



**HIT Policy Committee  
Clinical, Technical, Organizational & Financial Barriers to  
Interoperability Task Force  
Final Transcript  
October 9, 2015**

**Presentation**

**Operator**

All lines are bridged with the public.

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

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

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Here.

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

Hi, Paul. Bob Robke?

**Bob Robke – Vice President, Interoperability – Cerner**

Present.

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

Hi, Bob. Christine Bechtel?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

I'm here.

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

Hi, Christine. Josh Mandel? Julia Adler-Milstein?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**  
Here.

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

Hi, Julia. Larry Wolf?

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

I'm on.

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

Hi, Larry. And Mike Zaroukian and Micky Tripathi aren't able to join today. So, with that I'll turn it over to you Paul.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Great, thank you, Michelle.

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

Oh, I forgot to ask one, I'm sorry, anyone from ONC on the line? I think we have Chris Muir and Genevieve on?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes.

**Christopher Muir, MPA – Senior Advisor – Office of the National Coordinator for Health Information Technology**

Yes, me too.

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

Okay, thank you. Sorry, back to you Paul.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

No worries. Thanks, everybody for joining and today what we're going to look at is looking at an update from ONC about the interoperability roadmap that was just recently released earlier this week and Genevieve has kindly agreed to give sort of a short version of it. We spent a couple of hours working with it on Tuesday and so we want to have this group look at it and see if there any ways we would need to update our recommendations to build upon what was released in the official roadmap, that's the topic for today.

And I think what we'll do is we'll go to Genevieve first and then we'll re-review the latest from our previous calls and what I had done is sort of tidied it up and just show that to you and then let's see what you think of the tidied up version and how we can integrate it with the roadmap recommendations. Does that make sense? Any other agenda items?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, Genevieve.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Okay, thanks Paul. So, I'm going to give you an overview of the roadmap. So, the slide deck that I'm going to use is the same one we used with the FACA committee on Tuesday, but I'm going to skip over some areas where we spent more time on Tuesday and trying to focus in a little bit more on the areas that I think are probably most impactful to this Task Force in particular. So, if you can go to the next slide, Michelle, I'm probably going to have you skip over a bunch of the intro content. So, next slide, next slide.

Okay, so I'm going to start here with the definition of interoperability. I agree with Erica that it is super important to define this because I think I've listened in on a couple of your committee calls and have been paying attention just more broadly to where things are at with interoperability over the past years we've worked on the roadmap and it really is being defined a lot of different ways by different people.

So, for purposes of the roadmap in order to narrow down the scope of what we were focusing on and draw some of the guardrails we defined it with the IEEE definition of the ability of a system to exchange electronic health info with and use electronic health information from other systems without special effort on the part of the user.

So, that's our basic definition of interoperability and as we went through and sort of built out what we think needs to be in place in order for that to happen that was kind of our guide that does include...so when we're talking about other systems that does include not just EHR systems but is expanded beyond that and as we move towards the 10-year timeframe we fully expect that this will move into community services, health and human services and basically all the places where an individual might go that effects their health. If you can go to the next slide.

So, the Federal Health IT Strategic Plan, goal number four of the strategic plan was that we would actually implement the shared nationwide interoperability roadmap and so this is kind of step one in that process of finalizing the roadmap. Next slide.

Next slide, I'm going to skip over the current state of where we are. I think you guys have actually talked about this quite a bit as far as what the numbers look like. So, Michelle, if we can skip to the first slide after the statistics, keep going.

Well, this is a good one to land on. So, in the very landscape here what we just wanted to highlight...and you'll see this when we get to the shared decision making section which used to be the governance section of the roadmap, one of the things that I think folks read in the draft version of the roadmap was that ONC felt that there shouldn't be multiple network organizations and that there should just be this one governance entity, which was not really what we intended to indicate. We understand how folks read it that way, but it was a bit of a miscommunication.

So, what we wanted to just demonstrate here, these are some of the networks that exist, some actually building technical infrastructures, some more focused on the business policies and practices, and DURSA and things like that, but it is a really varied landscape everyone is sort of covering different use cases. There are some similarities across these organizations and the use cases that they cover, but there are a lot of different organizations doing things all sort of related to interoperability that need to work together. Next slide. All right, so next slide, we'll skip past this one, the final version, let's go to the next one.

All right, so from the draft roadmap we worked really hard to incorporate the public feedback that was received. What we wanted to give you was just a couple of high-level items on the feedback we received, the governance approach was one where there was very mixed feedback because folks did misinterpret that section so we worked to clean up that language and really make it clear what we were indicating there.

There was a desire for more clarity on standards direction while also a request that we not name specific standards and calls to action particularly standards that are in the middle of being developed. There was, of course, a call for a unique identifier, which we added some language into the roadmap around a unique identifier and what HHS can and cannot do.

There was definitely some confusion about some of the privacy and security concepts around the basic and granular choice and we've tried to address that and then there were overall recommendations to restructure the document. So, if you go to the next slide I think I'm going to have you skip past the principles to the roadmap structure.

So, based on the recommendations that we received from the industry we did a couple of different things to restructure the roadmap first we made it significantly shorter, which I think will make everyone happy with a lot less reading. We did that in a couple ways one we moved content that was a lot more background and more detailed information around particularly the technical components to a supplemental materials guide which is available on the interoperability website for those of you who want to read all the background information.

We also tried to make an effort to really streamline the language and gear it towards an audience of health IT professionals. And then third we did reduce the overall number of action items in the roadmap. What we heard pretty consistently was that we were a little over aggressive with how many action items there were and that we should really focus in on what the priority things are that need to get accomplished particularly in the next three years so that we can get to that 10-year place.

So, the goals of the roadmap itself should look very similar, they were only modified slightly, particularly in the 2021 to 2024 timeframe; the original goal in the roadmap was to achieve a learning health system. We clarified that, I think we heard a lot of feedback that this concept was a little bit confusing and how interoperability feeds into it is confusing and so we clarified that goal in particular that we want to achieve nationwide interoperability that enables a learning health system. So, interoperability is sort of the enabling factor to make those things happen.

The 3-year timeframe 2015 to 2017 is still focused around send, receive, find and use priority data domains to improve healthcare quality and outcomes and what we did is frontloaded the majority of calls to actions and commitments to that timeframe. I think it's almost 60% of the calls to action and commitments fall into that first timeframe and then the middle section 2018 to 2020 has I think about 35-40% and the last timeframe has about 5-10%.

In restructuring the document we've tried to focus a little bit more on the logical flow of how things happen. So, while all of the components sections are the same as in the draft roadmap the organizational structure is a little bit different.

So, we start off in the roadmap with drivers which is really the supportive payment and regulatory environment and the goal of that section is to define what we think that environment needs to look like in order to drive the demand for interoperability and we'll spend a good bit of our time there because I think that this directly relates to the work that you all are doing on your report.

The middle section or the policy and technical components that need to exist to enable send, receive, find and use in particular but really have to exist to enable nationwide interoperability, all those sections are carryover. So, the top part of that graphic you'll see the way we kind of broke it down is shared decision making and then the privacy and security items sort of support all of those send, receive, find and use. And then standards and functions support some of those items but not all of them.

And then the outcomes section is focused on individuals and providers and what we think they should be able to do if we get towards nationwide interoperability as well as the measurement section. So, I think...I know you all have talked about this on your committee and it has been a much larger conversation within the industry.

You know right now we're really focused on measuring transactions because it is really, really hard to measure outcomes and so the focus of the measurement section is developing better metrics so that we can get towards measuring outcomes rather than just transaction numbers.

So, what I was thinking for the committee, and feel free to tell me if this is totally off, I think we can spend the majority of our time in the supportive payment and regulatory environment and go pretty deep there as well as the shared decision making because I think that gets to a lot of the policy issues.

We can touch on the privacy and security items and talk a little bit into the standards and functions as well. And then we can touch on some of the outcomes and particularly the measurement section. So, we're going to go to the next slide.

So, we start with the drivers, next slide, so what we did for each of these sections is define a milestone for each timeframe, underneath each of those milestones you'll see calls to actions which are focused primarily on the industry and things we think need...the industry is best positioned to do and that's based on public comment that we received through multiple different avenues and then there is a section of commitments and those commitments are focused on really federal agencies and what they are committing to do.

The calls to action and commitments are meant to support that milestone. So, for each time period we believe that the calls to action and commitments will actually get us towards meeting the milestone for that time period.

So, for the payment and regulatory environment all three of the milestones for this section are focused on the commitments that CMS has already made publically. So, they've said that by 2016 30% of Medicare payments through the alternative payment models...well, will be through the alternative payment models and that by the year 2018 50% of Medicare payments will be through the alternative payment models.

