



**HIT Policy Committee  
Clinical, Technical, Organizational & Financial Barriers to  
Interoperability Task Force  
Final Transcript  
August 3, 2015**

**Presentation**

**Operator**

All lines 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**

Hi, Christine. Josh Mandel?

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

I’m here; good morning.

**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 – Health IT Strategist – Kindred Healthcare**

I’m here, thanks.

**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.

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

Hi, Mike. 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?

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

This is Chris Muir.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Co**

Hi, Chris.

**Veronica Gordon, RN – Program Analyst – Office of the National Coordinator for Health Information Technology/Office of the Secretary of Defense**

Hi and this is Veronica Gordon.

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

Hi, Veronica.

**Veronica Gordon, RN – Program Analyst – Office of the National Coordinator for Health Information Technology/Office of the Secretary of Defense**

Hi.

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

Okay, with that I'll turn it over to you, Paul.

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

Very good, thank you, Michelle and thank you everyone for continuing on our series of calls. We're going into the homestretch before at least next week's meeting and then we'll talk a little bit about the schedule going forward. So this call is in preparation for next week's presentation of sort of our initial findings and recommendations in front of the Policy Committee to get their feedback.

As you know, this is a report that's asked for by Congress. As a report from the Health IT Policy Committee, we wouldn't nec...we wouldn't be going through the clearance process; somebody asked about that earlier, and so we may have a little bit more time as far as when our report's due and we want to also put it in context with the things that may be coming out of ONC or even Congress. So, we want to do a great job at making our recommendations and also want to be timely and build upon the reports of others. Next slide, please.

So today we're mainly going to...we've gotten the feedback, we've gotten our deliberations and Michelle and I have tried to put some of this into words for your review. And again, we want to put it in the broader context of all the work that's been done, particularly by our FACA committee and this group on interoperability. That summary, I think Chris is going to help us pick up the work on that and bring it back in a future call, but we intend for our final report to Congress to have the whole body of work and show how it all interrelates; so one, it's sort of an education about interoperability in general, some summaries of what we've said in the past and putting into context what business and financial barriers and incentives, what role they have in facilitating or sometimes not encouraging information sharing.

Okay, next slide, please; the listing of our task force. Next slide, please. And this is where we are in our step. We've had a number of calls, had some really important hearings and we're preparing our draft recommendations to get feedback from the Policy Committee. After which we'll have a few more calls to finalize our report. It'll also go into sort of a prose form, since it is a report to Congress before eventually making its way back to Congress. Next slide, please.

Our overall timeline; as Michelle mentioned, since we have a little bit more time, meaning we...so ONC is preparing its annual report to Congress; obviously it goes through a clearance process. Our report from the FACA committee doesn't go through that so we may not have to have it finalized by October 6. Next slide, please; a reminder of our charge, which is to look at interoperability and give Congress some feedback on technical, operational and financial barriers with additional comments on the role of certification. Next slide; please.

So these were the questions that were charged to us, in particular to focus on financial and business barriers and what can we do to relieve those? Next slide, please. I thought I'd start with, we talked a little bit last time about a "preamble," why are we doing this in the first place and just to remind ourselves, our goal is to put in place an information infrastructure that would help us all, as providers and all the stakeholders in healthcare, which includes people and families, to improve the health and healthcare for all Americans.

We believe that in order to do that, we need to facilitate coordination across the continuum, and the straws on some of the work of the Advanced Health Model Workgroup, where we...the continuum means not just the care continuum, but really the continuum of all services that bear on health, and so that certainly includes community service organizations, community and social services. We also talked about wanting to have a shared, and I put a placeholder, really would love to have a name, instead of a care plan, really thinking of it as a plan for an individual's health, then that really is from birth to death instead of just focusing in on when we're sick. So this is across the entire health team, not just the care team, and certainly includes the individual and family.

It crosses sites and organizations; it sort of doesn't pay attention to boundaries of whether you're Meaningful Use eligible or not, it really is across and sites and organizations and as I said, extends into the community so service organizations. We want to, in that second sub-bullet, coordinate with the social and health services, because those are important determinants of health.

Another goal that we have as part of improving health is to improve patient safety. And again, this whole notion of having shared information across all of the stakeholders in an individual's health it's really important to have comprehensive data, to avoid the adverse events that would happen with conflicting treatment or overlapping treatment and to coordinate any care plan. And finally to reduce the inefficiency or improve the efficiency, reduce the waste such as medically unnecessary testing. IOM has already said that maybe up to 30% of some of the things that are done are unnecessary and sometimes those can lead to harm. Next slide, please.

