



Interoperability Standards Priorities (ISP) Task Force

Transcript
October 23, 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

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Good morning, everyone. Welcome to the ISP Task Force meeting on today, October 23. We will call the meeting to order, starting with role call. Ken Kawamoto?

Ken Kawamoto – University of Utah – Co-Chair

Here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Steven Lane.

Steven Lane – Sutter Health – Co-Chair

Good morning.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Anil Jain? Not yet. Arien Malec? Not yet? Andy Truscott?

Andrew Truscott – Accenture – ISP Task Force Member

Present.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Clem McDonald?

Clem McDonald – National Library of Medicine – ISP Task Force Member

Present.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Cynthia Fisher?

Cynthia Fisher – WaterRev, LLC – ISP Task Force Member

Present, good morning.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Good morning. David McCallie?

David McCallie – Cerner – ISP Task Force Member

Here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Edward Juhn?

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

Present.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Terry O'Malley?

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

Here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Les Lenert? Not yet. Jack Po? We have you on the Adobe. Jack, if you can hear us, please let us know. Raj Ratwani?

Raj Ratwani – MedStar Health – ISP Task Force Member

Here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Hi, Raj. Ram Sriram?

Ram Sriram – NIST – ISP Task Force Members

I'm here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Ricky Bloomfield?

Ricky Bloomfield – Apple – ISP Task Force Member

Good morning. I'm here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Sasha TerMaat?

Sasha TerMaat – EPIC – ISP Task Force Member

Here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Scott Weingarten? Not yet. Sheryl Turney? I think I saw Sheryl's name on the Adobe. We'll double back. Tina Esposito? Not yet. Tamer Fakhouri?

Tamer Fakhouri – One Medical – ISP Task Force Member

Here, good morning.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Good morning. Valerie Grey?

Valerie Grey – New York eHealth Collaborative – ISP – Task Force Member

Good morning, here.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Good morning. And Victor Lee? Okay. We'll circle back. They may join late. I will turn it over to our co-chairs, Ken and Steven.

Clem McDonald – National Library of Medicine – ISP Task Force Member

Did you get Clem McDonald?

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Yes, I got you, Clem. Thank you.

Steven Lane – Sutter Health – Co-Chair

Well, good morning, everybody. Thank you so much, Lauren, for getting us started there. As best I could tell, the only people we have missing were Les Lenert, Tina Esposito, and Victor Lee, is that what you have?

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Arien Malec as well, and Anil Jain.

Steven Lane – Sutter Health – Co-Chair

Okay. We will watch to see if anyone can join us. Well, thank you all for coming today, again, and returning. We are excited to start the next phase of our work. We did present to the HIT Advisory Committee the results and recommendations from our initial phase of work on orders and results. And I think they were well received. There was some discussion but not a lot of significant, constructive input. And we have made the slides available that we presents, so that all of you who are not also on the HITAC or weren't able to attend that meeting now

how our work was represented there. We do have a meeting, I think, tomorrow perhaps with Don Rutger to go over this with him in person. I think he had some ideas and feedback that he wanted to offer.

So, we will be collected that and sharing that back with you. There has also been some other feedback that some of you and others have provided. Dave McCallie had missed one of our meetings and provided some really helpful feedback in an email. And I think we probably will have an opportunity to go back and make some further adjustments to that body of work before we finalize it in our recommendations next year. And Ken, do you want to add anything to that?

Ken Kawamoto – University of Utah – Co-Chair

No, that sounds good.

Steven Lane – Sutter Health – Co-Chair

Does anyone have any questions or any of you who were at the HITAC meeting have any follow up comments from that discussion?

Clem McDonald – National Library of Medicine – ISP Task Force Member

This is Clem. I had to leave about a half hour early. And the slides you've described, have they been sent to us, or do we look for them on the web?

Steven Lane – Sutter Health – Co-Chair

Well, I know they're on the HITAC site. Lauren, we talked about distributing them to this committee, so that it would be easier for them to find them. I don't know if that was done.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Yes. You mean the notes or the – I mean, the summary or the transcript?

Steven Lane – Sutter Health – Co-Chair

I was thinking the presentation itself, the slides that we had sent.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Oh, yeah. The presentation materials are there. The summary will probably be there next week, which it takes a little bit of time to get the summary up. So, the transcript and all of the meeting material should be there.

Clem McDonald – National Library of Medicine – ISP Task Force Member

Well, I was actually asking about the slides that Steve mentioned and if they'd be mailed to the committee members.

Lauren Richie – Office of the National Coordinator for Health Information Technology -

Designated Federal Officer

The slides from the full HITAC meeting last week?

Clem McDonald – National Library of Medicine – ISP Task Force Member

Well, I'm not sure what you were talking about, Steve. The summary –

Steven Lane – Sutter Health – Co-Chair

Yeah, I meant the slides from our presentation on the task force recommendations.

Clem McDonald – National Library of Medicine – ISP Task Force Member

I saw those. Never mind, yeah.

Steven Lane – Sutter Health – Co-Chair

Okay. That's what I meant. Great. All right. Then, why don't we go –

Andrew Truscott – Accenture – ISP Task Force Member

Steve, it's Andy. Just one comment from the committee meeting last week. My interpretation of the lack of commentary from the committee was more of a comfort with the direction than a disinterest.

Steven Lane – Sutter Health – Co-Chair

I like to think the same.

Andrew Truscott – Accenture – ISP Task Force Member

I think, if we were wildly off course, someone would have said hang on a second. I think we're okay.

Steven Lane – Sutter Health – Co-Chair

All right. Excellent. So, let's go ahead then, and turn our attention to our next domain area, which is referrals and care coordination. I don't know about all of you, but in anticipation of this discussion, I've certainly had a lot of interactions with people in various parts of the industry and heard a lot of good ideas. So, what we wanted to do was start with our friend, Brett Andreson from the ONC, talking to us, again, about what are the existing standards that have been identified that really support this area within health IT and interoperability. We're then going to be hearing from two people representing the 360X Project, which has been very much focused on the evolution of health IT standards to support closed loop referrals.

That will be Holly Miller from Med Allies who will be supported by her colleague, Jim Fisher, as well as Vassil Peytchev from Epic who have been key actors in getting 360X to where it is today. So, that will be good to hear. And then, we will have a period of time for discussion. I did put together the beginnings of a process flow diagram, as we did for orders and results, which is up on the shared site. And we may utilize that, in our discussion or not. But I think it's a real opportunity to start to understand the key components of referrals and closing the loop and coordinating care and then, thinking, over the next few meetings, about where we

think we have the opportunity to make recommendations to help move this area forward. Ken, do you want to add to that, before we hand it over to Brett?