So, if you go to the next slide, the calls to action that you're going to see, and this is just an example of set because I think Erica said this at the meeting and it bears repeating here, we know that we're not following good slide structure. These are actually word-for-word from the roadmap itself because folks worked for more than a year with the industry to really craft these exactly as they wanted it to be and we did not want to paraphrase then and lose a meeting.

So, these are three, there are more calls to action for this section that are in the appendix of the PowerPoints that you received which is personally why they're so long. But these three focus on states with their managed care contracts, requiring provider networks to report performance on measures of standards-based exchange so really building into those MCO contracts some additional requirements on health information exchange.

There is a focus on private payers and how they should implement provisions around supporting interoperability within their value-based payment arrangements. So, as the private payers get on board and have made commitments to move towards those value-based payment models we believe that they should implement interoperability provisions into those contracts.

And then purchasers of health plans, so employers and folks like that should consider whether the health plan actually has a commitment to use interoperable health IT and whether they've built anything into their contract.

So, the focus there is really on using a couple of different means to drive the demand for interoperability from the provider perspective. So, I think you all in what you work on are really well aware that without there being value-based payment models and reasons to use interoperability providers aren't going to demand it from their vendors and so there is a strong focus in this section on really building that demand from providers that is a little bit of change from the draft roadmap where I think it read a little bit more like interoperability is the goal of value-based payment models, which was not what we intended to state but I think we did. So, this is really shifting that focus towards working with providers to push this forward.

And if you go to the next slide there is a set of commitments that are CMS focused. So, CMS will take advantage of opportunities when possible to build interoperability requirements into relevant payment rules and programs. I think we're already seeing this with the MACRA requirements, if you look at the MPPS Program as well as the advanced payment models there are requirements to use certified health IT in both of those and CMS is really looking for other ways in which they can build interoperability in.

And then CMS will also encourage states with MCO programs to include references to health IT or health information exchange in relevant sections.

So, what you might see between these and you'll see this pretty consistently throughout the roadmap the federal commitments, while supporting the milestones, also help to support what we're asking the industry to do in the calls to action section. So, they really do work together and I think the approach that we took is that the federal agencies in many cases are well positioned to support the work and they're doing that through commitments that they're making publically. So, those are the two commitments for that section. There are no additional commitments for that first timeframe.

And I think it might be helpful, since this is a really long deck, Paul if we want to pause here perhaps since this section is quite relevant to what you all are doing and maybe take some questions here and then we can to that a couple of times throughout as well.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

That makes sense, thanks Genevieve. Questions from members of the Task Force? I think it definitely dovetails with particularly our recommendation number four where we focus specifically on making the alternative payment model milestones and goals more palpable, is the way we described it before. So people know where it's going but they don't know sort of when and when do they have to react and I think this is basically very congruent with our sense of wanting to make a more powerful one here on the screen is for CMS and then on the previous one was really the private sector.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

This is Julia, so I just had a quick question, is there...so, I mean, these feel like I think great recommendations at a high-level but sort of thinking about what it actually means to operationalize these and sort of when we say sort of build interoperability requirements into relevant payment rules, I mean, are there examples of sort of what that looks like in a more concrete and specific way?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, so, I think for that commitment in particular the easy answer is if you go through the MACRA legislation or...go through it because it's a lot of pages, maybe do a Control F for health information exchange, what you'll see is that CMS for both the MPPS Program as well as the advanced payment models have built in the requirement to use certified health IT and then they're going a step further in that, they just released an RFI on the MACRA Program I think about two weeks ago, I just started reading through it this week, but I think it came out two weeks ago, and in that they're actually asking specific questions from the industry around is the current certification requirements really enough to support advanced payment models or are there additional things that are needed in order to do that and there is a strong focus in that around interoperability which I think we all understand is super important for advanced payment models but not always clear what that looks like.

So, for example, APMs need referral loop closures which is a very different type of interoperability than clinical information exchange. So, they're doing some things like that to build it in. As far as giving language I do believe that there is some work taking place around some model contract language but some of that is definitely going to have to be from the industry.

But I think probably Julia your question is more how do you operationalize what's in the roadmap versus kind of agree that, yeah, these are the right ideas? Is that it?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

Yeah, exactly, I mean, I think you can sort of, depending on how you go about building interoperability requirements in, you know, it could be a really powerful lever or it could sort of just be sort of reinforcement of current state.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

So, I think, again I don't...and especially if the recommendation is sort of the private payers should start to do this the more consensus there is around the right way to do this I think will be really helpful in making sure that there is some kind of coordinated action and that providers aren't getting, you know, payer specific sets of interoperability requirements that sort of again reinforce the current sense of like there is just no coherence in what they're being asked to do.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, I think that makes sense and I think what I expect will happen now that the roadmap is released and as folks read through it...and I think Paul you even had a suggestion on this of having sort of a summit, you know, a little bit down the road once folks have had a chance to digest what's in the roadmap, because, you know, we...there is only so much that federal agencies can do, right? And I think you'll see that in the roadmap there, in most sections, are less commitments than there are calls to action because we really feel like the industry is best positioned to do a lot of things but it will take a fairly high coordination effort amongst industry stakeholders in order to actually operationalize it.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Genevieve I think you did a nice job tying it into what we call our recommendation one about this. So, this is series of it's a framework, it's milestones, it's commitments but it's also calls to action, a lot of the action is really required by the private sector to be effective and I think Julia is really pointing out we have to go beyond just these words on the screen and I think that's still...and interested in everybody's opinion, I think that's still congruent with our...the reason we had this recommendation one of this quote, I don't know that we need a better name perhaps, this working summit that takes the next step both from this roadmap and how do we begin that coordinated effort to have a coherent action plan, I forgot who used that word, I think it was Genevieve, but it's really that coherence and Julia's reminder that we don't yet need...we don't need yet more 50 ways of having requirements because...and that's the reason why we were thinking about, we've really got to get people in the same room public and private sector, and understanding the game plan which is one step perhaps even further down from the roadmap, right.

Does that make sense both from an ONC point-of-view is that logic that we've sort of thought about making sense and consistent with, you know, what you would think the next steps would be from this roadmap.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, so I think from an ONC perspective I think it logically makes sense because, so what the roadmap is an action plan, right, but operationalization of an action plan is slightly different. So, it's really how do we figure out how to implement it in a coordinated way because I think we've all been in the industry long enough to see the uncoordinated way...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

And it's not really ideal for anyone. So, I think it's really taking it to that next level of, okay, so we have an action item that purchasers should do this, how do we operationalize that and when I say "we" I really mean the industry in coordination and collaboration with the federal partners.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

So, maybe can I actually try to see if this is one way to describe roadmap versus summit and next steps? Roadmap has a lot of calls to action and what we're trying to do is make sure action proceeds after this call and maybe that's what we're trying...so we envision this working summit to be the kickoff of the action that's being called for in the roadmap.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah and what might be helpful for this group in particular, as we go through the calls to action I think some of them are going to be directly applicable and be very supportive of overcoming the barriers that you all are identifying some are probably more focused on other barriers that aren't necessarily within this group, right?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So, what might make sense is to sort of identify any section as we go through which calls to action are really most applicable to the barriers that you all are focusing on and as you think about the summit and next steps and how this can integrate with your work maybe focusing on those particular set of calls to action, because, you know, we reduce the number...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

But there is still a lot.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

There's a lot.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

No one can tackle all of them. So, it might make sense to kind of do a little bit of that mapping.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah, I think that would be helpful. So, Julia...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, which I don't...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Are we talking about...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Sorry, go ahead.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

The point that you tried to raise?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

Yeah, yeah, exactly it's just...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

I mean, I think this is...and I agree I think the roadmap was not necessarily designed to get to this level of detail but it seems like it's just the critical piece in order for this recommendation to work.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yes, okay.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, so my guess would be probably what I would suggest is the mapping itself could probably take place off line in an easier fashion, but I'm happy to keep going through these because I think it's good for you all to have some of the verbal commentary on how we came up with some of this...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

No, absolutely.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

And sort of the public feedback on it, but...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Absolutely and I think you have a really good next step which is that mapping so as you hear us discuss, react to both the road and to discuss in the context of the recommendations we believe that would be a valuable next step that maybe you can help us map that, because as you said, there is still quite a few calls to action in this.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, no one group can conquer all of it. That is not going to be humanly possible in a two year timespan.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay. Any other comments...

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Hey, Paul?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Before Genevieve goes on?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Could I jump in...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yes.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Christine...

