



**HIT Policy Committee  
Clinical, Technical, Organizational & Financial Barriers to  
Interoperability Task Force  
Final Transcript  
August 25, 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 morning everyone, this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Policy Committee's Interoperability Task Force. This is a public call and there will be time for public comment at the end of the call. As a reminder, please state your name before speaking as this meeting is being transcribed and recorded. I'll now take roll. Paul Tang?

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

Here.

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

Hi, Paul. Bob Robke?

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

Here.

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

Hi, Bob. Christine Bechtel?

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

Good morning.

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

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

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

Here.

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

Hi, Julia.

**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**

Hi.

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

Larry Wolf? Mike Zaroukian? Micky Tripathi?

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

Here.

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

Hi, Micky. And Stanley Crosley? Anyone else from ONC on the line? Okay, with that I'll turn it to you, Paul.

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

Thanks, Michelle. And thanks for joining us members of the task force; I know that it's still summer and so people were traveling, etcetera so we're going to try to make...and Micky has to drop off a little earlier. So we're going to try to go through this quickly and try to establish at least a framework for some of our recommendations and make progress before our September meeting, when we have to report out to the Policy Committee some of our initial thoughts.

So today we'll go over briefly the two meetings and really focus in on, we already went through some of the findings and observations we had last time, happy to entertain new notions. Michelle has some...the findings we had from last time recorded and moved into sort of the what's next, sort of the recommendations; this based mainly on the financial and business barriers. Next slide, please.

Just to show you where we are...here's our group, lean and mean. Next slide, please. And here's where we are, so we're working on the recommendations really, themes from the hearing. Next time we'll gather up all the summary of the past findings, the work we did earlier, and try to incorporate those, since we are supposed to report on sort of the overarching barriers to interoperability for Congress; present that to the HIT Policy Committee, get some feedback and then develop our final reports for report out on October 6. Next slide, please.

So our overall timeline, sort of repeat some of that in higher level; next slide, please. The charge and the next slide, please; our questions to ourselves that were given to us. Next slide, please. Okay, so some of the findings or summary themes that we heard from the two hearings...next slide, please. Reminder of who was on the panel; and next slide, please sort of try to move through this summary quickly.

We talked about how patient care coordination really is a key driver or the need for care coordination is a key driver, that people were finding it even with their motivations difficult...challenging to execute, some because of the field not being ready, whether it's from the vendor side or the provider side...need two to tango. And a lot of talk about the costs of the interface, because a lot of them right now are sort of point-to-point, so you have to do this multiple times, sometimes hundreds of times, so it just adds up.

That once the...once we have clear motivation, what do we need to do to make care coordination happen? Right now it's a concept, coordinating care, but I don't know that we have either the instruments to coordinate or the information to be able to coordinate if you wanted to. And so but once it's clear what you need to do, then the barriers start fading away. No one is...no one has cracked this nut yet; there are organizations in cities or regions that are...have some going together. A lot of its put together not in the opera...the interoperability that we dream of, that is systems just sort of talk to each other and the information's understood by all the systems, but a lot of sort of cobbled together, because we lack the true infrastructure and have platforms for exchanging and exchanging information and coordinating care.

Next slide, please. From the second panel, whose members are shown here; next slide, please. We heard about the need to align incentives. So providers need a clear path of where they need to go and what they need to do. Vendors then, we're told, follow their customers; if customers could sing off the same song sheet, then presumably vendors would follow with new developments. That really not everybody...so everybody sort of has this general need or motivation to share information so that you can coordinate care, but really don't know who all's involved, who needs to be involved and who's working on the same problem.

So there was a call for convening all the stakeholders who are participating in the supply chain of information to coordinated care. There's really no forum to even talk about...forum to talk about it, let alone get work done to solve this common problem or the problems that impede achieving that goal. And there's no universal standard to say hey, does this vendor or provider do what they need to do so that I can participate on the team to coordinate an individual's care? There's no real universal standard for that and there's consequently no universal testing to say oh, that vendor does, that product does comply, etcetera.

So it's really hard. We're...a lot of people are pointed in the right direction, that's what we heard, because the motivation from a payment and care point of view are pretty clear. It's just that we're all trying to do that individually in our silos and we need to do a much better job coordinating with all the parties that are required to play in this sandbox to end up with interoperability of information, exchange of information, interoperability of systems and coordination of care. Next slide, please.

So that's sort of a top level summary and we had some other themes, some of which were sort of interesting in the sense of, for example, we did not hear, even though that was one of our topics, about that competition or fear of competition was a big factor in why we didn't have as much interoperability as we'd hoped for at this point. We did hear a lot about the costs, as I mentioned. We did hear about lack of standards and the how of importing data from one system to another was not clear. So, let me pause for a moment and see if there are things that I missed from our last discussion and then let's move on to ideas about recommendations. Any additions to that? And thank you for...to Michelle for putting this together from our last discussion.

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

Paul, this is...

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

I mean, Paul...go ahead.

**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**

No, this is Julia, I was just going to say, I mean, I think one of the tensions that continued to come up was between, you know sort of being narrow and focused and that we've seen a lot of progress, you know in perhaps particular, very specific use cases. But then the fact that there is...you can't just go after a lot of narrow use cases because there are going to be some sort of...you know, infrastructure and sort of other issues that need to be coordinated. So it's not really a conclusion, but I just felt like that tension kept coming up between 818

sort of being narrow and more agile and able to act faster, but also the need to coordinate across and interoperability is essentially, you know, a collection of these use cases and sort of how to deal with those...that tension.

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

Well said, Julia; thank you.

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

This is Micky. I...my sense was, and I didn't...I missed the first hearing, I was on vacation, but I did go back and read the material. And my sense from looking at that, and I think it's consistent with what's here, but let me just throw it out and see if others agree, was that...and first off, demand seems to be the answer here. And lack of demand has been sort of an issue for a long time, but we're now moving to a market where demand really seems to be driving things. And if you don't have demand, then everything else is just not going to work and we're now...but we're now in a position where demand really does seem to be sort of working its way through the system and working its way into provider mindsets, which is translating into shifts in vendor mindsets around this. So that seems to be one thing that at least I got from this.

The second was that to the extent that there are active blockers, perhaps with malice, it didn't feel like we heard a lot of that. We didn't hear a lot of it on the provider competitive side of providers actively blocking information flows for competitive purposes. And that doesn't mean maybe we didn't ask it as directly, doesn't mean that it never exists anywhere, but it didn't come out...I don't recall it coming out as being sort of a really large theme. As well as on the vendor side, as you pointed out Paul, the issue of vendors behaving in anticompetitive ways, you know against each other and information blocking actively for that purpose; it just didn't...it didn't come out, for whatever reason.

