and Clem pointed out that the FHIR observation identifier can be useful in this regard.

Clement McDonald – National Library of Medicine – Member

I just want to point out that I actually didn't know this two months ago, but one of the IDs in the observation record is persistent, and it can be used for deep duplication. Those aren't all the things that provenance wants, but...

Kensaku Kawamoto – University of Utah Health – Co-Chair

Just because it's kind of late, I'm going to change it to "could provide" because we don't have time to really vet whether that will provide what's needed.

<u>Clement McDonald – National Library of Medicine – Member</u>

I think it does provide it.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

I mean we don't have time to... We're putting this in with one minute of review. I think we should say "could provide."

Clement McDonald - National Library of Medicine - Member

Okay.

<u>Steven Lane – Sutter Health – Co-Chair</u>

And then, I don't think we need the second bullet there because we're calling it out specifically.

Kensaku Kawamoto - University of Utah Health - Co-Chair

Actually, we should, because they're developing a specific resource on provenance. It's a separate issue.

Steven Lane – Sutter Health – Co-Chair

Separate from the identifier or resource, okay.

David McCallie - Individual - Member

Yeah, and it's a more important issue because provenance is far more than just that identifier.

<u>Clement McDonald – National Library of Medicine – Member</u>

Exactly.

David McCallie - Individual - Member

It is a necessary but not sufficient component.

Clement McDonald – National Library of Medicine – Member

It is clear from the text that we're aware of that, and I just wanted to be sure we were.

Steven Lane - Sutter Health - Co-Chair

Okay. Sasha, you have a comment here. Can you scroll down a little bit? "In our review with internal clinicians, we've seen source organization clinic to be far more valuable and consistent than the user who administered, ordered, or documented the result," and I just responded that clinicians want to know the actual origin of the data in addition to the immediate source that was sent to them, but I appreciate your comment. Can we resolve that one?

Sasha TerMaat – Epic – Member

I don't know that it needs further edits or anything.

<u>Clement McDonald – National Library of Medicine – Member</u>

I think they're interesting facts, though, and I think they're probably true. The providers – you've got residents and all that – it's hard to know who's related to whom, but I'm fine with it, too, and I think Sasha's comment was apropos.

Steven Lane - Sutter Health - Co-Chair

Okay. Ricky has a comment here about provenance being in the NPRM, and it should be mentioned here – "here" being under "policy levers."

Kensaku Kawamoto - University of Utah Health - Co-Chair

I think it's under "observations." I'm going to say, "This topic was brought up in the latest ONC NPRM, and is also a topic being worked on as a part of the Argonaut Project." Can you scroll up a little bit on the main screen? That last sentence before "recommendations" – so, I think that addresses it.

Steven Lane – Sutter Health – Co-Chair

Okay. We've got three minutes to go. So, the next one, Sasha, we're down to the section on "Need vendors to send unique reference IDs for results data, and our experiences should be tier 1." Ah, this is the whole question about tier 1. I agreed, Liz agreed, everyone agreed. Ken, can you swipe this piece and take it up to tier 1?

Kensaku Kawamoto - University of Utah Health - Co-Chair

It's accepted, and I'll move it to the bottom of tier 1.

<u>Sasha TerMaat – Epic – Member</u>

Thank you.

Steven Lane - Sutter Health - Co-Chair

Perfect. Thank you, Sasha. Okay, tampering – then, we're down to closed-loop referrals. We've done this fairly recently. Jack had a comment about confusion. "This section is confusing, as it partially overlaps with the referral management section below."

Kensaku Kawamoto – University of Utah Health – Co-Chair

That ID part – Clem had made a note that this applies to things other than orders and results. I'll just make a comment that this applies to things other than orders and results.

Steven Lane – Sutter Health – Co-Chair

Thanks. Jack, you're on, aren't you?

Ming Jack Po – Google – Member

I'm on. I just think the last few times we talked about, we slowly broadened the section to the point where there's a significant overlap between this section and the section below.

Steven Lane - Sutter Health - Co-Chair

Do you think it's unacceptable in its current format?

Ming Jack Po – Google – Member

I don't think it's unacceptable, but then, we also have to do some work to make sure they say the same things. There are some things where right now, there are recommendations sort of split between two sections.

Clement McDonald - National Library of Medicine - Member

It's going to be a challenge to get it done by tonight.

Ming Jack Po – Google – Member

I think this is more of a... It doesn't have to be done, I guess, but it's slightly confusing.

Kensaku Kawamoto - University of Utah Health - Co-Chair

I think we just don't have the time. I agree, but we can't really deal with it in time.

Ming Jack Po – Google – Member

That makes sense.

Steven Lane - Sutter Health - Co-Chair

I think your comments further down on page 28 are related to the same things – the opportunity to reorganize that section a bit. Jack, you also made some specific suggestions down on page 29, which we should just go through quickly. This has to do with patient/clinician electronic messaging. "Patient/clinician electronic messaging is currently supported principally within proprietary and provider-specific EHR-integrated patient portals." I think that's fair. "Most patient portals also do not support multi-party messaging capabilities, even when all care providers are from the same institution." I think that's also an accurate observation, so I'm comfortable with that. And then, under "recommendation," again, we're on page 30 now, but let's pause right on time for public comment. I think we're at that point now, aren't we? So, let's go to public comment, and then try to resolve these issues.