Ken Kawamoto – University of Utah – Co-Chair

No, I think this area has a lot of good work like the last topic we covered. So, I'm hopeful that we can make good progress, like we did for the last topic. Okay. Shall we hand it over?

Steven Lane – Sutter Health – Co-Chair

Great. Brett?

Brett Andreson - ONC

Hi, good morning, everyone. I don't have a ton of slides here, but I will kind of run through a number of different points that the group has asked me to speak to. You'll see some links on the screen here. This will be some information that I'll cover, as I'm speaking. And I'll try to refer back to it. But as I understand it, the task force members have received a list of kind of the various different relevant ISA, interoperability need sections that have been sent to the group. Those include various items that are relevant to referrals and kind of overall care coordination. But, at least until recently, there hasn't been much out there in the way of standards that are explicitly related in supporting managing the referral process overall.

So, some of the different sections in the Interoperability Standards Advisory that might be good to look at are a number of different subsections within Section 2, which are the content and structure standards. So, those around admission, discharge, and transfer, around care planning, around images and laboratory needs, as well as definitely summary care records. And then, there's some on the more administrative side of the house, including healthcare claims, coordination of benefits, and administrative transactions to support clinical care. So, I definitely would encourage the group to take a look through those, see what might be helpful and important to consider, as you're working through this. But shortly, you will hear from Dr. Holly Miller and Jim Fisher from Med Allies, as well as Vassil Peytchev from Epic regarding some of the work that they and ONC has been doing around closed loop referrals, more specifically, a 360 Project for closed loop referrals.

They'll give you some more background, but, just briefly, it did begin in 2012 as part of ONC's, CAP, Cooperative Agreement Program, with a goal of enabling cross vendor referral management and exchange utilizing existing standards that are out there, such as Direct and consolidated CBA. As part of bringing that 360X Project work through IHE International, there was another IHE specification that was identified in support of referrals. That was the cross enterprise basic E referral work flow definition profile, which is that bottom link there, and also known as XBERUD. As far as the group could tell that had a relatively low uptick in adoption. It seems to be largely based on other IHE profiles like XBS, which may or may not be directly supported in a lot of health IT products. There's another method that also comes to mind, a group out in Tulsa, Oklahoma, I believe, My Health Access, is utilizing HL7B2ORM messages to support referral work flows.

And that seems to be working fairly well, in that region. It is a somewhat proprietary method. It's something someone could be aware of that's out there. As I mentioned, 360X is based on

Direct. And I thought I would give a little bit of background to the group for those that are not aware of what Direct is. You can see the first link there is the link to the Direct project clicky, which has the full specifications, as well as all of the history and notes from previous work group meetings. You can also see the link, the second one down there, is linked to the 360X clicky, which has the latest and greatest implementation guide. But that's the background on Direct. It began in 2010, I believe, with pilots launching sometime shortly thereafter. But, essentially, it's a set of standards, policies, and services based off of existing internet standards like FMTP and X509 digital certificates, to enable secure transport of health information between authorized providers.

It's a push method of exchange. It was created through an open and transparent process of public work groups kind of going through a duocracy where concrete action is really valued as much as, if not more than discussion. Direct operates utilizing and with the support of HISP, or health information service providers. It really acts as a backbone and serves as the intermediaries to package, encrypt, transmit, and decrypt the contents and delivered securely to providers that are identity proof and authorize the – access the amount of information that's kept in the system. As many of you know, Direct was included as part of – in support of meaningful use Stage 2 as one of the standard identification criteria for the transitions of care criteria, which definitely brought a pretty big increase in adoption and use of it there. There have been kind of a number of communities that help to manage common trust agreements and policies.

Probably the largest one of them that will come to mind to many is Direct Trust. Those are the pop ups to help kind of reduce the burden and the need for individual trust agreements and contracts between different providers and groups. They establish common criteria and requirements that everyone can meet, so that folks feel comfortable exchanging information with each other and kind of that trust. Direct has been implemented differently by different developers and in different products and systems. But, at its core, essentially, it is a secure email or messaging specification. Some have implemented it in a way that treat it that way, so that you would open an in box. Folks can even configure Outlook to work with Direct addresses, so that it works in that way that you could use it to send a care summary as a PCPA, pictures of cats, whatever.

Others have done it in a way that providers may not even know. But it's really email, and they don't see an in box but something that's kind of acting behind the scenes to enable a care summary exchange. I'll mention Direct Trust does have a white paper that includes kind of a number of different direct practices around supporting different features and functionalities for direct. And I would encourage the group to take a look at that as well. The Direct community does remain active to this day. In addition to the original specification, they've developed a number of different kind of documents and different implementation guides around things like message disposition notification that let users know if a message has been delivered or if they maybe got a bounce back. Edge critical guidance that helps systems kind of configure how to step up or step down to some of the different protocols that are available in support connectivity to Edge systems for that last mile of connectivity.

And most recently, the work group has been focusing on an implementation guide for expressing context indirect messaging to help systems understand what a message may

contain or why it's being sent. So, I thought I'd try that information and can help with some routing functionalities. Use cases out there could be widely varied. But more commonly, we see it used for care coordination, obviously, for transitions of care and support of programs like meaningful use, lab results delivery, secure messaging, and use for a view on transmit measures, account information with patients to be used for public health reporting, documentation, and exchange of payers. It can support system or human end points for a number of different uses cases.

And I know there's been some talk in the past. I haven't seen it directly used for kind of some targeted query types of use cases where it can be kind of the mechanism to send the query as well as receive a response back of the information. I'll pause here and see if the group has any questions. I know, if Arien Malec has joined, he was one of the original Direct project coordinators. So, he knows probably a lot more about Direct and knows all of the ins and outs, and he can remember many of the different pin points and exciting points on the Direct history. But I'll pause here and see if there are any questions. Otherwise, I will turn it over to Dr. Miller to introduce and kind of go through 360X shortly.

Ken Kawamoto – University of Utah – Co-Chair

This is Ken. Could I ask a quick question?

Brett Andreson - ONC

Sure.

Ken Kawamoto – University of Utah – Co-Chair

Is there any work in the area, when you're making a referral, the particular specialist may want to know, if you're a neurologist, and if you're referring or having – I want to make sure that you've asked these questions, you've gotten these imaging. Are you aware of any standards efforts that have taken place in that realm yet?