So...but what did come out in the way of barriers were, and I think Julia was getting at a little bit of this, were things that are more about the heterogeneity of the market so that the market is moving directionally. And the demand...and demand is starting to pull it through but because of heterogeneity in sort of regional variations, vendor systems, provider systems, you know sort of models of care that we're starting to see there's a lot of splintering that sort of prevents the more ubiquitous kinds of interoperability that we would like to see, which is really a coordination issue and a facilitation issue rather than being about active blocking.

Which leads to the final point which is to the extent that there may be helpful things that can be done from a governmental perspective, that they seem...it seems to point to things like facilitate an infrastructure, facilitative policies to help with that alignment, which is about pointing people in the right direction rather than having to sort of be punitive or beating them over the head to tell them that they shouldn't be doing what they're doing. It's more about everyone heading directionally in the right way but needing a little bit more focus so that they're actually not just focused directionally all in the same direction, but have a little bit more clear focus of where they ought to be heading.

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

Thanks, Micky. I will make one comment remembering the first hearing day both on the vendor's side and provider's side; so we had CommonWell talking about some vendors and then Carequality talking about some providers that maybe weren't aligned with the more common motivations that either the vendors or providers had. So, don't want to say that that wasn't mentioned.

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

So Paul, this is Christine. I just had a quick question on this topic. I know CMS has established that e-mail address for people to report instances of info blocking. Is it worth reaching out and see if they've at least gotten reports and what they can share, if anything?

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

I don't know, Michelle?

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

We can certainly look into it. I believe that ONC has actually established something as well, but I'll have to check.

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

Okay. Other comments?

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

I wonder if there...sorry, this is Micky, just on that theme. There is a reporting process regarding certification as well, isn't there, where I think providers can report, and I don't know whether they do it through testing bodies or to ONC where they think that providers are in violation of specific aspects of certification. Maybe that's something to check as well if there's any...has been any reporting related to interoperability aspects of certification.

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

Good point, we...that would be useful data to bring forth. Okay, why don't we move on to sort of themes for the recommendations side? Go ahead and start and build on some of the comments we just heard, so I think everybody was saying, and the panelists said that the motivation seems very clear to everybody on all sides. That that exists, it's clear, people talked about the market moving in the right direction I think most people said, but not fast enough. They were giving in the 5-10 years kind of a thing; so, not fast enough to meet the needs of say the timetable the Secretary set up for delivery system reform.

That...and Micky just said this I think, the current market forces are present, I'm not sure they're clear enough. So for example, in the transportation industry, like cars, the goal is we want safer cars. Well the goal in our world is, we want coordinated care for better outcomes, but it's not clear that the market can act on that alone, since it's directionally there but not very specific. So in the car...transportation, then the law was airbags; so that's a specific and measurable thing that you can...that contributes to safer transportation using automobiles as an example. I'm trying to make an analogy of is it goo...are the market forces strong enough, they may be, but are they clear enough so that they're actionable.

So it struck me that there are three areas, looking at it's not totally regulation and it's not totally laissez-faire in the sense of continue the same status quo. So one is, I think there is a need for, and the request was from the panelists for clarity of the specs, what to look for. And I think that is in the realm of certification; so if I look for the UL certification, I know such and such will be there. So we have that...it's directionally there in the sense of certification for Meaningful Use and the interoperability objectives in Meaningful Use, but apparently they're not specific enough so that I know, oh that really will work when I want to use it.

A second point is not having really an informed market with transparent metrics. So does the market understand what it takes to have interoperable systems, from a provider perspective, so that the provider system can coordinate care when patients are receiving services across the community? So that's where we get the need for HIE sensitive measures or the transparent metrics.

And finally, I think and Micky talked about this as well, the...we need an unambiguous pull, like payment reform, with an agreed upon enabler. So the unambig...the pull is quite there and that's why I think the market is directionally going in the right place, but I don't know that we know what's the tool we need in order to get there; so we need an interstate highway, agreed upon speed laws, etcetera. So one thing and this has come up in other settings and was mentioned in our hearings, is really this, what we talked about before as a dynamic shared care plan.

So in a sense it's without maps, it's not necessarily and infra...a superhighway...interstate highway's not good enough without maps and the standards for getting vehicles from one place to another. We're...in the realm of care coordination, not having a shared map is sort of you wouldn't do that in any other project, so not having this thing that we can measure, oh in order to coordinate care, I need to know what everybody's game plan is, what everybody's objectives are and the patients need to buy in, the people who drive the vehicles.

So in some sense that might be a way, we've talked about this before, of focusing the multiple stakeholders in what does this map, this blueprint look like and who needs to play a role. Well plumbers need to play a role and carpenters and building inspectors, etcetera. So it seems like there's...the direction is clear, the motivation...not clear...the direction's clear and the motivation's clear, but the specs of how to get from one place to another is not.

And without forcing everybody to do the exact same thing, if we clarified the specs, we made the efforts and the behavior more transparent, the HIT sens...HIE sensitive measures and understood what are the tools we need to get from here to there that might at least help people focus their attention. People meaning all the stakeholders, focus their attention and it may get to the recommendation that many of the presenters had which is, we need to convene...have a forum where not only we can understand the problem better, but we can have a working relationship so that the multiple stakeholders can participate in the solution. I'll stop there in terms of some elements of what recommendations might look like and open up for other people to chime in.

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

Paul, this is Julia; I really like all the dimensions. I think the one piece I might add is just that I felt like we heard a lot about sort of information quality and how that is really sort of impairing the value of summary of care records and CCDs. And so I'm just wary of sort of suggesting shared care plans as sort of another document framework without feeling like we can really make clear that we're going to address the information quality issue. Because I think, you know just my sense is that that will be key to sort of making people feel like shared care plans are going to be successful, right, to sort there, well I filled out my part, but if people are really invested in making sure that that tool is used effectively. So that would just be the only piece I would add.

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

Thanks, can I respond to that just a little bit. So, the shared care...so right now, it's a really good point, people think of let's say the summary of care thing that's in the Meaningful Use as part of the shared care plan and the complaint is just as you said, well people are just dumping data into that and that isn't very helpful.

