Interoperability Standards Priorities (ISP) Task Force

Transcript
October 9, 2018
Virtual Meeting

SPEAKERS

Name	Organization	
Kensaku Kawamoto (Co-Chair)	University of Utah	Co-Chair
Steven Lane (Co-Chair)	Sutter Health	Co-Chair
Andrew Truscott	Accenture	ISP Task Force Member
Anil Jain	IBM Watson Health	ISP Task Force Member
Arien Malec	Change Healthcare	ISP Task Force Member
Clement McDonald	National Library of Medicine	ISP Task Force Member
Cynthia Fisher	WaterRev, LLC	ISP Task Force Member
David McCallie	Cerner	ISP Task Force Member
Edward Juhn	Blue Shield of California	ISP Task Force Member
Leslie Lenert	Medical University of South Carolina	ISP Task Force Member
Ming Jack Po	Google	ISP Task Force Member
Raj Ratwani	MedStar Health	ISP Task Force Member
Ram Sriram	NIST	ISP Task Force Member
Ricky Bloomfield	Apple	ISP Task Force Member
Sasha TerMaat	EPIC	ISP Task Force Member
Scott Weingarten	Cedars-Sinai and Stanson Health	ISP Task Force Member
Tamer Fakhouri	One Medical	ISP Task Force Member
Terrence O'Malley	Massachusetts General Hospital	ISP Task Force Member
Tina Esposito	Advocate Health Care	ISP Task Force Member
Valerie Grey	New York eHealth Collaborative	ISP Task Force Member
Victor Lee	Clinical Architecture	ISP Task Force Member
Lauren Richie	Office of the National Coordinator	Designated Federal Officer

Operator

Thank you. All lines are now bridged.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Okay, great. Thank you. Hi, this is Seth Kasinsky with the Office of National Coordinator for Health IT. Good morning, everyone, and welcome to the Interoperability Standards Priorities Task Force meeting. Welcome, all. We'll officially call the meeting to order. And we'll start with a roll call, before turning to our agenda. I'll just read through names. Please confirm that you're here. Ken Kawamoto?

Kensaku Kawamoto – University of Utah – Co-Chair

Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Steven Lane?

Steven Lane – Sutter Health – Co-Chair

Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Ricky Bloomberg? Tina Esposito?

Steven Lane – Sutter Health – Co-Chair

Seth, that was Ricky Bloomfield, I believe. And I believe he's on the Adobe Connect.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Okay. Tina Esposito? Tamer Fakhouri?

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Cynthia Fisher.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Cynthia Fisher, thank you. Valerie Grey? Edward Juhn?

Edward Juhn – Blue Shield of California – ISP Task Force Member

Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Anil Jain?

Anil Jain – IBM Watson Health – ISP Task Force Member
I'm here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Victor Lee? Les Lenert?

Steven Lane – Sutter Health – Co-Chair
Seth, I'm a little concerned because you're calling names of people who are showing up on the Adobe Connect but that you're not hearing from. So, Tamer Fakhouri and Victor Lee are both on the Adobe Connect.

Tamer Fakhouri – One Medical – ISP Task Force Member
This is Tamer. I'm here.

Steven Lane – Sutter Health – Co-Chair
I'm wondering if we're having some audio problems. Okay.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Okay. Arien Malec? David McCallie? Clem McDonald? Terry O'Malley?

Terrence O'Malley – Massachusetts General Hospital – ISP Task Force Member
Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Ming Jack Po?

Ming Jack Po – Google – ISP Task Force Member
Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Raj Ratwani?

Raj Ratwani – MedStar Health – ISP Task Force Member
Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Ram Sriram?

Ram Sriram – NIST – ISP Task Force Member
Here.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Sasha TerMaat? Andrew Truscott? Cheryl Terney? Scott Weingarten? Okay. Anyone else that I missed? Okay. Thank you. With that, I'll turn it over to Ken and Steven to start the meeting.

Kensaku Kawamoto – University of Utah – Co-Chair
Steven, do you want to go ahead?

Steven Lane – Sutter Health – Co-Chair
Sure, if you'd like. Welcome, everybody. And we can see, on our side, a full list of those who are on, even those who didn't have a chance to verbally acknowledge their participation. So, welcome back. You've got the agenda up in front of you. Hopefully, everybody can see it. We are going to be reviewing our draft recommendations that, hopefully, you've all had a chance to take a look at. These were developed through our meetings, as well as a couple of smaller meetings with some of you, to try to cull the information down into a shorter, more succinct set of observations and recommendations, as well as associated recommended policy levers and responsibilities.

We'll go through that and entertain any specific feedback and, hopefully, finalize that work, so that we can then move on. And then, we're going to discuss moving on to a second domain, with the group, with the proposal that we will be discussing, closed loop referrals and care coordination. And then, we'll have time, at the end, for public comment. Any comments or suggestions regarding the agenda? If not, let's proceed. I can share the document, I believe. Let me give a shot at that. Let me see if that is successful.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah, we see it.

Steven Lane – Sutter Health – Co-Chair
You're seeing it, good. And is it a reasonable size? I increased the size so that we could see it more clearly. Is that filling people's screen, or can it go a little bit bigger?

Kensaku Kawamoto – University of Utah – Co-Chair
I think a little bit bigger would be good. I think, on a lot of people's screens, it only takes up part of the screen.

Steven Lane – Sutter Health – Co-Chair

How's that? Is that better?

Kensaku Kawamoto – University of Utah – Co-Chair
That's better.

Steven Lane – Sutter Health – Co-Chair
Okay, great.

Kensaku Kawamoto – University of Utah – Co-Chair
And, I think, Steven, you probably won't be able to see hands. So, I'll manage the hands.

Steven Lane – Sutter Health – Co-Chair
Right, yes. It's like one or the other. Do you want to walk us through it, Ken? And I'll take notes, as we go?

Kensaku Kawamoto – University of Utah – Co-Chair
Sure. That sounds good. Okay. So, this was circulated a little bit earlier. But these are the draft recommendations we'd like to get input on before we finalize. And then, we'll move on after that. So, we did prioritize these, in terms of where we thought the most effort and weight should go. So, the first priority was around the observation that not all results sent to clinicians – sorry, am I looking at the right one?

