



**HIT Policy Committee  
Clinical, Technical, Organizational & Financial Barriers to  
Interoperability Task Force  
Final Transcript  
July 29, 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 or good morning, I'm sorry; this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Policy Committee's Clinical, Technical, Organizational and Financial Barriers to Interoperability Task Force.

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

Is that it?

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

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? Christine Bechtel?

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

Good morning.

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

Hi, Christine. Josh Mandel?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

I’m here.

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

Hi, Josh. Julia Adler-Milstein? Larry Wolf?

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

Here.

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

Hi, Larry. Mike Zaroukian?

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Here, good morning.

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

Hi, Mike and Stan Crosley? And from ONC do we have Kory Mertz?

**Kory Mertz – Challenge Grant Director – Office of the National Coordinator for Health Information Technology**

I’m here.

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

Hi, Kory. Anyone else from ONC on the line? Okay before we turn it to you Paul.

**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**

Sorry, this is Julia Adler-Milstein I’m on as well.

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

Hi, Julia, thank you.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

And, hi, Michelle, this is Micky I’m on.

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

Did I not say you?

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

No.

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

I'm sorry, Micky. I checked you off. Sorry, Micky. Okay, before we turn it over to Paul I just wanted to make one quick announcement. I know most of you...we just formed this group, Kory Mertz though was the staff lead of this group and unfortunately today is Kory's last day at ONC, I'm very sad personally because I adore Kory and also professionally it is a great loss to ONC, but we wish him all the best. So, we will be working to identify a new staff lead so this is our last call with Kory, but I just wanted to thank him for all his hard work that he has contributed to the FACAs since I have worked with him and even before that. So anyway back to you Paul.

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

All right, well, I want to add my thanks to Kory as well. He played a big role in putting together the summary that we used last call in preparation for this call. So, thank you very much Kory and for all the work you have been doing on interoperability.

Okay, so for today, our agenda basically is to go through the homework that we have put in up to this point and the goal is primarily to look at what has already been said and sort of put it in digestible nuggets and the audience for this report is congress and so it is really not in the weeds it is really if congress hears that interoperability is not happening the way that it thinks it should and everybody is complaining about it, how can we explain, well what are the components in a very high-level way, you know, what goes into that, why is it complex and what are the critical barriers and in particular what are the barriers that we can help mitigate either through policy or through law if that is required.

And I think the attitude is certainly we want to make law as the backup because it gets very complex both to create laws and then laws do not change very frequently so it cannot really keep up with changes in the environment. Regulations a little bit less so but they also have more flexibility in terms of the kind of input, just like this advisory committee can provide input into the creation of those Regs.

So, if the market can do this alone then that would be great, in theory it is more efficient, but then the whole reason why we're having this topic, why it hasn't been solved for 10-20 years is because it hasn't been doing it on its own. So, chances are there are some things that really have to be done on behalf of the public good and to set sort of an even playing field for everybody and so hopefully the market can step in and fill some of these gaps.

So, our job is, for today, and then the next call, is to really finish up on summarizing what's already happened, one we don't we to redo that work, there is a lot of good work that's already preceded us and then position ourselves to focus in on the gaps where we haven't done as much exploration and where there is really a crying need and that has even come up in the senate HELP hearings and that surrounds the financial, business and incentive kinds of levers and barriers. So we are going to hear a lot of that from Julia on that piece.

So, does that make sense? So, we're going to go over our homework for each of these areas, try to...this group can give feedback to the person who is summarizing and then hopefully tweak that and send that out, probably we can even try to do some of that over e-mail, but start to position ourselves to work on some of this new area in particular. Comments, questions on that?

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

Paul, it's Christine, I just was trying to figure out where the materials that were sent in the e-mail this morning...does that include everybody's homework? So we are reviewing the Word document or where is the contact?

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

No, maybe Kory you can orient us?

**Kory Mertz – Challenge Grant Director – Office of the National Coordinator for Health Information Technology**

Sure.

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

This is Michelle...sorry.

**Kory Mertz – Challenge Grant Director – Office of the National Coordinator for Health Information Technology**

Go ahead Michelle.

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

There was an e-mail sent earlier this morning that doesn't have all of the documents, we got some last minute ones as well, so you will see those, I'm not sure if Altarum has sent them out yet, but we will be sending them out. So, if you're not following along via the Adobe Connect we'll try and guide you through what we're looking at. There are a few things in the PowerPoint and then a few things that you'll have to refer to external documents for.

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

Okay.

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

I noticed that there were a few documents posted on Adobe that were not in the e-mail at least the one that I generated late.

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

That's Larry's.

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

Yes, Micky and Larry sent theirs after the meeting, after the first e-mail.

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

Okay. Yeah, I see them now and will this just...last logistic question, is this our only opportunity to review and respond or will we have the ability to, you know, after we've maybe digested a little bit to come back with any other comments? At least for the...

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

I don't...

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

New material.

**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**

I'm assuming we're going to have to come back because we didn't get all of the homework in time so we'll have to review during our next call as well, but defer to you Paul.

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

Yeah, I think we're...so, as everybody knows we're on a very tight timeline and the major part of our efforts, new work, is going to be around the business financial side but we'll have to clean up some of the work that we didn't finish for today so I guess we're going to...as I say some of this maybe trying to do this over e-mail but let's see where we get today. The idea was to finish with the past work today, but I don't think we'll be able to do that.

Okay, so let's go to the next slide, please and that's just the charge that came out of the congressional act, next slide, please. And here are some of the specific questions that Jodi gave to us on the last call and you see that focuses a lot on the financial business barriers because that is what is emerging as something that is a big barrier, it is not talked as much, people sort of think of it as a standard's kind of a thing or a technical thing but really the financial business tend to be a huge part of this. So, those are some of the questions from Jodi last time. Next slide, please.

So the timeline was to try to get to summarizing where we are so that we're all on a level playing field and all understand what's come before us and sort of...and try to create a digestible version that is suitable for congress to look at and to help better understand the challenges there and then as indicated to go into hearings or ways to gather additional information from relevant sources about the business areas. Finally, to present our draft in September and our final in October. Next slide, please.

So this is the cadence we have for our meeting this being the second call and we'll try to get as far as we can based on the homework assignment so far and also I think we were open to, and I don't whether anybody submitted suggestions for witnesses for our...or input or panelists for our information gathering sessions in August, but that's what we're going to want to try to do. Next slide, please.

Okay so we're now going to go through review of the homework. Next slide, please. Here are the goals; this is a request from congress so that's really the primary audience. And what we're trying to do is get a concise understandable message that really explains the high-level barriers to meaningful interoperability. Concise is a big thing for any executive or high-level person you can't weed through all the details you really want to start understanding at the gut what are the issues and you heard, for those of you listened to some of the hearings we tried to get some of that information and I think it is helpful to members of congress to understand what the real issues are.

And we also don't want to repeat, we don't have time to repeat, the work of past both Committees, Task Forces, Workgroups and so that is why Kory and Michelle put together that summary which is really, really helpful. So, our job is really to even pull it together more as an integrated summary. So almost as in a two-page so people understand really what are the issues here and have a better sense of what's needed.

So, any glaring gaps that we have we want to try to fill but really we're going to try to address the big glaring gap that we haven't spent much time on which is the business and financial. Next slide, please.

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

So, Paul, it's Larry, just a quick comment, I sent a note to some of my ONC contacts about the Kaizen that was done, I think they said last fall, on certification and I think that may inform the certification materials and I haven't heard back from them on that though so I'll be...

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

Any ideas Michelle or...

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

Yeah, I can also ping them.

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

Okay. Okay, yes...

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

Let me...I can track down the who in just a second so that we're at least...

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

I mean, I know the who, but...

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

Well, I should tell you the who that I've been...that I have an e-mail with.

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

Yeah.

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

So, I'll track it down and send it to you separately Michelle.

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

Who's on first? No really.

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

Okay, thank you Larry.

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

Thank you, Larry and that's also very relevant we don't want to be making suggestions that are already in the process. All right, next slide, please. So, Julia put together this, and we distributed this earlier, Julia put together this global view of where the influencers are for interoperability as just sort of one framework for seeing where our work plugs in.

And so we have people driven by their financial incentives, which influence their business practices and those business practices certainly either promote or impede and actually this is a perspective of the incentive alignment and business practices that she had. They promote or impede the ability to have patient-centered meaningful interoperability and information exchange.

So, the policies obviously influence all of those three and the mediators do the financial and business incentives and business practices. And actually I should have had Julia go through this. How did I do?

**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 did great, I mean, I think for me the key point is that we have to really start with financial incentives and go from there and think about policy as impacting that as opposed to sort of starting from the policies or starting from the business practices, again, that's my opinion that, you know, I think we have to start with that and then understand the flow from there.

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

Yeah, so, Julia, why don't I turn it over to you to go over the homework you submitted and I'll just give one preference that...so she has done partly a summarization of the past work but also there are some recommendations she included that are draft recommendations that came out of what she gleaned out of the HELP hearings so those aren't necessarily just hers alone and they are only generally individual recommendations from some of the people on the panels at the HELP hearing. Take it away 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**

Okay, sounds good. So, I think the way...I'm sorry; I'm just trying to understand can people see the whole page here or is it a little cut off in the Adobe Connect view.

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

We can scroll with you Julia, but we can't...

**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**

Okay.

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

We'll have to show it in pages.

**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**

Perfect, okay, so I'm just going to start talking and then I'll let you know or you will be able to follow with me as well. So, what I saw in the document that was sent around was the sense that there are sort of two key policy forces that in general have...are driving, you know, positive impact on promoting interoperability and those sort of two big buckets were payment requirement and Meaningful Use and so I put those in green because I think most of the comments, sort of the tenor of them was positive, so around payment reform really creating financial incentives to share information across provider organizations and thus leading to then changes in business practices.

