



Collaboration of the Health IT Policy and Standards Committees

Interoperability Experience Task Force

Final Transcript

June 21, 2016

Presentation

Operator

All lines are now bridged.

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

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

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Yes, I'm here.

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

Hi, Anjum. Jitin Asnaani?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Good afternoon.

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

John Blair? Oh, you are here, yay. John Blair? George Cole?

George Cole, MS – Principal Scientist, Community Solutions – Allscripts

Here.

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

Hi, George. Janet Campbell?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Here.

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

Hey, Janet. Jorge Ferrer?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Here.

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

Hi, Jorge. Kelly Aldrich? Larry Wolf? Larry Garber? Phil Posner?

Philip Posner, PhD – Patient Reviewer – PCORI

Here.

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

Hi, Phil. Shaun Grannis? Ty Faulkner?

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

Here.

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

Hi, Ty.

Ty Faulkner, MBA Adjunct Professor – Lawrence Technical University

Hi.

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

And we have Stacy Perchem with ONC? Anyone else from ONC on the line?

Christopher Muir, MPA – Director, HIT Infrastructure & Innovation, Office of Standards Technology – Office of the National Coordinator for Health Information Technology

Chris Muir.

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

Hi, Chris.

Christopher Muir, MPA – Director, HIT Infrastructure & Innovation, Office of Standards Technology – Office of the National Coordinator for Health Information Technology

Hello.

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

Okay with that I'll turn it over to Anjum and Jitin.

A. John Blair, III, MD, FACS – Chief Executive Officer – MedAllies

Yeah this is John Blair; sorry.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Thank you, Michelle.

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

Hi, John.

A. John Blair, III, MD, FACS – Chief Executive Officer – MedAllies

Hi.

Larry Wolf, MS – Principal – Strategic Health Network

And Larry Wolf; I just joined, sorry I'm late.

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

Thanks Larry.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Okay, hello everyone, thank you very much for joining this call. So what we will do today following from our last meeting is really focus on our presentation with our recommendations, initial recommendations to the joint committees the day after tomorrow. So we have had one go at it, I think a lot of the time that we would like to spend today is really focusing on what those recommendations are that we want to present before the committees and if you would like to adjust or have an opinion about changing some of those things, that will be great. So, next slide.

So let me start with just the background; so we are also kind of, I think this is a dry run in terms of how this will be presented before the joint committee, so if you have any thoughts about the order or the points to be made in any area, let us know. But we have gone through a lot of these early slides so I will try to go through them quickly and then we'll get into the main discussion. So the charge was mainly to look at ways in which we can improve interoperability experience and to narrow the scope of the work to the most doable and impactful prioritized needs. Next slide.

And basically what we looked at was we looked at previous work that had been done in this area as much as possible and then tried to gain an understanding of what is working in the field and factors that may improve that experience or may be impeding that experience. Next slide.

And this, where we will be explaining in more detail; I think everybody on this call knows this, but we basically started by thinking about this broad topic of interoperability experience in terms of specific use cases, so we are really talking about concrete...in concrete terms what are some of the challenges and where the needs are. And we looked at these five use cases around transitions of care, around shared care plans, patient initiated data then clinical information transparency for both patients and providers and then a broader quality improvement, population health use case. There are details here briefly, but

we also have an appendix that gives more details on how we developed these things and how we looked at the use cases in more detail. Next slide.

And then the other exercise that we did, based on these use cases we really started seeing what are some of the common needs that thread through all these use cases that are necessary or would be helpful in improving that interoperability experience and we identified these seven major buckets; the ability to identify patients nationwide, to locate relevant patient records, to locate providers, to access and interpret consent and authorizations, to encode data in interoperable ways, to exchange data and then a topic around governance.

So these were the seven buckets and then again, we had several sub-needs, almost 35, 36 sub-needs that were under each of these, which we all thought were important. But again, I think in terms of organizing them, we organized them like this. So we will have an appendix that will give all the details in terms of what those sub-needs were, so if any of the joint committee members want to go into detail in terms of what this topic entailed, there'll be...it will be easier to read in the appendix to this slide. Next.

And then the next step that we did, we wanted to expand our purview from the rich experience that we have in the task force through the members, to other stakeholders in the community and the industry, and so we held virtual hearings. We had three panels, healthcare stakeholders, health IT stakeholders and the state and federal stakeholders and then we give just a snippet in terms of what were some of the frequently cited themes versus those that were less discussed.

And as we discussed in our last call, there are some insights even in those topics that were not discussed very much by the panelists such as, you know provider directories or locator services and others. And we did note here that some of these may be understood needs under broader topics that were discussed by the members of the panels. Next slide.

And then just to give us a taste of kind of what some of the discussions were, we thought it would be helpful to at least have one slide that has some quotations from the virtual hearings, which highlight again, some of the to...some of the observations that were made in the...during the virtual hearings that specifically related to interoperability experience, either from the patient's perspective or from the provider's perspective. So as you see, there are relevant quotes that highlight some of those things in terms of burden on providers but also challenges from patient's perspective in terms of what they can or cannot get access to. Next slide.

And so this was kind of the background. I think I'll let Jitin take over from here and help us go through the rest of the slide deck. Any obse...any comments so far from the first part of this presentation? Or any suggestions how we could improve this as we present it to the joint committees?

M

Makes sense so far.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Okay, hearing none; Jitin?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, great. Yeah, I think it will be great. All right, so...or I'll just...I'll first just reiterate what Anjum said at the beginning and then we will go through some of these slides. Again our draft presentation is the day after tomorrow and I think we've done a good job of baking everything in this deck up to the recommendations, where we spent only about 25 minutes in the last meeting.

So, everybody who is here on this call has seen and discussed this slide. I think Larry you were not here last time and John, I'm not sure you were...oh, you were here last time, so you have seen these slides. So we'll go through them relatively quickly and spend most of the time on the recommendations, which you know I think they look actually pretty good, considering how little time we've given them; but let's give them some more time so we feel really good about them before we go.

So coming off of, obviously you guys know the story of coming off of the hearings, we realized that there's some sort of theme going on there in terms of what we are hearing and what people focused on, the fact that they focused on. The fact that they focused on these aspects of interoperability more related to the users delight and the perceived friction rather than the infrastructure components which you'd expect, like provider directories and so on and so forth which we all know are impor...very important components.

So it's clear that there was some sort of relationship between what users said they were feeling or enablers felt they were feeling versus what's out there. And so we kind of backed into this equation really, looking at it and it's not inconsistent with user experience equations from other industries. I won't spend any time on it here, of course, but hopefully...I think everybody at the last meeting thought that this was a sensible way of kind of articulating what we had learned. Let's go to the next slide...oh, I'm here clicking my computer, I don't actually control the slides.

Here are the, so out of these...those top level needs that we identified, we realized that three really bubbled up to the top and actually it's two that existed previously and a brand new one. The two that existed previously, ability to encode data that is syntactically and semantically interoperable, ability to exchange clinical information and a brand new one, ability to meaningfully utilize clinical information, which we'll detail out in a subsequent slide.

And obviously everybody understands that what these things really represent is that there is more focus needed on driving interoperability demand, and that's what the user experience enables. And that will in turn cause pull-through and driving of better infrastructure on the supply side of interoperability; so the provider directories and the locator services and all that good jazz. So that's the...that's kind of the way we're framing this slide, if people are comfortable with that. And let's go to the next slide.