Steven Lane – Sutter Health – Co-Chair
Yeah. We put them in the chronological order, I believe. Oh, wait, maybe I – no, there we go. This is the first one.

Kensaku Kawamoto – University of Utah – Co-Chair
Okay. Perfect. Yes, got it. I got confused for a second. So, the first one was that laboratory and other test results are not consistently coded with the appropriate standard codes. So, again, the observation here was, to our best estimate, if you look at things like lab results, it may be that only about half of these results are not coded, in the results part. So, the recommendations first, and we'll go through this, I think, fairly deliberately and slowly just to make sure that folks agree with this. The first one is the standard LOINC and SNOMED CT coding must be provided by resulting agencies, such as labs, imaging centers, and providers as a CLIA requirement. So, making that, actually, something that's required by CLIA. If this is ineffective in delivering data, this could be made a CMS condition of payment.

So, the idea here is to start with CLIA, and then, move on, if needed, to CMS. Next is to identify and prioritize the most common and important results of each order type. Consider priorities and multiple stakeholders, in use cases, such as patients, clinicians, population health management. There's quality, safety, public health, and research. Require and enforce the use of information models and terminology standards for all test orders and results. Priority should be on the test identification. Numeric test results and free text results. Map codes must be included with the results, as they're maintained in an exchange between health IT systems. EHRs and laboratory information systems should provide a mechanism

that allows clients to map internal results codes to standard vocabularies. And implement mechanisms to ensure proper LOINC and coding by resulting agencies, such as auditing or certification by CLIA. So, those are the recommendations.

And then, we have comments here on the policy levers and responsibility. And, I think, of all of the recommendations, probably the most important, I would say, is that first one about really having some mechanism to ensure it does, in fact, get done. I don't know, Steven, Arien, others, whether you want to comment on these before we move on to the policy levers and responsibility.

Steven Lane – Sutter Health – Co-Chair
Well, I'll just say a number of people worked hard to boil these down to this relatively short list. And I guess this might be a good time to stop and get comments or feedback on this.

Kensaku Kawamoto – University of Utah – Co-Chair
Any comments from folks? And if you can't raise your hand on the Adobe – okay. I see a hand up from Terry.

Terrence O'Malley – Massachusetts General Hospital – ISP Task Force Member
Yeah. I think this is a really nice job. I guess it's a nice change in templates if anything else. And perhaps being a little bit more of interventionists, I think we might want to look at ways that we can make it easy for people to do the right thing because, right now, it's easy for them to do the wrong thing. Maybe this may go more with the local code that you're going to come to very quickly. But figuring out ways that we can do the work for the end users, so they don't have to spend a lot of time and energy trying to do their mapping, taking on standardized code sets. And all of that work gets done so that the point is to say they're just given the things that they can do.

And we'd make it as easy for them a possible to do the right thing. But, I think, what we've come up with now is it's not easy to do the right thing, which is why we have what we have.

Steven Lane – Sutter Health – Co-Chair
So, I think, Terry, we addressed that in the prioritization of coding at the source. That first recommendation was that the resulting agency is required, by CLIA or other means to do that coding, which, I think, gets at what you're saying. Or is there something else in there?

Terrence O'Malley – Massachusetts General Hospital – ISP Task Force Member
Well, it's not so much requiring it. It's requiring it and really making the resources available for us to do it. I'm having a hard time articulating. My cold has got the best of my brain. But it's really to make it as easy as possible for people to do the right thing rather than just require them to do the right thing. That's a slight difference.

Steven Lane – Sutter Health – Co-Chair
Thanks. Any other comments there?

Ming Jack Po – Google – ISP Task Force Member

I think it makes sense, but can you elaborate? I guess, it, theoretically, makes sense. Do you have specific examples of how that could be done?

Terrence O'Malley – Massachusetts General Hospital – ISP Task Force Member

Well, no. This is winging it, for sure. But say there's – so, a lot of places have their own internal either proprietary codes or local codes that they use to run their internal machinery. So, how are they going to do the mapping that actually gets their local codes mapped to the broadly shared semantic standards like SNOMED? So, how are they going to do that and make sure that it's done to spec? But part of it is regulation and requirements and provisions. But the other part might be really to provide some of the resources to the expertise or the actual code sets or the actual process to do it. I'm just trying to move it away from just straight regulation to really facilitation.

Steven Lane – Sutter Health – Co-Chair

So, I just inserted a word here in this bottom bullet, implement mechanisms to support and ensure, proper LOINC encoding by resulting agencies. I don't know how much more in depth we can go into. But I think you make a good point.

Ming Jack Po – Google – ISP Task Force Member

I actually really like that point. I just realized that one of the things that sometimes is very frustrating for us is when the labs have proprietary mapping, and they specifically say that they own those mappings. And you're not allowed to release any type of mapping tables, even though many of us, in separate institutions, have built those mappings. It would be great if one of the things that we say are that these mappings cannot be somehow held as proprietary IT or something else, so that knowledge sharing is purposely blocked.

Steven Lane – Sutter Health – Co-Chair

That's a good point. Who would be responsible for that? And maybe this brings us to the next cell over, which is the responsibility. So, maybe, Ken, do you want to go through the responsibilities that we've envisioned here, and we can figure out where that would go? I think that's a great idea that notion of transparent knowledge sharing.

Kensaku Kawamoto – University of Utah – Co-Chair

And let's do that. And just as an administrative point, I'm sorry I got confused there, for a second. If you're a participant that's on the participant list maybe you can raise your hand only if you're a member of the task force. We'll have time for non-task force participant comments, specifically, later on. Okay. So, with this set of recommendations, we have some policy levers and responsibilities. And Arien was instrumental in really helping us figure this out as well. So, ONC wise, potential responsibility, things to do, use available EHR data sources to assess current compliance, with the LRI specs and LOINC and SNOMED encoding to identify areas for additional focus. And, I think, there are a number of EHR vendor colleagues on the task force that can help with that.