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Yeah, thanks, I just...so, I totally agree with the conversation and I think it's a helpful framing to get a little more specific in our recommendations, I know we're going to talk about that later, with respect to operationalizing these calls to action, but what we had talked about several meetings ago was that we really needed a process that it wasn't a summit which implies sort of a onetime thing, but a working process that is co-led with federal partners and industry and so I wanted to suggest that we kind of think about it in that way and welcome Erica to respond to that.

But I also wanted to say I think that Erica is right and the Workgroup is right in that there are a lot of these actions that require private sector industry led effort, no question, but what's happened over the years is that we do have all these different initiatives that are industry led voluntary, private sector and what happens is you get into the room and you turn to the payers and you go "hey, you know, you guys really need to implement this in your contracts." And they go "yeah, well, you know what would be really helpful is we could do that if Medicare would just blah, blah, blah."

And so without really robust co-leadership not just participation by federal partners I think it's going to be harder to do this. So, I think it's...it takes a village but that co-leading with federal partners is going to be really important so that those conversations begin to really reinforce each other and think about the best strategies for operationalizing in ways that are mutually reinforcing.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, so Larry had something and then we should probably move on so we make sure we get through the presentation. Larry?

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Yeah, thanks, Paul, yeah, so the...to reinforce a couple of pieces we've already said, so I think this notion of alignment across programs is going to...it continues to be both an enabler and barrier where it's not done well and I'm thinking particularly around reporting requirements, particularly related to quality measure reporting as we're going to head towards...we're going to focus more on the outcomes and so I feel like the more we can get single methodologies, single data management, data governance in terms of the federal quality reporting measures that we start to give a message that at least at the federal level we're getting consistency across programs and encourage others to use similar measures and to learn about which measures are really working, so obviously this is not static, it's going to evolve, but that we really start to head towards coordinating that much better than we have in the past.

And measurements, so this week there was a private convening of folks that KLAS organized and I wasn't there, but I understand from a couple of folks, that it really did focus a lot on trying to create some measures of interoperability, how do we know that we're doing something of value?

So, I don't know where they came down in terms of what those measures are, but I think just that they all got together is a really positive first step.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah and I think John Halamka talked about that meeting a little bit at the FACA meeting on Tuesday and I think what they're doing is very in line with what the calls to action and commitments are in the measurement section which is agreement across the industry on some measures that can get more towards interoperability and outcomes, and transactions. I don't think that they developed any in that meeting, but more committed to actually doing it.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, let's you go forward.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

All right, next section. All right, next slide. Sorry, it's a fun topic, right?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yes.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

You can talk about it for hours. All right, policy and technical components, so if you go to the next slide just a note that these do not necessarily go in the same order as the roadmap itself. We re-organized them a little bit for the FACA presentation to flow a little bit better but...and that's why there's things like (h) after section (a).

What we did do, and this is more so you can pass this information along, each, and I should have said this earlier, each milestone call to action and commitment actually has its own unique numbering system so you'll see here on this slide H1.1 so H1 are always, anything with a "1" is a milestone, 2's are calls to action and 3 are commitments. So when we get to the next slide you'll see it's going to be H2 dot and then a number. So, we did that to make it a little bit easier to track actual calls to action and commitments so folks can know what they're talking about.

Data semantics in the near-term is really focused in the next two years around agreeing on data semantics for the priority data domain. So, in the roadmap itself we have a list of priority data domains they do align to the 2015 certification data elements. We did that purposefully not because we think that those are the things that need to be shared on every transaction but because we think those are the minimum set of things that need to be standardized across vendors and systems.

So, the near-term focus with the semantics, each of those domains has a lot of different data elements that could fall underneath. So, the work that really needs to take place in particular are with the industry is choosing the data elements underneath of the domains that are the highest importance to get standardized semantically. That's not a prioritization that we felt that we could do without industry participation and so the data domains we've selected but the elements underneath we did not. So, you'll see that when you read the roadmap.

If you go to the next slide, the calls to action in this section are predominately around working with SDOs to standardize the data elements and data domains and prioritize them for semantic alignment. There is a specific call to action around laboratory exchange of data and standardizing those semantics. And then there is a call to action around accurate translation and adapter services where they do them.

If you go to the next slide, commitments for this section, ONC is committing to work with SDOs to align the implementation and use of vocabularies, code sets, value sets and the structure so that we can have common data semantics across those priority data domains.

This is actually a typo, the second item on this page is a duplicate, it is not in the roadmap that was just something we didn't catch in the slide.

If you go to the next section should be consistent data formats, the focus for the formats is that as we look at the different formats that we're using whether it be a C-CDA, HL7 2.5, HL7 version 3 perhaps all of those different data formats we believe that the data elements across those formats need to be standardized both semantically as well as whether they're required or not. So, that's really the goal by the end of 2017 is that we have some alignment across those different formats that are the most commonly used with the priority data domains both in requiring them as well as the semantics that are used.

If you go to the next slide, calls to action are for SDOs working with ONC to actually align those semantic standards across the data formats as well as aligning things like null values and I think Steve gave a great example of this on Tuesday that, you know, you can...null values can mean a lot of different things, I didn't ask, you didn't tell me, you didn't remember and there really needs to be some standardization on the data format there.

We also have a call to action on developers updating their products that are provider and patient facing to use those format standards and those that are identified in the ISA the most recently finalized. So, consistently in the roadmap you'll see us use the term of recent finalized ISA. Typically what that means is the one that's been final, so...and Chris correct me if I'm wrong on this, 2015 is out for public comment right now and will be finalized as we head into 2016, so the expectation would be that folks would use the format standards that are identified in that 2016 version.

**Christopher Muir, MPA – Senior Advisor – Office of the National Coordinator for Health Information Technology**

That's correct.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Oh, good, okay. And then finally, SDOs and stakeholders should document best practices and guidance on methods for exchanging unstructured health information such as physician notes in an interoperable manner. So, we heard very, very loud and clear from the physician perspective in particular that physician notes are incredibly important to exchange and there is not really a great way of exchanging those right now and so there is a call to action that the industry would start to focus on how best we can exchange that unstructured data in a somewhat standardized way.

If you go to the next slide, commitments for this section, there is one commitment for this section that ONC will work with both the SDOs and the industry to align the semantic standards across the format. So, really it ties in well with the data semantic section and the work that's taking place there and then this is kind of like the next step of ensuring that those formats are standardized with the semantics.

If you go to the next slide, I think...consistent secure transport techniques, so this is focused on how the information gets to the next place, it is agnostic of the content that is being carried so this is focused purely on the transport mechanism. Also a little bit different than shared services which is where APIs fall.

So, in the near-term and keep in mind that we're focused on send, receive, find and use by the end of 2017, the milestone is that majority of hospitals, providers and individuals can send and receive data elements with priority data domains, with their trading partner of choice at least with Direct so we're not saying it has to be Direct by the end of 2017, I think we'd all be happy if there were additional options, but at a minimum you should be able to use Direct and you should be able to do it with any trading partner you choice and not necessarily be limited because maybe they're not in the same trust bundle as you.

If you go to the next slide, so you'll see the calls to action in this section focus, and remember this is 2015 to 2017 timeframe so very near-term, first one there focuses on using Direct to enable broad-scale ability to send and receive the data elements.

Second is that tech developers and Direct service providers should join a single common trust community and trust bundle to enable all their users to send and receive the priority data elements. This is a significant issue right now where folks can't necessarily trade with the trading partner they would prefer because they're not in the same trust bundle.

And then the last two around public health agencies agreeing to a set data submission, transmission process which now varies depending on which public health registry you're submitting to.

And then the last is on providers and research communities and developers using standards for query functionality that are identified in the ISA. Next slide.

Standards services, so this is focused heavily on APIs not necessarily...so in the broader scope of the roadmap this section is not necessarily focused just on APIs for query and retrieve this is a little bit focused more broadly on any modular service that you could use. So, you can obviously use APIs to hit of things like a provider directory or a master patient index, all of that is really included in this section, it's not meant to focus solely on querying and retrieving data.

The near-term milestone for this section is that certification approaches that encourage the adoption of specific APIs or consistently functioning APIs in a manner that does not prevent the adoption of innovative new APIs are developed and implemented by ONC. If you had a chance to look at the 2015 certification rule you'll see that there is an API certification criteria in there and so we're actually on our way towards meeting that.

If you go to the next slide, the calls to action in this section, the first one there is SDOs working with projects like DAF and Argonaut and HEART which are all focused around FHIR APIs, those folks all working together to provide updated IGs and help standardize APIs. Notice that we're not saying that folks need to adopt them we're saying that those efforts all need to collaborate together so that the IGs coming out of them are consistent.