All right, and then we'll dive into each of the three needs that came up to the top. So actually before I get into those needs, is everybody fairly comfortable with those last two slides, just the framing? Nobody found it...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Hey Jitin...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, please go Janet.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

This is, yeah; the only thing I was thinking, and this is more from the product of mulling this over the past couple of days versus this presentation, but I think it might be worthwhile to point out that the fact that usability itself has become one of the more spoken concerns, actually does have a pretty positive indicator for the progress of interoperability overall. Because you know, obviously if interoperability wasn't happening, then people wouldn't be saying that they didn't like the experience of it.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

That's a good point.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

So I mean I think it's, kind of again pointing out that we are a lot farther now than where we were even a year ago at this time.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

That is a great point. Let's just go back to the last slide for a second. Yeah, okay, maybe this is the slide to call that out on. I think that's a really good point; I've written it down almost verbatim. We'll call that out on this slide, on slide 11. Terrific, thanks Janet, that's very helpful; that's a really good point, we shouldn't forget that. Any other comments on this slide or the previous one with the equation?

Larry Wolf, MS – Principal – Strategic Health Network

Yeah, it's Larry...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Hey, Larry.

Larry Wolf, MS – Principal – Strategic Health Network

Larry Wolf, since there are a couple of us. Some...the word meaningful has gotten a lot of press over the last seven years; I'm wondering if we can't swap it for something else. I don't have an immediate top of mind alternative, but I think if we could use something other than meaningful...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Effectively?

Larry Wolf, MS – Principal – Strategic Health Network

...that would be good. Effectively, yeah.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

How about utility? You're talking about the value statement or the content, correct?

Larry Wolf, MS – Principal – Strategic Health Network

I'm looking at the value statement on the very first one, ability to meaningfully utilize clinical information.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Since meaningfully is clinically defined by the end user...clinically, right? So what's the kind of...

Larry Wolf, MS – Principal – Strategic Health Network

Yeah.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

What we're trying to capture is the clinical utility, what's the clinical utility of the information that you're presenting to the clinician.

Larry Wolf, MS – Principal – Strategic Health Network

Yeah.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

I don't know if utility is the right term, but that's...if we can get so...you know, kind of because it's often that...that individual has decided the information will get in the, you know does it have the clinical veracity that I need to act upon?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, but I think this...statement even goes beyond that, not just what is the clinical utility of the data, but the ability for me to actually take the next steps of utilizing the data. You know, I think they had this conversation, actually I think Jorge you actually drove this conversation last time.

We realized that there's...it's more than this data, it's information and in fact, it can be more than just information, it could be insight and in fact it could be even more than that, it can just be a direct action caused by the knowledge you have about what's going on out there. So I think that's where this was trying to illustrate that there's more than just...good data.

Larry Wolf, MS – Principal – Strategic Health Network

So, would it be too much if we said ability to act on the clinical information?

Philip Posner, PhD – Patient Reviewer – PCORI

Well how about to productively utilize the clinical information, because that sort of ties meaningfulness and act on and actually produce a product that's worthwhile; so productively utilize.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

What does that mean for a clinician? What...productive, what does that mean? Does that mean that I...the test or does that mean that I...the information you presented is good enough, I don't have to order the test?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I mean I think what we're trying to get at, and I really like productively, is that it's not only the fact that the information is there, but that it can be somehow put to work. And we're not necessarily going to say how it's put to work, because there are a lot of different cases, everything from clinical decision support to automated actions to even just a simple; you know presentation that allows me to change my approach. But whatever it is, it produced something that I would not have had otherwise.

M

So in essence you're integrating...the ability to integrate...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I don't think it's necessarily integration though, I mean I think that certainly being able to semantically parse the data and potentially integrate it could be an outcome of this, but.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, you can see how integration may not always be the best outcome and also sometimes it just may not be enough, either to integrate it somewhere in the middle as a sort of a tactical step but not really getting to the spirit of what we're trying to get, I think.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

How about effectively...ability to effectively utilize clinical information?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, I agree. So there are two good ones on the table, we can take a quick straw vote to see if anybody leads one or the other. We have effectively and productively; I like both...I like productively a little bit more because it does indicate sort of forward-leaning actions beyond it, or at least it has a connotation of it, but I'm...at least I'm particularly comfortable with both. Does anybody feel strongly?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I vote productively.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, Janet votes productively as well. Anybody else have...strongly one way or the other?

Philip Posner, PhD – Patient Reviewer – PCORI

I'll just say my favorite phrase in this context is effectively and efficiently. I mean the goal of my research institute is to improve the effectiveness and efficiency of healthcare providers. Interoperability goes to that.

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

And I...this is Ty; I like effective as well, but I also am going back to the clinical information and would like to swap out that to be health information just because as we move forward, we're not just looking at clinical information, but health information.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

That's a good, yeah, because it could be patient-generated, which has not entered clinical realm and health information would certainly fit that patient-generated context.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

This is Jitin; I don't see any issue with making that change; I do feel like it's more inclusive. Does anybody feel otherwise or strongly feel that health is a good replacement for clinical with this particular...point?

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

Yeah, this is Ty again; it just drives the broad nature of what we're trying to go after, you know you have the lifestyle data, you have patient generated data, you have claims data and, you know clinical da...there are so many data points that lead to real information that impacts our health, right?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah. Anybody else want...

Larry Wolf, MS – Principal – Strategic Health Network

Yes, this is Larry; yeah I like the shift to health information. You know effective and efficient are clearly priorities, I think that there's lots of other ways to phrase it, but I think effective, if you want it short, that effective maybe captures it. Productive seems like it only focuses on the action side, but maybe that's good. And efficiency, because it's obviously been a huge issue as change in process and issues with technology have really produced a lot of inefficiencies in some implementations, in many implementations, probably.

Philip Posner, PhD – Patient Reviewer – PCORI

Yeah this is Phil, one of the reasons I thought of productive is the big discussion we had several meetings ago about the cognitive burden and basically what we're trying to do is get the information that's actually going to lead to something productive and do something. Because again, talking to a lot of my physicians that take care of me, they're burdened by having to put in a lot of stuff that isn't particularly essential at that particular time, so I think showing productivity is something that's important to the practitioner.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician – Veterans Health Administration

Can I...this is Jorge. I mean I...productivity is a great, desired effect of a system. My only problem is that it's only a metric of the clinical information management experience of a clinician. In one instance that might be one, but then what about if right now all...care is getting the information immediately to me, I want the expediency of the contact, it may not necessarily be productivity, but it means that you get right now...decision. And so the comment is such a subjective term, productivity.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

So I have a suggestion. It sounds like you could lean either way on either of these two words, so maybe this is...maybe this is one level of wordsmithing too much that we're going after. I'm going to propose we go to ability to effectively utilize health information. Does anybody feel like that's missing the spirit of what we are trying to achieve here?

Philip Posner, PhD – Patient Reviewer – PCORI

No, I think that's great. Thank you.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay.

Larry Wolf, MS – Principal – Strategic Health Network

Let's do it.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Let's do it; terrific; awesome. Thank you that was...sometimes these discussions around single words actually uncover a lot more insight than they otherwise appear, so appreciate the effort to fix that. And thanks Larry for starting off by reminding us that meaningful no longer has any meaning, ironically enough.