Work with HL7 and industry stakeholders to create a laboratory results interface companion

guide for HL7 medical document management and associated context and terminology standards to allow standards-based exchange of textual reports. Continue to work with CMS, CDC, and associated industry stakeholders to harmonize information models and terminology standards to electronic clinical quality measures, definitions, and reportable disease requirements. Continue coordination with FDA, CLIA, and NLM to establish mappings between the output of analytic devices and LOINC terms. And if you have comments, we can pause at each stakeholder, or we can just keep going if nobody has comments.

FDA. Continue to promote the use of LOINC and diagnostic device approval and oversight. CMS, establish safe harbors or fast lanes for achieving CLIA quality obligations through the delivery of HHS endorsed standard space results. EGLI with LOING encoding. Electronically certified EHRs, there was some concern that this was an issue. Also, require certification under CLIA to HHS endorsed standards-based results, such as LOI with LOINC encoding. And should above steps be insufficient to promoting standards-based interoperability, require certification as a condition of payment. So, let's go ahead and pause there. Steven, any comments? Members of the task force, any comments? So, we'll move on to the next set. Okay. All right. The next observation is that not all results are sent to clinicians in the codified format, with the necessary metadata to allow integration and utilization in EHRs.

So, that's the observation. Recommendations. Utilize USCDI to assure the prioritized results are interoperable via HL7 B2 messages where applicable, CCD inquire. Prioritize complete and accurate coding of the data source, such as the LIS, rather than trying to code or crack externally sourced data downstream. So, this was a fairly, I think, universal observation from folks that the folks upstream no best what the appropriate code is. Require that the resulting agencies provide standardized metadata, such as for methodology units in normal range to ordering and copy to providers. And standard metadata must be maintained as results data is transmitted between systems, so all of the effort used to generate them doesn't get lost along the way. Policy levers and responsibility for ONC. Work with HL7 industry stakeholders to map and harmonize US core data for interoperability to LRI.

Laboratory order interface and associated implementation guidance. And Argonaut profiled SMART on FIHR and support end to end stakeholders' testing of discrete lab result and report transmission of providers and patients. CMS. Establish guidance promoting the use of standards, LRI, LOINC, and others, with certified health information technology to address laboratory requirements for accurate reporting. Include laboratory and other result transmittal requirements and advanced alternate payment model program requirements, such as requiring Medicare savings program applicants to specific how provider participants will receive standards based on electronic laboratory results. And to reconsider the notion that there's a topped out nature for the electronic web to receipt, in the merit-based incentive payment system program.

Previous requirements address receipt or entry of electronic laboratory information but not the structure, content, and terminology associated with such receipt, which is being re-introduced. And others in the federal agencies require the use of standards-based laboratory seen in VA, DOD, military, health service, and other applicable federal provider organizations. So, we'll pause there. Comments, additions, etc., on these?

Ram Sriram – NIST – ISP Task Force Member

Hello, can you hear me?

Kensaku Kawamoto – University of Utah – Co-Chair

Yes, we can hear you. And if you're on the web meeting, as well, we'd prefer a hand up, if that's possible, too. Please go ahead.

Ram Sriram – NIST – ISP Task Force Member

No, that's okay. I'm just trying to raise my hand. I'm fine. Go ahead.

Kensaku Kawamoto – University of Utah – Co-Chair

Okay. Jeff, did you want to go, or is this Ram?

Ram Sriram – NIST – ISP Task Force Member

Oh, this is Ram here. So, I don't know who else is before me, so I'll wait for my turn.

Kensaku Kawamoto – University of Utah – Co-Chair

Yes, Ram, please go ahead.

Ram Sriram – NIST – ISP Task Force Member

No, I'm just wondering, one of the things, in all of these things, is to do the testing part of it like how do you know these things work the way they're supposed to work? You have a number of standards. And how do you test the conformance of the standards? When is that implemented? And some of the things we do for ONC, I guess, on the meaningful use testament, that's –

Steven Lane – Sutter Health – Co-Chair

That's a good point. So, who would be the appropriate responsible party for such testing?

Ram Sriram – NIST – ISP Task Force Member

For testing? I believe we have a testing program here at NIST. So, we could use that.

Kensaku Kawamoto – University of Utah – Co-Chair

Yeah. So, should we put in NIST as an agency that could, potentially, do this?

Ram Sriram – NIST – ISP Task Force Member

Yeah. Depending on –

Steven Lane – Sutter Health – Co-Chair

And would it be CMS's responsibility to require that?

Ram Sriram – NIST – ISP Task Force Member

Yeah.

Steven Lane – Sutter Health – Co-Chair
So, we could put under CMS –

Kensaku Kawamoto – University of Utah – Co-Chair
And the notion of testing was also in the earlier recommendation we covered as well. That one is this notion of if we say this is how something should be done, who actually verifies that it's being done crosses these, right, because –

Ram Sriram – NIST – ISP Task Force Member
Yeah.

Kensaku Kawamoto – University of Utah – Co-Chair
So, maybe that could be an understood thing. Maybe, Steven, should we add on that one, this recommendation or this should be done, right after that sentence just along with it, this should be done really where any kind of technical compliance or alignment is required? Because we do have, right above this also, the notion that it should be tested. I don't know if that makes sense.

Steven Lane – Sutter Health – Co-Chair
Right. I'm thinking, in the recommendations field, we should add a recommendation to require testing and certification.

Kensaku Kawamoto – University of Utah – Co-Chair
I'll take the work with NIST part, and I'm going to add it to the CMS part above.

Steven Lane – Sutter Health – Co-Chair
Okay.

Kensaku Kawamoto – University of Utah – Co-Chair
Just because it seems reasonable to make sure that what we're seeking actually gets done.

Steven Lane – Sutter Health – Co-Chair
Thanks, Ram. Good suggestion.

Ram Sriram – NIST – ISP Task Force Member
Thank you.

Steven Lane – Sutter Health – Co-Chair
So, I'm not sure. Where did you add that, Ken?

Kensaku Kawamoto – University of Utah – Co-Chair
I added it to the top.

Steven Lane – Sutter Health – Co-Chair

Oh, up above here.

Kensaku Kawamoto – University of Utah – Co-Chair

I added it to the very top one.

Steven Lane – Sutter Health – Co-Chair

Got it. Okay. Good. All right. Shall we move on then to Row 4, our third priority one?