But then there were sort of also these "however's" you know we haven't totally gotten payment incentives right to really drive interoperability and there were several however's. So, I think the first big however is the sense that we haven't quite gotten the coordination right across organizations that there are some people who are sort of ready and willing to do this but they can't compel other organizations to do it or it may be that they're sort on different timelines, you have a very mature organization that wants to exchange but the rest of the organizations aren't quite there yet.

So, there is this sort of...collection about...the right word but it is this, you know, what we really need is coordination among the entities for them all to be, you know, interested in doing it at the same time and that those mechanism aren't really there yet, you know, in given markets in which this is trying to happen.

And I think the sort of second however is that, you know, there is a sense of, well we've invested a lot in existing HIE efforts and so why aren't those meeting the needs as there are these things in the payment reform and I think there is just this sort of general perception that these organizations face a lot of challenges with sustainability and they don't exist in all markets.

I think it is a little bit of a chicken and egg here. While if there is demand for them because of payment reform you would think that might solve the sustainability problem but I think we're not totally clear on, you know, why those two dots haven't been connected, but I think there is a sense of like the HIE efforts that are out there may not really be able to meet the new needs under payment reform.

And then the third however here was around sort of a lack of consensus on the key quality measures or pieces of data that are needed as well as lot of burden from redundant reporting requirements and I think...and this was...Paul and I chatted about this because it wasn't exactly clear sort of what the direct implication for interoperability was, but I think what we felt is that it is, you know, these are not an issue it is that it results in a lack of ability to identify the key pieces of data for which there is really aligned incentives for sharing them.

And so if we could get some harmonization and agreement there that this could really say, these are the key pieces and then everyone has an interest, under payment reform, in collecting and sharing these specific pieces of data to support quality reporting.

Should I just sort of go through this whole thing or pause and ask for questions or comments?

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

Yes, go ahead and then we'll take 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**

Okay. So, then the next bucket of sort of policy alignment is Meaningful Use and I think particularly, you know, the patient and the view, download, transmit and the provider criteria around transition of care and summary records and sending summary records electronically are driving, you know, increased interest in interoperability.

I think then, again, a few however. There was certainly a lot of concern that, you know, by just...because MU just targets, you know, provider organizations in a particular...on the patient exchange side that there is still a lot of fragmentation, there is not a lot of good interoperability for patients, you know, between different patient portals and things like that. So, from a provider/patient perspective there is still sort of...it still doesn't feel like we've really achieved interoperability there because MU is an organization centric policy not a patient centric policy.

And the second however is sort of a matchmaking issue which is that, you know, providers who are interested in sharing information and want to do TOC and want to hit their threshold, there is a question of "well who's ready to share with me" and that there is sort of an information gap there.

And then sort of...that was particularly brought up as a challenge in rural communities and because a lot of the long-term post-acute care settings, the sense is that they are not ready because they weren't included in MU. So, it's sort of a lack of trading partners as well as uncertainty about who is ready to play in terms of the TOC criteria.

Again, I think I mentioned this before, the sense of, you know, timelines are unaligned or misaligned, that, you know, different trading partners are ready at different points to do different things and so it's not just knowing who is ready or not ready but the fact that one group might be ready but their key trading partner isn't ready at that point in time.

And then there was sort of just a broader concern that was voiced around sort of MU as a strategy that is pushing more data but isn't necessarily ensuring that the data that is shared is useful...totally on point for the interoperability focus that this group has but I just included it in here.

Okay, next slide or next segment. So, the recommendations that were sort of how to change the various policies that, you know, focus on certification as the lever and public API-based architecture came up in a lot of the different comments. Again, not a lot of specificity around how to actually operationalize that but it seemed like a lot of support for the concept.

The idea of sort of using the, you know, power, market power of CMS to drive adoption of standards or business practices that facilitate reuse and exchange of data would also be sort of a powerful policy tool.

And again, coming back to this idea of, you know, different programs requiring different things, you know, efforts to harmonize quality and outcome measures across programs. The hope is that could be done both across public and private sector though it is not clear that the levers exist to bring the private sector along.

And again, this idea of deeming that's been talked about so when nothing occurs don't require reporting out on all the measures only the sort of highest level measure.

The idea of customizing incentives, this is based on experience of advanced payment models, so, you know, for advanced organizations, you know, sort of focus more heavily on the capitated payments and for less advanced organizations more focused sort of the process and, you know, the HIE activities that you would need to do to eventually get to a point where you could sort of shift to just a more focus on the payment side.

New accountable care models that more heavily feature long-term post-acute care and behavioral health and home health as again a way to motivate interoperability across the care continuum and there was, I think, just one or two comments that said like maybe we're not ready to make these policies as a nation and what we really need to do is spend a little bit of time in more of a pilot mode and the focus here was on share and care planning tools to sort of really learn how to do this well before we say like this is the next set of policies to achieve interoperability as a nation. Okay...

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

Julia, I'm sorry, there is somebody with some background noise, if you are not speaking if you could mute your line that would be great, thank you.

**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**

And it maybe me I'm at Logan and so that maybe what's going on. Okay, so the next bucket and I'll mute as soon as I'm done talking and that may solve the problem too.

So, the next bucket is financial alignment and it may even make sense to present this first because as I said, I do think this is sort of at the heart of what's going on and the fact that, you know, provider organizations and EHR vendors, you know, could be, and again, this is my way of framing it, you know, more certain financial benefits from, you know, limiting access to data, impeding interoperability as opposed to promoting and sharing it and that gets instantiated in business practices and as providers that manifest as sort of business decisions and practices in which they really fail to invest in HIE capabilities or do so selectively.

And for vendors it sort of manifests in, you know, sort of obfuscating what the interoperability options really are in a given system or charging very high fees for interoperability and so it's really...I think of it as taking advantage of an information asymmetry between the client, the provider organization and the vendor.

So, here, you know, lack of like many people said in the document was lack of financial incentives, misaligned financial incentives, they didn't really go into detail so a lot of this is sort of taking my experience from what I've heard and trying to flesh out a little bit more what is the nature of the economic disadvantage in trying to put a little bit of a sharper point on what the challenges are.

I just think the other point that's not in here that is important to make is that it seems like different organizations, depending on where they fit in the market, perceive this to be happening to a greater or lesser degree and I think part of what's going to be important to understand is, you know, why someone like John Halamka is saying this is the Loch Ness Monster and doesn't really exist, this is not happening and someone like David Kendrick at the...said like this is happening all the time in a rampant way and in a way that's really disruptive and I think, again, we still don't quite understand why different people are experiencing these to different degrees.

So, again, that didn't come from the text but I think that will be something that will be important for us to understand because going forward we'll have some people saying, this is a problem and other people perhaps saying, this isn't a problem.

Okay, so the recommendations, and again here there wasn't as much in the Excel document so I drew on the most recent HELP session that did try to make some recommendations here for providers, again it goes back to financial incentives but perhaps the twist here is really making sure that the financial incentives are targeted more to the market level to help this idea of alignment so that sort of all trading partners are going after interoperability and at the same time so that they can better coordinate CMS-led public reporting of the degree to which hospitals and provider organizations are appropriately sharing information. I think appropriate sharing of information is going to be quite hard to define, so perhaps instead think about, you know, HIE sensitive outcome measures and more public reporting around that.

One suggestion, and I think this did come from the Excel, was to raise the transition of care threshold, right, the 10% is not really driving, you know, change, but if we were up in the sort of 70-80% that this could be a real catalyst, but...and Paul I think brought up a good point that this is being proposed and may have some unintended consequences. Can you scroll down a little bit?

Okay, so was that the last...we hit the last provider one? Sorry, so then the last provider focused one was requiring quality measures that are derived from a comprehensive record of the patient and again that would be sort of another means to really drive provider organizations to invest in interoperability capabilities because if they can't report out on all data about the patient then they wouldn't be able to report out on the eCQM, so again, that was sort of a way that policy could change financial incentives in ways that would change provider business practices.

Okay, so if you scroll down to the next, the final section here, the recommendations for the vendors, so again, sort of similar idea of CMS-led public reporting but more targeted on vendors and more transparent pricing for interoperability or business practices, again, not totally easy to do because a lot of the contracts are private and vendors obviously would feel that that's, you know, sharing proprietary information.

An alternative might be something like a voluntary code-of-conduct which vendors could comply with and there is some evidence in other industries that these voluntary compliance approaches do work.

Another suggestion from something at HELP was two-stage certification that right now we're really just making sure whether these systems can do what they say they do in the lab and the sort of post market surveillance even though it is there in theory it's not really doing its job of ensuring that should the systems do what they say that they can do once they are deployed in the market.

And then I think...and one way to do that would just be to just really enhance the technology surveillance programs and again these can sort of be tied together in terms of systems that would collect the data that could lead to the public reporting.

I think the sense overall was just that the surveillance program needs more teeth right now, no complaints get filed and that it's just not clear what happens to them after that or what timeline they get addressed, how they are given priority, etcetera.

So, that was a lot of content but hopefully conveyed the synthesis, it may still be too much since we're trying to be concise I'm not sure we're quite at concise yet, but I think we're on the road to concise.

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

Thank you, Julia. I thought it was really helpful, which why we distributed it ahead of time, her sort of putting it together in sort of this is what's there like the positives and there are incentives but how are they being applied and what's actually happening in the field and that is her green/red kind of contrast.

She did, as I said, included some recommendations that came from the panels of the HELP hearing that is obviously not what this group is saying so those are just there for thought stimulation but it's our job to essentially come up with recommendations that we believe could help further this along. So, comments, questions?