Larry Wolf, MS – Principal – Strategic Health Network

My pleasure.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

That actually that has got really a negative meaning, we want to take it out.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, we might have to do a control-H in this document and find all the meaningfuls and take them out.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

And Jitin one more thing, this is Anjum. Should we then change the ability to exchange clinical information also to ability to exchange health information?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

No, good question. It feels so, I would think so. I don't think we said anything in that discussion that precluded other types of information, to Ty's point. Okay, all right good; we'll change both of those two times that change, I'm putting in my notes.

All right let's go to the next page, so now let's go through each of these one at a time. Now we did spend a lot of time at the last meeting going through this so, we're not going to spend as much time over here, but let's at least refresh ourselves and if there is something really important that for example we mis-noted at the end of the last discussion, then please bring it up so that we can correct it over here. But the intention is we spend the next three slides on each of those three priorities that came to the top, to refresh ourselves, so that we can follow through on the following three slides, on the recommendations, which is where we should spend the most time today and feel like we have a good set of recommendations that we're comfortable with.

All right, I won't read through everything on the slides. Why doesn't everybody take a look, unless there's somebody who doesn't have access to a screen or to the deck?

Larry Wolf, MS – Principal – Strategic Health Network

So we have to change the heading here.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yes, we will change the...we will definitely be changing the headings in correspond...that's right. I will admit that the...when I looked at my notes, they were either sketchily taken or sketchily written, but at any rate, the last two bullet points, just wanted to make sure that everybody felt like this did capture what we discussed at the last meeting.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

What's...I have a question with regards to the first bullet, what does goal-centered work...what does that mean?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

That's a great question. I...Jorge, I thought you had introduced it, maybe you didn't, maybe it was somebody else who introduced it. When I think of this, I tho...when I think of that bullet point I think of two different things, the visual interface design is about how easy to use is this product, and maybe Janet or others have a much better definition. And when I think of goal-centered workflow, I think about I'm here on this, using whatever this platform is to accomplish something and whatever, you know if I'm getting data, the data must fit into whatever it is I'm trying to accomplish and not be another distraction, another window, another place I have to go to that takes me away from my goal.

So I think of those as two different things. I don't know if we've used the right words; I thought I had copied them verbatim from a discussion we had, but if there's anybody who knows more or thinks we should change it, please let me know.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

You just answered the question because you used the word task-centered workflow. If my task is to complete a clinical narrative, that's clinically what I have to do, clinically. The goal might be to finish my clinical documentation before I go home, but you know the doer, what I actually have to do is I have to...and that's the reason why I asked. I think you meant to put task-centered workflow.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

You know, I'm not sure I'd agree. I know that typically in user-centered design research it's all about achieving the specified goals of the user in a way that's back to decision satisfaction, you know, that's the ISO definition. But it does tend to be very goal-focused because the task is what the system makes you do, the goal is the outcome and so you should design with the goal in mind, and let the tasks fall into place on that.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

But what...but listen to what you just said that the system is permitting you to do; that might not be the task that I'm trying to clinically do.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I guess I kind of meant the technical system surrounding you, so like the ecosystem. I mean...

Larry Wolf, MS – Principal – Strategic Health Network

Sounds like you guys are tripping...I think you're using goal and task sort of interchangeably here, right? The goal is the big thing, right, whether it's make the right clinical decision or, you know get through my day, whatever the macro thing is you're trying to do and the tasks are more the steps you're trying to accomplish along the way. Is that right?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Correct. I mean, and that's mentally how I, I mean I think...I'm not in disfavor of what Janet just said, but I just think that Janet, you're at a higher level when you said that. But clinically, when you speak with a clinician, he's at the lower level, he wants to do something so that he can get on with his clinical day.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Can someone read the actual bullet to me; I don't have access to the slides?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Sure Janet, here it is, this is Jitin. The actual bullet is effective incorporation of visual interface design and goal-centered workflows. That's a sub-bullet to the ability to effectively utilize health information.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Yeah.

Philip Posner, PhD – Patient Reviewer – PCORI

...I'm a little troubled by goal-centered because we think about patient goals, clinician goals and they should come together as a final goal, which would be the outcome of the total therapy. Whereas what I think we're really interested in is the task for the day, the completion of what the person using the records want on that particular day, and it may be variable. I think goal sort of has too broad a meaning to it, I think we might want to find another word for that.

Larry Wolf, MS – Principal – Strategic Health Network

Do we want both? Maybe the way out of this dilemma is to acknowledge both.

Philip Posner, PhD – Patient Reviewer – PCORI

Oh I think that's a good idea to do that because really what we're talking about is the user must be able to use this easily, a user-friendly format.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

So...

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

...I think we should include both.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right, we include both then, we will include both.

Larry Wolf, MS – Principal – Strategic Health Network

So in the spirit then offering of sort of more optionality here, I wonder if we should drop the word visual from interface design. I was reminded today of, you know voice to text is certainly an option for people who haven't been typing since they were 12 or earlier.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

The one danger with that is that if you drop the word visual then that may be taken to mean like the technical interface between like...

Larry Wolf, MS – Principal – Strategic Health Network

Oh, as in the data interface, as in the data.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

You could say user experience design, which is typically how that's referred to.

Larry Wolf, MS – Principal – Strategic Health Network

Yeah, I'm happy with user experience design.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Yup.

Philip Posner, PhD – Patient Reviewer – PCORI

Actually you could go all the way and say accessible interface design, for those of the patients that are visually impaired.

Larry Wolf, MS – Principal – Strategic Health Network

Yeah, well, I didn't want to drop visual but I also think...I agree with the sense that interface could mean user interface or could mean data interface, you know...

Philip Posner, PhD – Patient Reviewer – PCORI

Exactly.

Larry Wolf, MS – Principal – Strategic Health Network

...HL7, etcetera. So I like moving in user experience to make that be the phrase.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right, so what we're saying is that we're going to change this goal to be effective incorporation of user experience design, task-centered and goal-centered workflows, you know plus task-centered and goal-centered workflows. So how to string the sentence together, but those are the three big components I think. I think that's about as inclusive as it gets without actually completely losing meaning. At a certain point it's just everything; we just put everything as a bullet point.

Larry Wolf, MS – Principal – Strategic Health Network

We just put apple pie, just put apple pie on the screen and you'll be fine.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

We can add some visuals to these slides; I've always found HITSC slides to be exceedingly boring, so I'm happy to add maybe a graphic, an apple pie here. All right, but that's just me when I create slides I don't have any words on them at all sometimes. What does any...any other...hopefully we're not going through this bullet-by-bullet, but I know that question came on bullet one. Does anybody else have any strong...on any other parts, any other bullets? Actually, most importantly, is the meaning clear enough to you that we can think about recommendations, which will come...stem out next?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

I don't want to beat a dead horse but what does greater intelligence mean?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Greater intelligence, so...well, we can...it's really some intelligence in the curation process as opposed to, you know curate and display with sort of very low connection to what it is that the user's trying to do.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Are you reducing the cognitive burden by the proper display of the data density to the clinical end user?
Is that what you mean by this? So you're just showing...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

It may not be about density, it may be about...so, it may be about density but it's about matching impotence levels, so yeah, it's about matching what it is that the user needs from the data that they're receiving with what it is the user is trying to accomplish in that moment.

Philip Posner, PhD – Patient Reviewer – PCORI

Part of it is data overload, the ability for the user to find what they're looking for.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yes.

Philip Posner, PhD – Patient Reviewer – PCORI

As an example if the primary care physician asks for a consult and the consultant does everything that the machinery can give them, but the primary care doc only wants one data point, they ought to be able to dig that data point out of all of the other data easily.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

So there, in the example that you're giving, what you're doing to the clinician is you're trying to reduce the navigational effort for the content.