Technology developers should implement standard APIs, oh, wait I said that is the second, I take my statement back, the should implement standards APIs from DAF, HEART and Argonaut projects and make them publicly available, working with SDOs to develop standard APIs for medical devices. So, we did try to include some items around medical devices because what we heard pretty consistently from public comment is that it's a huge patient safety risk when they are not interoperable with things like the EHR.

And then the last there is folks collaborating together on lab data interoperability and the use of APIs for lab data.

Next slide is the commitments for this section. ONC will support implementation of new API requirements in certification, again, you should have seen that in the 2015 certification rule. And I can pause here again to take questions because we just got through most of the technical stuff except for matching and directories.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

All right...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

How far along are you or how much more do you have?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

We're pretty close so we...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

I'm going to breeze over the privacy and security section, so there are four of those, I'm going to breeze over those pretty fast.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So mainly we have patient matching, provider directory or resource directory and the shared decision making section.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, all right, Larry?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

How much time...am I totally over time Paul?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Well, what we need to do is finish the briefing which I think is excellent and yet still very fast and so that we can reflect on...in a sense do sort of a high-level mapping, I think your suggestion would be really great if you could help with more detailed mapping. We need to get through the high-level mapping and see how it does map to our existing recommendations. Do we have to change any of those, do we need to add any? That's sort of the goal for this meeting.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Okay.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

So, okay, Larry?

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Yeah, so a quick thing that struck me about...it feels like we have several parallel timelines happening here, workflows happening here, because if I work backwards to say, if I, as a healthcare provider, am going to do something next year at an operational level with other healthcare providers sharing information I essentially need that technology in place in my environment today to make it operate in 2015, to make it operational in 2016, which means that my vendors needed to deliver this to me in 2014 or 2015 which means that the standards needed to be mature, right, in, you know, 2010, 2011, 2012, 2013 kind of timeframe so that there is...if you're looking at what we want to deliver in 2017 that in a sense all of that has to be somewhere pretty far down the pipeline today and that the things that we want to deliver in 2018, 2019, 2020 we need to see where they are in their pipeline and be moving them ahead.

So, I feel like there's a bunch of parallel flows happening here and I haven't read the roadmap in detail yet, but that would be a piece I would be looking for as a recognition that there is a lot of parallelism going on here and then we have to be pretty careful about not jumping the tracks, if you will, of, okay, so that's on track and it's going to show up in three years, but what we have to use today is what we've got based on work that was done three years ago.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah and I think that's why in the transport section in particular there's, you know, at least two items around using Direct, right, because I think the acknowledgement is that Direct is predominately what we have...is one of the most widespread transport technologies we have right now and so there are parallel efforts and a lot of things happening all at the same time.

And I think one thing to think about with the roadmap and how you read it, so while there are some milestones of things that we want to achieve by the end of 2017 a lot of things are not going to be achieved, right, like the continuing ongoing progressing work and so when you look at things like APIs for example you're not necessarily going to come to the end of 2017 and be like "okay, I achieved this API thing let me check it off the list" there's ongoing work.

And so when you do start to read the roadmap what you'll see a lot in the 2018 to 2020 timeframe is continuation of effort more so than I'm starting something brand new. Two reasons for that, one, there is just realistically no way that you're going to have widespread adoption of some of these very new technologies within a two year timeframe and I think we acknowledged that with the roadmap.

And two, we also don't know what brand new technology might get, you know, thought of tomorrow and so when you look at the further outlying years we were really hesitant to try and lock us into using a technology in even four years that's widespread today and so there's a lot of just building on previous year's work in the roadmap while trying to leave enough room to pivot where necessary when new technology and innovation comes into play.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Thanks.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

All right, thanks, Genevieve, why don't you go ahead.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

All right, next slide. Oh, I forgot about certification, my bad, there's an initial section, certification industry-wide testing and certification infrastructure. So, the main points here, I'm actually going to skip to the calls to action because they support the milestones, if you go to the next slide, Michelle, the biggest thing here, and we heard this really consistently in public comment, is that we need a robust testing infrastructure and that this testing infrastructure shouldn't just be in the lab before a product is rolled out but we also need testing to occur once technology has actually been implemented and folks are using it in the real world.

And so the calls to action in this section are focused around a robust set of testing tools as well as SDOs giving schema and testing tools for their IGs which they don't necessarily do consistently now, as well as care providers and trade associations sharing their feedback of what's happening once they've actually implemented a product and some testing around that.

If you go to the next slide, the commitments here, so ONC is committing to working with NIST to create more rigorous testing processes particularly for interoperability focused items, so I think you'll see some of this in the 2015 certification rule around the gold standard C-CDA.

And then ONC is also quite willing to consider non-government test tools when people bring those in, I think they've had some ePrescribing ones that have been suggested and then they're working on some open data on the CHPL. Next slide.

All right, go to the next slide, that's the carryover. All right, individual data matching, I called it patient matching but it is accurate individual data matching. I think recognition of this is that in the near-term we are probably focused predominantly on patients and their caregivers but longer term individuals obviously refers to a much broader spectrum.

If you go to the next slide, the focus in this section, on the calls to action, are standardizing the data elements that are exchanged. Again, those data elements align to the 2015 certification rule. I think while a unique identifier can be developed...while a voluntary unique identifier can be developed by the industry and there is actually a call to action in there for the industry to do that it was a little bit obviously off the table for ONC to include. So, we're focused on the data elements that can be exchanged.

In addition there are some calls to actions around developing metric rates. So, if you go to the next slide for the commitment there, ONC is working to develop a core set of metrics so that you can actually test your algorithm performance and use that to help develop best practices and be able to tune your algorithm and things like that.

If you go to the next slide, healthcare directories and resource location, so again, this is another one where near-term we're focused pretty heavily on provider directories because I think that is a huge need in the industry right now for anyone who has had to send a referral or work with a referral coordinator to send one, it's really frustrating when you can't find the provider that you need, so near-term really focused on providers, however, longer term is a much broader scope of any type of resource that you need to discover electronically.

So, if you go to the next slide, the near-term are focused on adopting some of the standards that exist today so the most recent ISA, at least out for public comment, has HPD included, I'm not sure if that will be final, but looking to get some adoption there.

We also think that there's a role for the FACAs to take a larger view of healthcare directories. We, if you read the section of the roadmap, sort of raise a list of questions for that longer term view of what...of all the resources we need to be able to discover and there really needs to be some thought given to the architecture that we're developing now that can support that longer term, I need to find your API and I need to do electronically in the background where I'm not having to manually look for it as a provider.

We really think there needs to be some heavy thought given to that and so we think that the FACAs are very well positioned to think through that so that we don't end up with a bunch of APIs that are publically available but no one can find them in an easy way.

And then on the last bullet, CMS should support requiring Direct addresses and electronic service information be entered into NPPES and I believe that they did that in their most recent Meaningful Use rule but I haven't gotten to that section yet. So, next slide.

Commitments here, ONC will work with health IT stakeholders to encourage uptake of current provider directory activities. Potentially that could be HPD there are a couple other directory standards out there that are used more broadly than healthcare and so there are some potential standards that could work.

CMS is actually already supporting efforts for health plan directories to be made electronic. They released guidance I think just a couple of weeks ago around that actually.

And then ONC and certification bodies will determine how best to support provider directories through certification. Next slide.

All right, so this starts sort of the group that is privacy and security, I will definitely glaze more highly over these, some of these are very detailed and very into the weeds on HIPAA. So, ubiquitous, secure network infrastructure is focused heavily on cybersecurity and encryption policies.

If you go to the next slide the majority of calls to action you're going to see in this section around things like security risk assessments, doing penetration testing, having encryption policies for data that is both in transit as well as at REST and things like the ISAC and participating more heavily in those. Next slide.

Commitments here, ONC is committing to identify best practices for encryption policies. HHS is going to continue to work in the ISAO and have a heavy presence there. And then ONC is committing to work with NIST and OCR to publish the NIST Critical Infrastructure Cybersecurity Framework and HIPAA Security Rule crosswalk, which we think will be very helpful for the industry as they implement encryption policies. Let's go to the next slide.

Verifiable identity and authentication of all participants, so this section is focused on identity proofing and authentication of everyone who is accessing protected health information or electronic protected health information.

If you go to the next slide the calls to action here focus on some things around FICAM and identity proofing and best levels for identity proofing as well as looking at some of the new technologies for patient identification like OAuth 2.0 and things like that which could be used to more easily identity proof and authenticate individuals.

If you go to the next slide, there is one commitment here that ONC will establish and adopt best practices for provider and individual consumer identity proofing and authentication. So, ONC is committing to work on that. Next slide.