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

Paul, it's Christine, I have comments in two areas one is in quality measures and one is in the Meaningful Use area. I'll start with the Meaningful Use piece. My suggestion would be that we focus the Meaningful Use piece a little bit more on interoperability specifically. I think it's very easy to take a broad interpretation of the content here. So, I think there are some really good things in this section and then some things that I'm not sure how they relate to interoperability or if they do.

I think overall...Julia, by the way, thank you for the presentation it's a really good starting point and really helpful.

My specific suggestions in the Meaningful Use section B would be number one that we add certification because I think understanding that Meaningful Use and certification go hand-in-hand so we would say that Meaningful Use and certification create the financial incentives and the technological capability to share information electronically. So, again, we're not really saying meet criteria globally but share information electronically so we're really focused on interoperability.

And the other piece that I think is reflected in the spreadsheet that I would suggest pulling in does relate to patients, which is the notion that there is a tipping point for patient engagement in information sharing specifically and that that's a good thing and that is, you know, a good accomplishment. So, my suggestion would be to add those.

But I want to challenge whether we should keep the last one and I don't understand the third one. So, the last one is more data versus data is useful, I think Julia I heard you say, you know, not sure if it's on point for interoperability focus, I agree with that I don't think it fits that well. I'm also not sure that it's just about EHRs in general as opposed to MU and those policies. So, I would lean towards removing number four.

And then I'm not sure I understand the timeline reference and how that relates to interoperability in three. So, I'll stop there and maybe see if anybody has answers to those questions or thoughts and then I can do my quality measures one which is very short.

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

Julia do you have a response or I can also respond to that?

**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**

Sure, so I think I want to try understand your tipping point comment, I mean, I think I generally understand what a tipping point is but I wasn't quite sure I understood like again in the context of interoperability what patient tipping point? Anyway, so maybe you could just spend one more minute diving into that.

I think the tie to certification is important and my sense is the next round of this will involve synthesis across the different domains. But I tried to stay pretty tightly focused on my area and I do think there are a lot of ties into the other areas and we should figure out how to make those come together.

I agree with the more versus better, I think we should drop it given our emphasis and focus on concise.

And the timelines reference is really about the fact that I think specifically related to MU that people are pursuing different stages at different points and so if everyone in your market is working on Stage 1 and you're working on Stage 2 you're not going to then have trading partners who are ready to do TOC exchange.

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

That's helpful so I think if we can just...because I think that totally makes sense, I think it is right on I just didn't understand the reference. I think if you could...if we can clarify that in three that makes a lot of sense.

The tipping point reference is in the spreadsheet and I think it's a reference and we've heard this a lot before that there is a tipping point happening because of Meaningful Use and certification with respect to patient access to their health information and their role in interoperability and information sharing. So, the HIE of one component that is something that we've heard a lot from various hearings but this has been, you know, a good thing and it's something that is a potential strategy and I think we saw that conceptually in the slide deck from the last call as well. So, I would just add that in.

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

And Christine, I'll respond to a couple of, one is I was assigned the timeline so I can actually expand on that piece which is a lot of what Julia said, but you'll see this next slide discuss that more thoroughly.

And the other is let me offer a perspective on the more versus useful data and I think it does bear on interoperability. So, the goal is to have a flood of data, any information going from one place to another and we heard this in our testimony on advanced health models it's really there are certain critical pieces of information that not only make it easier to send because you don't have to send everything and you don't have to have standards for everything, but actually in the concise relevant measures those actually are more useful to the recipient, to the receiving party and so that actually makes interoperability more welcome and more helpful rather than just a data dump. So, that...and Mike may say more of that in workflow but that's a critical piece.

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

Yeah, Paul that makes sense I'm just wondering whether it really belongs under MU as opposed to workflow or some other area.

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

Okay, yeah, I mean, that's a separate thing but I just think it...

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

Yeah, I mean, I just think there's a...it's too easy to broadly interpret this section and people are...so I really feel strongly about adding in certification so people understand, you know, congress understands the link between the two and understands the strategic value of these two programs at the same time it's a good thing that they are exposing some challenges in the market, that's a good thing, because the market, as you said in your opening comment, is not doing a good job of moving fast enough and that's why, you know, we have these and so I want to make sure we're really focused on both the challenges it's exposing, which is good and the value that it does have because I think they do go hand in hand.

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

Thanks. You know just so the...

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

Just very briefly if I could say my quality measures question?

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

Okay.

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

My initial reaction to this was that the lack of consensus on key quality measures, redundant reporting criteria, that's all true, but again, how should we really focus that in on interoperability or information sharing as opposed to the broad issue in quality measure alignment that many, many other people are working on writ large.

And when I read the second piece down farther in the document on quality measures I really agreed with it. Should we refocus it here so that we're really focused on incentivizing quality measures that are HIT or HIE sensitive things like care coordination, you know, longitudinal change, you know, patient reported outcomes things that are really sensitive to HIT and HIE as opposed to this broad every quality measure on the planet is redundant.

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

So, let me interject here. So, our purpose for the call today is to summarize the past and we're not going to get into the recommendations for the future because that...what you're calling out is something we need to discuss as part of the recommendations, but maybe we should do that when we get...and I can point out some areas where we need more input. But I don't think we have enough time unfortunately to discuss each of the potential recommendations on this call. Does that make sense?

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

Yeah, I do, so maybe there is just a way that we can kind of clarify the...

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

Okay.

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

Sentence in (1)a.iii to really connect it better to...I think it's just too overwhelming to think about, oh, we've got to align every quality measure. Really what we're trying to do is say how we have a challenge here in alignment of quality measures that are HIT and HIE sensitive or related to interoperability in some way. So, I'll stop there.

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

Okay and we also have the hand raising tool so that I make sure I don't miss anybody and Larry you're next.

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

Thank you. So, I'll start with a consensus here that this is really great and I found it a very high bar when I went to think about my own material so Julia, thank you for getting us off on a really good start here.

I have a bunch of comments I'll start with actually the quality one first because I did go to that place of eCQMs, if you will, so the electronically enabled quality measures and I actually think they ought to be in that top right most box in with provider/provider, provider/patient, provider/quality reporting because I think that some of the interoperability issues are data issues and are reuse issues, and it gets mentioned in the body.

So, I think it's actually important to bring forward the e-quality measures as a piece of interoperability. And I think there is evidence, it's not just my desire it's actually in the notes, at least I think it's in the notes, from the summary of the past.

And then continuing on under number...payment reform I'm not sure now that I look at my notes here this is really payment reform but it's more HIE business models. So, I'm not quite sure where that goes but my sense is that...well, actually I know why it's in here, it's because of payment reform we're seeing new HIE business models evolve in both public and private HIEs and capabilities things that were not necessarily in Meaningful Use, but for example...hospital notification is emerging as a priority for ACOs and others that are taking on risks to know where their patients are showing up and that's being met both by private exchanges that are offering to be the aggregator and the disseminator, and by the existing public HIEs that are taking on that function.

So, it seems like payment reform is actually building an additional model for information exchange and the implications for making things more interoperable because of how those exchanges are being built.

Some other things, picking up on the earlier discussion about more data and less data, I think we've got two very distinct classes of use that we need to account for and maybe part of the problem is that they're not well accounted for the way things are currently happening which is on the human readable side there is actually no argument that some key things are not being sent in the standard documents like "what's the reason for the transfer I can't find it here" or "what's your high-level three sentence assessment about what's going on that I need to understand" as either the specialist being asked to consult on this patient or as the next care provider receiving the patient.

So, I think on the human readable side people are feeling like they're getting a flood of stuff. On the computable readable side, which was really a lot of the drivers for those documents and the way they were constructed by HL7, in large to support action on the computer side, clinical decision support, is we need discrete data, it needs to be consistently coded and there needs to be enough of it to actually drive the decision support logic.

And so I don't want to lose the computer actionable piece as a swinging the pendulum too far against the human readable piece so I think that there's an important distinction to be made here in terms of what's being moved and why it might be confusing.

A couple of other things, okay, I added another section at the end that I called healthcare provider business practices which I think supports your blue bubble and I put a bunch of things...and I'll be happy to send these notes out to the workgroup as well...

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

So, Larry, is this a summary of what's been done in the past or this some of your new thoughts?

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

Well, I think this is in the material, but...

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

Why don't you send that...

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

I'll say that...

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

Over to...

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

Huh?

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

Send that over to Julia and then she can see if that's in the material and then try to incorporate it if that's something that's missing.

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

Yeah, okay, so the key point I think is that we don't have any reflexes for information exchange. The assumption of when I see a patient that there's information that is available that's valuable is really a new assumption and even though it's technically maybe been available for a long time EHRs within an organization made information available to providers within that organization. The actual details of the practice pattern didn't have a lot of review of information outside of the providers own notes on subsequent encounters.

And so...and I hear this repeatedly from my colleagues in the field that when they're in meetings about care coordination across providers and they talk about using Direct and established technology that people in the room don't understand that their organization, because of Meaningful Use, has capabilities, because they're not in their MU Workgroup, they're just...they're doing other things for the organization and there is a business practice disconnect that's happened because we haven't had this in the past and it's not in people's current thinking and that's coupled with the fact that interoperability isn't perfect and so I'll stop. This obviously could be a soapbox for the next 20 minutes. I'll send these specific notes to the group and you guys can sort out where they might go.

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

Okay, thank you. Micky you're next, please.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Okay, sure. So, I have two specific comments one was on, let's see it's (1)a.ii where it says, however the HIE efforts in many markets to which ACOs, blah, blah, blah, and I mean, I think that this doesn't account for or accurately reflect things that have been, you know, told to the Policy Committee and the Interoperability Workgroup, in a number of places, that the health information exchange and interoperability in general are growing dramatically and Larry touched on this it's just that's it's happening in other channels.