Kensaku Kawamoto – University of Utah – Co-Chair

Yeah. Okay. So, for this one, not all results are available for patients to review and receive. So, there's a gap there. Recommendations. Require that ordering providers make results available to patients for proxies. Proxies within a reasonable timeframe are allowed by state laws. Assuring that, where appropriate, providers have an appropriate opportunity to review and comment on results to facilitate patient interpretation. Make all results in the EHR available to patients via application programming interfaces, whether or not results are LOINC encoded. In the future, consider requiring resulting agencies to make results available directly to patients. This could, initially, be required via CLIA regulations. As necessary, this could be required as a conditional payment for resulting agencies.

Need clarification and alignment of state and federal policies to ensure consistent and predictable data accessibility and interoperability. And the policy levers responsibility here is for CMS. Make patient access to data via APIs a required measure for relevant programs. Augment program requirements to include receipt of information and other standardized accepted formats, such as CCDA, similar to API requirements. And continue to promote patient access and API requirements using certified health IT. Ricky, you have a comment? Ricky, if you're talking, you're muted.

Steven Lane – Sutter Health – Co-Chair

And we didn't hear Ricky say he was here, at the very beginning. So, I think we may have an audio problem for Ricky. I don't know if he can put comments into the chat perhaps.

Kensaku Kawamoto – University of Utah – Co-Chair

Yes. Ricky, we can't hear you. You can either chat your comment. And you're not muted, okay. Did you call into the line on the calendar appointment and state your name? It's the one for speakers. I wonder if – okay.

Steven Lane – Sutter Health – Co-Chair

While we're sorting that out, Ken, I think we should share the feedback that we got from Sasha who was unable to join us today, on this particular recommendation. And that is that she said she thought it would be helpful to see if there are steps that could be taken to standardize policies across the states on what is permitted to be released electronically. Further, even a strong recommendation that states could be pushed to adhere to might be useful or a clear mapping of what each state expects. So, I thought that we should probably

incorporate some of this. We ask for clarification, in the recommendation, the final bullet there. But, I think, she's going a little bit further. And I was trying to think about how we should incorporate that.

Kensaku Kawamoto – University of Utah – Co-Chair
Thanks. And I think that is at the bottom of the recommendations there.

Steven Lane – Sutter Health – Co-Chair
Right. The clarification and alignment are a little bit different than standardization or strong recommendations. And, I guess, I'm not sure whether we should change that language at all and/or add a specific recommendation to the CMS about that. I'm not sure who would do that. I don't know how this works legally. Is CMS in a position to make requirements, in this regard that would, potentially, trump state laws? I'm not sure.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah. Well, why don't we tackle that one at a time? So, recommendations wise, the bottom one, do we need to edit that at all? I think it covers it, but should we just change just the need to do it?

Steven Lane – Sutter Health – Co-Chair
Well, maybe clarification isn't the right word. We recommend the alignment of state and federal policies. And then, we can perhaps add to that. So, we can perhaps be more specific that this – Sasha referred to it as mapping of what each state expects. I think a clear articulation of varying state requirements is important.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
This is Cynthia Fisher. You could get bogged down in a continually changing place. For clarification, does the federal standard supersede or overrule the state, for consistency across the country? And then, sometimes, even hospitals or places will put their own restrictions that end up being more like information blocking. So, how do we make sure that the purpose is for sharing in a machine readable and human readable format and consistent? So, just a question, how do we have that across our country, in a standard?

Kensaku Kawamoto – University of Utah – Co-Chair
Thanks, Cynthia. I think, in terms of the format and such, I believe there are no state-specific regulations to date on formatting. I think it's probably around the access requirements and disclosure requirements. At least that's my understanding. I don't know if others want to – actually, Ricky is back on. Ricky, thanks for waiting. Did you want to comment on this topic as well?

Ricky Bloomfield – Apple – ISP Task Force Member
Sure. Can you hear me now?

Kensaku Kawamoto – University of Utah – Co-Chair

We can.

Steven Lane – Sutter Health – Co-Chair

Yes. Welcome.

Ricky Bloomfield – Apple – ISP Task Force Member

Excellent. Thank you. I think there was confusion. They asked if I was a speaker, and I guess that really means task force member. So, there was some confusion, which didn't happen on previous calls. So, my comment was, I think, in the area of patients receiving data. One of the issues that is present there is that the patients listed a title for the lab and can be very inconsistent between different laboratories and/or health systems. And so, there may be some benefit in aligning around a consumer-friendly title for the labs. And LOINC has some efforts, in this area. But getting folks to buy into this and use the same title would be very helpful, in order to have a consistent message for the consumers who receive the labs. Right now, some use long common names.

Some use their own internal terminologies. But it isn't consistent. So, if we could make a recommendation to align around that, first of all, to either work with LOINC or another entity to create such a list and then, align around the use of that list, I think, that would be helpful for consumers.

Steven Lane – Sutter Health – Co-Chair

That's a really good point, Ricky. I'm going to try to capture that here, as another recommendation. While I'm doing that, I want to point out that I did make some changes to the last bullet there, based on Cynthia's and others' comments. So, see what you think of that.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

And, Ricky, this is Cynthia. I think that's an excellent point, too. Thank you for your comment.

Ricky Bloomfield – Apple – ISP Task Force Member

Sure, no problem.

Kensaku Kawamoto – University of Utah – Co-Chair

I wonder if this should be with this one, or whether it should be with the – no. Well, it fits under many places. It could also fit under the earlier recommendations as well.

Ricky Bloomfield – Apple – ISP Task Force Member

I'm almost inclined to make it a separate item because simply receiving data and then, the format of the data are two related but separate items. I'll leave it up to the committee to decide how you want to do that. But it could be seen as a sub-bullet or a separate item.

Kensaku Kawamoto – University of Utah – Co-Chair

Yeah. I wonder if this one fits under just the first one, not consistently encoded with the appropriate standard codes because, Ricky, you're getting at the fact that, for example,

LOINC has standard LOINC long names and short names and stuff. But they don't have a patient-friendly name. So, every institution sort of does it on their own.