Philip Posner, PhD – Patient Reviewer – PCORI

Well, not to reduce the content, but make it easily to pick out...

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

No, no, no, the navigational effort because the u...the clinician that has to look at that data is the person who has to click through to find the relevancy of the clinical content.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

That is largely captured in the next bullet point, right? Time spent navigating and reviewing imported data. So the question is, is this completely superfluous? Is this bullet point not needed or does it capture something else about the intelligence and what you could receive?

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Isn't reconciliation also part of this?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

And we captured that as well in the next bullet as well, you know for that matter.

Larry Wolf, MS – Principal – Strategic Health Network

So I wonder, this is Larry; I wonder if it makes sense actually, we could spend a lot of time on the individual bullet points, and to your concern about getting to the recommendations...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Larry Wolf, MS – Principal – Strategic Health Network

...should we jump ahead to the recommendations, sort them out and then cycle back to make sure that these intermediate slides actually get us there?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I'm very comfortable with that if everybody here is comfortable with that as an approach. I know it's not always easier to go non-linear when you're part of the bigger team. Should we go down that approach? Let's...I'll tell you what, Larry, you know what I love that approach. Let's do something just slightly in the middle, let's go to the next slide please; take a quick look, just get people a little familiar, we may come right back after the recommendations and say that this doesn't get us there. But at least take a quick look.

I'm not sure I agree with the e.g. there on bullet number two, I missed that the first time around. And I think Jorge you were going to send us a couple of...a few different...this terminologies doesn't encompass everything, the terminologies, code sets, ontologies, a couple of, you know a few different constructs that enable semantic interoperability, so those are what we should capture over here.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Yeah and there what I had...as we had the discussion on interface terminologies...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup, yup.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

...which, you know...which that time itself for the IMOs of the world, the actual products that actually are running the semantic interoperability among these systems that has nothing to do, I mean that is what these systems are running to actually get semantic interoperability. It's actually called an interface terminology; IMO is an example of that.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right, is that what we intended here or were we really talking about code sets over here? I thought that's what we were really talking about, things like...

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

They include...interface terminologies include code sets, terminologies, nomenclatures.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right, terrific. All right, code sets, terms, nomenclatures. Okay. All right, let's go to the next slide; so this is the...this is obviously syntactic, semantic interoperability, and the next slide is the ability to exchange information. And so we had the four main sub-buckets here, enabling easier access, harmony of policies from state-to-state, I mean we discussed this at length; there are a few different types of things. Accepting direct communication from patients and other forms of patient-generated

data and transparency of the cost burden to consumers...to the consumer of the data; maybe we should say that, consumer of the data, both providers and patients.

And there are obviously a lot more aspects around exchange of clinical information; these were certainly the ones which came up several times during our task force discussion and quite a bit during the hearings. So that's probably where we will, you know we'll put the stake in the ground as to what we're talking about when we say this term.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

And this should become Jitin exchange of health information.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yes, thank you very much, yes, ability to exchange to health information, that's right. It'll change. All right, let's go to the next slide; the next slide is just a caveat, we won't go through them right now, but as we've had discussions, we realize there are a few things which, you know will impact anybody doing further subsequent work in this area, as well as discuss some of the things that we encountered as challenges.

Let's go to the next slide and let's...and that's now where we start our recommendations. So here's the first set of recommendations, and there are three slides of recommendations, each one pertaining to each of those three buckets. And really the place we landed on this one was, and I think Janet you said you didn't have the slides, so I'll read this out to you because there are two recommendations here.

Recommendation number one, create a joint task force, so in other words joint between Policy and Standards Committees and subsets thereof, to improve clinical information reconciliation across interoperability contexts. I think the focus on this was clinical information as opposed to the larger health information, but you know that's...we can decide if we want to expand that here. And that is where, the reason we called this one out specifically is because it came up as a very specific example several times; a little bit through this task force in our discussions, a lot in terms of what we heard from the hearings. It was one of the most often-cited issues of interoperability.

So the challenge here, of course is we didn't recommend that they do something very specific for reconciliation, there has to be some amount of art that makes sense only for a specific EHR or HIT platform context, but there is...since there is a general...there was general feedback from everybody, from a number of folks we talked to through the panels, it's clear that there's some amount of work that...some amount of floor that can be raised for the industry. And the joint task force to help figure out what that floor should be, or you know, in some way kind of point that out for the industry so the industry can get there seemed like a valuable outcome from future work.

The second recommendation we mention here is sponsor challenges centered around visual design opportunities. And of course that's...we phrased it this way in terms of we articulate it as sponsoring a challenge as opposed to a task force or an ONC study, etcetera, because a visual experience is very bespoke by nature. But there is probably something that can be learned and shared, borrowed and maybe even competitively worked upon and finding an opportunity to bring out visual design, much as the visual designs competition for the style sheet associated with the C-CDA, maybe there are other opportunities as well that ONC can help facilitate.

So those are the two recommendations. What do you guys think about both...these two recommendations as well as anything we might have wanted to recommend for, I have to go back to our original wording now, to effectively utilizing health information?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

This is Jorge; I have a comment on the second one. If you said sponsor challenges centered around, to use Janet's phrase, user-centered design reconciliation opportunity. Is that too verbose?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I like use...this is Jitin; I like user-centered design opportunities...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Uhh...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

...or maybe there's something else around user experience opportunities. I'm not sure about reconciliation in the same breath, this may be...there may be other parts here besides reconciliation that are worthwhile. Janet...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Yeah, my only sort of hesitation on that is that user-centered design is typically a means to an end and so the challenge is around producing the end, not necessarily the means, so far as I know.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

This...I actually, Janet, that's...thought. Anybody have an idea of a type of a competition ONC could potentially help facilitate that would get the indus...that could potentially get the industry forward? I had a hard time thinking through this, like what would be an example of this. It came up towards the very end of our last meeting, so we really didn't get enough chance to bake this one.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Well as you pointed out earlier, there is a precedent for this. They've done design challenges around you know patient presen...presentation of patient-friendly information. They've done design challenges I think around like medication reconciliation. So perhaps whatever language they used there or referencing those other challenges at least allowed, might allow people to know what we're talking about.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. Does any language strike anybody immediately as good language to potentially use? We can go and figure out, Stacy and Michelle if you guys have time, maybe we can go figure out some of the language that's been used in previous competitions.

Anastasia "Stacy" Perchem – Public Health Analyst – Office of the National Coordinator for Health Information Technology

Yes, definitely.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, awesome. All right, then we can propose something as background. If anybody has some language they think should be here, that's valuable. I agree that given our last discussion, visual design, I'm not su...that might be too...that doesn't seem like it has enough meat on it, so maybe it's more around the user experience design or the user-centered design, as more specific language. Any other thoughts on recommendations to ONC to effectively utilize health information?

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

This is Michelle; we have a fair bit of background noise if somebody could please mute their line.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Does anybody disagree with these recommendations, I mean especially number one, we'd referred to it ironically way back in the beginning of this workgroup, in terms of there being an opportunity to improve reconciliation nationwide, at least the floor of reconciliation. Anybody have any concerns about this? Okay. All right, let's go to the next slide, let's go to slide 17.