So, this, you know, sort of implicitly assumes that the gauge of whether HIE is sustainable is whether, we'll call it "public" HIE organizations are sustainable that this is the gauge of whether health information exchange and interoperability is sustainable and I would say that that's a very false premise, that that's what this suggests.

So, I would just suggest that this include other testimony that's been given in a variety of places over the last year or two that interoperability is indeed growing it's just happening in other channels that are competitive with these public HIE efforts.

The second comment I had, and I think this is...actually Julia you touched on this in your oral remarks but the words don't reflect it, which is, the financial alignment where you say perceived economic disadvantage to sharing data and then...and this reads as if it's sort of, you know, almost ubiquitous that everyone has a sense that there is a perceived economic disadvantage to sharing data but then in your oral remarks you did note that there are widely different views of this in the market Halamka and Kendrick being, you know, just an example of the kinds of heterogeneity that exists in the market and there are many places where there is not a perceived economic disadvantage to sharing data and organizations are doing it and they're doing it more and more every day. So, I guess I would just ask that the words reflect what you said orally.

**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**

Yes, that was a recent revelation I think so that's why it...but I completely agree and it wasn't also reflected in the Excel but I think it's fair to summarize and reflect that variation.

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

Very helpful, thanks, Micky. Anyone...Mike.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah, so, I'm going to piggyback on that first, Julia, again thanks this is a great summary and a great starting point.

I think one of the aspects of the financial that providers and their staff see that maybe isn't as much called out here is just the pure financial barriers to setting up the ability to have interoperability even though your system is certified for it the cost in terms of either dollars or manpower to get these set up is not small and the smaller the organization the more that may be a challenge.

The other comment I just wanted to make, if we could go up to the diagram, because I think the diagram was helpful but I want to be cautious about or make sure I understand correctly, it looks as though this conceptual model starts with the driver for all of this is financial incentives and so just remembering throughout our history of the ability to exchange information back to the paper days and the like the first incentive was to make sure patients got good care and the ability to send information and request information that helps you in the next step of care is a really important incentive and I think it's probably the main emotion behind physician complaints of the lack of interoperability.

I think they are going to have to be careful what they wish for, to Paul's comment about the notion of getting floods of information and not filtered or digested enough and I'll make comments about that in my sections, but I think if we're going to use this as a congressional facing model in any way we want to make sure that there is a clear provider and patient centered incentive part of where financial incentives can help but financial incentives alone won't make this happen anyway and so it's important to call that out.

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

Good point, thank you. Any other final comments? Well, thanks again, Julia for setting the bar for all of us and by the comments you can tell that people are very interested in this area and it's a good thing because that's how we're going to spend our summer August is really on these issues and they clearly are important and could stand some teasing out and then some recommendations that would help to make things better.

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

Hey, Paul, it's Christine.

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

Yes?

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

I was trying to come off mute and I couldn't but I wanted to really echo what Mike just said. I think he made a completely important point and I fully support that and I also think it holds equally true for patients that patients really do want their providers to have information, they want their providers to talking to each other and collaborating. So, I might suggest that we add those two elements into the model.

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

That sounds good and also resonate with it doesn't really belong...it doesn't...finances are not the center of the universe for most people either providers or the patients so we want to make sure that, yes there are levers but they're not the center that drives everything. Okay, very good. Can we move to the next slide, please?

So, I'm going to follow-up with timing and actually Julia has talked a lot about this and maybe I'll just expand on this and it starts out with the preamble that says, really, I mean, these programs...most of the crafters of either laws or regulations are clearly well intentioned and it's just when they're done either in different times or by different agencies they may not coordinate well or integrate well and sometimes it causes unintended consequences.

So, for example, these are all things that we've heard through the various hearings and workgroups that if things are released prematurely they have a number of downstream effects. So, there is sort of an order of things that have to be done before people can get to work on it so that's whether it's the vendors creating functions or the providers who have to implement those.

So, we've heard that, well the standards have to be there, they have to be approved, they have to be adopted, the final rule not just the NPRM has to be final before people engage and make their financial investments. And then testing to make sure they've completed according to the certification, those tools need to be robust at the time they're expected to be used and the certification scripts clear. So, that's some of the feedback we had during some of our hearings.

And then what Julia also mentioned is, it's hard in something where you have to have multiple parties playing and that's the name of the game for either...well the goal is care coordination in a sense not interoperability for itself and so we heard about how hard it is when well-meaning providers may want to send its information along but not everybody in the community and especially in rural areas are ready, a lot of times these early adopters may actually even have to help or do for other providers so that causes both a resource requirement but also it makes it tough to implement in a timely way.

And then there is the timeliness as far as whether it's the hospital or the providers and fortunately now they've been synchronizing and so that's clearly CMS reacting to feedback they got. But so everything from the calendar from the programs themselves and there are various programs of course that involve the financial incentives or penalties and the timing of let's say MU which drives certification, which drives the vendor requirements.

In general a sort of global view of what it takes and that's one of the reasons we're having this whole activity in terms of interoperability, what's the global view of what it takes to have things interoperate and transmit meaningful information that can be used by all parties including the individual patient.

So, that's...it's really hard to do, it's hard to do when you're operating as separate entities whether in the public or private sector or even different departments of entities, but in a sense that's what's called for, it's sort of the interstate example is you have to have set the standards, the width of the lanes, how they're marked and all that before...in theory before you build the first...lay the first asphalt but that's the goal and things that we can do to help with that, there is certainly things going on in that direction like the alignment of the EPs and the EH like doing a better job at having all of these things in the first bullet in place before the time clock starts, but further attention on that could be very helpful.

So, that's it for my report on the timing and as I stated a lot of it overlaps with what Julia presented and we can probably fold this into that. Questions, comments? Okay, next slide, please.

So, the next topic area is knowledge resource availability, let's see who was this...who is...who is covering this?

**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...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**  
So, Paul, this is Mike...

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

**Larry Wolf – Senior Consulting Architect – Kindred Healthcare**  
Yes, so...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
So, Mike including workflow.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**  
Yeah, so yeah, I had workflow, knowledge and administrative overhead...

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

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**  
Resource availability was there as well to some degree. So, I...

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
And let me just give a little suggestion to try to keep it high-level so that this is a...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**  
Sure.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
I know there is a lot of words here and details. So, think of how you would present to congress.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Sure, so I took a different approach than Julia's but hopefully complimentary. So just by way of background to help you as you look at it, you can see that I put in a preamble, I included which workgroups were prominent for either finding in terms of a barrier or where a recommendation came from categorized by workflow, knowledge or administrative overhead.

And then the last thing I'll say is that you'll also see some sections that have some italics in them, that's where I felt there was at least enough difference between either what was recommended or there was not a specific recommendation I could find and so I tried to put together what I could from what I was seeing or some of my own thoughts from talking in multiple groups and settings to put out something that was I think much closer to a strawman recommendation. So, when you see something in italics please be mindful that this one probably requires particular scrutiny to make sure that the group is aligned with those ideas.

So, for the workflow part I tried to simplify it in a way that again is somewhat congress facing. The words are perhaps not as simplified as they need to be but I hope the concepts are. So, what I was seeing from the various sources was, you know, first of all the right person, patient identity and identity matching getting that right and that in the absence of correct patient identity matching the willingness to or the ability to send and receive is significantly impaired.

So, the recommendation is really one that comes from various groups about solving that problem of a national process for having correct patient identification. So, if we can go to the next one.

The...so you're going to need to scroll a little. So, right data, so that again is that notion that Paul and others have alluded to which is the notion that to many providers when there are data to exchange the biggest...one of the biggest barriers, assuming it's even exchangeable, is that the signal to noise ratio of what they're going to get, given the context of the patients they're seeing, can be so overwhelming, particularly in the absence of the ability to filter that there are two things that tend to happen, one is the desire to ask for less or to receive less to which often the sender in terms of meeting Meaningful Use as an "I'm sorry but I have to include at least all of these things" and unfortunately one of the sections is many pages of patient instructions or many pages of labs that I don't have the ability or I don't feel I have the ability to filter.

And so the issue then becomes identifying some flexibility in that regard as well as the issue of how to know when you're required to send a summary of care document, assuming that's the right document, and what constitutes a transition so there is no confusion.

So, the recommendation is to find strategies again to deal with that I've alluded to them already in this notion, but certainly one of them is the ability to decide perhaps not to send everything that is currently required, perhaps to be able to send other things that are not currently required but are of high value to the recipient and then to be able to filter them on receipt and even search them on receipt so that you can find and ejection fraction in the document that's been exchanged even if it isn't structured. So, that's that one.

The next one is right recipients, so that deals with the issue that again was talked about in a number of locations but perhaps most prominently in the Meaningful Use Workgroup hearing and it's very long here but it really basically boils down to the issue of making sure through our process of being able to identify recipients, if they exist, the equivalent of a national directory to be able to say, if an individual or a practice, or an organization, or a department is available within the system I have a phone directory of some kind to be able to identify that they're in there and I have a process for sending them.

Right now part of the resistance, if you will, to connecting is not just different stages of Meaningful Use but also the issue of being able to make sure that the right information is going to the right location so that you can deal with things like duty rosters and who is actually going to be working on this, particularly when schedules change and when providers don't actually care who within a group or a specialty is going to be assisting with the care of the patient at the next step or it hasn't been decided yet. So, a process to make that available starting most importantly with a widely available provider directory akin to a national directory of individuals available would be really helpful.