Ricky Bloomfield – Apple – ISP Task Force Member
Right. So, it's really a lack of a standard agreement. So, it's lack of a standard, and then, lack of application of a standard that doesn't yet exist.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
This is Cynthia. Would we just –

Steven Lane – Sutter Health – Co-Chair
I do think that this is the right – sorry, Cynthia. Go ahead.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
I was saying a standard consumer nomenclature along with the code. Maybe having it as a separate item that you have to have a consistent code, and you have to have the code name to consistent standard consumer nomenclature or terminology.

Kensaku Kawamoto – University of Utah – Co-Chair
Yes. So, I think the patient-friendly result display names, I think, you capture that. So, I think it is result display names to patients, based on, I guess, we say LOINC standards. LOINC doesn't really have a standard, in this area, right? Would it be based on as to be developed?

Steven Lane – Sutter Health – Co-Chair
I thought Ricky said that he believed LOINC does.

Ricky Bloomfield – Apple – ISP Task Force Member
They published like an alpha draft this summer, I believe, for patient-friendly terms. It's very, very early. But I think they're very open to feedback on that. So, there is something that they've started. Daniel can give you more information on that.

Steven Lane – Sutter Health – Co-Chair
Yeah. We've reached back out to Daniel to join us at the full HITAC meeting for our discussion there. So, I think a lot of these recommendations are based on the excellent presentation and information that he shared with us about the real progress that LOINC has made, in many of these areas but that they have not yet seen fully embraced. So, I think we're really building on that work there.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah. And then, I just made some small edits to this, based on this feedback. So, under Column B, I added effectively to not all results available, patients to be received and highly utilized, with the assumption that – by saying to effectively be received and utilized on just the one rule above like patients understanding what they're looking at is kind of important. They, certainly, don't want to see a LOINC long name. I don't think anybody would ever show

that to patients, but I could be wrong. And then, under recommendations, I just added in the process for the LOINC standards. Ricky, did you have thoughts on any particular policy levers or responsibility you wanted to associate or recommend to associate with that?

Do you feel like LOINC will just do this and continue to do this, and we just need to raise awareness of it and sort of point to it? Or what were you thinking?

Ricky Bloomfield – Apple – ISP Task Force Member

My sense is that LOINC could be open to collaboration around this. And if it doesn't fit anywhere else, I think that makes sense for folks to engage there. I think the question is will independent entities do that on their own, EHR vendors and health systems? Or would it require some incentive? My sense is that they would probably do that on their own, if there was a good list available, or if it was almost done, and they could just weigh in. So, I don't think it would require too much. I think the question is it would require a slight change in the work flow to how they currently do things, with their own name. So, there would need to be enough awareness, at the health system level, to say there's a new list, and I need to implement it.

And it may have to go through legal and compliance review, etc. And I think that could be tied to coding system use and application of coding systems, as was mentioned in the first item here. I don't know that I'd create a separate set of incentives for it.

Kensaku Kawamoto – University of Utah – Co-Chair

So, I'm going to just start editing something here. I'm going to say ONC facilitates completion and maturation, with relevant stakeholder feedback of ongoing LOINC work to define patient-friendly result display name. And encourage and facilitate the use of these terms for patient-facing purposes. And so, I think I tried to capture what we just discussed. And I would assume, for example, there's been peer review. And it can be not just like a pilot project kind of content, but if it's been a validated and vetted list, folks would feel much more comfortable using it. Does that work?

Ricky Bloomfield – Apple – ISP Task Force Member

Yeah. I think that's very reasonable.

Steven Lane – Sutter Health – Co-Chair

I like it. And I'll also point out that, as part of this discussion, I made some minor changes here, in the observation in 4B. I expanded this a little bit. Not all results available for patients' proxies to effectively view, receive, and utilize. I can go on to Cynthia's point about the human and machine-readable formats.

Kensaku Kawamoto – University of Utah – Co-Chair

Okay. Jack, you have your hand up?

Ming Jack Po – Google – ISP Task Force Member

To add a little bit to Ricky's point, so at Google, we use something called Schema.org, which

is a place where a lot of folks can edit and sort of dump these mappings, not in the help desk space, traditionally. Traditionally, we do it in movies and other types of things. I feel like something like that might be very helpful, which is something that the ONC is willing to maintain because, I think, similarly, for patients' name mappings, I assume that many of us, whether it's being at a place like Google or, when I was at Columbia, other institutions actually already have some of those mappings that exist. It would be really helpful if there's someplace that facilitates getting these things together, even if they don't have a regulatory power to enforce it. To Ricky's point, I think a lot of folks would actually use it if it's mostly complete.

Kensaku Kawamoto – University of Utah – Co-Chair
That seems to me maybe a higher level comment around how to better crowdsource those kinds of mappings. I wonder if that should go into the separate document we had, Steven, where we just had sort of these higher level comments that we want to communicate.

Steven Lane – Sutter Health – Co-Chair
I think that's a good place for it. We're trying to keep this very directed at recommendations and specific requirements. But I do think that's a point worth capturing.

Kensaku Kawamoto – University of Utah – Co-Chair
I'm going to just look into that one.

Ming Jack Po – Google – ISP Task Force Member
Also, I have a 5-week-old, and that's who you're hearing screaming.

Steven Lane – Sutter Health – Co-Chair
Congratulations. She or he is welcome. Let's go on to our next top priority recommendation.

Kensaku Kawamoto – University of Utah – Co-Chair
Yes, let's do that. The next one is orderable tests are not standardized between systems and less mapping to standard terminologies. So, the recommendations here are developed standards-based catalogs of orderable tests with consistent mapping to associated code sets. Utilize this consensus development process to develop standard orderables for the most common and important tasks of each order type, including orders that link to prioritized results. Standardize commonly used order panels building on about 2,000 order panels currently cataloged by LOINC. So, anyway, on the results side, there's been a lot of, I think, work. This is getting at the orderable side. And maybe should we clarify here, Steven, a little bit what the folks are recommending here?

So, we're saying tests, so not procedures that are not diagnostic procedures. Well, should we do any clarification here on what scope beyond laboratory orders, if any, we're doing? Or should we clarify that we're meaning here laboratory tests only?