Brett Andreson - ONC

I think 360X is definitely showing some promise, in that area. It would certainly require kind of the referring provider to include that information and to be sending some of that stuff over to the provider receive the referral. It wouldn't necessarily be an automated process. But outside of 360X, I'm not aware of anything that is kind of the standard based method for supporting that type of connectivity, at this time, other than kind of the fax, phone call, sending messages that we see pretty often right now.

Steven Lane – Sutter Health – Co-Chair

Ken, what I think what you're getting at is the question of, for any given referral, for a given diagnosis or symptom, to a given specialty, are there people developing standards of what should be obtained by way of examination, by way of testing, by way of history to facilitate the referral. And I think that is an area that we're going to want to talk about. I know there's been a lot of talk about having specialty societies weigh in on that. I know the AMA is doing some very interesting work in that area. And they're actually in a position to, potentially, put together the various specialties that are engaged. And I think that we may want to talk with

them, as a domain expert in that area. But I hear Brett's response that, from the ISA perspective, it hasn't made it to that level.

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

Hi, this is Terry O'Malley. I'd like to throw in a comment. I'm wondering if we should look more at the process of making a handshake, signing what information needs to go, and really make it a one on one. Part of the process of making a referral, rather than specifying the content of what should be exchanged at each point, just because we got a billion different data sets, if we do that one at a time. The 360 decline is a really nice process. It's a handshake and an identification number. It really forms the basis for this dialogue that will let you prep for the referral, then, make the referral and make sure it happens, and etc., etc.

Steven Lane – Sutter Health – Co-Chair

And Terry, I think that's a really good point. We've got the process. We've got the content. And then, I'm struck by your use of the word dialogue suggesting that it's really a dialogue between two parties. And I think what we're going to find, as we dig into this, is that there are actually multiple parties that perhaps have not had their voice well expressed in these discussions. There's the patient. There's the referring provider. There's often a payer involved. There's the referred to provider. Those four parties, at the very least, seem to have key stakes in this process. So, hopefully, as we go forward, we'll sort of tease apart those different stakeholder groups and their needs. Other questions or comments for Brett? I don't see any hands up.

Andrew Truscott – Accenture – ISP Task Force Member

Hi, it's Andy. Just a quick comment. So, I'm dialed in on land, so I couldn't put my hand up. Is it okay to speak?

Steven Lane – Sutter Health – Co-Chair

Please.

Andrew Truscott – Accenture – ISP Task Force Member

Cool. So, when we use the word "standard", it gives me a little bit of caution in that I'd like to know that we're all on the same page as what we mean by a "catalyst standard". It's a definition that's been through a rigorous process ahead of our discussions versus a definition of something that's been created, which might not have been through such a rigorous process, but we've unintentionally viewed it with a level of validity and fidelity, which might not represent the process it's been through. Do you get what I'm kind of saying probably quite inarticulately? But what I'm trying to get to is that a standard is a standard from a standards organization versus something, which is useful and, which may or may not, eventually become a standard.

Ken Kawamoto – University of Utah – Co-Chair

This is Ken. Certainly, that makes sense.

David McCallie – Cerner – ISP Task Force Member

This is David. Can I make a comment to that?

Steven Lane – Sutter Health – Co-Chair

Go ahead. And David, I see you used the hand raising feature, which we greatly appreciate. So, go right ahead.

David McCallie – Cerner – ISP Task Force Member

You trained me well. I think the question is a really interesting one. And I think it boils down to, in some cases, the difference between a standard and a profile. And, typically, the way it works, at least so far, has been the core standards are fairly rigorously balloted, usually by some kind of an ANSI defined process like HL7. But the profiles, typically, cross across multiple standards, so there is no single entity that controls them. And the profiles themselves often don't go through a formal ANSI process, but they do go through a group consensus process, which is sufficient for regulatory purposes. So, something like the Argonaut work to define Smart on FHIR is a profile captured in an implementation guide that went through a consensus process but isn't formally an ANSI managed standard.

And I think that's an effective way to address specific use cases where the standard bodies are focused much more narrowly on the base standard that could be used in many, many different use cases. And the profile and implementation guides tend to be focused on a specific use case. And this 360 referral management is a good example of an implementation guide that layers on top of the standards. That's how I see it anyway.

Andrew Truscott – Accenture – ISP Task Force Member

I think that's a good comment, David, certainly in the FHIR world. I think the more we have a, for want of a better word, call it a collection of standards, which are brought together, or collections of parts and standards, which are brought together to create something better on top of their shoulders, I completely agree with you. My caution is where there are I'm not going to use the word profiles but a collection of artifacts brought together, some of which have been through a standardizing process and others which might not have been. And I'm not sure we, this group, should be imbuing them with the same level of fidelity as what David just described, which I think is a high level. It's almost like it's a pyramid of fidelity here.

David McCallie – Cerner – ISP Task Force Member

Yeah, this is David. I agree. I think that we should be careful to talk about implementation guides, which are different from standards. The point where it starts to matter – it matters to ONC, in terms of what could be a part of a regulatory, something that binds with regulatory power. But apart from that, even if there is no regulatory connection, we should be careful of those distinctions. I think the implementation guides tend to be more dynamic. And based on market experience, does it work or not? If it doesn't, then, fix it. And that can sometime happen at a fast pace than regulation is comfortable with. But those are tensions that we faced from the beginning of this process.

Andrew Truscott – Accenture – ISP Task Force Member

Yeah. I think my coaching coming out of that, David, would be this group's advice and

guidance that goes to the committee, which then goes through the ONC channels, we should be clear and distinct when we're saying we advise you to do A, B, and C with this standard. And to recommend D, E, and F, which are profiles or collections or whatever, as a distinction.

David McCallie – Cerner – ISP Task Force Member

I agree. I just think be careful about what you put in regulation because that locks it down and can create unintended consequences.

Andrew Truscott – Accenture – ISP Task Force Member

Absolutely. And there's lessons learned from around the world where dozens of organizations that feel like they're doing the right thing by putting such statements in regulations. And they've found themselves slightly hamstrung because they've got something wrapped up in a piece of actually even worse legislation, which they're trying to back out of.

David McCallie – Cerner – ISP Task Force Member

Yeah. So, do something like create an incentive for electronic referral management, and then, let the industry partners work out the best protocols, so that all of their customers can meet that incentive. That way, you have the flexibility that you get their desired result, better referral management.