So, we can scroll down to the next one. So, as a right placement of received data, this is that notion that says, once you receive it it's going to the right places to be used for subsequent care of the patient. So, the obvious ones are the structured data going to problems, medications and allergies where they can be reconciled which has its own issues but certainly is more helpful than just having it be in a non-structured text. And then other areas where similar documents or document types are identifiable as easily in the receiving provider's electronic health system as it was in the senders.

The next section you can see is all in italics, so I consider it something that was discussed significantly at Meaningful Use Workgroup but I didn't see it identified specifically in recommendations and that's the notion specifically related to medications.

There is a large amount of volume of concerns and complaints I hear from providers particularly in the safety issue when it's possible to send an ePrescription but it's not possible to send a cancellation of a prescription and that part of interoperability with other systems cannot only be wasteful but also can be dangerous and we actually have some patient safety events that relate to patient's filling prescriptions sent by pharmacies that were cancelled medications.

So, a process, again, high-level description here, but one where we can decide what's the best message to congress to try to move the market in the direction of being able to have that as a functionality for providers and staff.

The next one is the right patient centeredness, I think and I hope this relates in part to what Christine was saying as well, because I think it's really...patients are a really important part of making sure interoperability is right or they won't use it either and they'll give up on the process of expecting data to be available.

But that notion that says, the data dysfunction where patients cannot access, combine their own data, turn multiple portals into one, be able to have the information then available in a more central location has caused what we've seen as portal fatigue in which they simply decline or disengage from some or even all of the portals they've been invited to access.

So, a process with the public APIs seems to have some significant potential to help solve that problem and I think that would be one way of using that lever to describe a solution that I think will help with our patient engagement and satisfaction.

The next section is on right use of data and information to improve care and that's really the notion that I think many of us at least see as having a convenient way of linking other members of the care team particularly when they're not in our own system or perhaps even out in community service organizations or in long-term post-acute care, etcetera and so a process for being able to improve our ability to manage these whether it's part of the certification criteria or other kind of levers I think is important, but I think the recommendation that was in the ACO Health IT Capabilities Group was indeed to have CMMI, AHRQ, etcetera work on some initiatives to improve this process, identify the best practices and then put them out in the market.

So that's the section on workflow shall I continue then with the others or do you want me to pause here?

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

No go ahead.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Okay, so if we can switch to the next tab then. So, this is shorter section but again that notion of knowledge in both the benefits and unintended consequences so that as people implement their interoperability they can do so in a way that maximizes benefits and mitigates risks.

CDS was the biggest part of what I saw discussed in the various workgroups and hearings so that was indeed the focus area here. And so as I looked at the knowledge component I looked at it from a couple of major stakeholders, one is the health professional knowledge which was alluded to, again, in the workgroups that you see to the right, but where providers and clinical staff need help with the combination of the people who are doing the work, the processes they follow and the technology to rapidly convert the data that is incoming through interoperable health information exchange to knowledge that drives decisions that support the Triple Aim.

So, this is where that notion that one's own integral clinical decision support that's been validated can be used with inbound data well enough to help take decisions expedite them and help them improve quality, satisfaction and cost.

So, the recommendation was basically to have ONC partner with other organizations to help improve those options and maybe perhaps even some certification standards that would support it. Next section so if we scroll down, yes. Can...okay. I'm on a slow connection so I may be lagging behind in terms of what I can see.

So, patients consumer knowledge and literacy, again this was described in the Meaningful Use Workgroup dealing largely with either low patient health literacy or what I would say even where literacy is high the tools that they have available to them in terms of support for preferred languages, cultural sensitivity, condition, result or event specific, educational resources can keep them from having the information they need or in a usable enough format. Likewise it sometimes represents a reason why providers express concern and limit their or delay at least their contribution of data to a record because they're concerned patients won't be able to interpret them well enough, again, because of the lack of adequate tools.

So, there wasn't a specific recommendation called out in this process. One of the things that I heard talked about in some of the workgroups was this ability, and maybe there's already something in certification but if so I'm not familiar with it, to link test results and diagnostic information interpretation to the appropriate educational materials and make those available to patients electronically that can I think help in that regard but we also have to tackle these other topic areas such as adequate preferred languages, cultural sensitivity and so on. Next section.

So, organizational knowledge is that description that came out in a couple of different workgroup hearings where people are still basically discovering, developing and deploying the most effective strategies for patient engagement and patient centered care.

I would simply call out that one of those aspects is the direct touch by the caregivers who are part of their professional health team and making sure that they can champion that issue because I think without that we're probably going to have limited progress.

It's certainly true that smaller organizations need more help with regard to meeting the IT investment in administrative requirements associated with value-based payment and accountable care. The seamless access to data analytics is one that was also called out in the group.

So, recommendations, again, I didn't see a specific enough one to be able to quote it but basically one of the approaches I've seen discussed is to put together the types of programs sort of at least analogous to regional extension centers that allows smaller organizations to get some of the help they need to solve those two problems. So, I put that out as a strawman for consideration.

The next one is regulatory knowledge. This gets to the point of even when people are trying to understand and follow the rules with regard to interoperability and sending information when required there is confusion in a number of areas I outlined here, I won't go through them all, but basically the recommendation continues to be ongoing CMS improvement and refinement of the process of giving regulatory guidance.

I threw in one sort of suggestion with regard to the notion of actually testing that out with users to make sure that they are interpreting them correctly and that they would rate the implementation capability of this high enough to predict it would succeed.

And then the next one, financial knowledge or literacy, again, this didn't have a section but I thought to be sensitive to the fact that we wanted to expand the aspects of financial barriers that notion where some of the interoperability benefits to knowing what the test costs, what tests are already available, what test results are already available and how those could act as drivers for retrieving for example a recent MRI report rather than repeating tests might be helpful so a recommendation related to that since it was called out by at least three different workgroups or hearings.

And then I think the last one I have is community service organization knowledge. This came out in our Advanced Health Models hearing the notion that says there are a lot of community service organizations out there, their interoperability challenges notwithstanding even the ability of providers and other health professionals knowing that they're out there, what services they have and how to begin the process of not only using them for a referral but also exchanging data with them was important. So, a recommendation again calling out at least one potential high-level strategy for doing that both within the EHR and then having, if you will, a repository of information on those organizations was suggested.

So, if we can go to administration I think that was also even shorter a section, so if we can go to that tab. Okay, so, again there was...it was a very small section with only recommendations so I basically just tried to again tie back the smaller organizational challenge because that administration overhead was significant but it's not a different recommendation that I posed earlier so we can skip that one.

The second one was the ACO scalable infrastructure model to meet the data reporting needs of providers and their arrangements. So this is a direct quote from the ACO Health IT capability's group and the recommendation as well. So, that resonated with me as well, no change in that.

And then the last one, I think it's the last one, the access to de-identified claims data really again came out of the same theme but it actually called out one strategy that at least at a regional level was working and providing benefit and there was a recommendation that this somehow needs to be understood better in terms of how one could scale it out to a larger scale and so I put it in there as one example of how we might be able to call out a success and then advocate for a strategy to expand it. So, that's my report.

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

Okay, thank you. Questions or comments? So, I wonder Mike if we look...this is a really comprehensive look at a number of topics a lot of which are very important and have a lot of meaning to...a lot particularly to sort of the technical pieces and if we want to...is there a way to...so the exercise for this group, for congress outside of the financial is really to essentially have an elevator pitch that could be understood and broaden the knowledge of a congress person. So, I don't know whether getting into...so the intent wasn't to get into specific let's say discontinuing a drug electronically or the data dysfunction.

Is there a way to up level this probably two levels up to say, what from a workflow that's probably one of the key areas, what from a workflow does a congress person need to know to better understand why it isn't just simply interfacing these systems why can't they just talk to each other. What's the meaning and how does it flow in and how does it become useful to the recipient in managing a particular patient's care.

So, I think if...I wonder if you could up level it two levels as you look at this. This is really good, it's actually a really good synthesis of so much work and you've indicated the source but for this particular report if we could up level it so that we have an elevator pitch in that area.

It's almost like...in fact each of the hearing testifiers had only five minutes to talk so if in each of these non-financial, non-business areas if we had our elevator pitch to say, well, what about standards or what about workflow does a congress person need to know that's about where we'd like to end up in the end. Does that make sense in terms of like audience and purpose?

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah, of course and actually for some of the other members of the group who may not know me as well as you, my early tendency is to try to get it out in a manner that the group, you know, sees them as a chance to resonate with and then to translate that into the shorter and briefer message but also to be able to prioritize.

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

Yeah.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

So, for example, the right person was probably one of the...or the identity matching was probably one of the hugest things we heard from a lot of different sections, it's really easy to make that into an elevator speech.

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

Yes.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Likewise data. So, I'm very...

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

Yeah.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

I'm totally fine with that. I think what I wanted to do with this group today is to have them hear the feedback and make sure we weren't missing anything and then maybe get some help with what do you think are the key messages, is it right person, right data, you know, right use of data to improve care, what is it. If we only have five minutes and 3 sections or do we have five minutes for each section...

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

Well...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Etcetera that kind of thing.

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

Yeah its almost five minutes for...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

The whole thing.

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

Yeah.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah, so or all 12.

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

And I think, you know, so if one of the things is identity matching that's one but from a workflow point-of-view if you think of all the feedback we get from the AMA in particular and understanding how...okay, it's not just that I want a whole lot of data flowing into my computer system. I really want data that can be...information that can be very useful to make sure I'm coordinating and understand what's going on elsewhere and can communicate back how I'm following up on the shared care plan as an example. I mean that kind of thing makes a lot of intuitive sense. It would make sense to an individual, it makes sense to a provider and that's a little bit more consumable by a policy maker.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Okay.

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

And then, well how does...what goes into making that possible? Well, it's not just standards for example. Do you see what I'm saying? It's just broadening...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah.

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

The understanding.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Right so but let me...