Operator

If you would like to make a public comment, please press *1 on your telephone keypad. A confirmation tone will indicate your line is in the queue. You may press *2 if you would like to remove your comment from the queue, and for participants using speaker equipment, it may be necessary to pick up your handset before pressing *. There are no comments at this time.

Steven Lane - Sutter Health - Co-Chair

Great. All right.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

Just an editorial note – we have a duplicate between the send-around metadata for unique reference IDs and metadata. I'm not going to try to fully address it, but I just moved the notion on FHIR observation IDs to the one on IDs, and I'm moving the related tier 2 recommendation higher up, just so it's next to each other. I don't think it's anything controversial, but I'm just moving some things around.

Steven Lane – Sutter Health – Co-Chair

Let's go back to page 30. Jack, I think you worked with Cynthia and introduced a graphic here. We are in "Recommendations around patient/clinician electronic messaging. The recommendation was to require all HIPAA-covered entities to implement an externally accessible Direct/XMPP server" – wow – "that serves as the gateway for all patient/physician conversations at the institution." That's a very specific recommendation and requirement.

<u>David McCallie – Individual – Member</u>

That would take a ton of work.

Ming Jack Po – Google – Member

The comments state that – I think we should discuss this, and I was purposefully making a strong statement to prompt a discussion. This is essentially some of what allowed SMS to interoperate, and this also follows some of Clem's comments about making sure that patients have the ability to access messaging in whatever way they prefer, but still centralizing messaging so that they can be communicated between different parties.

Steven Lane - Sutter Health - Co-Chair

I think Ken is trying to soften this language a bit.

Clement McDonald - National Library of Medicine - Member

I also wonder about specifying it in terms of the function to be achieved, rather than the technology to do it. Find ways to permit SMS to be exchanged, as you just said, Jack, rather than say, "Use this specific technology." That's usually not a happy receipt.

<u>Ming Jack Po – Google – Mem</u>ber

So, the technology that I mentioned was specifically around just the gateways that are talking to each other. I don't know if you can see the diagram. Basically, it just forces, for example – so, Stanford can theoretically allow any patient communication method – it could be through email, SMS, or even Snapchat if they want to, but the suggestion is that basically, Stanford has to consolidate all its messaging through some sort of mobile gateway. I put "Direct/XMPP" because that's what the current healthcare standard is, even though there's low usage, and they provide that specific gateway for an external user to basically synchronize with.

Clement McDonald - National Library of Medicine - Member

I think the way you just fixed it is good. Who's doing that editing?

Kensaku Kawamoto – University of Utah Health – Co-Chair

That was me.

Clement McDonald – National Library of Medicine – Member

Ken, you fix it good. It's sort of like those translators typing in the words on the screen.

<u>David McCallie – Individual – Member</u>

I would agree that "gateway" is the operative word, not "Direct/XMPP server." That's so technologically specific for such an ill-defined notion.

Kensaku Kawamoto – University of Utah Health – Co-Chair

Is it okay the way it is now to say "explore, such as"? It weakens it quite a bit to say – obviously, we can't decide this in one minute, but can we decide [inaudible] [01:18:07]

<u>David McCallie – Individual – Member</u>

I'm sorry, Ken, I'm okay with it. I just would suggest dropping the "Direct/XMPP server" and just say "implement an externally accessible gateway for all patient/physician conversations at the institution." That's the goal – to have a gateway, not to specify that it be Direct/XMPP, which are two essentially invisible technologies at the moment.

Steven Lane – Sutter Health – Co-Chair

I think the graphic is too much. We don't have any other such graphics to implement.

David McCallie – Individual – Member

Yeah, and it's not very... I agree.

<u>Clement McDonald – National Library of Medicine – Member</u>

But, thanks for the work anyway, Jack.

David McCallie – Individual – Member

And, the "gateway" was -

Ming Jack Po - Google - Member

I'm happy to redo the language. The graphic was more for us internally because I was not articulate enough to be able to write out what I wanted in the graphics.

David McCallie – Individual – Member

I think the gateway idea is key here. Cross-modality messaging is a challenge that needs to be thought about.

Steven Lane - Sutter Health - Co-Chair

Okay. I think we captured that. Thank you so much, Jack, for bringing that idea forward. Okay, we're going to jump over the care plan and the closed-loop exchanges. If we jump down to medication and pharmacy data, Ed, you offered some edits on page 35. "RTPB is used to confirm the price of prescribed medication, provide appropriate patient-specific and benefit-specific therapeutic" — okay, that's just clarifying text. We keep going back and forth around this issue — total cost, total out-of-pocket cost... So, you said cash, TrOOP, and total recea, and I think that's fine. We've done that in other places.