Andrew Truscott – Accenture – ISP Task Force Member

Yeah. I think we talk about referral management. I think we've covered supply across what we do. But I think referral management, we could say, look, the basis should be upon A) this syntactical standard. Let's say something in the HL7 pantheon, this semantic standard. We've talked about many different semantic standards on here before. And then, the actual implementation is implementation. And the market will –

David McCallie – Cerner – ISP Task Force Member

Right. And the balancing act, I think, and maybe we're way off topic, but this is a fun conversation close to many of us, our jobs. The balancing is between those parts of that work that you feel are stable and proven enough that you want to force their use versus those parts, which are still fluid and evolving as our technologies get better and as processes get better. And the balance between those two is tricky and shifts over time. So, we standardized around certain key nomenclatures. And I don't think anybody would say we shouldn't have done that, but maybe we went too fast in standardizing around certain implementation guides like say the Direct spec, without sufficient market understanding of how people actually want to use it.

And getting that balance right, in this referral management case is going to be just as tricky. That doesn't mean we can't go and do it. We can do it aggressively. We just have to be careful about what parts get in regulatory scope.

Steven Lane – Sutter Health – Co-Chair

I think those are great comments. Go ahead, Ken.

Ken Kawamoto – University of Utah – Co-Chair

We were doing the same thing. Please go ahead.

Steven Lane – Sutter Health – Co-Chair

I was just going to say, I think those are great comments, by way of background, as we think about the standards that apply here. And I want to go ahead. We have a number of visitors who came to talk to us about 360X, and we want to give them a chance to do that.

Dr. Holly Miller – Med Allies

Good morning. And thank you for the opportunity to discuss 360X with you today. I'm Dr. Holly Miller. I'm an internist and the chief medical officer of Med Allies. Those who know me know I'm passionate about healthcare improvement. And I'm inspired by 360X by the many times, as an internist that I sent a patient out to a specialist outside of the integrated delivery network where I was working, at the Cleveland Clinic, and the patient came back and sat in front of me. And I said, "What did the specialist say? And what did the specialist do and prescribe?" Because I had no information from the specialist about my patient. So, I'd like to kick us off by introducing Vassil Peytchev, who is the lead technical advisor for Epic and has done some significant work on the 360X project. And he will start us off. Next slide, please.

Vassil Peytchev - EPIC

Hello, everyone. My name is Vassil Peytchev. I work for Epic in working with standards, implementing standards. I started quite a few years ago doing HL7 [inaudible] [00:31:09] interfaces. And I have worked with CCDA and various IT profiles, Direct, etc. Currently, also, I'm working with FHIR. So, the background of 360X, it was launched, as Brett already mentioned, in 2012 under ONC. And we had a very involved group. We had several work groups that looked at how we can build an implementation guide to solve the problem of having a closed loop referral where, initially, two sides of the referral process, initiating provider and the recipient provider can share the information about the patient, in ways that will make it as seamless as possible for the referral to proceed and provide good care of the patient.

So, as we work through, we use several different standards and specification implementation guides. Next slide, please. We started our work by separating about three main layers. We talked about the transport. We talked about context and work flow, and then, the clinical information needed for the referral process. Next slide, please. As we looked at what is available, we were very strongly influenced by what was, at that time, a meaningful use Stage 2. And so, in terms of protocol that we thought would be already available, we looked at the direct protocol as the main push mechanism that had been promoted by meaningful use, at that time. And then, we started looking at how to represent context work flow in the clinical information. Next slide, please. So, the way we looked at it is, again, what is available and what currently has been in use, so that it could be adapted for actual use cases that we're looking at.

And as already mentioned, Direct was required for meaningful use Stage 2. And we looked at context. And there was extensive testing and available implementations of the cross enterprise document sharing metadata, one specification of which, XDM, was more or less

part of Direct, from the beginning. It was specifically mentioned in the implementation, the Direct specification, as a useful to have capability for anybody, as far as Direct. It was part of the meaningful use optional criteria. And a lot of the major vendors that are part of the ecosystem in the healthcare information technology area in the US already supported it. So, it was well understood, available, to establish the context for the referral that could – in other words, the linking between the various messages that need to go back and forth between the two sides of the referral.

And then, we looked at, specifically, how we can talk about work flow and states. During your previous topic, one of the things that this committee recommended was for, in the lab orders and the results space, to look at the lab results, implementation guide, and lab orders. The implementation guide also done under the ONC auspices and available for implementation. Knowing that, at this time, this was already – Version 1 was already out, and Version 2 was under development, we believed that using HL7 Version 2 messages is also well understood, at least, again, in the majority of the players in the healthcare space. And so, we adopted that standard as representative of the work flow information, of the dynamic information that changes over time, during the life of the referral. And then, at the top level, the clinical information, CCDAs had just been mentioned. Version 1.1 was specified in NU2.

And now, we are in Version 2.1. And not only was that specification mentioned, it also provided the common data set and provided various templates that were quite specific for referral, the referral note and the consultation note. We understood that we cannot cover, in terms of content, all of the possible variations and all of the specific needs. So, we envision that future work by medical societies and specialty groups can further constrain and specify exactly how a CCDAs would look for a particular clinical use case. So, this was left as future work. Next slide, please. As we built upon these standards, it became clear that it is essential to have patient identity management capabilities on both sides. We require that the referral initiator send basic demographic information and a patient identifier known to them. Now, in many cases, the initiator may also have a common identifier with the recipient.

And so, there is also a way to send that common identifier to the recipient, in addition to the one known to the initiator. In some cases, that can be one and the same identifier. The key requirement, however, is to continue the dialogue, as was already mentioned here. The dialogue about the patient is that the referral recipient must send back the same patient identifier that they received from the initiator. So, that is a requirement on the recipient's system. It's not just a requirement on the format. It is something that can be verified and tested that this can be done. And so, both sides continue to use that same patient identifier throughout the exchange. And that helps immensely with being able to conduct a discussion, a dialogue, about the patient. It also enables for future enhancements beyond the initial use cases that we looked at.

The main use case we looked at was a primary care provider referral to outpatient specialist. But having these patient identity management capabilities would allow this to be extended, including interrogation as was mentioned today. The question was how can I ask for certain things to be done before the patient comes to me from the referral recipient's point of view. And that does not have to use the same format or standards. For example, it can be done through FHIR queries or through a FHIR questionnaire, methods that are currently evolving.

They can fit within that 360X framework by using the same patient identifier and the referral identifier. So, the referral identifier is also something that needs to be communicated constantly between the two sides.

And it's required to be sent by both sides. So, the initiator signs the unique referral identifier. And from that point on, both sides need to keep using it, as long as they're referencing that referral. Next slide, please. I'll turn it over to Dr. Miller to talk about how this actually would help the care process.