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

Does that make sense?

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah it does but let me just start with that notion of actually nothing matters, your search for information for a patient or what's sent to you doesn't match on the patient that you have.

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

Of course.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

So we see people give up on even more robust interoperability because there is only a 20% chance that they're going to find a match and therefore they quit using it altogether.

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

So, that's a very good point.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah so but...

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

So maybe three of those points.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah.

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

Yeah, there maybe three of those points that you can do on your way to the 10<sup>th</sup> floor.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Okay, all right.

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

So, I...

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

And try not to introduce new recommendations because, you know, these are really vetted by a lot of people so I don't know that we're...for the non-financial business we're not interested...we're not concentrating on new recommendations.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Right.

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

Was that you Larry?

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

It was. I'm going to wait until I review my stuff I think I'll probably wind up touching on all these things again.

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

Yes.

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

So, thanks.

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

Okay, so, that's sort of our goal and we're just readjusting it but this body of work is very, very helpful. It's almost like what Kory put together. It's just very helpful to have all of this in one place. So, I think we want to keep it and save it and then like you said, Mike, where you go to the next phase and after you've gotten all the stuff together than you sort of digest it and figure out what are the key priorities, what do you want to work...what do you want to talk about on the way to the 10<sup>th</sup> floor.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Right, so, the thing that I would...

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

And I...

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

The thing I would help clarifying is, you know, now that you see all of this here are we really going to say, from all of these different things, we need to identify three things and that's all or is it more than three things and if it's much less than what we're seeing that we can point out it would be really helpful if the group could weigh in on what they see to be the key things.

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

Sure.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Thanks.

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

So, let me turn it to the group. What are the three things, you know, what are your top three in this area that he has outlined workflow, knowledge and administrative overhead? Well your first pick Mike was the patient matching and that certainly came up just over and over again including in the HELP hearing.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Right.

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

So it seems like that would be one of those things. And like you said, it's very understandable. And by the way congress has a big role in at least not preventing further discussion.

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

Paul, it's Christine, I think one of the ones that did stand out to me Mike in the admin bucket is helping...the challenges that small organizations face in knowing how to, you know, how to invest, what to invest in, how to do the implementation workflow challenges.

I think the way the recommendation is worded isn't quite, in my mind, or let me say, the way the finding is worded doesn't quite go to the recommendations, but I think what's behind the recommendation is what I hear a lot which is small organizations need access to expert advice and assistance. So, I think some kind of a reworked version of that is definitely one that stands out to me from the admin side.

And then I think on the workflow side I sort of need a minute to digest it because I didn't get to look at it since we got it so late. I only had a chance to look at the Word document and didn't realize that these were in here. But I'd be happy to send some thoughts off line, but this is really good stuff. So, I'll get you more thoughts later, but I really appreciate the work you did here.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Thank you.

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

Very rich repository.

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

It's Larry, let me jump in with one of the things that struck me while you were talking and that's that notion of until you reach some critical threshold it's very hard to get clinicians to actually look for and use the information that might be available and, you know, on the one hand we might look at 20% as really being a great achievement but if you're only getting information on one in five you might stop looking because it's just not worth the effort to sort it out.

And I wonder how much...I don't know how to think...so this is really jumping ahead to the recommendations, so I think that's a really key insight of what is critical mass and if I think about things like, you know, if you look at ePrescribing, you know, at what point are there enough pharmacies that the provider doesn't have to think about can they ePrescribe they just do it or where their system is smart enough to go "oh, the pharmacy you're trying to send to doesn't take this electronically but we know how to turn your ePrescription into a fax." So that you have consistent workflow and that as the receiving pharmacies get enabled they can go automatic and clean up their workflow.

So, I think some of this might be better tuning use cases to get to the end point, but there is a core message in there about how do we get to critical thresholds and before we get there how do we still make this a useful work for the providers who are willing to take it on.

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

And I can give just even a personal anecdote, so you mentioned the ePrescribing, so for whatever reason California was behind...wasn't one of the early ones that had a high penetrance and so even when it's 70% it's not good enough to sort of like "oh, there's a 70% chance this is going to go through."

On the other hand let's say the interoperability we admit to other hospitals of course and when the workflow is such that "oh, I have to go push a button, then wait when it tries to go find something" that just became unattractive.

And now we have a new...with our frequent clinical trading partners we'll do a pre-query before the visit "hey, do have anything on this person, etcetera" and then already pull it in, then I go there and find it enormously beneficial. So, that's the night and day value of having a good workflow and thinking about that. So, at any rate so those are the kinds of things that can make sense.

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

Paul, it's Christine again.

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

Yes, but we've got to move on.

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

As I'm just digesting what Mike's spreadsheet is on workflow it's like picking among your children in my opinion because I think Mike what you have is really...there is so much here around not just right person but the right data, the ability to ingest and act upon that data, patient centeredness. I think there's only, you know, two that I might condense elsewhere, but I wanted to suggest that I think it is more than three in this bucket Paul because there are some redundancies.

So, what Julia did in the beginning does talk about portal fatigue, so I would kind of err on having more out of this section of the workflow spreadsheet then less so that we can combine and move around and condense, but to me there is so much in this particular sheet that is really on point I think it's valuable to keep, maybe raise it up a level but there's very specific things in here that are very specific functionalities, I think you can just take some of the wording out but that they really need to be preserved and then we can look at everything together and pare down again.

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

That's fair, may I suggest a modification of that. So, for example I volunteer to put timing into the financial picture and that helps move things into the new area because all the things we've talked about are already in the public domain what isn't in the public domain, because we haven't explored this much, is the financial business barriers and so that's why I think the more we put our effort into that the more contribution we'll make.

So, instead of having yet another bloated document that people won't digest let's focus in on the new area which is the financial business and there are lots that are going to be impacting on that.

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

I'm not sure I'm following you Paul. What do you mean by...

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

I don't know that we can have...I don't know that we can have another 30 recommendation kind of report.

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

No, I agree.

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

I think...yeah, so that's why I'm trying to force us to have the discipline of taking the high priority some of which can be folded in and that gives, you know, maybe that gives you some freebies, but, so, as an example I'm volunteering to put the timing in the context of the financial business and not to produce more.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

And Paul...

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

So, Paul, in the interest of building this as a report to congress and the whole notion of a very high-level, understandable, actionable, engageable preamble or executive summary.

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

Yes.

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

I don't think that says we shouldn't have the more extended discussion but that we should be able to really distill it down to, here are a few key points and here's why they're important and here's how they make sense and if all you get is this first page or this first three pages that's plenty. You will not look like a fool. But if you do want to know more about any of this there's a whole lot that's already been done and here is the appendix, if you will, that has that whole lot. Do you think that would be workable?

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

That's workable, you know, like the whole Mark Twain "it would have been shorter if I had enough time." So, we have a short timeline, we need to spend our time wisely to make sure that this two-pager, you know, really the goal is the one-pager, that gets to congress, so if you have 20 floors let's get it out there so that they have a different understanding and a different sensitivity and appreciation than they did before getting on the elevator. That, I think, will advance the cause a whole lot more than a tone. Okay.

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

Yeah, I agree with that completely Paul. I just think it's only our second call and I...

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

Yes.

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

I think that Mike's categorization of the sort of...I'm not talking about the whole entire workbook or sheet...

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

Yeah.

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

Or whatever we call it, but just Mike's section on workflow where it is very concise, it can be even more concise but the concepts are there and I'd rather not lose those yet, but rather see everything that we've been talking about today combined into one place where we can then do lumping and pairing. I mean, take some pieces out of that sheet now, there are probably two and I'll find what they are, but I don't want to lose too much now conceptually because I think that's...if we lose too much it's not actionable anymore. So, that's my concern.

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

All right.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

So, Paul, if I could just reflect on that a little. So, I resonate with that. So, as I think of a big change like this some of these are more nice to have than must haves in the early days so the crawl, walk, jog, run philosophy of what do you need first and foremost can help us both drill these down while leaving the others for future reference and maybe future advice and action.

There certainly are some that I can consolidate such as right person and right recipient because it's really the same principle if I don't and so I can do that kind of work. And then now that we have a concept in writing I can turn it into language that people can refer back to and make sure that the language to congress does still correctly reflect what the point was.

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

Okay that will be great.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Okay.

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

Okay, I think we need to move on. Next is standards and Josh you want to postpone?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So, I would be happy to talk about standards now. I did just send in a first draft. I just e-mailed a link maybe half an hour ago or a little less.

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

I...

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

Paul, can we go to Micky or Larry we have their documents ready.

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

Yeah, yeah.

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

And then we can go back to Josh.

**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**

Thank you.

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

Okay, so, and Bob is not on?

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

No he's not on today.

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

Okay. Micky take it away.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Okay. Let's see, oh, are we going to put up the Word document?

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

Yes, please.

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

Yes, we are bringing that up now, thanks.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Okay, great, thanks Lonnie. So, I have managed to hit the sweet spot of the function probably it's not as comprehensive as Mike's and it's not as clean and crisp as Julia's, but I have adorned it with colors so that might make the reading easier.

So, what I did is I tried to, you know, sort of took all the different recommendations that were there or different things that had come up and tried to write a narrative more in the style of Julia's and then let's see what everyone thinks about it.

So, first was, you know, sort of the notion that came up in a number of places and this is, you know, sort of historically where we've been that interoperability has been hampered by a lack of incentives and by market fragmentation. I think Julia's piece speaks a lot to this as well but this was, you know, there were a number of things that were in the tab for governance so I, you know, wanted to place that as, you know, kind of the foundation here.

We know that there is, you know, technical, strategic and financial considerations that inhibit practical HIE, community organizations are fundamental to advanced health models and that came up in the Advanced Health Model work.