So the notion of a dynamic shared care plan that was arrived at through some multi-stakeholder process is that you would only get the relevant information that can be used both by...and that was...people made that comment, too. It's not that we need everything; people talked about let's say a problem list, med list, med all...there's some very high value elements in a shared care plan that are useful. Right now, just having a document container really, summary of care, people are just dumping a whole bunch of stuff in there and that isn't it. So, you bring up a really important point which is, so that we're talking about this more useful dynamic shared care plan, not just a document containing a bunch of data. So that's a really good point.

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

Paul, this is Micky; I like the synopsis as well. I wonder if we want to abstract just one-half step from the idea of the shared care plan to shared care planning because we don't know exactly what that looks like, and maybe that'll address some of the issues that you were just pointing to that people have a construct in mind based on sort of their blinders that they have from what they've seen and perhaps it's to more open...open it up to the functionality than a particular way of doing it.

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

That's a good point. Other comments?

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

Hey Paul, this is Bob. I think one thing that came up during the testimony was the conflict of scale and there are examples of both Surescripts as well as the FAX machine, how that has been successful, albeit maybe not the right...from a FAX machine, not the right medium but it was both based on national infrastructure. So I think the scale was something I picked up during the course of that, you know all the testimony, was how do we promote something that's not just localized to geography and prop that up as a success. I think people are looking at it as a national issue.

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

Good point. Are there other additions? Well let me try to...maybe we can go through the recommendation areas and see how we might build recommendations, still obviously not closed to new additions. So one is, it's sort of one of the de facto enablers for interoperability is really talking about standards, specs and certification. What specific recommendation might we make in that area?

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

So this is Julia and this is, I would not say my area of expertise, but I feel that the recommendation needs to be something that really relates to ability...I think this has to be sort of post-market, right? That it has to be something about the ability for these systems to perform in practice the way that they do in the lab and to sort of help bridge the information gap that we kept hearing about between sort of...

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

Um hmm.

**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**

...what vendors say their products can do and what a provider's actual experience of that is; so I don't know what standards or approach get us there, but I feel like...I feel confident that that should be sort of the goal of our recommendation in this area.

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

Good point, so sort of like a post-market surveillance.

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

Yeah, I mean, I worry about surveillance as an effective tool; I'm not quite sure that that...that again I'm just not sure what the right way to get us there is and if we can again look to other industries or areas where they've done a good job at sort of again making sure that what products are certified to do they actually do when consumers use them. So, I hope...other people might have better ideas. I mean, I think surveillance is one of the options, but it's just not clear to me how well surveillance...like who is actually doing the surveilling and who are they surveilling; it seems like that is really critical to getting surveillance right.

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

It'll be interesting to get information from these 1-800 numbers that CMS or ONC has, to see if people...well, possibly people don't even know about it, like I'm not sure all of us knew about it and whether they're being used.

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

Right. So I wonder if we...this is Micky; if we parse this a little bit. I mean, these are big topics and I don't know how detailed you want to get, Paul, in this task force in these areas, but it seems like there's one whole set of questions about standards and the question of the importance of standards, where they come from, how they're maintained, how do they fit in the overall puzzle? And at least my perspective, and I think that's consistent with the industry perspective and what we're starting to see from the market is that effective standards are something that are organically determined but have a certain degree of focus at some point once they're ready.

And so the notion that they can be just developed in isolation from market experience, both provider and vendor, and then forced down the market as...in an expectation that that's going to solve the problem is probably a little bit naïve and not consistent with experience in healthcare, as well as in other industries. So maybe that's just a general point worth making, which isn't to say the standards aren't important, but...and certain things couldn't be done to accelerate that process and perhaps focus it. But that it needs to be sort of understood in the way that it happens to sort of multi-stakeholder representation and coalescing around a set of things that are shown to work among providers and vendors, rather than being things that can be promulgated from above and the expectation that all providers and vendors will line up around that.

To me there's one sort of general sort of set of things we could say along those lines. Around certification it feels like we've heard both here and in other places about the need for more focused practical certification that more accurately reflects what's going on in the market. And then the third point that I think we're just sort of alluding to is the importance of being able to have meaningful feedback on market experience. Individual vendors...vendor or provider, market experience on what they're seeing on the ground, the gaps that seem to be there between what systems are certified for and how that gets sort of incorporated back into the process and what processes there are for following up on those reports and sort of what measures can be taken.

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

That's a great way of organizing this, spec, standards and certification. Can I ask you some questions? Let's say on standards; so you're...what your point is it's hard to get it right if you work...approach standards from a predetermined sort of development versus letting the market grow organically and just be determined almost organically. Let me ask you the question about how did Surescripts get...approach standards and sort of Rob's point about...Bob's point about in order to get a nationwide footprint, don't you have to be a little bit more deliberate in setting standards versus having it grow organically? And then a side question is does the organic standards setting process require specific objectives on the pull side?

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

Yeah and I certainly, you know, Rob is much more expert in this area so please, Rob correct me anywhere where I'm wrong, but I'm happy to go out on the limb and give a first shot at this. One, I think with the Surescripts...so, let me just step back for a second. I think...first off, I think it is a very sort of complex interplay, right, between the top down and the bottom up that there needs to be enough bottom up that you know that it has a solid foundation and that it is something that will a) meet the demands of what people want to do, because it's not about the standard it's about what they actually want to do. And then that there is enough sort of experimentation in the market to suggest that the standard that is sort of seems to be bubbling up is going to be some...is going to be aligned with the way that people do things.

So...but then at some point I think what you see in standards development is that you can sort of be in the same...in the general vicinity or in the general bucket of what you want. But there's a lot of refinement that needs to take place then to have it be an actual standard that can be tested against sort of...from an objective criteria and that you can literally look at something side-by-side and say, this meets it and this one doesn't, according to a set of parameters that makes sense from a technical perspective as well as from a business and clinical perspective.

And so that interplay, I think, is sort of the way that enduring standards have sort of developed, again, not just in healthcare, but across industries. If we look at Surescripts as an example, and again, Rob I'm sure knows more of these details than I do, that actually is an organic standard. I mean if you think about it that was created by the pharmacies both the bricks and mortar pharmacies as well as the mail-order pharmacies as a standard that they developed among themselves. And then that became a national standard precisely because those organizations that were doing it sort of worked out all the wrinkles in it to show that it could actually be used as a durable and sort of bullet proof standard and was aligned with the workflows behind the scenes, both on the provider side and the payer side to get it done. And then it just became a de facto standard because it was already in use in the market.

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

And what do you think motivated the market to do that?