Dr. Holly Miller – Med Allies

Thank you so much, Vassil. So, let's talk about the project goals of 360X. And our initial use case is referral management. So, 360X augments Direct interoperability. Currently, Direct interoperability facilitates the secure exchange of clinical data across electronic health record and health information technology systems and greatly enhances communication in clinical care. The primary goal of this use case of 360X is to improve patient care and referral management across ambulatory care transitions. This is achieved through standardization built into EHR systems, in terms of standardized type of data exchange and method of transport, transparency of progress, and/or gaps in care, until the loop is closed, a process with a low bar of entry for implementation, and the enhanced capabilities that I'd value to patients, clinicians, office staff, and overall clinical work flows.

Next slide, please. We thought the best way to illustrate 360X was to tell a clinical story demonstrating the current state and then demonstrating how the story might evolve with using 360X standards built into the EHRs. Our patient is a 67-year-old obese man with new complaints of chest pain and high risk for heart disease. He says that when he's exercising, he experiences chest pain and shortness of breath that is relieved immediately with rest. He's in his PCP's office, and the PCP and the patient agree that the best next steps are an urgent referral to cardiology. Ideally, on the physician's electronic health record ordering screen, or on the front desk screen, depending on role based work flow in the office, the physician or front desk staff would have information about the specialist provider to share with the patient, so that the patient actively participates and is engaged in selecting the specialist.

Such information might include the specialist culture and languages spoken in that specialty office, proximity to the patient's home or work, the specialist's CAPS rating, and a specialty value score, including transparency about the cost of the encounter. So, in this case, we're going to talk now about the current state of what might happen, given that the PCP and the patient have agreed that the patient requires an urgent referral. For most offices, what happens is the patient is given a phone number of the specialty practice and asked to call to schedule the appointment. The patient calls the number he was given, when he returns home, in this case, and is told there are no appointments in the specified timeframe. Or he could be told that the specialist no longer accepts his insurance.

In any case, with that one phone number he's been given, he's unable to schedule this urgent referral. Next slide, please. Being unable to schedule an appointment, per his doctor's instructions, he calls his doctor's office back immediately, and he's told they will call back, once they've discussed it with his PCP and get a new name. The patient knows this was

supposed to be an urgent appointment, so his anxiety is steadily increasing. Next slide. The PCP office staff finally return the patient's call and give the patient another cardiology office phone number. In our current state, we are eliminating phone tag, which would add significant further time elapse to this process. Next slide. The patient calls the second cardiology office and receives an appointment for the following day.

Then, to help relieve his anxiety, he and his wife go for a walk after dinner. During the walk, the patient, again, experiences chest tightness and shortness of breath. And though it is immediately relieved with rest, his wife calls 9-1-1, and the patient is admitted to hospital for rule out MI, despite a normal EKG and preliminary normal labs. The following day, Arnie, who has been admitted to hospital, is a no show to that cardiology appointment, annoying his staff who scheduled an urgent appointment for the patient. Next slide, please. Almost two weeks later, the staff assigned to track referrals in the PCP office, working off the open orders in the electronic health record, or in some offices, working off of an Excel spreadsheet to track open referrals, noticed they have received no documentation from the cardiologist and called the patient, only then to learn of the hospitalization.

And the cardiology team in the hospital gave him many tests but determined that he had stable angina and would best be treated with medication management, which would have been the same conclusion as the office cardiologist. So, now, let's move to what might happen with 360X. Again, ideally, once the patient and the PCP have determined, mutually, that the specialty referral is in order, the process of selecting the specialist would include shared decision making regarding the specialty referral and the specialist to be selected, based on the patient's preferences. Of note is that 360X does support the patient being able to change or cancel the appointment, once it is made. And 360X will automatically keep the PCP in the loop. In this case, the patient and PCP have agreed on an urgent referral. And Dr. Allen's office staff sends an urgent request to Dr. Brown's office for same day cardiology consultation.

The PCP orders the cardiology consultation and indicates the urgent timeframe on the order. This referral request is sent to Dr. Brown's office. With the 360X functionality, each referral order generates a separate, unique referral number. This number persists across systems, until the referral loop is closed, facilitating the PCP office staff to manage all referrals and to know the status, at any point in time, of the referral. Statuses include declined, scheduled with appointment date and time, no show, canceled, appointment rescheduled, interim consultation note, and final consultation note. Decline, referral canceled, and final consultation note are all statuses that close the loops and terminate that unique referral order.

So, even if the patient is sent for a new referral to a specialist that the patient had seen previously where the referral loop has been closed, the new request will have a new referral number facilitating tracking. In this case, when the first referral – next slide, please. The PCP's urgent request is received in the cardiologist's electronic health record system into a pool managed by his staff who pride themselves on handling the requests as soon as they come in. Due to scheduling conflicts, the request must be declined. The decline automatically purges the received documents from the system, once the request is declined. Decline is automatically sent to the PCP's electronic health record, and the PCP's staff can see, in real

time, that the referral request has been declined, as the cardiologist is not available for same day appointment.

Receiving the decline in the PCP's electronic health record closes this referral request. Next slide. Once the PCP's office staff receive the decline, they immediately send a new urgent referral request to another cardiologist. Next slide. Dr. Carlyle's office staff receive and review the request and accept the urgent referral. They schedule the patient for a same day visit. The EHR automatically sends a 360X accept notification, along with the date and time of the scheduled appointment to the PCP's electronic health record. This new unique referral order ID will persist, until this referral order loop is closed. Of particular note, the entire referral process has taken a couple of minutes. The patient has a same day appointment before leaving the PCP's office. And the office staff have not needed to pick up the telephone to make this happen.

In Dr. Carlyle's electronic health record, his office staff create a new patient, schedule the appointment, and pull all of the discrete data received from the PCP's CCDAs into the new patient's chart eliminating transcription errors. The data pulled into the EHR includes patient demographics and problem list, allergies, medications, and immunizations or PAMI data. And in some cases, procedures or CPT codes can also be pulled into the EHR, depending on the EHR functionality. All of this information will be verified with the patient, at the time of their encounter but pre-exist in this record that has been created. A few hours later, the patient arrives for his cardiology appointment. The cardiologist, or his nurse, reviews with the patient the referral information and the discrete data in the chart and edits it, if need.

The cardiologist performs the consultation encounter, based on his testing, patient information, and exam and work up. The cardiologist determines that the patient requires only medication management optimization and treats the patient. The cardiologist includes the new diagnosis of stable angina and orders the new medication and documents this in the patient's chart in his EHR. The cardiologist recognizes that this patient needs no further cardiology encounters, at this time. So, the staff sends the cardiology consultation CCDAs to the PCP indicating that it is the final encounter note. This closes the referral loop. If, in the future, the patient were to require another cardiology consultation, a newer referral would need to be generated with a new, unique referral order identification number.