Also advanced health models motivating providers to want to share data but integration, you know, remaining a challenge in a number of different places. I think also in the advanced health models work, you know, pointing out that there is more comprehensive data like social determinants data which, you know, could be increasingly important that's going to require even more in the way of governance or conventions on privacy to be able to integrate that data along with the kinds of, you know, traditional claims and clinical data that are used today.

You know certainly there are, you know, conventions for transport and content that are still developing and there are lots of variations in the market, we saw that I think there were a number of places in different hearings and different testimonies that people had given about the variation they're seeing across the country, people being in one HISP not being able to communicate with other HISPs things like that.

And then there was a set of things that I think came out of, if I'm not mistaken, from the JASON Task Force hearing material which was about two challenges that were sort of significant barriers to further progress in transition of care and view, download, transmit, one is coordination of trust across entities and the other is workflows and process innovation that's required to accompany technical innovation.

What I wanted to do here is lay these out as, you know, planting the seeds for where governance plays an important role adding, you know, sort of a wraparound on top of just technical infrastructure, because I think a lot of this points to the need for things beyond just technical infrastructure in order to move forward with health information exchange.

So, if we move down then that, you know, sort of tee's up the next point which is governance is required to overcome the collective action problem brought about by market fragmentation. So, a lot of these issues relate to the fact that healthcare and the healthcare delivery market both in the supply and the demand side is highly fragmented so you don't have lots of the market coordination that can come about through large organizations, you know, Walmart or large electricity providers, but that we see in other sectors.

So, you know, that sort of begs for the need for governance in order for us to overcome that collective action problem. So, what is governance first off and this came out of the JASON Task Force work, you know, it means a common understanding among a group of participants about technical, legal and business alignment that's, you know, required to achieve an agreed upon set of goals and where the emphasis there is that it's not just technical there is legal and business alignment that's required to be able to achieve those goals along with some clearly articulated expectations about what constitutes appropriate behaviors, you know, along the way to achieving those goals.

It doesn't necessarily require government, this also came out of the JASON Task Force work, and indeed in most other industries market-based governance has proven to be more effective and durable over time but, again, to the extent that there are market failures identified in certain places that may call for the need for government intervention.

Again, pointing to the JASON Task Force work, federal and state governments are significant market participants in healthcare, which makes it a little bit different than perhaps some other industrial sectors, and thus even if the federal and state governments don't play a direct governance role or don't determine government with a Capital "G" they will inevitably have considerable influence on interoperability and governance just through the market actions alone both on the providers side, through DoD, VA, Indian Health Service, what have you, as well as on the payers side Medicare and Medicaid, as well as just on the purchaser's side as the purchaser of healthcare benefits for very large populations of employees.

So, third point is that governance defines networks that are fundamental to interoperability because they solve a variety of problems that go beyond just technical infrastructure. So, access to networks, I mean, in an Internet world a network is really just about governance because we're not laying down lines to connect people the lines are already there and what governance means is defining the rules for who can participate in sort of a common understanding of, you know, of what we're going to do together and how do I determine what those things are that we're going to do together and how do I determine who gets to participate in those things.

So, they create the ground rules for exchange. You know an important barrier to that...so in one sense the interoperability requires governance it doesn't have to be single governance but governance localized to a set of organizations and people who want to do a set of things and they come together to form a set of rules so that they can do those things that's sort of a positive and a positive development that's starting to happen.

Sort of on the barrier side is that building a network to solve or networks to solve business and legal challenges is at least as complex as solving the technical problems which we've seen and if we just think about APIs for example as being, you know, sort of the next step forward in technical capability, you know, it could be that those end up becoming stovepiped by an EHR vendor without effective networks and without, you know, sort of the governance overlay to figure out how you have that and coming out of the JASON Task Force work a lot of that was focused on the notion of the public API to enable, you know, sort of and catalyze more market-based networks to enable transactions based on the notion of a public API.

So, point number four is demand for interoperability has started to grow driven both by Meaningful Use but also importantly by the growth in accountable care we are seeing now in the market and I think it's important that the congress understand this, that governance networks, you know, are emerging and indeed are, you know, well underway and in some cases are in some sense, you know, sort of mature in certain areas, if you think about what Care Everywhere is doing, yes, maybe it's just a single vendor. On the other hand for those participants and in certain markets that's pretty mature interoperability in a large number of transactions that are happening over, you know, that network alone as well as, you know, certain other networks that we start to see.

And so they're beginning to solve this collective action problem. You start to see variation in local needs that, you know, sort of form as the basis of local governance or local networks to solve local needs that vary community by community. So, you see community initiatives for resource directories which have different, you know, sort of flavors as you move across the market because they have different needs that they're trying to solve.

The, you know, Advanced Health Models recognized the importance of practical data sharing as starting to, you know, sort of be a demand from the bottom up that starts to, you know, sort of form the demand for governance and for networks that can enable that practical data sharing because the practical is the key word there, because, again it's not just the technical infrastructure but it can't be practical if it hasn't solved my basic contracting problem of having to contract with every other organization I want to exchange with if it hasn't solved the business alignment problem for, what do we consider fair rules for exchange and hasn't solved my workflow problem which is what can I expect when I get something from you and what should you expect when you get something from me and is it going to be something that I can consume and integrate, and use in a timely way.

So, you know, what we're also seeing as these networks form is that up until recently they have been geographically focused, so, you know, that notion of the IHE organization that's, you know, sort of captured the mind in a way and in a way because it has direct analogies to phone service and electricity provisions and other things like that, but we're now starting to see the formation of networks along a number of affinity dimensions that aren't just geographically, so vendor-driven networks for example which are nationwide in scope but limited to a particular vendor or like CommonWell which is multiple vendors, or starting to see research networks like PCORI and other types of networks and I think as we start to see the market mature there will be other types of affinities that grow around different types of exchange and different ways of looking at, you know, what constitutes a network.

And importantly, you know, we're starting to see the seeds of what could start to constitute patient-driven governance that could become significant in the future as VDT and APIs start to get patients more visibility into and control over how their data is used, that's obviously just a glimmer in our eyes right now, but, you know, at least we're starting to see the small technical levers that, you know, patients can start to exercise and perhaps pathways where they might be able to exercise that and, you know, to greater degrees to be able to serve the need.

Again, you know, something more in the way of caution is that the development of market ecosystems takes time especially in the situation where technology and payment models are both highly dynamic so it feels like, you know, based on a number of things that we've seen in the Interoperability Workgroup, the Advanced Health Models work, the JASON Task Force that it's an important thing for the congress to understand that this stuff just takes...that this stuff does take time and other types of networks like ATM networks for example took a long time but no one was watching them as closely as we're watching interoperability and so in some sense, you know, certain things that are happening in interoperability are actually happening fairly quickly if we think about, you know, sort of...when you should, you know, start the clock, as it were, but that doesn't mean that it's where it needs to be but market-based ecosystem systems are more durable but they do take more time to develop. But as we've seen with Direct they actually are developing and we're starting to see more and more traction there.

Fifth point is that and that sort, you know, leads into the fifth point is that if it follows...if interoperability in healthcare follows the pattern of other industries, you know, we'll start to see nationwide interoperability be established not as a single network but as connecting market-based networks according to a common understanding of what's required for a nationwide interoperability.

So, what is the bridging that is required across these networks that will bridge what we will decide, you know, is nationwide interoperability and again, this comes out of the JASON Task Force work, the notion that every network doesn't have to be the same, every network doesn't have to be expected to use the same technology, the same standards, do all the same things for all of their participants because each of them is formed to serve a set of needs that their customers have paid for, but when we have a definition of what constitutes nationwide interoperability the important thing will be how do we bridge those networks so they can conduct those transactions so that we can then say that we have nationwide interoperability because it's about the bridges that define that.

One, you know, important...and some examples of the kinds of bridging that will need to be required are patient matching across networks, authentication and authorization across networks, format and content conventions across networks, patient permission across networks and then there are other examples.

Again, one caveat along the way is that a clear, concise, achievable and widely accepted definition of nationwide interoperability is a prerequisite to being able to achieve that but that definition is still evolving and certainly the ONC interoperability roadmap provides some useful guidance but I don't think it's yet at the point that we could say that this is the definition of nationwide interoperability that people can act on today and understand, you know, what that's going to mean a year from now, two years from now or three years from now, although it does provide some very useful guidance to that.

And then, you know, finally, the last point is that, you know, the market is making rapid progress and the best approach for government at this point is to use the various levers that are already at its disposal to catalyze and motivate market-based accountability and governance for interoperability and this was a direct recommendation that came out of the JASON Task Force work that was approved by both the Policy Committee and the Standards Committee.

So, you know, networks like DirectTrust, Care Everywhere, CommonWell, the eHealth Exchange, Surescripts and many others are starting to solve these problems among a growing number providers, however, again it's that need for cross network bridging that's now more and more apparent.

Coming out of the JASON Task Force that bridging would create nationwide interoperability through an idea of coordinated architecture which loosely couple data sharing arrangements using standards and approaches based on Internet principles and building blocks. So, the idea is like the ATM network example each ATM network doesn't have to be identical but we do need a...have to have way, some conventions for connecting those ATM networks to form a nationwide network.

Finally, you know, the federal government can play a really significant role in motivating market-based governance through a variety of means, transparency, building core infrastructure like provider directories, nationwide provider directories, nationwide record location services for example. If we could scroll up please.

Providing more active guidance in an area such as privacy. We talked about perhaps the federal government playing a key role in identifying what some of the bridging gaps might be and what some standards might be appropriate for network bridging standards if the market doesn't seem to be moving as aggressively as necessary in that area. The important incentive alignment through accountable care, which is, you know, a huge motivator in the market. And then finally that operational alignment that I talked about earlier with the government playing a huge role just as a market participant.