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

I think it was clear...again, this is just me speaking; a couple of different things. One is a very clear business imperative, so alignment on from a dynamic side of what those organizations wanted to do and the need to do it. Now some of those were business competitive kinds of things that if you go back...history of Surescripts and RxHub and the competitive battles that were in play there, but there was a clear business focus, whether we decide...whether we think that was a good focus or not, it was a clear business focus. That meant that they wanted to do something and they had sort of the imperative to do it.

And I think the other piece of it though was that it was a relatively small group of players. So you could get 10, 15, 20 organizations in a room and they would constitute a critical mass of the transactions that happened in that particular category. And once they had agreed to something that was going to become the standard for the market because that 20% tail would follow along. And Rob is that a fair...

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

Yeah, absolutely. Yeah, absolutely. And then they...

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

I think that...no, go ahead.

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

I was going to say, and there was a series of incentives, well before Meaningful Use that was in play as well during that period of time around e-Prescribing or...and that also was a catalyst, too. You know, I heard Paul Yearwood talk at the EI conference and even at first it took them an overnight success of 14 years to get to where they're at today. So it's...even in a situation where they have alignment and business incentives and a national infrastructure and a standard, still took them 7 years to get to 1% and 14 years to now be at 70%. So, I think this was, Micky made this point earlier, we have to get on the right course and then it's going to take some time.

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

So hopefully the second 14 years is faster than the first 14 years. I mean, in general that's been true, but...

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

Yes, that's right.

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

I think both of you have really done a great job explaining why did that work. Now, what lessons can we apply or is it...see that was fairly well defined, so the use case was very clear, and what you pointed out Micky, the business benefit of executing on that use case was very clear. They did have only one competitor, RxHub and like you pointed out, relatively small group where you could eventually get to some kind of, well, it's in everybody's best interest to go that way. What can we...what of those attributes can we apply in this broader interoperability space or do we have to define some high priority use cases?

But then I think it was you Micky that said, and ten high priority use cases don't make interoperability. So we've got all kinds of tension and complex interplay. But, what can we apply from that example into the broader interoperability space?

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

Umm, this is Micky, I can take a shot. So, I mean it seems like we've got a growing business imperative first off, but one of the differences between what we're talking about with Surescripts and what we're...and what we talk about generally with interoperability is Surescripts is a very particular transaction set with a particular set of players and we're talking about something that's much broader. So that just means that there's a lot more heterogeneity that has to be accounted for and as political scientists and economists would say, that makes the collective action problem that much harder.

So, but the business imperative now I think as we've described is there. And though it certainly needs more focus to be less ambiguous in certain terms, it at least is there. In terms of this...the collective action problem, at least for one dimension of it, the issues start to become around network governance or as network governance as a way of perhaps solving that collective action problem and at least pointing to the JASON Task Force work, one of the things that the JASON Task Force had looked at and had pointed out was that you're starting to see the development of networks like CommonWell, for example, that cut across vendors. Or like the eHealth Exchange managed by the Sequoia Project, which is cutting across providers and vendors. Or single vendor ones like what eClinicalWorks has or what EPIC has.

But each of those are networks that at some point you could imagine that could be one way that sort of solves that collective action problem so that you have the same phenomenon of...that we were just describing with Surescripts. If you can get 10-15 organizations in a room, in this case they are networks, to agree on a certain set of things related to how to bridge their silos that could be a way of getting enough critical mass around some subset...important subset of interoperability transactions that could move it forward significantly.

And it's the development of those networks that may be the key to doing that, so you don't have to think about 500,000 individual providers, you're really talking about geez, we have 10-12 networks that cover 70% of providers. And Surescripts in there too, because Surescripts doesn't just do prescribing, they do clinical exchange as well. Again Rob, does that...would you agree with that?

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

Yeah, I think you're absolutely right and the...we heard a little bit in the testimony as well that care coordination is a local thing; however, so is e-Prescribing, so is Faxing, though we don't use proprietary networks or local networks to send a script across the street or send the script across the state. So, I think we're...we often times as industry look at problems locally or look at care coordination and think, well it's happening here so I need to put infrastructure here to handle it.

And there may be portions of that infrastructure that are organizationally based that need interoperability to make it robust, but there's also a fabric where there is an un...there is an expectation that my care coordination of me as a patient may not be within my geography; I may be going to different specialists across the country so care coordination to me means a lot different than what it may mean to a healthcare organization.

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

So Micky mentioned getting the networks in a room. I remember from the first panel, first day, those...somebody asked, it may have been Julia that asked them about interoperating amongst themselves and I believe their answer was not yet because they didn't have enough overlapping use cases. So how...so, thinking about the things that you needed...said needed to happen, how...what's the role of some external party, it could be government with a big G on a federal level, it could be state, could be regional; how...what actions can we do to make those sets of attributes of interoperability come true sooner?

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

I allowed 5 seconds of silence and thought I'd jump in then; Micky. I don't want to be monopolizing this but again, one of the things just to refer back to things that the FACAs have gone through that in the JASON Task Force report talked about is, how does that imperative sort of develop where you've got 10-12 organizations, whatever it is, they still have the collective action problem.

There is a coalescing function that needs to happen whether it's ONC that can play an instrumental role there as the neutral organization that can provide some convening power and some direction or does it develop through market sort of a governance or hierarchies that develop more organically. Or maybe it's the impetus from the outside that gets the market to move forward but clearly there is sort of something that needs to happen, that magical activation energy that needs to be achieved. And perhaps the way to frame it is that it could come from the market, it could come from, you know ONC could play a facilitating role. I think what Charlene Underwood in one of our meetings who had said that the pressure from the Congress is playing a significant role there and maybe that ends up becoming that spark that sort of creates that governance, whether it comes from the market or is facilitated or even participated in by ONC.

But some of the things...it seems that the sort of one important piece of that is defining what constitutes nationwide interoperability. So to Rob's point, it doesn't...nationwide interoperability doesn't necessarily mean that everything that happens locally has to happen nationally and that's what we mean by nationwide interoperability. If we're saying that well there are 10-15 networks and what we need to figure out is the bridging, well then that key question is going to be, well what's the bridging? What are the things that we think are really important that have to happen across silos, just like they did with ATM networks, just like they did with telephone service. They didn't say that every ATM network has to do all the same things, they said that a nationwide ATM network should be able to do this subset of things that all of the networks agree to do.

And so that would be one first step, I think is how do you get that coalescence around in a multi-stakeholder sort of national, I'll put that in quotes, convention about what constitutes nationwide interoperability; is it push and pull or whatever that is. And then those...then the second layer under that then is those bridging sets of...the bridging infrastructure and in the JASON Task Force there was sort of an acknowledgement that bridging infrastructure has a policy and legal dimension. So what are the policies and legal sort agreements that have to come into play for those networks? But there's also a technical dimension, how do we, you know what are the standards or the conventions or the combination of the two that get used for patient identity matching across networks, for example.