Once the consultation CCDAs are returned to the PCP, there is no patient matching required, due to the 360X unique referral ID, which all be it is the need for patient matching. When a consultation is received, the documents are automatically added to the correct patient's chart, and the PCP's electronic health record. The PCP reconciles the PAMI data by adding the new medications and discontinuing any discontinued medications and also adds the new diagnosis of angina. The reconciliation process updates the chart with the latest patient information and allows the care team accessing the chart to always have the most up to date information, when interacting with the patient or other providers on the patient's care team.

In summary, 360X functionality for tracking referrals dramatically enhances patients' ability to receive the care they need, when they need it. It also considerably decreases staff time required to schedule and track referrals, allowing staff to devote more time to patient care.

Next slide, please. Beyond what these slides have demonstrated, as previously mentioned, 360X functionality also includes the ability to automate important status transactions between the referred to and referring practice. These transaction messages include scheduled appointment, appointments rescheduled, patient no shows, cancellations, and interim consults, prior to a final consultation, in which the specialist deems that the loop is closed. These functions significantly facilitate the referral tracking leading to enhanced patient care. Next slide, please.

The current planned next steps for 360X include, first, reporting for ECQMCMS measure IDCMS50V5, which is called closing the referral loop, receipt of the specialist report. We want to take the burden off of providers to track this manually and have an automated process by using 360X. We also want to include the patient's insurance information, when the initial referral request goes out to the specialist to better facilitate the specialty office's ability to accept the referral knowing that they accept that patient's specific insurance coverage. We plan to expand our use cases from the simple closed loop referral, PCP to specialist, and back to include transfer of care from an acute hospital to a long term, post-acute care facility or skilled nursing facility, expanded care coordination and care team work flows, the use of 360X with additional technologies, such as FHIR search for additional information.

Finally, we plan to use 360X as one of the EMDI, electronic medical document interoperability, use cases and to pilot this use case and to encourage the use of 360X order tracking unique identifier specification for all of the EMDI order tracking use cases. The pilot will include the Med Allies and potentially a second HISP, two electronic health vendors, and two healthcare organizations. But this is our ask. In order to dramatically enhance the referral management capabilities in electronic health records, it also recommended that, for future certification, ONC requires EHR vendors to adopt the standards, which have been developed and titled 360X. These standards are designed to ensure that patients receive the care they need and that providers always have the patient information required to provide efficient, coordinated, patient care.

Given the direct exchange of pertinent information, prior to the encounter, 360X has the potential to reduce costs related to duplicate testing and to facilitate enhanced care efficiency. Incorporating discrete data from received CCDA documents may also decrease adverse drug events by preventing transcription errors and assuring that all providers informed of a patient's current care plan. In addition, as I previously mentioned, the unique ID order tracking until the loop is closed for that order could be expanded to all order tracking to completion. And before we take questions, I'd like to ask if either Vassil or Jim Fisher wanted to add anything. And then, we're ready for questions.

Vassil Peytchev - EPIC

I just wanted to add that, in addition to the project work itself, this specification also went through developing and piloting through the IHE process. So, 360X is a project implementation guide, and it's also an IHE profile in the patient care coordination committee in IHE.

Dr. Holly Miller – Med Allies

Thank you. And any questions?

Steven Lane – Sutter Health – Co-Chair

Thank you both for the presentation. That was very helpful. And I suspect, for a number of people on the call, it was the first time they had really seen all of the work that's been going on. Can you say a bit about where this is in the process of actually being implemented and piloted in the real world?

Dr. Holly Miller – Med Allies

I think we are looking to do an implementation through EMDI. We already have, at a minimum so far, one organization that's very interested, on EHR vendor. And so, we're waiting on the second electronic health record vendor that will bring in the second organization. And we're ready to pilot.

Vassil Peytchev - EPIC

In addition to that, for those who are familiar with the IHE processes, we've had some prototype implementations tested at [inaudible] [00:59:34] last year, and we plan to do that again next year. So, we are aware of several prototypes being currently developed and trying to move that implementation guide to where it is actually implemented by systems and organizations.

Ken Kawamoto – University of Utah – Co-Chair

Great. And I see a number of hands up as well. Steven, are you okay to move on to the folks that are –

Steven Lane – Sutter Health – Co-Chair

Yeah, that would be great.

Ken Kawamoto – University of Utah – Co-Chair

At least on my screen, it looks like Ricky is first, and then, David and then, Terry.

Ricky Bloomfield – Apple – ISP Task Force Member

Hi. Great presentation. Thanks for sharing that information. It's clear that, based on what you've shared here, and in general for referrals and care management, communication ends up being one of the most important aspects. You mentioned integration with the messaging flow, for EHRs. What standards are you using for that? And is there any thought to having an open standard for both the provider centric communication as well as patient centric communication, in a way that integrates into the work flow on both sides?

Vassil Peytchev - EPIC

This is Vassil. So, integration with messaging within a system is, basically, left for implementation for different EHR vendor. So, the 360X specifies how using Direct and XDM and the others in the content within those packages, you communicate between organizations about the referral. And then, each side decides who, how, and what they see as

result of this communication. The key part of making all of this work is that we require the aforementioned patient identity and referral identity management. And building upon those, you can further enhance communications between the providers.

One thing that was mentioned that there is a scheduling portion to it. And within the specification, this is described as an additional capability that people can claim or not claim, because you could have a fairly simple referral flow where the scheduling information is not necessarily required. But when you have it, you can implement it a 360 way, or you can implement something with similar functionality and still use the 360X capabilities. One example is, I'm going to paste it in the chat, the Argonaut Project has scheduling implementation guide that shows how you can do that with FHIR. And if the scheduling – if the proper identifiers are available, in that small piece, then, you can see how two different technologies or specifications can work together to enhance the base to 360X specification.

Ricky Bloomfield – Apple – ISP Task Force Member

Great, thank you. And I think that kind of gets to the heart of my question. I probably should have been a little more unspecific in that. Using Direct is, obviously, one method for that type of communication. But given that there are many EHRs now that have implemented Argonaut, not as many of the scheduling implementation guide, but even the scheduling IG would rely on the Smart authorization guide for the identity piece and for authorization and authentication. And so, is there a path forward here where we can have a standards based way to handle the messaging for those hospitals that have already implemented Argonaut and Smart leveraging the same authorization?