Steven Lane – Sutter Health – Co-Chair
Well, I think, further up, we do talk about the test domains. Let me see if we – we say e.g.,

labs – no, we don't. Okay. No, I think that's a good idea. I don't think, in this document, we specify the domains of tests that we're talking about. We talked about the resulting agencies. We say each order type. Maybe this is really where it goes, Ken, because it's at the top here. So, we can add e.g., labs, lab imaging, cardiac, pulmonary, neuromuscular. That's usually the list I include. So, now, we've got this additional clarification. And I think we can probably assume that that would carry over into the rest of the document. Is that reasonable?

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
This is Cynthia. Should we also include but not limited to?

Steven Lane – Sutter Health – Co-Chair
Yes.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
That it kind of leaves open for –

Steven Lane – Sutter Health – Co-Chair
Yeah. I thought that's what e.g. meant, but we can change that.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
Yeah, I think to be specific.

Steven Lane – Sutter Health – Co-Chair
It could be more spelled out.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah. Okay.

Steven Lane – Sutter Health – Co-Chair
So, then, we can go back down here. And I think it's fair to assume that that applies throughout when we talk about order types.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah, that sounds good. So, policy levers and responsibility. So, for this and the next ones, we don't have anything currently listed. So, this is an opportunity for us to have any specific recommendations as well. And it's not listed here, but I think the consensus we sort of reached through our discussions is that for lab test orderables, LOINC makes sense. But LOINC may also be relevant to other orderable tests. Once you get beyond orderable tests, I think SNOMED becomes more prevalent. But we don't have a particular list. It just needs to be appropriate ones, unless I think folks want to say these should be LOINC. But that seems to be the consensus then. Any particular policy levers or responsibility we want to list with these? There's work that's ongoing. And the question is how do we want to accelerate?

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Hi, this is Cynthia. Just on the standardization, as we move towards the future, especially people that have to get repeated labs, it's very helpful to have a layout, in our standard, for patient information, including the net negotiated pricing. So, when you're comparing apples to apples in labs, you can see, between an acute care facility versus a Lab Corp or Crest, almost 11 times or 23 times pricing difference for the same exact labs. So, as consumers, and we move towards consumerism and more transparency, it would be very helpful that we kind of lay the groundwork for a standard today that will allow for the visibility into pricing tomorrow. So, someone can actually have full ops to that. And I've actually been, interestingly enough, working on it for a few consumers.

And it's so difficult to get matching on the pricing. And then, once you do, a Medicare rate or a Lab Corp or Crest rate could be 11 to 23 times difference for that consumer. So, as we're moving to high deductibles, as they're moving towards consumerism, as we push for transparency, I think this is the time that we could lay that groundwork along with these standards.

Kensaku Kawamoto – University of Utah – Co-Chair
Thanks, Cynthia.

Steven Lane – Sutter Health – Co-Chair
Is there a term called consumer decision support? Because, on the next row, we talk about CDS, which, clearly, we need to spell out, as clinical decision support. But in my mind, this is really generic. This is support for the ordering provider, potentially, support for the person who is involved in scheduling, support for the consumer, with the kind of data you've been talking about. So, I think we might want to expand Row 6 here to include various types of decision report and call that one out, in particular.

Kensaku Kawamoto – University of Utah – Co-Chair
Yeah. And I think the standards are, certainly, there for invoking, when you're about to order something, or you have selected a laboratory – well, it's in progress for being able to display cost. I think my main question is do we want to tackle this notion of price transparency across different sort of categories or orderables? Because this, obviously, is highly relevant to prescription medicines as well. What's going to be my deductible, if I pick it from here versus here and that kind of thing? I wonder, we have, stepping back, one of the top level priorities that, I think, we were going to try to tackle in our task force is price transparency and value-based care.

I think this use case and this notion of patients being able to know how much something is going to cost and be able to see alternatives, I think, fits right in there. I just wonder if we should work on not just lab tests or test orderables but all orderables, in that context. It's just a thought.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
I think that would be fantastic because we are interviewing consumers, and we're videoing them. And the big issue is they have a blindfold to understanding that pricing. And they're afraid to go to the doctor because they can't pay for their only son's Catholic school if they

don't know what that last test or that MRI is going to cost. And, in fact, we're filming, next week, a woman who had to pay a $10,000.00 MRI, when the place around the corner for her 3 sons that have brain lesions is $300.00. And that was the Catholic school tuition. So, I think we can actually make a great step forward, societally, if we make this move now.

Kensaku Kawamoto – University of Utah – Co-Chair

I agree. And there's been a decent amount of studies around pricing info, for example, for lab tests being shown to providers. And there was a recent systematic review, in the *Journal of American Medical Association* that showed it doesn't seem to impact behavior that much. So, I think, focusing the cost transparency to patients, in addition to providers, is really important.

Steven Lane – Sutter Health – Co-Chair

So, I'm trying to add some language, in both Columns B and C, for this.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

This is huge because, frankly, our company is self-insured, but the insurance brokers and the plan like the Blue Cross Blue Shield administrators are selling go for high deductibles. We're pushing consumerism. Get your employees to make better choices, so the employees have no optics. So, I think this is really a huge move that we can all do. So, thank you.

Kensaku Kawamoto – University of Utah – Co-Chair

Thanks, Cynthia. I really like how you labeled it, Steven. Let's see. So, we've already moved into that observation. So, let's just go ahead and discuss that next. This will be Row 6. So, that's observation. Need standard methodology to integrate external business support for clinicians, patients, and other stakeholders into old orders workflow. And, I guess, I'm just going to take out the old orders workflow. That's good. So, recommendations. Leverage the CDS Hooks standard. Define and support a CDS Hook that can be activated, when a provider or patient is reviewing the result. So, this is a note that this is just, often times, not available. So, when you're looking at the result, you can't actually get – there are a lot of mechanisms in place when you're ordering something that you can get guidance.

But there isn't much in looking at a result like I want guidance about this. Develop and support the use of standards to determine explicit costs and pricing information to ordering providers and patients. I think that all sounds good. Any comments on these?

Steven Lane – Sutter Health – Co-Chair

I just think that the second bullet is a little granular. So, I'm just going to change how we have that there.

Kensaku Kawamoto – University of Utah – Co-Chair

Yeah, I like that.