And some of those things become harder for networks that are not configured exactly the same. So you could take, for example, the eHealth Exchange and CommonWell. CommonWell has an NPI and record locator service at the center of it whereas the eHealth Exchange explicitly, because their customers didn't want one, does not have an NPI. So, you know between those two networks, for example, patient identity matching would be more complex from a policy perspective as well as technical. That doesn't mean it's not resolvable, it just may take longer for those as opposed to the Mass HIway and CommonWell, both of which have an NPI and record locator service at their center, so it's easier to figure out.

So that's just one example of the kinds of things that would need to be hammered out. Again, I defer to Rob if he disagrees...

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

No, you're absolutely right. A network...two networks are not necessarily because we call them a network does not necessarily mean they're the same thing. And so there's even questions on what is the...what is a standard around record locator, because there really isn't anything out there in the standards world that describes what a record locator is supposed to do and what the functions are. So, there's a lot of that sort of thing that are at the network level that need to be hammered out as we look at bridging.

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

Well let's pick on bridging; again, very well laid out in terms of what the needs are. What's...so you talked about influencers; ONC could be, market has some, external force even congressional pressure has cau...as you alluded to, Charlene mentioned how vendors are getting more sensitive. But yet all of those, even the sum of all those hasn't gotten the market to move in a clear direction quickly enough. What's the added sau...what's the magic sauce or the added element that could make it happen? You talked about coalescence, you talked about convening, but what recommendation and executed by whom would be the...make...have the turning point happen?

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

Well I gu...this is Micky again; I guess I would divide those, I would divide your questions into two; one is just speaking to the acceleration point. And I guess I would take issue a little bit with the acceleration or the velocity, velocity and acceleration I guess to just say that we just need to put this in context, and I don't know when we say that we started this, but if you think about sort of the growth of interoperability across systems in a meaningful way and you start to move from push to pull, I mean, it's really only been 3 or 4 years really that we've been at it.

I mean, if you think about when Direct came into the market and then...and now you're seeing the networks like CommonWell and eHealth Exchange and Sure...well, Surescripts but Care Everywhere that enable pull capabilities. I mean those haven't been sort of really meaningfully sort of at play for much longer than 2, 3, 4 years and if you look at...if you take that as the starting point, then there's been tremendous growth and CommonWell, and I don't know Rob if this is reality, but they're talking about having 5,000 provider settings by the end of this calendar year.

Even if they're off and it's the end of next calendar year, that would be a lot. And then you add that to the growth that's happening in Care Everywhere, all of a sudden you've got a pretty large velocity, it's just that we don't fully recognize it, a) because maybe our expectations aren't quite realistic enough, but also because we're in the middle of it so we don't appreciate how fast it's actually happening. But that doesn't mean that there doesn't need to be, at some point, enough maturity to force that conversation and I don't, I mean, I don't have an answer out of the box for that.

It seems to me that ONC could play a very convening role, CMS around care management and...but somewhere having that market-based as well as...or public private base, I should say, clear definition of what constitutes nationwide interoperability. It seems to me, at least, that that's a really first...important first step and we don't have it right now. Right now the ONC roadmap says we need a learning health system. You know again, my personal opinion is that that's paralyzing more than its enabling, because it doesn't really tell people what they need to do right now specifically and when we'll have achieved it.

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

Anyone else?

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

This is Julia, I mean I think my only additional question really is sort of because these networks are in a more formative stage, does that make...is that...is it more sort of helpful to act sooner, before they get too entrenched or is it actually better to let them mature and then figure out how to get them to work together. It seems like I could argue it either way, I just would be curious with what people think about that.

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

This is Bob, I would elect for maturing of the networks before we get too far...just because there's so many of them out there to work on any kind of bridging would be potentially not furthering the actual cause of each network.

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

So what would help the networks mature in a either quicker or more productive fashion? Is the pu...is clarity around the pull...is there something that let's say the CMS' or the payers can do or the providers that can crystalize what they/we would like to see move more quickly? Could th...does it help to have the pull clearer, let's say more focused use cases? And if so, what would that be?

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

This is Micky again; I mean it do...I think it does absolutely help to have demand get crystalized and just sort of mo...sharp, more sharply focused, and I think that's happening. So from a CMS perspective, advancing as far as possible and as quickly as possible as they can in advanced care models, whether it's through Pioneer ACO or MSSP or any of the other programs and being able to sort of unshackle them a little bit so that they can keep moving forward aggressively.

At least I personally have been pretty struck by how...what a market impact just those two government programs, the Pioneer ACO and the MSSP have had on the market, as well as readmission penalties. I mean those three seem to have done more to accelerate interoperability nationwide than almost anything else that one could think of, except for Meaningful Use itself, which put the tools in the hands of physicians to at least even put them in a place where they could even think about interoperability.

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

It sounds like both you Micky and Bob are talking about the market is directionally going in the right place. The standards and the governance are maturing. We do need to have network of networks. And there's at least a strong pull, if not a clear pull. So would you be arguing in favor of like the HIE sensitive measures as a way of sort of giving the market more information about where it's going well and where it isn't and where to focus lights?

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

Yeah, I would say...

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

Or is there another way like in certification, more specific certification?

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

This is Micky again. So I would, to the extent that we have something that can help crystalize...so first off, there's something that needs to help crystalize what it is that we mean by nationwide interoperability and whether that's something that I think that we would probably all agree that if it was market-based but aligned with national objectives, that that would be the ideal scenario because it ends up becoming...being more durable but how strong a role in a participatory role the federal government like ONC in particular needs to play from a governance and coalescing perspective I guess is a part of the question here. But then once that's established, then I agree with you, I mean I think that the very important role that can be played then is being able to have a set of measures that gives some transparency to this and that allow the actors to know where they are and all of us to know where we are, where there are perhaps gaps and discrepancies and to the extent that there are sort of punitive actions that need to be taken or greater incentives or some combination of the two, a set of measures that can help identify those.

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

And what's the relative role of measures, HIE sensitive measures versus certifications or proactive versus after the fact?

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

Umm, well the measures are necessary, it seems to me just...because those are the outcomes, that's...or at least, I mean, they're as close to the outcomes as you can. They're going to be sort of prophesy in nature, but they're at least, you know getting as close to outcomes as we can. The role of certification, I guess, is...it's important, but I guess, I mean it opens the question of, what are we certifying for and the whole question of, do we have certification that's appropriate to what it is we want to accomplish and that's focused enough so that it isn't an obstacle in the market but it's actually an enabler.