All right, so the recommendations here are around the ability to syntactically...to encode data that is syntactically and semantically interoperable and there are two recommendations; create a joint task force focused on recommending a path forward for standardizing non-clinical data, so behavioral, social other non-Meaningful Use data, so to speak. And then a second recommendation around continuing or renewing efforts with the National Library of Medicine and other terminology stakeholders to continue improving the coverage and value of industry terminologies and code sets; that's how we've articulated right now.

Any feedback on either of those goals at a hi...those recommendations at a high level or the wording specifically?

Larry Wolf, MS – Principal – Strategic Health Network

Yeah, it's Larry Wolf; I wonder if we should specifically acknowledge the Standards Advisory that ONC's been developing.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Ok...oh, okay, all right.

Larry Wolf, MS – Principal – Strategic Health Network

As maybe a second recommendation that, you know that we support this, it's a good activity, it's, it you know is providing direction, it's, you know is doing the things that I think need to be done. And then in some ways it sets the context for the NLM recommendation.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

So I have some thoughts on that. One is I'm not sure it's uniformly agreed that the ISA is a good thing.

Larry Wolf, MS – Principal – Strategic Health Network

Umm, okay.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I certainly know a lot of folks across the industry who think it causes more confusion than anything and gives an un...it's not actually as trustworthy a crutch as people use it, and they're using it as a crutch. But that being said, that's...I just know that there's a representative of folks who believe that. I do think it is absolutely worthwhile calling out the ISA here, but rather than endorsing it, more acknowledging it under potential elements of the solution and key considerations, that whatever was developed here should in some way inform or tie back to the ISA. What do people think? Is that...am I just hearing some bias...

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

Jitin, this is Michelle. So there's an ISA Task Force that's currently working and at that meeting on Thursday they're also providing an update on their draft recommendations. I will certainly say that we have spent a number of calls talking about the relevance of the ISA, so I don't think that that's something we want to rehash here, but you are correct there are those of you who have some concerns. But I think maybe you could provide as an example, not necessarily endorsing it.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, I would love to...I do think that we should tie back to it. What could we specifically say here, I mean, it's really that if new terminologies and so on are developed that we'd want to ensure that those tie back to...that those inform what's in the ISA. That's what we'd like to say, right? Or is it something different? All right, for now I'm going to take th...and Larry is that also what you would consider trying to dovetail?

Larry Wolf, MS – Principal – Strategic Health Network

Yeah, that's fine. Yeah, I wanted to get it out here as something that's there that can be worked with, given the comments about there's an active task force, it's nice to have cross-links between the task forces, so thank you for that.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

And actually that's a good point. So it's not just the ISA, but it's...Michelle, is that...is it something we should be tying back to the task force specifically or should we just leave it at the ISA level?

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

Umm...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Because this is a future work...this is future work, so it really depends on whether...

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

Right.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

...the ISA Task Force is going to continue.

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

Yeah, so maybe the outcome from the ISA Task Force could help inform whatever you put here.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Oh, interesting.

Anastasia “Stacy” Perchem – Public Health Analyst – Office of the National Coordinator for Health Information Technology

This is Stacy, I think it's part and parcel, right? So I think the task force will be informing ONC in actually pulling together the recommendations for the 2017 draft ISA. So I think it's part and parcel, we can work on the language.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Terrific. Okay, that's great. Actually that's important because that is two distinct things; there is the task force which we'll...which any future work might update, but there's also the fact that there is a task force already existing that's updating that and might contribute to the goals we're setting out over here. All right, that is terrific. That's good, thank you.

Larry Wolf, MS – Principal – Strategic Health Network

So we had an earlier note about priorities, right, about sort of a parsimonious standards, is this a place to bring that forward?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

A parsimonious set of standards, this...ah yeah, I...what did we do with that language earlier?

Larry Wolf, MS – Principal – Strategic Health Network

I'm busy looking for it.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Yeah it was in the second need, ability to encode data.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. Okay, I think I mean I think this would be the place to bring it...in what form, is there a particular recommendation we'd want to bring here Larry, you think? Or...condition.

Larry Wolf, MS – Principal – Strategic Health Network

You know, speaking of apple pie, right, so what it reads here, my take on what it says here about moving forward with terminology, stakeholders, etcetera, etcetera to improve coverage. I think it needs to be in the context of priorities, right? In order for this not to just be a general, yeah we should improve standards, that would be great, but do we want to focus on things that have some priority and do we have any thoughts about how they should be prioritized?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

That's a good point.

Larry Wolf, MS – Principal – Strategic Health Network

Or am I opening a can of worms to things we haven't really thought about, so we can't offer priorities, but it would be important to try to focus and say let's get a few things better before we try to get everything right.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yeah, yeah.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Mm-hmm.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Is there some guidance we can take from the Federal Health IT Roadmap or any other legisla...regulation that would suggest priorities, or is that a task in itself to figure out the priorities? You know, over here beyond the task force members, Michelle and Stacy, I might call on you guys as well again. Do you...are you aware of any specific work to figure out priorities that we should refer back to? Or are we suggesting here that the priorities actually be figured out?

Anastasia “Stacy” Perchem – Public Health Analyst – Office of the National Coordinator for Health Information Technology

This is Stacy. I think the priorities, you know as listed in the strategic health plan as well as the interoperability roadmap, I think that the work that we've been doing as part of this particular task force all leads to the work...all leads to the priorities as a whole, right, to interoperability. So I think it's just one of many. As far as ranking is concerned, I don't know that there is a natural ranking order; I think it's all part and parcel of what makes that wheel turn.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right. So here's my suggestion then based on that, I would suggest that we augment recommendation number two here with some language that ties ba...to, that articulates that including figuring out the priorities for these terminologies to be improved because that's...it feels a little bit like that's what you'd expect any workgroup to do next, but I do think it's worth calling out that there is a priority to be attacked that has to be...that will also have to be figured out, in light of the guidance we have from the, you know the strategic and other sources. That's the best I can come up with right now; I don't know if anybody has a better suggestion.

Larry Wolf, MS – Principal – Strategic Health Network

I wonder if there's a way to actually pull forward the priorities from what people are doing as opposed to a top down theoretical umm...so I'm not sure how to frame that, I'm not sure what I would look at to say here are indicators of where real work or real pain is pointing to a need to improve standards and improve priorities.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

I have a question, this is Jorge. And since we're having this kind of conversation and we look back in at least the last decade, what has not...what problem has not been clinically you know solved? And so in the almost polar extremes you have interoperability on one side and then you have usability on the other; those two are big problems for health IT systems and so why do we have to hunt other priorities

becau...you know the Health and Human Services Policy Committee's dating back at least a decade have been talking about those two elements and they have not been solved. I don't think we need to chase any more problems, why don't we focus on the ones that have not been technically solved?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Hey Jorge, I wonder if the thinking there is that there is still a lot of leeway even in that context that we need to prioritize further. I mean what are the sets of code sets in there that have been articulated? I think it's a fair number.

George Cole, MS – Principal Scientist, Community Solutions – Allscripts

So it's George, Jitin; some of the answer to that question would be in the section called projected additions to the ISA, there's a whole set of categorized vocabularies and value sets that are discussed in terms of areas of possible future inclusion. And there's a great deal of overlap in what's already present, it's really interesting.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right, that's great; thanks George, I've captured that as well. All right, let's go on from there then because I think there is going to be some work to be done in narrowing down the set of priorities for the code sets...for, you know these code sets, terminology, etcetera, etcetera. We have a few places from which we can get such priorities as a starting point, so the interop roadmap, the ISA itself, including the projected addition section, but it's...that's still work to be done, to narrow it down from there. We have some subset of the world already, but there's probably you know, depending on what that workgroup...on what the work effort looks like, they'll...there's probably some more winnowing down that they'll want to do.