The next section is consistent representation of authorization to access electronic health information, very tightly coupled with verifiable identity and authentication but this is basically electronically representing that you have the authorization to access a set of health information.

If you go to the next slide on the calls to action here, these are focused pretty heavily around having control rules and policies in place for enabling access to electronic health information and very focused on policy here and then as well as some standards for, as you see the last bullet there, SDOs working with technology developers to do pilots of standards-based approaches for electronic authorization.

Next slide is the commitments, so ONC is committing to work with stakeholders to identify the technical standards for representing the user's authority. Those standards I think are in process right now and ONC is committing to work on those and make sure that those are identified for technology developers.

OCR is also considering giving additional guidance on the HIPAA Privacy and Security Rule. I think we've heard this pretty consistently is that there needs to be a very large educational effort around HIPAA and what's allowed and what's not allowed.

I would be remiss if I didn't say that the clear message from OCR as well as ONC is that HIPAA is not a barrier of exchanging electronic health information, it is meant to enable it in a private and secure way. So, we think that there just needs to be a large educational effort around that and ONC is committing to do that in conjunction with OCR. Next slide.

Consistent understanding and technical representation and permission to collect, share and use. Commonly we think of this as consent so this section is focused pretty heavily around that.

If you go to the next slide for the calls to action here, calls to action are really focused pretty heavily around the varying state privacy laws and actually coming together to try and fix that. So, I think pretty consistently we have all heard that sharing across state boundaries because of the varying laws is very complex and very difficult and can be an impediment and so we think that there needs to be a pretty concerted effort to actually review those laws that different states have and see where we can actually align them better. So, you'll see some calls to action around that.

If you go to the next slide there's actually some commitments specifically around that and I believe that ONC made an announcement on Tuesday about working with NGA to actually do this work and so bullet number one is already in process at this juncture and we are hopeful that this will make a big impact. Next slide.

All right, shared decision making, so I'll get through this one and then we can maybe pause for questions. So, shared decision making was the governance section previously we worked to use the word "governance" very sparingly because of all the baggage associated with it.

So, what this section is focused on is the industry coming together and developing a shared decision making process and if you actually go to the next slide, it states this, Michelle, developing a process that will enable all those networks that we saw at the beginning and plus all of the other networks that we know exist like all the health information exchanges across the country, developing a process so that they can address the varying business and policy practices between them so that we can agree to some common rules of the road and actually exchange across those networks. So, that's really what that first bullet is focused on.

Based on public comment this is an effort that the industry wants to lead and wants to make progress on so we're sort of leaving that to them. I think this one is probably pretty directly related to policy barriers that prevent interoperability.

And then in addition to that ONC is also committing to...and if you go to the next slide it will show this, developing a policy guidance document or a policy advisory similar to the interoperability standards advisory that sort of lists out the business and policy practices that we think are necessary in order to enable exchange between those varying networks. So, we'll pause here because that was a lot of content.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

All righty. Any other questions or comments on this? Okay, so similar comments...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

I may have lost everybody.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

We'll have...we're going to have a summary of past recommendations and certainly our Privacy and Security Workgroup have been very active in this area so it will be good to map this because I think there is quite a bit of mapping between...and really want to highlight again the whole HIPAA...HIPAA is not the barrier but the misunderstanding, confusion and use of HIPAA as a potential barrier is so we have called for a clarification of that to help people better understand it. It is complex, so...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes, yeah.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

But those are the ways that it interacts with a lot of our previous recommendations so it would be nice to really just get this done, it's almost like a matrix or a table, a lot of overlap and that will...I think that will continue to start bringing some of these things together. I think I mentioned this during the HIT Policy Committee and Erica said she was working on this whole, can you tease out for what stakeholders would be most interested in which of these calls to action because it's pretty hard to digest...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

This many.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes, we actually are working on that. They are being 508 complied right now.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So they should be able to post I think early next week.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Wow, good.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So, I think the plan is for hopefully them to post on Tuesday, please don't hold me to that because things can go wrong in 508 compliance...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Fair.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

But we're hoping to have them out then, yes.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

And Christine you had a question or a comment?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Yeah, thanks, Genevieve this is helpful. Can we go back a slide? I think it was one slide. Yeah.

So, the shared decision making process can you talk at all to how this is similar or not to like HITSP, you know, remember the Health IT Standards Panel, I mean, I feel like we've got that and we also have of course the Health IT Standards Committee, although I'm not sure they've played this detailed of a role, but how does this recommendation...I think my question is, how might this result in a different environment if this action was created than what we have today given that we've done some similar things with HITSP and other standards organizations?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah and I think that's a fair question and when you read the section of the roadmap I think what you'll see is we talk a little bit about some of those past efforts because there have been multiple past efforts which is why we don't use the word governance in this section.

So, there have been multiple past efforts and I think there's a couple of things that make this a little bit different. It seems like, to me, in watching the industry particularly over the last year, that there is more willingness on the part of networks to actually work together and agree to those policies and sort of common rules of the road.

So, I think we're sort of out of place where folks are acknowledging and recognizing that interoperability is not where they want to compete and so I feel like the industry is actually just more ready for it, I'm hopeful. We don't necessarily, from an ONC perspective, have a set out vision of what we think this should look like frankly.

In the draft roadmap we sort of articulated it as like a single entity that has kind of helping to make these decisions and lead it through in a fairly formalized way and we pretty consistently heard that's not what we want.

So, I don't know that I can totally answer what this looks like. I do think it, at this juncture, needs to be industry led, however, it needs heavy participation from federal partners because the federal folks are just as invested in these networks connecting and use these networks in fact themselves and so they would be considered stakeholders that would participate in the process.

I don't know if I answered your question Christine because I'm not sure that I have a great answer in that space.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Yeah and I'm not sure there's one that exists and I'm starting to wonder...I mean, I just feel like someone needs to look at it because we keep doing and calling for the same things and we've tried many different formulations and I guess I'm starting to wonder whether the lumping, I know Paul is a lumper, but the lumping in this case might be doing us a disservice because I feel like you've got the standards community and they do lots of stuff around the nitty-gritty details of which standards and all of that.

But then the rules of the road are a little bit different than just standards, right, in fact they're a lot different I think and, you know, what the policies are around the architecture, you know, and I'm harkening back to the days of, you know, the Markel Connected for Health Project which looked at different ways you might do that and, you know, that's different than standards, that's different than policies and so when we put them all together in standards, services, policies and practices...and I think you're saying that you guys have backed out of thinking it's one organization that might do all of those, but that there is some process...I just feel like this is an area Paul where we have struggled for so long and we have tried so many different organizations and entities, processes and some of which had federal participation, some had federal leadership then of course you add in certification stuff and it's like "oh, my God" you know. I think this is a gap area for me, but I'd be curious if others have input.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

I will say one note on why we actually included it all in the same bullet, so when we talked through this and Chris I think you were even in some of these conversations so feel free to jump in, but when we internally talking with SMEs in the industry and really were thinking through sort of how this could work, I think we agree with you that they are different things but they're all sort of interconnected and so you can't necessarily work on one within a silo without having it have a major impact on the others.

And so I think our thought process was that it's not necessarily the same people in each...like for the technical standards for the policy, right, it's not necessarily the same people but there needs to be some level of coordination across all of those areas so that you are not developing something over in the standards section that cannot possibly be done with the policies that you've chosen. Does that...

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Yeah, it makes total sense and we...I think there's really widespread agreement about that, I mean, that dates back to...that was probably one of earlier calls from the Markel Foundation in that early work but it also dates back into the HITECH Law and, you know, when many of us were working with congress on that it was why we, number one, bifurcated or we recommended the bifurcation of standards from policy because in previous efforts it's frankly a little bit easier to work on standards than the intractable policy stuff that, you know, we struggle with.

So, those were bifurcated but they were also attempted to be linked by creating two federal advisory committees in this case and we felt like...and the law is never going to get this specific but I remember, and Paul you probably do too, the early discussions about, well, how are we going to get reports from each other and how are we going to coordinate between the Policy and the Standards Committees and we had the Governance Workgroup and we had the Interoperability Workgroup, and we had the Information Exchange Workgroup on the policy side, and so I think you're absolutely right and I think everybody agrees it's just such a huge chunk in those buckets that it's been really...and I think we have made progress so I don't want to do a disservice to folks who have been working hard, you know, in these areas and I think certainly almost all of us have been.