Steven Lane – Sutter Health – Co-Chair

How is that?

Kensaku Kawamoto – University of Utah – Co-Chair

I like it. Perfect. And then, I think, just to make sure we have sufficient time, let's just go through the net maps, too, and then, we can spend additional time on policy levers, responsibility, and the next steps as well.

Steven Lane – Sutter Health – Co-Chair

Well, I think, on the policy levers side, Ken, I think we really captured most of those in the sections above. And I think the thought was that we didn't need to just keep repeating ourselves. So, that's why you see them lacking down here. We're just trying to keep the document streamlined.

Kensaku Kawamoto – University of Utah – Co-Chair

Okay. I think that's fair. Let's, then, look through the last two. And if we think there's anything else that we missed, we can always add. Second, from the last, need standards to support prior authorization workflows. There are a number of competing prior auth standard efforts underway, including those listed. These efforts should be harmonized into a consistent approach. And the last observation was needed standards for the interoperable methodology to specify what has been ordered and what is the status of an order. So, include in scope all orderables, not just left orderables. Also, include order status, as a required component of interoperable metadata and that priority order list of standard codes. LI standard can be useful, potentially.

Use LOINC orderable to submit for values. And I'm assuming the scope here is still the test orderables. So, maybe pause there. Comments about what we have listed? Anything major that folks think we may have missed? Let's pause there.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Cynthia here. I was just thinking across the system, as we look downstream, and we do move towards transparency. As there's a physician order that's standard, how could it be that we want to think of open APIs and apps being able to show the patient and the doc, ultimately, in a perfect world, the pricing differential of where that patient could go and what it would mean to both the employer or the insurance plan, as well as to the net cost to the consumer as well as to the employer? So, imagine, if you will, if a patient walked across the street and got a $200.00 lab down the block versus a $3,000.00 lab at an acute care when it was just an outpatient visit anyway.

One could be incentivized by their employer to say we reward you with X amount in increased wages because you saved X amount in not having our healthcare costs go up through good decision support. So, I'm just trying to think how we lay this out that both an employer and the app world, as we get to a standard, can flash that net pricing up for good decisions.

Steven Lane – Sutter Health – Co-Chair

So, Cynthia, I just added here, in Row 6, development support. Use the standards to determine and expose cost and pricing information to providers, payers, and patients.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Yeah. And I think you can get to the net pricing. What I know the arguments have been, by insurers and the like and pharma, under the word of cost, they use cost as their "trade secret". So, if you have the negotiated price as the terminology or the nomenclature, and we used pricing, I think it would save the pushback from saying we don't disclose costs. Do you see what I'm saying? So, I think it would serve us well because then, you couldn't get pushback on saying we just want to know what the net price is.

Steven Lane – Sutter Health – Co-Chair

How is that?

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

I'm not in front of the screen, sorry.

Steven Lane – Sutter Health – Co-Chair

Oh, sorry. I have developed and support the use of standards to determine and expose cost and net pricing information to relevant stakeholders, including providers, payers, and patients.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Yeah. I guess that would even eliminate the word cost because it gets argued against a lot.

Steven Lane – Sutter Health – Co-Chair

Okay.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

So, just net pricing. And the reason why it is net is that, often times, when you push on it, they'll give you a chargemaster list price. And you never get to see the true price. So, we have a net negotiated price, and then, we see a true price.

Kensaku Kawamoto – University of Utah – Co-Chair

I do think this is a very deep topic. I do think this topic really does deserve us focusing on it, specifically. And I think we should touch on it here. I think, later on, we should circle back on this. It's a pretty complicated field, too, because, to really get the right price, you need to know things like the patient's things like medications, the patient's current deductibles and how much they've already paid. And there are a lot of factors at play. But I think the current set of implementations, typically, are getting towards if I order it where I said I want to order it, how much it will cost. I'm not aware of much in the way of where could I choose from and what would be the differences in cost there.

Or, even ideally, when you want to order something, the system is just defaulting you to the best option, considering a combination of price and convenience and all of that kind of stuff. It's a pretty deep field. We need to discuss it more.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

I agree. And I think, if we ask for the ability to have some standardized in the net negotiated pricing, then, the rest can play out. It will happen through developed apps. So, we can at least start the groundwork.

Steven Lane – Sutter Health – Co-Chair

So, in the interest of time, I'd like to clarify that our goal here was really to come up with a set of recommendations that we are going to now set aside, with the intention of moving on to new domains. And then, later next year, when we bring together our report, we will come back to these and harmonize them internally with the other domains that we've worked on and put it together into a larger, separate document that we will be reporting back to the HITAC. But what we'd like to do here is, if there's anyone who has any significant reservations about this, otherwise, we'd like to sort of consider this final for now, and then, talk about the next domain that we're going to work on.

Kensaku Kawamoto – University of Utah – Co-Chair

That sounds good. If you're a member of this task force, in particular, if you have any disagreements or reservations about anything we've stated, can you raise your hand or speak up?

Steven Lane – Sutter Health – Co-Chair

Including the choice of priorities. You'll notice that we've sorted them into two priorities, one and two. And we, very specifically, sort of drew a line feeling that the decision support integration, the prior auth, which is almost a special case in decision support, and the order status were sort of secondary to the highest priority items, which is really getting the data mapped and available and interoperable.

Kensaku Kawamoto – University of Utah – Co-Chair

Okay.

Steven Lane – Sutter Health – Co-Chair

Great. Hearing none, we will consider this task at a good stopping point. I'm very excited about that. And congratulations to everyone, and thanks for all of the input you provided. Ken, do you want to talk about our proposal for the next domain?

Kensaku Kawamoto – University of Utah – Co-Chair

Yeah. So, I think the desired approach that we discussed maybe at the last meeting was, instead of splitting up into different groups, let's continue this group discussion just moving on to different domains. The next one, there were a few that were next, in terms of the initial prioritization matrix and people's thoughts on them. Based on what we found going through this domain, where there was a lot of existing work and a lot of the value we provided was understanding that seeing how to promote it, we wanted to propose the next topic. Here it is. And the potential proposed topic is to move on into closed loop referrals and care coordination.