With that in mind, let's go on to the third set of recommendations, if that's all right with everybody. So let's...

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Could I mention something on this...?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Oh yes, please.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

...this is Anjum...in our second recommendation then as we are talking about priorities and I think one of the discussions we were having was that the basis of that priority could be you know, different depending on who you ask. Is this a place where we should call out like to that this prioritization should at least take the perspective of interop experience from...based on our task force recommendations that you can say it could be other criteria as well that improving the interop experience should be considered as a basis for prioritization.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Hmm. What...okay, that's a really good suggestion and a question. What do others think? Should we include that as part of the recommendation, that the prioritization progress take into account what the interop experience would be like?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I mean I think part of the issue here is that we can't solve some of the usability issues until we also solve some of these other issues. So trying...it's sort of putting the cart before the horse.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay so Janet, can I...I'm going to try to rephrase that; help me make sure I got it right. What you're saying is that asking that these...the correct set of code sets be prioritized and ensure that one of the prioritization criteria is the interop experience, that might be putting the cart before the horse because you can't really get to the interop experience issues until you actually have a working code set?

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I guess so, yeah. I was thinking of like some of the things that we discussed that would make these flows more usable, and it was around things like automation and reconciliation and generally having the system guide you through the data. And if the system doesn't know what the data is because the code set is either non-existent or not widely used, then you kind of can't get to those other things.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Got...oh, I see, got it. That's a very fair point.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

And that...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I guess capturing it as one poten...as one of several criteria may not...may help mitigate that issue a little bit, but that's definitely a fair point as well, you...for some code sets, you just...you don't have a point where you can get anything meaningful and from thinking about it from an interop experience point of view. Sorry, go ahead, I just interrupted somebody else who was trying to speak at the same time.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Yes, this is Jorge; I was just going to support you know Janet's comment is really dead on; this architecture you can have a desired effect, but if you can't semantically exchange the content, you know here within a computable framework, then it's just simply information that we can't really act upon it so it's a balance we have to strike, but it's a problem we have to try to solve.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, okay. So then, I mean it just comes down to a simple...relatively...it's a relatively benign thing to figure out whether we want to add or not. Do we want to add that prioritization should include some thinking about the interop experience, yes or no?

What I hear from Janet and Jorge is, it probably does not add enough value, we should not add it in, and you guys let me know if I've...if I mischaracterized what you said. I personally as I think about semantic in...code sets, I always think to myself that the interop experience does follow later, so at least I think I

agree with your initial comment Janet, in terms of what comes first. So I'm also inclined to vote no. Does anybody feel strongly that yes we should include it or violently that we should not include it?

Larry Wolf, MS – Principal – Strategic Health Network

So it's Larry and I'll point out I think there's like a chicken and eggness to all this...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yes.

Larry Wolf, MS – Principal – Strategic Health Network

...right? You want the experience to be really good, the quality of the experience in part is going to depend on the kind of data that's available and how well it matches the things that you're looking to automate and make better, and that's going to depend on how good the semantic encoding is. And given that we have this problem of boiling the ocean, as examples of success start to surface on the usability of the information coming in from other settings, I think we'll get a feel of where there are glitches in the data encoding and where we have a model that could be extended.

So almost feel like in some ways our first recommendation, our focus on the value of the information, the efficiency, the productivity, all the things we talked about earlier, as those examples emerge, you know our first recommendation that there should be continued work on this, it's going to point to areas where the coding isn't as good as it ought to be.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, okay. So this is ac...this is also, all right, this is a very important point in terms of Larry, what you just said suggests an iterative...to the focus on iterative improvement of what already exists. And I don't know enough about code sets to know that the entire world of code sets already has something that exists so that it's just sort of a tautology or whether that's an important insight that we really should just continue focusing, for example on the code sets called out in Meaningful Use or the ISA or the interop roadmap specifically or the ones that we know off the top of our heads are most important. But it is...it's about iteration as opposed to brand new code set development for sure. Everybody...does everybody agree? I'm talking way out of my depth here.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Can you do me a favor; can you repeat what you just said?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I wish I could. What I think I just said was that the focus is on improvement on existing code sets in use today as opposed to de novo development of new code sets.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Okay. I thought that's what you said, but just, I'm going to give you an example to try to clarify this.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

If you're trying to improve SNOMED-CT for clinical end use application and development, the federal government spent 32, 34 million dollars over almost a decade to try to do that. If you buy it commercially off the shelf interface terminology that problem with saying that clinical operating system is already solved. So those are two very drastically different ways to approach the same problem; so are you going to go for the standard development/ecosystem stuff people have been talking about? Are you going to go with a product that actually is clinically being used by the EPICs and the Cerners and the leading electronic health records information? And the reason I say that is because the way you framed it, you know it's not...those are very different things. There are interface terminologies today that are ready to go as we speak that are being used today clinically.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay, so let me ask you this question, Jorge, just to tease it a little bit; and again, this is, you know I'm not an expert in semantic interop, so I might be speaking out of my depth here. My understanding was that for things like LOINC, when you want to encode orderables, its limited, it does not cover the world as it should and so its inadequate, even though that is the closest we have to a standard to use.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Mm-hmm.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

And so there has been call for improvement in that code sets to be utilized at the...not at a sort of commercial availability of the language level, but at the you know, the code set level itself; so the former of your two examples. That is what I thought we are talking about and I'm happy to be pushed back upon if that's not what people think is the right thing to be recommending.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

And just, I think we should also just be aware of the history here. The federal government initiated a Consolidated Health Informatics Initiative...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

...dating back 2001 which was exactly what we're talking about. More than 10-12 years later, we have made almost no progress on that effort.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Is there an alternative recommendation then Jorge that we'd want to suggest here, given that terminologies aren't where we want and actually probably never will be up to where we want to be.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

If you speak to the large electronic health records in this country, why don't you...what do they use? They use this magical thing called interface terminologies.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

That's not entirely correct across all domains, as far as I know. I mean so speaking what I know of the code sets that we use, in some place...cases they're good, commercially available interface terminologies, but a lot of times there's not anything to map back and forth and actually I think LOINC is a really good example of that. The number of groups that I know that have LOINC codes for their results out there is actually surprisingly low, because of a lot of different features, some of them the property of LOINC and some of them the property of just how you do the mapping. But I mean I think there are deficits there, even in the big, commercial EHRs.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

You know, I mean there's always semantic deficits, I mean that's the nature of the industry; the question is, do we continue with efforts that have proven that the level of effort has not given any value or do we go a different route?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

What is a different route, I guess that's what I'm struggling to understand. What could be a recommendation bes...is it a recommendation, for example, to say that a study should be conducted to figure out where are the biggest gaps for us? Is that the number one recommendation and from there you could go down the fix it in the standard or fix it in the implementation as two different potential routes?

George Cole, MS – Principal Scientist, Community Solutions – Allscripts

Well it's George; so at eHealth Week there were several very interesting presentations giving a completely different alternative and a different route. I don't know that we're ready to go in that direction but, they make very good use of Shannon's information theory and point out that as soon as you start taking any information and try to encode it, you're losing information. And there were very strong proponents of stopping the use of encoding and code systems and going to natural language processing of all of the narrative and all of the text. So radically different approach, very well grounded in information theory; the question is is it ready and something that would be suggested as a research alternative?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, so actually this is, you know George, that's a little less out there than you might imagine so thanks for bringing that up because this does tie back to a conversation we had last time which was, there is a role and opportunity, the very last bullet on this page, a role and opportunity for natural language processing and data mining techniques on unstructured social, behavioral and other data. And maybe what you're saying is not just the other data but also the original clinical data as well.