And it seems like that's still a little bit of a gap that could help facilitate this process to enable it to scale to many, many more institutions, in a way that doesn't require a lot of individual customized work, at each end point, unless I'm missing something big here.

Steven Lane – Sutter Health – Co-Chair

This is Steven. And I'll just comment. But I think what you're doing is you're clarifying that, early on, we talked about the content of the data that needs to move to support these referrals. Terry pointed out the need to focus on the process. But I think you're also identifying that we need to look at the methodology or various methodologies that could be used to support kind of the various steps in that process and that we may not want to tie ourselves to a single methodology but acknowledge that there are multiple ways that these steps could be accomplished, using different technologies, depending on the capability of the system. Is that part of what you're pointing out here?

Ricky Bloomfield – Apple – ISP Task Force Member

Yeah, I think so. And trying to leverage a lot of the effort that's gone into this already and integrating Argonaut and making sure that we have a way to scale this. Ultimately, there's one participating site right now the desire is for more. And lowering that barrier as much as we can to enable others to jump in with less friction will enable this to be more successful.

Vassil Peytchev - EPIC

Just a note on using FHIR for managing work flows, it is something that, obviously, is on the

view of many FHIR contributors. And I'll give you another link where you can look at what is being done about FHIR work flow. And as we looked at various standards, during this process, we looked also at FHIR. And, at that time, at the beginning, in 2012/2013/2014, that was really bare bones. Smart on FHIR was still being developed and looked at. But here is the link that will show the current view. And it links directly to a referral work flow. Actually, very similar to what Dr. Miller described. And that's not a coincidence because, actually, I wrote that part to it. And you can further look at that page and the other tabs on that page to see various ways of managing work flow with FHIR.

And you'll see that there is still a lot of work in progress that needs to be done and completed. I agree that it would be great if we can seamlessly – we can specify something that covers various capabilities, in a way that seamlessly can switch from one to another. And there, obviously, needs to be gaps between authorizations. So, the Smart on FHIR type of authorization versus the Direct authentication authorization, based on certificates and Direct addresses. It will be great, if we can have, on that level, some type of seamless interoperability. So, that would be something to look at. But, in general, we are aware of various efforts. And we're trying to be very cognizant of where we're going. And the current 360X specification is based on something that we believe is there. And, in terms of barrier of implementation, will be probably the least resistance, in terms of how hard it is to implement something like that.

Ricky Bloomfield – Apple – ISP Task Force Member

Great. Thank you.

David McCallie – Cerner – ISP Task Force Member

This is David. Thanks. First, also, thanks for the presentation. It's really, really clear, very helpful. And I support the notion that 360X is a good way to get started, in large measure, to leverage the ubiquity of Direct and the fact that most of the vendors have most of the building blocks necessary to add a CDA, pull a CDA up, reconcile it into the records, and so forth. So, I really like that. But I do want to mention the tension around this notion that it's conceivably a halfway station to a more robust solution that would involve all and/or, in my thought, maybe even Smart apps. But where the reconciliation process is much more dynamically interactive, and if information is needed from the sending EHR via the Smart app, you have to go get that and so forth.

But the challenge is how far do you go down one technology path, when you think there's a better approach, in the future, or a more robust approach because I don't think better is the right word? But just maybe a more robust approach. And we faced that decision in the early days of meaningful use where FHIR was beginning to emerge. We almost mature CDA document standards. We had tons and tons of debate about whether to skip over the CDA document stage and just go directly to FHIR, or whether to do CDA document exchange, and then, replace it with FHIR, or whether to do them, in parallel.

And it was a difficult decision. But in retrospect, looking back, sort of focusing on the technology that we had at hand that was the best understood and the best tested, which was at the CDA document exchange, was, I think, the right way to go. And FHIR has taken a long

time to reach maturity because it's going through a process of getting better and better before it gets balloted to a normative status. And mature, I guess, in the resource sense. So, I like the 360X approach, as a way to get started down this path knowing that there may come a day, in the future, where there is a more robust approach that replaces it. I don't think that rules out using it, getting started with it.

Steven Lane – Sutter Health – Co-Chair

David, can I just follow up and ask Vassil and Holly, is there a sense that 360X is a static weigh station, as David suggested, on the way to something more robust? Or do you think that 360X itself will continue to evolve to incorporate other transport mechanisms, other tools, as they do become available? Because what I saw, in, as Holly said, the ask slide was the notion that this task force, for example, might recommend that 360X be supported by EHR vendors and, potentially, be required for future certification, if we took that step and sort of threw our weight behind 360X, could we assume that 360X itself will evolve or not?

Vassil Peytchev - EPIC

If I put my implementer's hat on of how to approach implementing 360X, one of the distinguishing features of 360X is that it puts a requirement, at least some requirements, and we try to keep them as low as possible, but we feel that these are essential requirements on the systems themselves. So, this is not just, hey, can you press a button and build me this package. It is more of make sure that, when you build the package, you do A, B, C, and D. And when you receive the package, you do A, B, C, D, E, and F. And so, if somebody implements 360X, they have to implement certain things in the system. And many systems already may have it. So, they just need to link what they have to providing this exchange that 360X describes. So, doing that work, I believe, will be a great investment to the future regardless of how 360X evolves.

And 360X will evolve, as we implement it. We already started seeing questions. One of the hot questions is can we send payer information. So, we can specify a way, again, as a module, if you want, within 360X, how we can do it within those existing HL7 messages that we're already using. There is very obvious and well understood way to send insurance information that is directly related to the referral, so the other side knows, okay, this is the insurance information I need to deal with. I can do my authorization with that insurance, and I don't have to find out which exactly, out of the three that they have, I need to deal with. But that, again, there's a lot of payer work being done with FHIR currently. So, nothing will prevent somebody to implement the same functionality that 360X evolves to and further describes and use the FHIR capability to do the same thing, to obtain the insurance information, for example.

So, the evolution of 360X will involve looking at different capabilities and making sure that we're not locking anybody in one path to the exclusion of any other path. That's also one of the goals that we had, when we kind of built it.

Dr. Holly Miller – Med Allies

I'm going to answer the question in a slightly different way, Steve, which is my experience with technology, and I've done a great deal of technology implementation, is so much of

technology implementation really is role based work flows with the healthcare organization that you're implementing the technology in. And 360X, part of why it's, I think, easy is because so much of the functionality in 360X already exists, in the electronic health records. For example, as a physician, when I'm on my referral or my consultation ordering screen, I can indicate the timeframe I'm looking for. I can indicate the number of visits I'm anticipating. I can indicate the urgency of the referral. So, that's all already there, in most electronic health records. And so, I think that this can move forward very quickly.