Two caveats, again to that is that one, though the federal government has many market reinforcing levers to shape and rapidly accelerate nationwide interoperability, alignment of those levers is not trivial and the National Coordinator's Office for example does have authority over all of those other...over all of those levers, over all of those other organizations and again, in a highly dynamic environment it's, you know, very difficult and quite a challenge to keep all those things aligned.

And then finally, this came right out of the JASON Task Force recommendations as well that, you know, top down regulation should be a last resort, certainly is one of the, you know, one of the levers available to the government in the area of governance, it should be a last resort used only if nationwide interoperability doesn't progress according to a clearly defined set of metrics, goals and timelines, you know, the caveat there is that those metrics, goals and timelines haven't been articulated yet. Again, the interoperability roadmap provides some guidance there but I think, you know, certainly from the private side I think the sense would be that those aren't crisp and clear enough for us to, you know, really get a good sense of, you know, what are the specific goals along the way to, you know, a learning health environment and how do we know whether we're making progress or not.

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

Excellent, thank you Micky. So, comments and questions on what Micky presented? And Micky you did sort of give a source for each of these, all of them are sourced versus being personal opinion?

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Yes.

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

Okay, thank you. Questions/comments? Okay.

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

Paul, it's Christine, I'm just wondering if what...you know, if we might focus our discussion more on the role of government, I think, you know, actions, government can take and the very concrete things that need to happen to accelerate progress in governance. I mean, Micky has done a lot of work in that area himself, obviously, for the Policy Committee and we have lots of reports on it. I know Carol Robinson Co-Chaired a piece that really looked at, you know, federal role and governance.

So, I don't know how to condense but I think we need to do some synthesizing of the core findings and move into...and I know we're not doing a discussion of where should the focus be for us in governance, it's not clear to me exactly.

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

Yeah and I think you do have some themes going through here Micky if there's a way to sort of tighten it up, you know, you just really had a very nice logical flow. But, so what would we do with the elevator pitch to make sure congress understands what's not here, what needs to and what doesn't need to have the role of governance, you know, what does governance look like, how tight, how loose, etcetera and is the market progressed.

So, there are a few of these high-level messages that I don't think is well understood by congress or the general public or many of us. So, if there's a way to get that elevator speech down I think it's very, very helpful.

And then it can probably feed...and then it can feed into, again, our new work so all of us are going to be reporting on old existing work that's already gone through a delivery and process so we're not repeating and how does that shape how we look at the role of governance, incentives and government in financial, you know, mitigating financial barriers.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**  
Right.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
I think it fits in very nicely, but, thank you.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**  
Okay.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
I appreciate it. Great work. Okay, so let's see next one, who was the other that Larry had something on certification, right?

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

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
Okay. Larry do you want to go up next please?

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

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
We are low on time so just...

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**  
Paul, can I ask, we only have nine minutes left I'm not sure if you think we have time to go to Larry or if we should talk about, you know, presentations and next steps before.

**Paul Tang, MD, MS – Vice President, Chief Innovation & Technology Officer – Palo Alto Medical Foundation**  
Probably not, you're right.

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

Okay.

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

No, you're right. Okay, so we have...what we didn't cover yet are standards, development, privacy and certification and we've had some practice at sort of what we're looking for and I think we have quite a bit that can actually fold into the new work, the financial, business barriers, so timing and I think there is a fair amount from the workflow piece and we just mentioned governance can flow into how we're going to discuss, think about and discuss the financial barriers.

So, I think what we need to do is we'll finish up this activity the next call but also start thinking about, and maybe Julia can even take the lead on this, what are the things we'd like to hear more about, what's the input. Clearly where there is evidence that would be wonderful input to helping them both understand the barriers but also understand what might be working and Micky alluded to some of this too, so he teased out how not...interoperability isn't broken everywhere but it also isn't happening everywhere. So, what can we learn about the things that are emerging, you talked about the difference between geographic HIE versus affinity HIE. So, what can we learn about that.

Is the world going to evolve from affinity HIE and then there is a governance that has to make sure they can interconnect or bridge, you know, so I'm just throwing out things, but this is the kind of thing if we frame the discussion we can make progress as we both understand the financial barriers and work through what could be done to facilitate more rapid overcoming of these barriers and then they fall in different buckets. There is the government, there is governance and there is market-based just to name a few.

But that's I think how...would be useful and how we frame our discussions in the financial area. Let me just pause and see feedback on that approach.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Yes, makes sense to me.

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

Okay, thank you.

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

Yeah, I agree.

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

Okay. Julia you're up to working on a little bit of framework for how to fold things into the financial incentive and business barriers and also trying to help us identify what areas we need to hear more about and particularly if people can suggest some people we can turn to that's one of the main things for August is to try to get more input and more opinion and advice from others who spend a lot of their time in this area.

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

Yes, Paul, it's Larry, one of the things that's in the material I submitted are several bullet lists of the variety of use cases sort of this notion of an ecosystem of technology and governance that's necessary in order for interoperability to happen that's not this sort of single uniform concept and a lot of that came out of the bits and pieces although I have to admit I wasn't being rigorous in what I pulled. I'd read something, I'd get inspired, I'd make my bullet list and I didn't cross check that everything was in the history.

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

Right.

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

But, I feel like that is an important message in many places to how we look at what's working and not working out there in the field, because that diversity of what people are doing and what they mean by interoperability and how it then effects certification, how it effects governance I think then become really important.

So, in my mind probably the elevator pitch is there's a huge diversity of what people mean by interoperability and that there might be some places where we can help focus the conversation to better educate people that some things are already happening really well and other things clearly are pain points.

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

So, that's...I mean, that's a good thing to take off of, let's focus on those. I think, again, we're...so we do not want to...so I have the thankless job of trying to herd us all into delivering something by the timeframe given to us which is only one month. So, yes, it may seem that we're restricting some of the broad, rich discussion but we have to be focused just because of one, the nature of wanting to delivering something that is useful and impactful, and two is just this timeframe.

So, I'd focus on looking at things where...so, Micky mentioned how there are other examples, an ATM was one of those examples, so there are other ways where you have to get the...the whole sector has to get its act together, what can we learn from that in one of your points and his point as well was, gosh there's all kinds of different kinds of HIEs and you're saying the same thing about there's all kinds of perspectives on interoperability and what do you certify.

So, what can we learn from other attempts at getting things to work together and what were the key things that made that happen even more quickly. So, the Internet or the railroad things, well eventually somebody had to put their foot down. I mean, I'm just using that as an example, but, where can we start making progress and less on the litany that a lot of people already know how has progress been impeded by the litany of things. How do we go forward?

So, I think congress is looking for...they are very...the whole reason they're having this hearing is they certainly heard of why it isn't...that it isn't working. I think what we're trying to do is contribute a little better understanding of why it isn't working but more importantly on how can we move things forward and they're looking for, and the chair even said, you know, they don't necessarily need to create a new law except where necessary.

So, the bias is not to create cumbersome things, we want to really tap into what would move things forward more quickly, the catalyst. So, if you concentrate your remarks, go through let's say, Larry in your certification, and digest it and not repeat history but what can we learn from this and what are the key things we need to do so that we can advance...how can certification advance, help us overcome the business barriers let's say to interoperability one of our focuses of this Task Force.

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

Okay.

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

So, it's a challenge but I think it's a very worthwhile one, it's very timely, I'm almost worried, and that's another reason for having this short timeline, we don't want to be too late either. So, I think congress is going to make some of their opinions on...you know, within this calendar year and they were talking about if they have to legislate it might be in early next year. But we really want to contribute to the discussion in a useful, timely way.

So, that's our charge, I think it's a wonderful opportunity really to try to make an impactful difference. So, is it clear what we're going to do next call? We're going to finish up on the remaining homework but also some of the homework maybe we want to take that eye of being very concise, very contributory to the financial side and not generate new things it's really assimilate so that we can get the elevator pitch. How does that sound?

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

And Paul the next call is a week from Friday, August 7<sup>th</sup>, is that right?

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

Somebody else has to tell me.

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

Yes at noon.

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

Thanks. Okay, any other comments about the process?

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

Paul, I would just ask if there are names for people that would be good to hear from if we could start to generate those now.

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

That would be great.

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

The sooner we can invite people the better.

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

So, if people could think about that, I know it's a bit early but it still is back to this timeframe thing is we're looking for more information that would inform both understanding the financial business incentives barriers and who...people potentially from other sectors that could contribute to our thinking about recommendations for how to overcome those would be very, very useful. Any other final comments before we go to public, open up to the public? Is the process working for folks? I'm sorry about the short timeline.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Yes.

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

Okay, why don't we open for public comment, please?

**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.

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

I want to thank everyone for participating in this activity and thanks for all the work that you're doing, really appreciate it.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

And, thank you, Paul, this is not entirely thankless we certainly thank you.

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

Oh, thanks Mike.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

Yeah.

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

I just feel bad when I try to like keep us focused and at a fast pace.

**Michael H. Zaroukian, MD, PhD, FACP, FHIMSS – Vice President & Chief Medical Information Officer – Sparrow Health System**

It's a tough job but you do a great job.

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

All right, it looks like we have no public comment and thank you to everyone.

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

Thanks, everyone.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Thanks.

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

And thank you Kory and good luck on your next whatever you're going to do.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Yes.

**Kory Mertz – Challenge Grant Director – Office of the National Coordinator for Health Information Technology**

Thank you, Paul.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Thanks, Kory.

**Kory Mertz – Challenge Grant Director – Office of the National Coordinator for Health Information Technology**

Thank you.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Take care, everyone.

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

Thanks, Kory.

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**

Bye.