So maybe this really does come back to, there is further work to be done to figure out where to go on code sets specifically. Because I would say that we spent very little time as a task force on this issue so far, but it's partially because it's a very large area of sort of gap and concern that we'd have to run down, and we may not also have the full set of expertise on this task force anyway to chase down, you know go down that rabbit hole.

So I think what we can do is we can say, we can take the second recommendation and instead of continue or renew efforts with NLM and other terminology stakeholders that we actually change it to say, let's do a study on the approaches to code sets and the priority of code sets out there because

those are becoming factors now, the gaps in them are becoming factors now in the interop experience you know for the code sets which already exist. Is that a better recommendation for ONC? And we could be...we could suggest that either ONC do it or another task force convene to work on it. What do folks think? What do you think about that proposal for a change to the second recommendation?

Larry Wolf, MS – Principal – Strategic Health Network

So it's Larry and maybe I'm responding to the fact we feel like we've been chasing...I feel like we've been chasing our tail for a while here.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Uh huh.

Larry Wolf, MS – Principal – Strategic Health Network

So I'm wondering if there are a couple of things that don't apply. So first I like the last bullet and George's reminder that NLP is an important piece we shouldn't lose.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Larry Wolf, MS – Principal – Strategic Health Network

That code sets...so there's the...so I feel like there are a couple of streams here. So there's a stream about what's happening with unstructured and will we have tools to better work with it and treat it like structured, treat it as actionable?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Larry Wolf, MS – Principal – Strategic Health Network

There's work around where are there glitches in the current code sets, right, either because they're not clean enough, robust enough, etcetera or they're confusing or there are too many options or, you know how many ways can you represent a test in LOINC and how many ways can you create a compendium of tests and part of the problem with LOINC for ordering is labs can arbitrarily group the tests that they want to bring together for their own efficiency or because, you know they're offering a blue plate special this week and we want to bundle these tests together.

And I think there's a third stream in here, which just flew out of my mind, so NLP, code sets, oh yeah, so speaking of cognitive burden. So one of the complaints from clinicians is that they've become coders...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Larry Wolf, MS – Principal – Strategic Health Network

...that they have to go thr...they spend a lot of effort trying to get the right codes on something, and often are asked to deal with multiple code sets because of the different uses of the something. And so I think if we're looking for research areas, trying to reduce the burden on clinicians as they enter information so that getting to either structure or actually getting them to say the thing they want to say to support the good NLP is part of the front-end story to tell here.

So three things; I'll start with...taking them in the reverse, in the intermediate order. So how do users provide the information that's going to be semantically coded?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Yup.

Larry Wolf, MS – Principal – Strategic Health Network

What are the...what's the current state of possible for NLP and where is it in production and is this actionable...actionable? And where are there gaps in code sets where small adjustments would make things a lot better?

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay.

Philip Posner, PhD – Patient Reviewer – PCORI

Well said.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

That's great. All right, terrific, that's great. Okay, we will try to capture those three and send it out to everybody as part of an updated deck within the next day or so and Larry in particular you will send those three bullets, just to see we capture them correctly. But I think that makes...I think that does tie it up well, I mean there are three different activities. I mean it's...there are a lot of ways of structuring those three different activities, so...but I'm happy to call them out as three different activities. Okay.

All right, let's go to the last slide, oh sorry, the third slide in this series; ability to exchange data. So here's the recommendation...sorry, I'm just capturing from the last discussion. So ability to exchange data; three potential recommendations to ONC; first of all we acknowledge that a substantial components already within purview of the API Task Force, since we discussed APIs and open APIs at some length. One incremental suggestion to the API Task Force scope was to think about the requirements and considerations, if any, for other health IT systems; in other words, health IT systems used by clinicians, patients, etcetera beyond EHRs, to enable open APIs.

And another standalone recommendation was highlight opportunities and best practices for successful incorporation of patient-generated data into the providers' decision making process. So it could go through something like formal case studies or research or it could go through something like a sponsored challenge, a hackathon, etcetera; but really to start pushing the ball on that front.

Those are the three sets of recommenda...it's really two sets of recommendations for ability to exchange data; slight addition to the API Task Force, in other words, sort of endorsement that you know, they're studying something that we think is important, too. And secondly, highlight opportunities for incorporation of patient-generated data. Actually we call out specifically here, patient-generated data into the provider's decision making process, which I think is the right spirit. I don't know if there's better wording, but I think that's the right spirit.

What does everybody think? Are you comfortable with those recommendations or any changes you'd make?

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

This is Ty, Ty Faulkner. I think the only thing I don't see here that I thought I mentioned before is we need sort of a watchdog enforcement piece on this. There's the Interoperability Bill that's moving through Congress, gosh, which...it's the Senator from Tennessee started that...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Right.

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

...and in there they're recommending this sort of user toll watchdog type approach where we're looking at really are we exchanging and if not, why and then also putting some enforcement behind it. So some sort of bullet or sub-bullet that says, you know we're watching, right? And just like we do with HIPAA, right, so we throw out the policy for HIPAA and the OCR backs us up and enforces that as well as the FTC now. So similarly, you know one of these agencies has to come in and say, you know break down the silos, open this up or you're going to be penalized. So how, you know maybe again some sort of watchdog task force or group.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

So Ty this is Jitin; let me ask you a couple of questions just to kind of get the fine points on this. A watchdog for what type of exchange specifically? A watchdog that is there to ensure that a clinical...a clinician's system can incorporate patient-generated data, is that what we're watching for so to speak?

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

Yeah, I think last call I threw out a progress index, you know this sort of X and Y thing that shows you know here are your standard body organizations that are available to be used for exchange. And then these are all your systems that are using it and you know, just like any other progress index you move up and down, right to left based upon what you're actually doing to allo...including cost.

And I was really harping on cost on the last call, too because I think that's the number one barrier that we still haven't figured out, particularly for consumers, but in this case we're talking about providers. But there has to be some sort of way of knowing, are we getting our money for what we're paying for, you know thousands of dollars are being paid to access a record right now and is that really the ri...are we doing the right thing here? You know, are we putting the toll and the tax on the wrong thing meaning getting the data versus, you know some other area where the cost really should be borne versus the provider and the patient coming out-of-pocket.

I mean I think about a provider office and most of my thoughts are around the small guys, the unaffiliated ones, the ones that aren't part of a mega-institution that pay for all of this; none of them will ever be able to afford all of the cost of getting data back and forth you know, even though we've supplied several incentives, subsidies, and grants and all that sort of thing. We've got to figure out a way to make sure we watch cost, we watch whether or not we're actually using these standards, right? And then what systems are doing it and which ones aren't.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, what do other folks think about what we should say with respect to this...to that observation?

Philip Posner, PhD – Patient Reviewer – PCORI

I have to agree since most of my healthcare is with single practitioners, not in large groups and that's a major complaint that I hear from them all the time.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

The major complaint being that they're not able to get the data from anywhere or they're not able to get the patient-centered da...the data that's patient-generated?

Philip Posner, PhD – Patient Reviewer – PCORI

They complain mainly about the cost and trying...what it would cost them in order to be able to get the data from the different systems and to interact with the different systems.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Hmm, okay.