But it also feels like we need to find something new that might really unlock and accelerate progress and innovation in some of these areas and I'm struggling to get what that is except to notice that "oh, my gosh, you know, this is like a huge bucket of stuff." So...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

I think that's helpful though and I agree.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Okay.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, thank you. Let's go ahead Genevieve.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Okay.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Final stretch.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yeah, we're almost done. Next slide. So, outcomes, next slide, so individuals, this section focuses on them having access to the longitudinal electronic health information. If you go to the next slide, the calls to...and I'm not going fast because individuals and providers aren't important just to be really clear, we're just almost out of time.

The calls to action here, there is some focus on development of technology to make health information more accessible in a way that individuals are more accustomed to so things like Apps for accessing and that ties in pretty closely with some of the privacy and security identity proofing aspects around things like OAuth 2.0.

And then there's some work around promoting trust that their health information is going to be protected and secure that's more of an educational effort with patients and then some push around Blue Button.

If you go to the next slide on commitments, so ONC is committing to work with the Health IT community to support Blue Button Initiative as well as trying to remove some of the barriers on consumer's ability to access so some of that are things like not being able to send the data wherever I want to send it to because they don't have a Direct address on the other side, things like identity proofing and authentication, ONC is committed to working on those. And then there is also a commitment around looking at APIs to more easily be able to share information. I think some of that you'll see in the 2015 certification rule when you read through that.

Next slide is provider focused and it's focused on their workflows and practices. So, if you go to the next slide, so to be very clear usability of products is out of scope for the roadmap because it is just incredibly large and it's a huge issue and we don't want to do a disservice to it by including it with the interoperability roadmap because it's actually a much larger effort that needs to take place.

However, our first call to action is around developers focusing on more seamlessly integrating interoperability into the workflows of providers and the technology that they're building. I love providing clear instructions to those end-users on how to do it.

So, we have some calls to action in addition to that around providers working with individuals and getting them their health information as well as including interoperability content in the training of new providers when they go through their educational process or even as CEs.

If you go to the next slide, the commitments here, so ONC is working on best practices for the incorporation of patient generated health data. They also, ONC has a commitment around developing a policy framework for this and I think that project actually just launched publically I think about a week ago.

And then ONC is also committing to develop a Health IT playbook that will help providers as they adopt more interoperable technology of the things they need to think about for workflow, how they better integrate it into their existing workflows and build new ones as well as engaging consumers.

And last section is measurement, so the measurement section the big focus, if you go to the next slide Michelle, there you go, focus here in the near-term, next slide, is going to be around developing the measurement metrics for measuring outcomes and so you'll see that that's like the very first bullet, how do we address the measurement gap particularly around getting data and how do we do that in a way that doesn't just require more clicks from a provider, which we obviously don't want to do.

So, most of the calls to action in this section focus around that as well as pulling in some other folks like behavioral health, LTPACs and non-Meaningful Use folks who need to...we need to measure their level of interoperability as well and don't necessarily have great ways of doing that right now.

And then last slide on the commitments, next slide, there we go, so ONC is going to report on nationwide progress in a report to congress, they are mandated to do that under MACRA, they are well on their way towards that.

And then they're also committing to work with the industry to address the measurement gaps. I think you all know getting the right data is really difficult and so I think really the heavy focus on measurement in the near-term is on figuring out what those potential data sources are and how we translate that into measuring outcomes versus just transactions.

And that is everything, it's much shorter than it was but it is still a lot of content either way.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Have you actually counted up all the CTAs?

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

All of the calls to action?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So, Erica gave the number when she did her presentation on Tuesday and I cannot for the life of me remember what it was. We do have a count I just can't think of it right now.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah, no, no, no...

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

But I can get to you on that.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

No, no.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Yes, it's a lot.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Comments and I think then what we need to sort of see how we meld this together or how do we coordinate or reconcile it with the roadmap?

One thing I might notice is...actually what I might do is go to our slides and review our four recommendations and then maybe have this discussion if nobody else wants to say anything before we do that?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

I think that actually would be really helpful Paul.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah. Okay, can we switch over please? Okay, so the first one got sort of a structure of background recommendation and then the rationale. So, the background is...and a lot picks up on where the calls...we really wanted to translate the calls to action into and action plan so in a sense if you really view it as call to action, call for an action plan and the players to achieve the milestones that are required in order for us to have the HIT to support DSR.

So, the background is we've done quite a lot so far and we are going in the right general direction and everybody in the market seems to understand that but we don't quite have the compelling financial palpable incentives here yet and that's also mentioned here in the roadmap.

The roadmap does give us a blueprint with a number of both commitments and calls to action but because it requires collective actions and more than that its collective simultaneous action it really becomes a challenge.

So, we think that we need to convene a major stakeholder initiative. Some of the stakeholders are not at the table which looks like a table of health information technology folks and it really is far more than that if you truly want to achieve coordinated care in a value oriented and value-based system that's, you know, really redesigned.

So, we think there is sort of a kickoff of the action planning process with the right stakeholders and accountabilities that emerge from that. We would love it to be a public and private sector effort not only for this kickoff and the summit itself is a one meeting but think of it as a kickoff, it's a working summit and think of it as a kickoff meeting rather than an end in itself rather than a conference and that speaks sort of to the rationale.

The federal government is in a unique role in many ways, it is the federal government, it is the largest payer, it does have a coordinating function through ONC that's why it is so important.

The private sector, as we just heard how Genevieve reviewed the roadmap, is called upon for at least half of these efforts. So, that's why we really think of it as a collaborative effort and it has to be public/private.

The outcomes of this would be much better understanding of what's required, much better understanding of who needs to participate and ideally sort of the action plan milestones and accountability so that you can move forward with ongoing activities. So, that's sort of draft recommendation one. Next slide, please.

So, two and three focus on, well how do we know where we are and whether we're getting there. So, we focused a lot on...we really said we just actually don't have these instruments, we don't have these measures for either knowing where we are or how do we get there or how do we focus our efforts and that's why our recommendation talks about HIE sensitive health outcomes that are publically reported and eventually are used for payment much like the CMS strategy first get it publically reported then it will eventually become the base once we've worked out all the finer points and details moving onto what's used for payment. That's not going to happen by magic. We need funding to develop these measures that matter first to consumers and patients.

We came up with an example of an HIE sensitive measure that I think really illustrates the case very well, if you said, no reimbursement for medically unnecessary duplicate orders it seems pretty straightforward from a...conceptually it's a no-brainer but it actually clearly needs HIE, effective HIE to be able to execute on that well. So, that's our first part. Next slide, please.

The second measure really does...vendors are an important player in this both a stakeholder and a player in this, and a large complaint, and Genevieve referred to it as well, is that they may be passing some kind of test and yes we need better testing tools, but then it's not clear that it has been implemented as designed or stated in the field.

So, we want to have an HIE sensitive performance measure for vendors, and again we came up with an exemplar that goes from process, it only begins with process it doesn't end with process. So the beginning is, well, how many data elements, how many electrons are flowing, it goes all the way to what difference is it making, is it changing orders for example, is there reconciliation going on between what I got from the outside world and what I have in my record. So, that's clearly far more outcomes oriented in a sense of has the exchange done something at the other side. Next slide, please.

And everybody from Karen to Secretary Burwell, to the roadmap has said this really requires palpable compelling incentives to do this and although everybody is pointed in the right direction unless the incentives are concrete and it shows how you will not do well if you don't pay attention to HIE and that only with coordinated...care coordinated information, coordinated care where you do well in the new payment model well that...will you be able to succeed.

And clearly I think CMS is holding up to its word in the sense of changing its payment model that has the RFI and really saying how can we do this and we're echoing it and reinforcing that message and continue to encourage that this direction be reinforced with concrete rules and actions, and along with that prohibit information blocking because that just obviously gets in the way.

So, that's a summary of our four recommendations. I think it's pretty consistent and if I look back, you know, whatever the total count is, if it's 50 then we've picked off...we have not dealt much with standards but I think one, our past work has dealt with standards and we're going to try to summarize that.

Two, it's more the purview of the HIT Standards Committee.

Three, it's definitely called on in both the elements and the CTAs from the roadmap. We've focused on what...in our opinion are the things that need to be done now that haven't been done and it's maybe just timing from a point of, where both Genevieve and Christine were saying, it's not that this has never been thought of but now seems to be the time to get together to do this action in a collaborative way.

I think Genevieve was right, you know, first I don't know that all the stakeholders that are needed in order to make this successful have been engaged at all and second this is a new time and we didn't have the roadmap before and the networks that are out there now, you know, figure out more that they've got to collaborate together and providers are understanding where networks fit in.

A lot of things are gelling now and so that's why we think that, in particular, recommendation number one would change the glide path here.