There's some of the discussion related to Meaningful Use Stage 3 in the cer...draft certification rule, for example. There was a lot of market feedback that that was not an enabler because it was too broad and asking for certification in too many different realms rather than being perhaps focused on a smaller set of things, but that would constitute the core of national objectives or nationwide objectives, however we want to think about 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**

And this is Julia, I mean; I guess it depends on who we're talking about the measures applying to. I mean, I think when I think...typically think about HIE sensitive measures, I think about provider quality measurement and so for providers that does seem like the right way to go. If we're talking about vendors, to me sort of measures and certification, they say like they're sort of two strategies to try to achieve the same outcome and so do we start measuring vendors or do we certify that they can do things.

And I think there's been a lot of frustration with the certification process which may mean that it's time to try a different approach for ensuring that vendors can do...can sort of meet certain standards and developing a set of measures around that may be better. But to me, they...in the vendor realm, they feel a little bit more redundant whereas in the provider realm I think HIE sensitive measures were sort of a new idea that are important and worth pursuing.

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

Right, right. Although I will point out, I think that's a really good point, Julia, but I guess because certification is more...though, so there's not really...so in a way we're not measuring vendors in the way of measuring their performance. And one of the things that came out in the JASON Task Force discussions, and Rob, I don't know if you agree with your colleague David McCallie on this, so, feel free to disagree with him. But one of the things that David from Cerner said in one of the hearings was that that probably as we think about this going forward, we've got a lot of infrastructure and a lot of focus on providers generating measures about their performance. And that there probably is room for conversation about vendors generating more...generating any information, standardized information about their performance, which in a way they don't do right now, ex post. Everything is...are you certified or not, prove it. But then we never...we don't have a measurement program that's akin to the Clinical Quality Measurement Program that says, well how are you as a vendor doing on some of these key...on some of these key transaction areas, for example.

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

Yeah and...

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

Yeah, I completely agree with that and I think that that to me gets...sort of accomplishes the goal that certification has failed to accomplish. So I really agree and I like that direction.

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

This is Rob, yes I would agree as well. I do think one of the things we get caught up in this kind of...in this industry is the throwing around of numbers that really have no context. Do they actually mean anything? But to provide a sense of confusion for a lot of folks is to, well if that much transaction's going on, they must be doing something right and no one can really put their finger on what it actually means to have that. So I think a very defined set of measurements and what they mean and what they don't mean would be great.

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

Right.

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

That's very interesting. So...love this discussion. So as Julia pointed out, we have the...well, we don't have yet, as Helen pointed out, we don't have HIE sensitive measures for providers but let's say we move in that direction, but what is true that providers are measured on what they are actually doing with their processes of care. We don't have that similar, well what are...okay, I understand they have a product and I understand they have certain things that got tested, but what's really happening in the field, in vivo. And having measures, almost like quality measures for vendors, whatever they are, now you could say number of transactions in the field. They actually would be the...an analog to provider quality measures.

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

Right.

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

But maybe that is one way to help motivate it. And then...right. Because you assume that people like, I work in an EHR and you'll either click that button that says, hey...so the button says there's information available, you'll either click that or you won't, and that's telling, right, on am I going to get stuff I can use or not. And so that's...that's a neat idea.

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

Yeah. And I apologize...this is Micky, I'm going to have to drop off in a minute but just one...thought of that, I think it's just important, and this is to Rob's point, that we just need...we need to be thoughtful about those and perhaps that's a sort of a recommendation coming out of this. We're obviously not going to create the measures here, but I'm just pointing out that we really need to be thoughtful about what those measures are so it's not just...

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

Right.

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

...sort of foisting a whole bunch of inane sort of reporting requirements on the vendors...

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

Right.

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

...and we don't want to do that on providers and vendors. So two examples, for example, one is there are many cases in which, particularly with narrowing of networks, that in 9 out of 10 of my patient encounters there is no interoperability required. But in the one case out of 10, it's required and it's really, really important. So how do we accurately measure that because you could just look at transactions and say, oh, they're not interoperating...Cerner is not interoperating; it's like well no, it's because the patient, the clinical context does not require that volume of transaction because of the nature of how health is taken care of there. So that's one example you'd need to be...we would need to be sort of cognizant of how do we address those kinds of issues.

And then the second is Meaningful Use Stage 2 for example has generated a lot of what I guess I would call spam transactions that I would argue we don't want to count; so, you know the selfies for example, right?

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

Right.

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

I think every vendor would agree that all right, well we do it because it helps our providers check the box, but they're not meaningful from any clinical perspective.

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

Correct.

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

So anyway, that's just two examples of how we really need to be thoughtful about that. But I apologize, I have to drop off, but great discussion and happy to help going forward.

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

Well thanks for your input, Micky; we tried to pick on you before you had to leave. But this is clearly an area where you have a lot of expertise and experience, so appreciate it.

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

Right, thanks.

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

Thanks. Well I certainly thought that was a very useful discussion and I like where we ended up, which is trying to measure what act...measure behaviors and this whole notion of having the equivalent of quality measures for vendors is...really seems very potent and really we haven't talked about before.

And the whole notion of the...what Julia mentioned about the quality of the data that's transmitted or exchanged; it's very telling whether providers click on that button to go get that external resource. It will say either, is that the right information or well, and, is that information presented in a way I can use. So it doesn't help if the right information is somewhere buried in that. And it doesn't help if there's...if it takes too long and I get stuff that can't be really integrated with my system when I push the button. That...it's like you vote with your feet, vote with your click really. That's a very potent idea. Other comments along this line of we've gotten to the specs, standards and certification, I should include measurement in that really, that's the new idea I think we have.

Okay, let's move to another area. Other area is informing the market and perhaps we just touched on something. So this whole notion of HIE sensitive measures and I'll add on what Julia talked about is there's HIE sensitive measures we typically think of as the NQF endorsed quality measures for performance of providers. And we need to add on transparent metrics for vendors or really it's how vendor products are used by their customers, does it really make a difference? And that would be...that would be very informational for the market. Do people like where that's going?

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

This is Julia, I do.

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

Okay. Next area is, is there so...we talk about...we do have an unambiguous and even a timeline for the pull, i.e. payment reform. People seem to understand that in all parts of the country and in all practices. They don't exactly know exactly what they need or how to judge whether they have it or how to use it.