And as a clinician, and I already warned you guys, I'm passionate about healthcare change, I don't want to hear stories about my colleague who is a neurologist and works in a neurology practice where he is sitting with a demented patient, he doesn't know the patient is demented because the patient has come in for the appointment but has no information at all on the patient. So, I think this works. We've seen it work. We just really want to get it out into the market. And all technology evolves, of course. But so much of the functionality is there, if we move this, if we train, and if we do it appropriately. It's already in the EHRs to be able to manage the incoming information and to be able to push out the information needed to make that appointment, and then, the information needed to be able to treat the patient by the specialist.

Ken Kawamoto – University of Utah – Co-Chair

I think Terry has also had his hand up for a long time and David has one up as well. What time do we need to go to public comment? Is it 11:25?

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

It's can be now. But if we want to just take these last two questions, we can do that.

Ken Kawamoto – University of Utah – Co-Chair

Okay. Let's take comments, questions, and go to public comment right after. Terry?

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

Yeah, hi. Terry O'Malley. Great job, folks. And this is such a fundamental piece of healthcare. As you already alluded, it underlies almost any order that we want to do, whether it's ordering a lab taste, ordering a consult, or ordering a change in venue from long term care to the Emergency Room is another great use case. So, the question I have, Holly, for you and Vassil is what's missing. If you had a magic wand, and you could fill in whatever gaps exist, what are the gaps that you see? And what can this task force do to highlight what those gaps might be?

Dr. Holly Miller – Med Allies

Terry, that's a great question. I think what Vassil alluded to and what Steven mentioned, in the very beginning of this conversation, which is there are diagnosis specific tests that a specialist would need. And in order to have care be as efficient as possible, for hyperparathyroidism, I would need to send a PTH and the most recent calcium. And the specialist surgeon would then immediately see whether that that patient needed surgery and

be able to work up, based on what I had done, not needing to repeat any tests. So, I think the magic wand that I would be interested in waving would be getting the specialty societies engaged and kind of what are the most common diagnoses that we send patients out for consultations.

And what information should be always included with those requests, so that we are being as efficient in care as possible, that the patient has appropriately been worked up, and the specialist is ready to treat the patient.

Ken Kawamoto – University of Utah – Co-Chair

Great. Let's take a quick comment from David and then, go to public comment.

David McCallie – Cerner – ISP Task Force Member

Yeah, thanks. I'll keep it real quick. I didn't mean to imply that I thought the 360X should or would remain static. I think it will, clearly, evolve. The point that I was raising is there may come a point where the evolution is not incremental but categorical. And a quite alternate approach may be more powerful. But we could be years away from such a transition. And just to try to give a non-healthcare example of the kind of thing I'm thinking about, imagine scheduling an extended family picnic with email versus using a private group on Facebook. There are categorically different approaches. At some point, email gets hard to do. It's just hard to keep it up and hard to follow the thread. So, a threaded conversation in an app may be a better way to do it.

But I don't think we're ready to jump to that yet. I think the 360X is a good starting point, and it should evolve.

Ken Kawamoto – University of Utah – Co-Chair

Shall we take the public comment now?

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Yes, please. Operator, can you please open the public line?

Operator

Certainly. If you'd like to make a public comment, please press Star 1 on your telephone key pad. A confirmation tone will indicate your line is in the cue, and you may press Star 2, if you would like to remove your comment from the cue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. Again, that is Star 1, if you'd like to make a comment, at this time.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

And while we're waiting for folks to dial in, I'll just circle back to see if any of the members have joined. Do we have Anil Jain or Arien Malec? Les Lenert or Scott Weingarten? Or Tina Esposito? Okay. And Operator, do we have anyone on the public lines?

Operator

Not at this time.

Lauren Richie – Office of the National Coordinator for Health Information Technology - Designated Federal Officer

Okay. I will go back to Ken and Steven for final remarks.

Ken Kawamoto – University of Utah – Co-Chair

Great. This is Ken. I'll just make a quick remark. I think this is great work and great comments. I think we've already hit on a lot of the important points, I think, which include what are the additional information that should be transmitted along with referrals, other than the fact that you just want a referral and the technologies to use. I think this will be a rich set of discussions. Steven, do you have comments, thoughts on proceeding and maybe how to incorporate the work flow processes you've been specifying?

Steven Lane – Sutter Health – Co-Chair

Yeah. Again, maybe we can just, real quickly, bring up the process flow document just to orient people to it. I just shared the link in the chat box. And I think we've got that ready to display here. But, basically, kind of like what we did with the orders and results. I've just taken a stab at identifying kind of the key steps in this process from the identification by the treating provider, the need for a consultation to all the way through the ordering, the prior authorization, the routing, the completion, and documentation of the referral. We don't have time to go through this line by line. But I really do want to invite the members of the task force to review this. I've actually been iterating this over the course of our discussion this morning, with additional information and ideas.

But I think that this might be a good place for us to renew our discussion, at our next meeting, so that we can kind of think through this. I also captured, at the bottom here, if you want to just kind of scroll down a little bit, a couple of comments that Terry O'Malley provided us before the meeting. And some of the recommendations that I've been hearing just floating up, including one that Sasha put in the chat box, the idea of looking at quality reporting metrics specific to the consultant, which, today, the CMS 50 is only reported by the referral initiator. So, just starting to collect some of these ideas, imagining that we're going to want to do with this domain what we did with orders and results, which is to identify what we see as important levers that can be pulled on the policy side to encourage the use of interoperability tools that we think will support the work flow.

Ken Kawamoto – University of Utah – Co-Chair

Awesome. Okay. I think we're almost to the time. Steven, should we close up the call?

Steven Lane – Sutter Health – Co-Chair

Yeah. Does anyone on the task force have any further comments on this or suggestions for how you see us most beneficially moving forward?

Ken Kawamoto – University of Utah – Co-Chair

Actually, I do have one thought. I wonder if some of the folks who were present today, maybe we can touch base offline, whether it would make sense to engage further in the two upcoming calls. I do think, especially as we discuss what are the alternate approaches we could take, I don't think we've necessarily resolved that conversation today.

Steven Lane – Sutter Health – Co-Chair

I agree. Great. In respect for everyone's time, we're just a minute before the end. We'll go ahead and wrap it up here. Thank you all so much for your participation. And we'll look forward to our next scheduled meeting. And we'll bring you back some feedback from Dr. Rutger that we hope to gather this week. Have a good day.

Ken Kawamoto – University of Utah – Co-Chair

Thanks, everyone.