And the thought here is kind of similar to what's going on in the test orderables and resulting domain where there's been a lot of work, including for the upstream appropriate encoding of test results, etc. There's a lot of good work happening here in the closed loop referral and care coordination space. And this could be an area where we could really just see what's already ongoing, identify the potential gaps and direction we can help provide, and to provide some value. So, Steven, do you want to comment some more on this proposed next domain?

Steven Lane – Sutter Health – Co-Chair
Yeah. I think what we found when we did our prioritization process with the voting, was that there was interest in all of the domains that we'd looked at. And this one, clearly, was right near the top. And we did feel that, similar to the orders and results where a lot of work has been done by others, we can leverage and really throw our recommendations behind. It seemed that this was a great opportunity. We also felt that it had a lot of potential benefit for patients, as well as clinicians, in terms of both streamlining the processes around referrals and assuring that those referrals are well informed, that they can be managed efficiently, that the data generated by those referrals is put back to use and is available to patients and providers. So, it seems like a very appropriate next step.

And, again, a lot of work has been done all the way up through connect-a-thons and live demos. So, it seems a very appropriate place to focus next. It also seems like one where it, again, would benefit from us all working together, as a single task force as opposed to breaking out into smaller groups. And we think that we can probably get through it in a relatively small number of meetings. So, I think we're interested in hearing whether anyone has any concerns about that approach. And if we're going to move ahead, we have a pretty good plan for how we're going to approach that, again, bringing Brett back from the ONC to talk about the existing standards. It ends up that he has also been involved in supporting the 360X program, over the last few years.

And we wanted to bring one of the domain experts from that group to come and talk about the work that they've done and what they see as the current challenges and future opportunities to inform our deliberations and development and recommendations. Any thoughts or comments on that?

Kensaku Kawamoto – University of Utah – Co-Chair
Does anybody disagree with moving on to the this next? I think we can take that as an agreement if there's nobody who disagrees.

Steven Lane – Sutter Health – Co-Chair
A lot of quiet, from our end.

Kensaku Kawamoto – University of Utah – Co-Chair
Well, I'd just note that in our health system – go ahead.

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member
I was just saying I agree.

Kensaku Kawamoto – University of Utah – Co-Chair
Oh, great.

Steven Lane – Sutter Health – Co-Chair
Thank you. I feel better.

Kensaku Kawamoto – University of Utah – Co-Chair
I'll note, in our health system, this did come up fairly high up in our institutional priority as something that we really wanted to get resolved because it's a big issue for both patients and providers. Okay. Let's see. Can we go to the next slide? I think we had something related to this.

Steven Lane – Sutter Health – Co-Chair
Oh, yes. This was just something that I saw on Twitter the other day, which I thought was apropos to this discussion. It was striking that it came in just a couple of days before our meeting. Somebody mentioning, specifically, the challenges of information sharing for patients around closed loop referrals and the siloed nature of the information, when patients move between systems. And acknowledging that the technology exists to support the appropriate transmission of data, as patients traverse the system through a referral workflow. But we are not assuming that it's used. So, I still thought it was worth pointing this out. This is a lively topic, in the world.

Kensaku Kawamoto – University of Utah – Co-Chair
Okay. If there are no further comments, I think we're ready for public comment. Any other comments from task force members, before we move on? Okay.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Okay, great. So, now, we'll open the meeting for public comment. Operator, can you please open the public line?

Operator
Yes, thank you. If you would like to make a public comment, please press Star 1, on your telephone keypad. A confirmation tone will indicate your line is in the question cue. You may press Star 2 if you would like to remove your comment from the cue. And for participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys.

Steven Lane – Sutter Health – Co-Chair
Do we have any comments in the cue?

Operator

There are no comments on the phone line.

Steven Lane – Sutter Health – Co-Chair

We did have Dheeraj Paul from NYEC trying to get a word in earlier. And we got some public chat from him or her. Are you here, on the line, and able to provide us a public comment? If so, that would be great. A number of comments, in fact.

Kensaku Kawamoto – University of Utah – Co-Chair

Do you want to provide a comment, Daraj?

Steven Lane – Sutter Health – Co-Chair

Daraj is typing the comment. We can await that.

Kensaku Kawamoto – University of Utah – Co-Chair

Okay. Thank you. That is good now. Okay. Do we have any other comments, in the cue?

Operator

There are no comments.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer

Ken, Steven, anything before we close out the meeting?

Steven Lane – Sutter Health – Co-Chair

I guess, the one thing that I would add is that we are in line to provide a report back to the HITAC committee when we meet next. And we will plan to present our recommendations. Again, as we said, we're hoping to have our subject matter expert from Regan Street and LOINC there to help address any questions that arise. And then, we will also share that we're going to be moving on to work on the referrals, with all of your agreement where we'll go ahead and set up the details for the referrals work. I was thinking of trying to put together another kind of process flow document, the way we did with the orders and results just to try to kind of cull out what the various steps are in a referral process, so that we may have that. Or the folks from 360X may have already developed that.

And then, the other thing that I think is worth mentioning is that we discussed the scope of the referrals work. And as you saw, we included, in the title, care coordination because my personal feeling, as a primary care physician, is that a referral is sometimes just a simple loop. You refer someone out. They get an opinion from a consultant, or they get a procedure performed, and then, they come back, and that's the end of it. But often times, there is a need and desirability for ongoing care coordination between multiple members of a care team, multiple providers, be they physicians, nurses, home care, etc. And I think a lot of the issues that arise in the discussion of closed loop referrals also bears on how we support ongoing care coordination and communications amongst the care team members,

specifically, what are the technologies to support that communication and coordination of care.

So, I think, as we get into that domain, we will also be looking at some of those questions.

Seth Kasinsky – Office of the National Coordinator for Health Information Technology – Designated Federal Officer
Okay. Great. Anything else? Okay. So, just two quick reminders. 1) The next full meeting of the HITAC will be between now and the next meeting of this task force, on October 17, which should be on all of your calendars. And then, for the public listening in, you can find the calendar for all of the HITAC meetings, as well as the materials that were used for this meeting, on HealthIT.gov. And with that, I will adjourn the meeting for the day. Thank you all.