So one notion is there either needs to be some clarity around the pull, let's say high priority use cases as in e-Prescribing or some agreed upon enabler that needs to come into view...come into practice such as these dynamic shared care plans in the new definition, not the old definition, not a container...a document container that just sort of moves data around without having good meaning. So is it specific use cases or is it specific enablers or is it both? What would make the market clearly understand what needs to have...be produced and needs to be consumed?

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

Hey Paul, this is Bob, I am no expert in this area but does CMS have any...I know we have bundled payments in the new payment reform...but is there any thought of just simply no payment for duplicate work? And specifically an MRI being done in one facility would not be reimbursed if it was done again 7 days later? Is that...

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

Very interest...no, that's very interesting. They're getting closer to...one of the ways they're approaching that is, and that came up in the Quality Measures Workgroup is CMS is working on decision support essentially for high-cost imaging; it's called Advanced Imaging. So in some sense they're trying to shape behavior around that, but it's mainly around internal...so I think what you're adding to that is duplicate work period across wherever the patients been seen. So that's...that would be like an HIE sensitive measure, I'd say.

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

Well, I mean, too, what I often see is the CFOs that we deal with or that I've talked to, the ACO stuff is still out there a ways in their mind, in terms of their overall operating environment, but indicating that you're not going to get reimbursed for duplicate imaging tests would hit...is simple to understand and it would hit them in a very immediate way, not that hit them means...is the right term.

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

Right.

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

But it would have an impact on operations right away so they couldn't push out a, yeah, we'll wait until the ACO environment matures before we get into a lot of the complex interop that we're talking about. But if they knew that the MRI that they did in their facility was not going to be reimbursed, I think that they would demand to be picked up; but I just don't know that environment very well to even suggest how you can take that forward.

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

Well there's the concept of medically appropriate and again, that usually is defined by a particular encounter really. But if you expand that, using even existing extant guidelines produced by ACR, let's say, you could see how...it won't...there are medically appropriate reasons to repeat a test within a defined period of time...

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

Um hmm.

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

...but that should be covered in the guidelines, for example. So that's an interesting idea. Other ideas in this area?

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

So this is Julia I very much like that measure and I think it seems like the most logical place to start. I think to be get a little bit back to your initial question about sort of where would you start with the notion of shared care plans; I mean I think focusing on sort of a narrow use case makes sense and then being able to expand from there because I think...I mean, it gets a little bit back to the collective action problem that Micky described. And I think we're so far from really even understanding what care coordination means that to sort of start with a shared care plan that's supposed to solve all dimensions of care coordination across all providers, I think feels pretty broad. So I would argue for again, starting narrow, but with an eye for building a framework that could be expanded to other care coordination use cases. So even just a shared care plan for transitions from hospital to post-acute care or ho...or just post-hospitalization, and I think there's enough work there that could serve as a foundation for that. But I'm worried about sort of saying a shared care plan for all care coordination is just too broad of a place to start.

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

That's fair. So I like both of the th...so one example you had was shared care plan for transitions and clearly that effects readmission and all...kinds of things. But you could also use share cared plan as a way to implement Bob's idea about the no "duplicate...no unnecessary work," only medically appropriate orders. Because all of a sudden you'd be interested in who else is working on this person's X and what have they done...

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

Right.

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

...and when and what were the results. That's very interesting. Any other ideas? That can even come back to pay the provider in the sense of, gosh, instead of having all these things on your differential or trying these things in your treatment plan, there's an incentive to know what else has been done and what were the results of those interventions; that actually makes the treatment not only more effective, but more efficient. So you don't have...you don't want to retry this class of medications when they already have experience with it and this is what happened. So that fits back into the quality of care, but it obviously also improves the efficiency and reduces the cost of duplicate services that are unnecessary.

This is shaping up nicely. Okay, so we've talked about standards, specs, certification and measurement. We've talked about informing the market and we're now have some new ideas in terms of what kinds of more specific use cases and quality processes, i.e. no duplicate work...unnecessary duplicate work as part of how the payment system can motivate exchange. Other levers that address some of the things we heard about in the hearing and in previous work?

So let's focus a little bit on this whole convening...so, we...the whole, how do we get everybody to work together? One of the needs actually is for there to be a forum for people to even understand all of the stakeholders that are involved in making effective and meaningful exchange happen and appreciating each other's problems or challenges in doing that. So that...is that something we believe that would help, so even having that convening function and then as a separate topic and an ongoing forum to do that work. So CommonWell helps organize vendors, professional societies help organize specific provi...but there isn't a group that gets together.

I'll give an example; NQF has a new function they call an incubator where one of the complaints is that...one of the concerns is that many of the quality measures measure process instead of outcomes, and Helen talked to us about there are actually a growing number of measures that measure outcome. Well you have to understand a whole lot of things, particularly in the new world; you have to understand well what data are in the EHR? What's the quality of those data in the EHR? How comparable are they to data in other people's EHRs? So that you can design electronic clinical quality measures that can be used across a broad number of providers.

So the incubator can bring together the folks that have that knowledge of EHR, have that knowledge of data, have that knowledge of measurement, have that knowledge of clinical care in one space to really work on things that the market isn't naturally bringing together because there have been these usual players have been in the space. Same thing I think is happening here where we don't have everybody in the same room to help problem solve more globally. Do we think that's a useful thing that would trigger future actions that would accelerate this process we're describing? I'll put out...

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

Hey Paul, this is Bob.

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

Yeah, go ahead.

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

I was going to say I believe so. I do also think there are stakeholders around post-acute that traditionally have not been included in a lot of these conversations around how they fit into this picture.

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

Um hmm.

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

And if we're looking at where the most need is for coordination, it's between primary care, hospitals essentially and the long-term care facilities.

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

Um hmm. Larry will be happy to hear you say that, I'll say that channel him in his absence.

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

Yeah, this is Julia; I mean, my sense is that that convening, when there's a very focused goal, i.e. to develop a set of measures makes sense. And sometimes I think just the broader convening of let's get these networks together to talk about how they can move more quickly; those tend to be less productive.

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

Okay that's...to restate what you said. So you're thinking instead of bringing together like-minded and potentially competing bring together the multi-sta...the broader stakeholder group, that's more productive?

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

So I think it really has to do with the degree of focus of the outcome that's trying to be achieved. So I think bringing together a broad stakeholder, I mean I think bringing together whoever we think has the expertise to develop measures makes a lot of sense with the clear goal of the outcome of this is to come up with a draft set of measures that give the convening focus. I think the sort of convening around, let's get these networks together to talk about how they can mature more quickly together, you know that starts to, I think feel a little more ambiguous than...and less productive.