Edward Juhn – Blue Shield of California – Member

Right, just total cost information.

We might put something in there that says – I don't think we know the right terminology. If we could admit that – never mind. It'll just take time. Forget it.

Edward Juhn – Blue Shield of California – Member

Did we want to put in total retail cost? I know we talked about that. Or, do we just want to use it -

Steven Lane – Sutter Health – Co-Chair

We got it in there.

Edward Juhn - Blue Shield of California - Member

I was recommending total cost information – to take out retail, just because the term "retail" isn't a term of ours, so just using the term "total cost" –

Steven Lane - Sutter Health - Co-Chair

Okay. I think I might have slipped it in there because it helped me understand, but that's fine. So, the total drug cost data, alternative drugs – thank you, Ken. I appreciate that.

Kensaku Kawamoto – University of Utah Health – Co-Chair

I don't think we should say "up to three."

Steven Lane - Sutter Health - Co-Chair

Yeah, it's too specific.

Edward Juhn - Blue Shield of California - Member

That was just an example.

Steven Lane - Sutter Health - Co-Chair

So, we are closing in – current NCPDP telecom standards allow up to four drugs as an observation.

Edward Juhn - Blue Shield of California - Member

We could pass through that. That was just explaining the competencies.

Steven Lane - Sutter Health - Co-Chair

And then, further down, there was... "Use of shared patient savings is **[inaudible] [01:21:34]** October 3rd" – we should probably put "2019." Someday, this will be looked at historically.

<u>Edward Juhn – Blue Shield of California – Member</u>

This is just time to current initiatives, the support – accelerate the work that we're recommending as well.

Steven Lane - Sutter Health - Co-Chair

Okay. Maybe we should call out that you got the title of the executive order here, so we'll copy that in.

<u>Kensaku Kawamoto – University of Utah Health – Co-Chair</u>

I'll do it. We can move on.

Steven Lane - Sutter Health - Co-Chair

Great. Then, you go on to talk under the policy levers around responsibilities. We have ONC include a requirement for real-time, patient-specific formulary and pharmacy benefit checks, and you added "and automatic delivery in the EHR at the time of prescribing."

Kensaku Kawamoto - University of Utah Health - Co-Chair

The purpose of that was that physicians may not have the time to come to the information themselves throughout the EHR if it wasn't automatically available in the EHR. So, it was more of a provider workflow...

Kensaku Kawamoto - University of Utah Health - Co-Chair

I'm just going to put "once validated" and "sufficiently validated." So, for example, I would hate it if a health system had to do this and incur, say, a \$0.25 charge in every single case for cheap medication that we always know is going to cost \$4.00 generic, which is then a \$5.00 charge or whatever. This is along Sasha's comment that we should be very careful if we put something in certification requirements until we're absolutely certain that it really makes sense.

<u>Clement McDonald – National Library of Medicine – Member</u>

Yeah, you have alert fatigue driving physicians nuts.

Steven Lane – Sutter Health – Co-Chair

So, Ed, you then have a comment about whether we should mention CMMI demonstration projects.

Edward Juhn – Blue Shield of California – Member

Yes. This is toward the end of the Medicare Part D programs. I wasn't sure if – again, similar to the October 3rd executive order – we want to mention the CMS demonstration projects. There's a Part D payment modernization project that, again, is very similar in spirit to what we are recommending in this section. Again, I didn't know if we wanted –

Steven Lane - Sutter Health - Co-Chair

It still falls under Part D, right?

Edward Juhn - Blue Shield of California - Member

Yes. CMS demonstration project, Part D.

Steven Lane - Sutter Health - Co-Chair

Yes, I think we've captured that. All right. And, I think that we have reconciled every single comment.

Edward Juhn – Blue Shield of California – Member

Oh, my goodness.

You guys are miracle workers.

Steven Lane - Sutter Health - Co-Chair

So, this task force has done tremendous work over the last – I didn't count up the months; has it been 16 or 18 months? – and we are going to submit this as our recommended report to the HITAC next week, and Ken and I will be in front of that group, representing all of you and the fine work that you've done. Again, if there are comments or specific suggestions that come back from the HITAC's review between today and next Wednesday, we will get back to all of you to discuss those, but our hope is that this will be approved by the HITAC and then transmitted from the HITAC to the national coordinator as the result of our work, as called for within 21st Century CURES. So, I see we've lost some participants here toward the end. Are there any comments anybody has before we close up?

Kensaku Kawamoto - University of Utah Health - Co-Chair

Thanks, everyone. I'm so glad we finished up our part.

Clement McDonald - National Library of Medicine - Member

Compliments to two chefs.

David McCallie - Individual - Member

Good job.

Anil Jain - IBM Watson Health - Member

Amen. Great job.

Steven Lane - Sutter Health - Co-Chair

Thank you all. Have a wonderful Friday.

<u>Seth Pazinski – Office of the National Coordinator for Health Information Technology – Designated</u> Federal Officer

Thanks, everyone. We will officially adjourn our meeting. Have a great rest of the day.