So, let me pause there and see...I guess so my upshot is, I think we've captured some very critical sort of tipping point actions that could move us much more quickly and in a more reconciled gelled way towards this new goal and I think it's okay not to focus in on the standards that have been numerated in the roadmap, one because we've...we'll summarize some of our past thoughts about that but that isn't what...where the Policy Committee needs to make its strongest arguments not that it's not important but. All right, Christine?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Thanks, so I agree, I think there is a lot of really good alignment. I do think there are probably two gaps where we're not as aligned. So, there is...and then there's one area where I think we can be stronger and should be stronger so...but let me just start by saying about the standards piece.

I think we do need to acknowledge in the report that, look, we're not diving into standards because, you know, pretty much what you just said Paul, but I just think we have to be explicit about that or it's not that credible because there is still...I think folks in congress are still hearing a lot about standards problems, so I just want to make sure we don't leave that out too much, but I think that can be done.

The two areas that I see as potential gaps are, one, privacy and security and two, the role of the patient. The roadmap does talk a lot about that, about both issues and I think it's worth...I know today we're kind of going to be looking at high-level areas like this so I think it's worth as we go forward diving into the roadmap elements and figuring out what we could lift up either into an additional recommendation or into an existing recommendation or somehow in the body of the report and those would be two I think really important areas.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

That's good Christine, let me address those. One, is it's more than just acknowledging I think the standards issues, as you know we've had...in interop we had an HIE and Interoperability Workgroup and we've had adjacent...we've had a number of activities that...I think you were there when we were trying to summarize them. ONC still owes us that sort of summary but that's going to be covered...standards will be covered well and as you know we've been extremely active in privacy and security so I think that's going to be covered well too. We just haven't put it into print yet.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Okay.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

The role of patients, where do you think we might strengthen that in areas that we haven't talked about before? We certainly had the PGHD activity. Is there some other way that we can make sure we cover it?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

I think there is...I guess the gap in my view is...and Genevieve's slides did list out some example calls to action, but in my view the role that consumers can play in supporting interoperability is an important lever that we really haven't done a good job of pulling and so we have a recommendation for example around financial incentives and payment getting a lot more stronger, you know, creating a much better framework for that. So, similarly one of the things I think that could advance the market is if consumers are equipped to get their own health data, but then number two, is providers are also actually equipped to receive it.

So, that's one of the big challenges that I think we have and it speaks directly to interoperability, is okay, so I've managed, in my own example, to get my primary care doctors to give me the actual data I've compiled it in an App now my next primary care doctor is going to be at a real disadvantage because I have a whole lot more data than they do but it could be a lot easier if they had an easy way to upload, ingest.

So, there is much more than just sort of patient generated health data which people tend to think is wearables and, you know, whatever, but it's really this idea...it's kind of coming back to the HIE of one, the old health record bank's idea, not old because it's still in existence, but that idea that look there's a really important role for consumers here and it's also delivering real benefits to them because I think...and that's where the trust happens. So, definitely linked to privacy and security.

The more that we can see the data that our providers hold and the more that we can access it, download it, use it and share it then in fact the more benefit we have, the more trust we have and the more benefit providers will also have, right? Because I know at least where my data is, mostly.

So, I think that's just a gap piece of this and I don't...I didn't immediately see one of our four recommendations where it felt like it could be part of...I think...so I think it's most similar strategic, you know, strategy-wise to recommendation four but it's very different.

So, I'm wondering if there should be an additional recommendation in that respect. I know we also talked about it. I wasn't on the last call but I went back and listened to it and the report about info blocking and Larry raising good points around, you know, role of consumers there as well.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah, I don't have any ready ways to think about how to incorporate that.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

I can, you know, send some recommendation thoughts to you guys to distribute to the group off line rather than trying to do the work of that right here.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

All right.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

But I think, you know, based on what's in the interoperability roadmap there is a lot of support for this notion.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

And it's actually a case where consumers could really help and so if we want them at the table in recommendation number one there needs to be something in it for them too and that's what I would suggest is just adding a new recommendation.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, maybe you can help us with some words.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

And then the only other thing I had is around the alignment of incentives and the sort of, you know, more robust of a payment approach. I think there is great alignment with the roadmap but I also think that the interoperability roadmap is limited in what it can say, right, it has to say, these are the pre-established CMS goals, but I think I would support us, and I think we are, but at least in the narrative, being stronger because I think, I'm probably going to get audited by the IRS for saying this, but I have some concerns about the robustness of the payment changes that CMS is making and then tying them

to alternative payment models doesn't always, in fact it often doesn't, necessarily equate with the kind of real outcomes that we're talking about being meaningful to consumers and to payers.

And so, I would just want to put a plug in here for the fact that we could go a little bit farther and really call for a lot more significant payment change as opposed to still continuing, you know, that sort of fee-for-service basis. So, it's an opportunity I think we should definitely seize because the roadmap can't by nature.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay. Any other comments?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

Paul, this is Julia, I guess hearing the roadmap and sort of now revisiting our recommendations, I guess I was just struck by the fact that, you know, we are sort of...we're thinking big and we're thinking long-term, right?

I mean, most of these actions would take a long time to put into place and again, I think they're the right...I think they're the right recommendations if you know...as we want to work towards, you know, interoperability in, you know, 2018 and beyond.

And I guess I'm just wondering sort of given the nature of this request from congress and sort of some of the urgency that's being felt whether do we feel like there is any sort of near-term low hanging fruit and just...or are we saying that we really think that there isn't or that we shouldn't focus on that because it's counterproductive?

I guess, you know, if I wanted to act today, you know, my reaction to this would be like, oh, it doesn't feel like it gives me anything to sort of start on in the near-term that I think could really have immediate benefit and so I guess I just want to maybe get some thoughts about whether that is sort of what we're thinking and feeling, and is there anything that we want to do that we...a recommendation that we feel like could have a little bit more immediate impact.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Well, let me try to ask you more about that then. Recommendation one is a, you know, ideally recommendation one would happen at the end of the first quarter in 2016. The reason for saying that is then it still can be contemporary with the development of MACRA. So, MACRA is just getting started and Patrick Conway was saying something like the springish, you know, 2016 in terms of some of their initial NPRM, so getting the people more in sync with this rulemaking process, so one they can be aware of it, that helps with recommendation four.

Two, they can contribute to it and even some of the output from this working summit can contribute to the development of the thinking around implementing MACRA. So, that's one point, so that's certainly a near-term. I mean, that's like you'd have to start tomorrow in planning.

Four, I think is intended to be near-term because if...you know by 2018 it's sort, game's over in a sense, and I think it's really reinforcing CMS's pretty deliberate foretelling of where they're headed by the RFIs and the public statements in terms of how serious are they with the delivery system reform and using these newer measures to drive it.

And two and three even though the results aren't going to be immediate because of the lead time required for endorsed measures to come out, if you don't start the work actually in the immediate term and what does that mean, in like 2016, I don't think it's going to be around when MACRA starts which is 2019 I believe.

So, in some sense I'm looking at these and saying, there would have to be...if we want...if people believe that the recommendations we made are one, good and two, timely then you'd have to start in 2016. And with number one and potentially four, in the early part of 2016. Does that make any sense?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**  
So, I really agree...

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**  
Yeah.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**  
I think they require near-term action but I think the results of them feel like they will still be sort of several years out and I guess just the examples that are coming to mind are, you know, there was some heat around pricing for exchange that came about...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
Yeah.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**  
I think as a result of some of the health committee hearings and like a major vendor made a change almost overnight in their pricing, and, you know, and so I'm just trying to see if there any and I think, you know, we talked to CommonWell and, sorry now the name of the other...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
Carequality.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**  
Carequality, right, I mean, they sound like, oh, we're working together, but, you know, is there something that could sort of tomorrow lead them to like a much more rapid active collaboration just, you know, again, I don't think this is going to solve the big problem but are there any recommendations that we have that we feel like could, you know, change things a month from now or two months from now and, you know, I don't know...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

I just sense that there is sort of a hunger for those kinds of things and I just worry that we have...we've focused on the big, which is good, but like have we missed the opportunity to think about a few small near-term wins.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Good point.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

So, let me...it's Larry, let me jump in with two things I came across this week and I apologize for not having full depth of detail on either of these, but I think they actually speak to how to build on what's already there.

So, the first example, and these both came from Mariann Yeager at Sequoia that's the umbrella for both Healthway and Carequality, and she said that Intel as a payer, so the Intel employer health plan funding said, if you're a provider that we're paying for you will be part of Healthway. And the uptake of providers getting connected to Healthway has been huge.

Now obviously it's important to get the details right on that and we should cycle back with Mariann on exactly what happened, but it's an example of an existing information exchange, an existing set of rules, 30% of, you know, the patients in the country are already covered through one way or another they claim, so a big tick up on using an existing infrastructure to provide real access to patient information because a payer said, if you want my money you have to be in this HIE.