Philip Posner, PhD – Patient Reviewer – PCORI

So for them it's a cost issue and a lot of the incentives are really punitive disincentives and they say, we'd rather pay the penalty than have to go through all the stuff that's involved in...I'm thinking of rural Florida where they're dealing with Cleveland Clinic, the University, the Mayo Clinic and all of the large payers in the area and they just can't afford to do it.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

I mean I think part of that though is that we have to look at what costs we're talking about because the Cleveland Clinic doesn't necessarily charge them, and the Cleveland Clinic isn't charged for doing this data exchange and the...

Philip Posner, PhD – Patient Reviewer – PCORI

No, no, no...

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

...money...you know.

Philip Posner, PhD – Patient Reviewer – PCORI

Yeah no, the cost is not from the Cleveland Clinic, the costs for them is to set up the appropriate software and maintain the system to access all of the different systems.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

But it's like eventually you need the software to do it, right? You need the enabling technologies.

Philip Posner, PhD – Patient Reviewer – PCORI

Correct. Correct and the technology burden for a small, single practitioner in a rural area is a lot.

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

So I'm just going to go from the legislation; they're asking for transparency ratings, usability ratings and a couple of other things, but those are the key things that I see moving through the legislation is transparency and usability on exchange.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Should we call out here under potential elements of the solution and key considerations umm, well I don't know, should we call out transparency of cost of exchange? Is that something we want to call...it doesn't feel like a recommendation in and of itself, but it feels like something that needs to be thought about in the context of the recommendations made here.

Philip Posner, PhD – Patient Reviewer – PCORI

Well I think transparency and maybe even affordability rather than cost.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Okay. All right. Anybody else have any opinion on this? We're going to have to wrap up real soon, so if there's anybody who has a thought over here that's not been incorporated, let's make sure we bring it in. All right. Okay. Let's bring it in then as a potential element as well, transparency of the affordability of exchange.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

We do mention this, Jitin, in the prior slides on the exchange, which was around transparency of cost burden for consumers.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Can we go to the last slide, that's right...sorry, to the previous slide? All right, is it mentioned here, Anjum? Was it mentioned here or was it somewhere else?

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

No, it was under the exchange when we were going through the priority needs. It is under...

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Oh, I see.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

...yeah, it is under the exchange discussion.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

I see, I see, okay, I got it. Okay, so then we can bring it in to this last slide...into this...into slide 18, then. All right, let's go to slide 18, let's go to slide 19, because I think we are about out of time and I always like to proactively turn it over to Michelle before she sends a virtual ruler on my hand.

So just last point over here, obviously draft recommendations are this Thursday; thanks everybody for the input. I know we, as always ran out of time because we had such good conversation, but this was not in our last conversation; we'll get back some feedback and we'll have another opportunity, at least one opportunity already scheduled on the books on July 12 to revise and edit. And if we need more than one of that, then, you know we will reach out to you and find more time. But we probably will be good

with one more opportunity and then our final presentation, including transmittal letter, etcetera, will be on July 27. And Michelle, is there anything that I missed as I said that?

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

No, that was perfect.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Perfect. All right, then I'm going to turn it to you so you can...we can open up for public comment.

Public Comment:

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

Okay, thanks. Lonnie, can you please open the lines?

Lonnie Moore – Virtual Meetings Specialist – Altarum Institute

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

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

While we wait to see if anybody has a public comment, we got lots of comments in the public chat today, so we will send those out following today's meeting as well.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

All right, terrific.

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

And it looks like we have no public comment, so Anjum and Jitin, see you on Thursday. Thank you everybody and have a great rest of your day.

Anjum Khurshid, PhD, MPAff, MBBS – Senior Health Systems Strategist – Louisiana Public Health Institute

Thanks everyone.

Philip Posner, PhD – Patient Reviewer – PCORI

Thank you.

Ty Faulkner, MBA – Adjunct Professor – Lawrence Technical University

Thank you.

Jitin Asnaani, MBA – Executive Director – CommonWell Health Alliance

Take care.

Janet Campbell – Vice President of Patient Engagement – EPIC Systems

Thanks everybody.

Public Comment received during the meeting

Theresa Wilkes – AAFB: Both goal-centered and task-centered focus is crucial. Task-centered focus is required in order to support clinician's natural workflows (which often technology design does not support) and goal-centered focus is required because clinicians are beginning to use technology for new population health focused goals rather than strictly individual goals. The ability to mark an individual record so that it is recognized in risk-stratification logic algorithms or disease specific registry reporting, etc. - each of those illustrate why goal focus is also imperative.

Theresa Wilkes – AAFB: I agree with your group consensus - with goal centered and task centered focus.

Theresa Wilkes – AAFB: The recommended challenge is a great challenge. It gets to the heart of a major obstacle physicians face in being able to use data that has been received from an outside system. Reconciling data received via HIE, in order to be able to promote and use it, so it is present within EHR's (with source attribution/data provenance) so it is available when needed to support decision making is crucial. Efficient data reconciliation is a huge challenge to being able to then use data that has been exchanged.

Theresa Wilkes – AAFB: For recommendation #2, not only is there a priority need to standardize non-clinical data, but there is first and foremost a key need for technology to be able to capture and effectively use/re-use socioeconomic (non-clinical) data. Many value-based efforts of the Quality Payment Program require incorporation of socioeconomic data into risk factor stratification technology functionality which then impacts clinical care plans - yet many EHRs and health IT modules do not provide these functionality capabilities. The ability for technology to capture, integrate and utilize socioeconomic data is a key need. This also would provide greater ability to identify and work toward eliminating disparities in care.

Theresa Wilkes – AAFB: Encourage renewed focus on Direct exchange as well, as components of the Quality Payment Program and interoperability in health information exchange call for exchange of health information between clinicians and non-clinician community-based support systems of patients. Secure information exchange must also be included in consideration here. Also, for PGHD exchanged between patients and providers, including from device data, Direct exchange is appropriate.

Theresa Wilkes – AAFB: When considering whether the interoperability experience should be included in challenge #2, it is imperative to at least include a pilot group that attempts to receive and use data which has been exchanged and these participants in the pilot group should include a significant number of physicians who are physician informaticists who are intimately still in touch with the needs of practicing physicians. This will provide feedback that is less wholly focused on the design and experience but more wholly focused on ensuring the functionality of the technology meets clinician needs, and the data is syntactically and semantically efficiently usable by clinicians after being received via HIE.

Theresa Wilkes – AAFB: Yes - call out need for transparency in costs within the Potential Elements of Solution + Key Considerations for the 3rd set of Recommendations to ONC. As well, the recipients of the \$20 Million/Year being awarded by HHS each year for 5 years to assist solo and small practices (15 eligible clinicians and fewer) could then also utilize the transparent cost info to aid small practices in implementing technology requirements to achieve interoperability.

This is David Tao from ICSA Labs. I think the Reconciliation and Visual Design recommendations on slide 16 are excellent. One possible addition: in addition to sponsoring "challenges" there could be sponsorship of pilot tests for reconciliation. Which would add the higher bar of real-world use.

David Tao from ICSA Labs: Another suggestion, re slide 17. Prioritization SHOULD take into account the priorities for the interop experience, especially reconciliation, since robust semantic interoperability will be important for automation of reconciliation. Without it, reconciliation will be doomed to be a manual effort.

David Tao for ICSA Labs: So the coding of data elements needed for reconciliation should have higher priorities.