So I think it's really about whether the goal for the convening is narrow and clear and I think then you just want to have the broad expertise in the room, because if not, I do think you could end up, especially if we talk about reducing duplicative services, like having the clinical folks there is just really critical as opposed to just the data people. So I think we will need some breadth there.

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

So let me pick on one of your earlier ideas. What if we had a convening function and the idea was...and the focused outcome is to look at shared c...the infrastructure and requirements for having shared care plans for transitions of care or appropriate testing?

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

Yeah, so no, I think that that...we may need to get even slightly more focused than that, but yes, I mean I think that feels more in the direction of where I'd suggest we go. And I think also will be really important is to have folks in the room who understand how these activities get reimbursed, because I think there's sort of often the sense of like, oh well, if we just build the tools and processes. But I think around care coordination what we've heard so much about is that this takes a lot of time and how am I getting reimbursed for that time.

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

Right.

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

So again, I think yes with sort of the caveat of who needs to be in the room might be a broader group than we may think.

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

Great. I think we've covered a lot of ground today. How are people feeling with what we have so far and where would you like to take the next topic? Any new ideas you want to add? Well let's check our work, putting on some of your day job hats, how would the various perspectives view this set of potential recommendations that we've been discussing today?

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

Paul, this is Bob; I think it's been a good discussion as well and I think from my organization's standpoint, would be supportive of these...recommendation.

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

Yeah. And would it bring in new life or new purpose or direction...clarity of direction for you?

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

Yeah, that's a good question. I think anything to provide alignment and clarity is always good, not just within my organization specifically, but just within the industries, our clients, if they're all kind of speaking to the same general purpose. Because I do think there is...that is one problem we're having is that there's...this means so much different to so many different people, it's hard to have that kind of conversation on a broad group.

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

Yeah.

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

If I went out and spoke to 30 CIOs I would have really 30 different conversations around what they want to do in their organization and in their community.

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

And do you think this would help?

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

I think that anything that can align them with programs such as that would help, yeah.

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

Yeah, okay. And Julia, from your breadth of interest and study in terms of both the provider and the vendor field, what's your take on what we've discussed?

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

Yeah, I mean I like it; I think it feels focused, but it also feels like it's going after sort of the multiple different pain points and going...sort of putting the onus on providers and vendors equally, which I think is something that's really important; that this really is going to require effort on behalf of both groups and I think if you just sort of target one and not the other, it just is not likely to be successful. So I think I like the focus of what we've come up with as well as the sort of spread of responsibility.

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

Great. Thank you. And Christine? Are you still there?

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

I think Christine we lost her at some point.

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

Okay, okay. Well I feel we've really made a lot of progress and we've introduced some new ideas that can...has a really good potential of moving the ball forward. It's largely shaping activities rather than either dictating or playing a...just saying, we need to have more interoperability and I think that's very, very constructive. Any other final thoughts before we open up to public comment? Okay.

**Public Comment**

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

Caitlin or Lonnie, can you please open the lines and can you bring me back to the screen? Thanks.

**Lonnie Moore – Virtual Meetings Specialist – Altarum Institute**

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

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

While we wait for public comment, there were some comments left in the public chat. They look a little bit long so I think I'll just share those with the group via e-mail, unless any of those folks are on the line and want to share them publically. It looks like we have no public comment, so thank you to all of those folks who submitted comments via the public chat; we'll share those with the workgroup members and hopefully act upon those.

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

Well I'll try to just hit some high points, because I can see them, they're a little long...

**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 and Technology Officer – Palo Alto Medical Foundation**

...but from Susan Clark, and I don't know who she represents, but vendor quality measures could include customer satisfaction the way hospitals get ranked. That seems useful...oh, it said eHealthcare Consulting.

From Madeline Jay from Johns Hopkins, to Micky's point about selfies not having clinical values, selfies do have clinical value in a large academic health system because not everybody knows I think what's going on. In the case of Ebola, patient at Texas...I think it was Texas Resource...let's see, in Dallas a nurse had information, yeah, nurse had information the doctor did not; so that's how she was trying to say selfies could help.

From Steve Waldren at, I think he's AAFP, exciting and well needed work. Same activities we've been discussing and appropriate measures for vendors' great, although measure creation will be difficult; really liked the early discussion moving away from document exchange.

So I think they're quite supportive of the direction, so thank you to the group for coming up with these new ideas. And our next call is in a couple of days where we have...we're going to start going back to the summary of the old recommendations to see if we can clean some of those up and just give a different breadth. We're...the work we've been doing in the finance and business area I think has been important because we haven't talked about it as much and I think it's at the root of the problem, but we want to bring along the work that we have already been done to include it in our report to Congress. So thank you for...

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

And Paul...

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

...go ahead.

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

Sorry Paul, one more note on the next meeting. I think we're going to move that to an administrative call so that we can do a little bit of work to clean up the documents; we'll certainly bring that back to a public call, but it just would make more sense not to have that public and we can move the document around and things like that.

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

Okay, thank you. Thank you all for participating on the call and for your really wonderful ideas. Appreciate it and talk to you next time.

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

Thanks everyone.

**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**

Thanks.

**Public Comment Received During the Meeting**

1. Susan Clark: Vendor quality measures could include a customer satisfaction ranking much in the way hospitals and medical homes are tied to patient satisfaction surveys. Questions could include measurable information around workflow, ease of finding desired information, integrity of reports, etc. Susan Clark (eHealthcare Consulting)

2. Madeline Jay/JHH: To Mickey Tripathi's point about selfies not having any clinical value: Selfies do have a clinical value in large academic health systems. Some electronic health records restrict information by user role. In the case of the Ebola patient at Texas Presbyterian Hospital in Dallas, a nurse had information that the doctor did not and the patient was sent home from the ED with Ebola. This is not an anomaly, if selfies are not sent, health information collected in the ED that is not sent back to the provider practice, even if the practice is part of the health system (selfie) important health information could be missed and there could be a risk to public health.
3. Steven E. Waldren MD, MS: This is some exciting and well-needed work. These are some of the same activities that we have been discussing trying to promote at the American Academy of Family Physicians. Appropriate measures for vendors is great; although measure creation will be difficult. I really like the early discussion of moving away from document exchange (been pushing this since 2006). Also think the comment about talking about "coordinated care planning" instead of a "shared care plan" is enormously helpful. We need to move interoperability discussions from data portability to enabling distributing care coordination. GREAT meeting today, thanks for the hard work.