Her second example was a White Paper that's coming out from some work that Intermountain did as part of the CCC, Care Continuity Consortium, I might have the...the letters are right but I might have the sequence of the C words out of order, where Intermountain said, okay, we have this group of 10,000 patients that we know got care at one of the partners that we have through CCC let's go and run the algorithms to give us the patient match. They only had a 30% success rate.

So, the White Paper is about what they had to do to get that success rate up and I think they've gotten about as high as 70 or 80% in their current ability to match and it mostly was issues of data quality about how the information was collected, what fields it was put in, whether a patient's whole name was captured or just an initial, whether, you know, how null fields were handled and default values and things like that.

And so I think that speaks to...that a lot of getting this right is getting the details right and that as much as you might want to legislate or just offer to pay in the end there is a lot of hard work that needs to be done just to clean up data, cleanup process and to some of Christine's comments about where the consumer becomes valuable if Intermountain didn't know that a patient had been receiving care at another setting they wouldn't of had the core data that told them we should be able to find a match and so at the very least I think we, as patients, become invaluable in these next several years of getting this right of being really clear with our providers of, I did get care at these other settings, you should be able to find information for me about me from them and let's figure out why you're not seeing it because it's important that you get it.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Can I run something by you to see if we can take advantage of these last two comments, so I don't know whether this group of people in the time available to us can come up with the level of detail even of the roadmap. An example of something that we did do is use some exemplars, so for example the no medically unnecessary duplicate tests does a couple things, one is it illustrates our point and makes it concrete. Two, it's actually not a bad example. And the two that Larry just mentioned do the same thing I think.

So, would that Julia, be...so what if we had let's say our four or five recommendations, we gave the "why did we come up with this, what's the problem we're trying to solve and why do we think this, you know, addresses that problem." But we also included exemplars that add clarity but also are even candidates for immediate action. Would that help address both of these comments, I mean, Julia your interest in getting something that could be an action that could be done instead of just moving in that right direction that so Intel might actually decide, hey, well, you know what not only do you need to be part of an HIE organization exchange I'd like to implement this rule that says "I'm not going to pay for duplicate tests that aren't medically necessary." And the fact that you're all connected by Healthway you should be able to figure this out not without a lot of effort, but that's the direction, I mean, so someone can do that. Would that make sense Julia?

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

Yeah, I like that a lot and I think even on some of the measures...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

You know if we feel like there are any near-term measures that are more mature and sort of more ready...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Julia Adler-Milstein, PhD – Assistant Professor of Information, School of Information; Assistant Professor of Health Management and Policy, School of Public Health – University of Michigan**

Naming those I think would really help.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah. I think it just illustrates our point and makes it feel like it actually is...somebody can do that, I mean, Intel can do that, already did that, another company can do that too if they concentrate a lot of employees in a certain area. So, I think that might be a way of sort of addressing your desire to have something actionable like today that could change things and without putting it as “law.”

Well, that’s good, I mean, if...Larry you seem to come up with these examples that’s really helpful. If people know of these examples of actions that can be taken that fit, especially these measures than that would be really helpful or the kinds of folks that are overlooked when we talk about acting on interoperability which is too much of a technical term I think.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

This is Genevieve, can I just make one suggestion as you’re thinking about measures?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Sure.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

So, when you’re thinking of provider actions in particular, so things like being part of a health information exchange I think what we’ve seen historically with these networks is that they have a lot of participants but like for a lot of the HIOs even historically, like if you take a look at some of the ones that closed like CareSpark and folks like that they had a lot of people who said they were participants who signed the agreement...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

But weren’t actually exchanging and using data.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Like when you dug into their metrics...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

Like CareSpark is a really great example of this, we did a report for ONC on it, I think as you're thinking towards the measures I think we're probably further along than just, hey you need to join this particular network or any network to maybe focusing a little bit more on what you're doing on the network.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Genevieve Morris, MA – Director – Audacious Inquiry, LLC**

That would just a suggestion from me.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

And that's why it turns out this example of the no duplicate test is a really...I mean, you could just stand back. The payer obviously knows from the claims which obviously says, well, wouldn't the provider be interested in that kind of information too in more near real-time?

So, there's all kinds of things that come up because of that one, you know, logical request and that's the kind of thing that does a nice job in a measure because everybody gets it, it seems like a good idea and then you start drilling down and say, well, what would it take to make that possible?

And then the, you know, Larry's example of what can a private sector company do to add...I mean, so that company...yes, I guess the company is the payer in a self-insured way, but it's not the traditional insurance company whether it's CMS or a private but it just shows how the private sector can act tomorrow, well not exactly, I mean, during open enrollment.

Well, I think we've had some great ideas. Other contributions in terms of how would we shape our recommendations to be compelling, to be the tipping point? I don't think we can be all things to everybody but do some key activities that would cause actions to start happening working off of the roadmap and the kinds of things we heard in our hearings and past recommendations?

All right, I think the plan, Michelle, we're meeting again when and is that when we're going to see the summary of the past or see our draft of the written document?

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

Yeah, Altarum can you bring up the work plan that's in a few slides?

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, so...

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

Well...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yeah.

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

Okay, go ahead, Paul, sorry.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

No, obviously the gap is within...before we work on the finalized report we need to see a draft of the final report so we can talk about it. So, do you have an idea when we might be able to see that?

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

Well, Paul, we had conversations today, we'll have to follow-up.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

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

Yeah, you've seen it, but, we'll talk about it.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay. So, sometime before we actually try to finalize that we're going to have to get together and try to get some feedback on a draft report so that we can iterate before we try to present the final.

So, I think we've gotten some concrete things that I think would make a material difference at least the ideas and I like what Julia is saying of saying, well can we give examples of what would be concrete steps in the short-term, low hanging fruit not that it's easy hanging fruit, but things that could make a difference that would be really helpful. Other people feeling comfortable with our four recommendations?

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Well, it's Christine, I am I just want to, you know, have that placeholder for the consumer component.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Paul, I also feel like the charge began with barriers to interoperability and we're, you know, I think appropriately, we've switched to recommendations on steps to go forward. So, I think we need to help people get through that shift of, yes, there are barriers, in many ways you can look at the whole of the roadmap that ONC put forward to say, these are all the things that have to move forward to really get broad, easy interoperability.

So, you could look at any of them as being a barrier, what's actually going to be an enabler and get us moving. And so, I think we need somewhere to be saying that just so people don't go, wait a minute, I asked you to tell me about barriers, I want to hear horror stories and we're going, well, we didn't think it was helpful to rehash, you know, lots of horror stories, here's the things it takes to be successful, we've got a big fat roadmap, we're pulling out a few things that we think are key rallying points, recommendations to move this forward.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

That's a good point and I'm also looking at the language, again, I think some of the original spirit of the requests had...was based on the thought that certification was going to be a big help and we may want to sort of place certification in the context of what we think would produce the most bang for the buck...

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Yeah.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

And the most forward progress, so, I mean, I think that's a good point.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Good point that we don't overlook addressing certification in our wrap up.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

It should...it has been there in our past recommendations so we've just got to make sure that we sort of do the bridging.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Yes, yeah...

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Paul?

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

I don't want to be in a place where people say, you guys just didn't get it.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Right.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

It's like, no, we think we did get it.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Yeah, I think Larry's right and I'm just reminded of the public comment we got about a month ago that basically said, you know, you aren't on the right track that you haven't given enough focus to the financial barriers and maybe it's been helped by the fact that we have heard now from the folks on the Health IT complaint side at ONC and the info blocking side at ONC and CMS, and so, you know, I don't know, but I do want to make sure that we are responsive to it because I think Larry has a very good point...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yes.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

We didn't have the time to really dive deep into the financial side of things but there are all these other pieces that are diving deep and I know we're trying to hear from them and perhaps when we have the summary of our early work that might help as well.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Yes, right. All righty, any final comments before we open to public comment? Good, please could we open?

**Public Comment**

**Lonnie Moore – Meetings Coordinator – Altarum Institute**

If you are 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 telephone 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**

It looks like we have no public comment.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Okay, thank you very much for participating in the call and for all your great thoughts and we will try to turn this around and add some of those. We'll look forward to getting a draft of the full report so we can start commenting on that and we'll try to work in some of these last thoughts that we've just talked about. Thank you, everybody.

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

Thanks everyone, have a nice weekend.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**

Bye-bye.

**Christine Bechtel, MA – President – Bechtel Health Advisory Group**

Thanks, Paul. Thanks, Michelle.

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**

Bye.