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

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

**Micky Tripathi, PhD – President & Chief Executive Officer – Massachusetts eHealth Collaborative**  
This is Micky; before we move from this slide and maybe this is just my own little nit, so, happy to move on if it's just my own, but on the...I guess the idea of the shared health plan, I guess I like...I feel more comfortable with it being, and I think I had mentioned this before, with something that's more along the lines of shared care planning or something like that. Because I think that the idea of a health plan suggests that there's something defined, that it's something, you know very discrete and specific and I think it creates a little bit of confusion when it's stated this way. Rather than the notion of something dynamic which is about shared care planning on an ongoing basis, and you know, if it's lifetime that makes sense as well.

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

It's a good point, in fact, what's on there is an abbreviation for...it was called the dynamic shared...the original term was shared care plan. Let's see, when would be appropriate...why don't we pause here and get some more feedback on this notion.

I'll try to indicate what was meant by the words showing on the screen; it sort of arises from work that was done in a number of workgroups, the most recent is the Advanced Health Model, thinking that we really need a game plan, a blueprint, some kind of a plan. And it really revolves around not only care and caring of diseases like in disease management, but really around an individual's health and of course that starts with prenatal care, in fact. That it is shared amongst not only the broad team members, the professional team members, but also with the individual and family. And then the other adjective that isn't on here now is dynamic, to reflect that this is something that you just don't write one, it's something that...the vision would be that it's visible and updatable by the individual. So those are the concepts so Micky, did...first of all, did I capture the concepts that you were interested in and then we can talk about words.

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

Yeah, I...yeah, to me the concepts make sense; I guess the reason I focused a little bit more on the verb than the noun is just because it suggests, written this way, I think it suggests that there is a clinical and technical definition for what that is and then in technical standards conversations, it gets confused with, you know HL7 or FHIR has...

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

Uh huh.

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

...sort of the idea of a care plan which is...they've struggled to define that...

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

Right.

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

...and Josh can probably speak more to that, but that's not well defined and so it just feels like using it as a noun in this way just creates a little bit more confusion which I don't think we want to do.

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

Correct.

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

I think we're speaking to interoperability, rather than a you know, specific discrete endpoint that hasn't been defined yet.

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

Others have suggestions on how to deal with this?

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

This is Josh; I mean what I hear Micky saying really is that he wants to emphasize the process and not some sort of output, not a document that people write, even if there are some shared documents but, describing a process by which the collaboration happened. Is it fair to focus on that collaboration process rather than an output?

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

So let me ask a question of the group, so...that’s an interesting distinction, too. Now let’s go back to building a house and how you have a general contractor and there is a blueprint that everybody follows, so the plumber doesn’t necessarily know what the electrician is doing, but they all...all of their work is represented on the blueprint. So we need one of those, too, don’t we? Even though it is dynamic and it’s of course shared, it’s not just the process. So maybe there are two concepts we either have to describe two or...anyway, we don’t want to stay too focused on it, but if we do come up with this magic way of saying it that would be a step forward, I think.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

Yeah Paul, it’s Larry. I’m...well first I want to say that the slide at least in two parts addresses the concept, right? So at the top piece we have it depends on a shared health plan and then below it’s in terms of improving patient safety; am I...I’m looking at the right slide, right?

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

Correct.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

Okay. And I think my concern, and it’s a recurring concern when people talk about a shared care plan is it’s conceptually really powerful, but I don’t feel it exists today. So it feels like we’re hypothesizing, creating, inventing something when we perhaps should be better focused on clarifying the need and perhaps some of the obstacles around the need, given there are issues here are trying to address barriers to interoperability.

And it could be as simple as Micky’s statement about this is sort of ahead of where the standards are in specific and suggest that they might already be there. So...but, I’m...it’s been a rough week, there hasn’t been enough sleep and I’m maybe not being completely coherent. But that’s sort of my concern around getting...presenting this like there’s already this well-defined shared plan and we just have to get everybody to start plugging into it. I think that it’s still a desire and a concept, but hasn’t really landed very much yet in the real world.

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

Okay. Perhaps since this really isn’t the charge of this group, why don’t...how about if I characterize both the noun and the verb to discuss...to set the context of the interoperability, one of the reasons for having...wanting interoperability is that that information, those goals need to be...need to come across all the settings and shared with the entire stakeholder group in an individual’s health. And so that is both a plan for health and the planning...and the process of coordinating activities to achieve that goal. But I’ll find some way of saying both the noun and the verb, would that be fair?

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

Hey Paul, it's Christine. We did a lot of work a couple of years ago to look at this issue; we called it kind of care plan 2.0. But one of things that I think is important is that the independent living movement has worked in this space for a long, long time; it is a very established space and the terminology they use is an integrated person-centered planning process. So, it is sort of similar to Micky in that it's not...or they just call it integrated person-centered planning, so they don't really focus on a plan, they don't focus on care, they are really trying to focus on a person-centered aspect. And to your point, that it's integrated; so, I don't know if that's helpful, but I feel like trying to invent a new term of art won't stick, but an integrated person-centered planning process might because it already has its roots in the disability community.

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

Okay, so I...umm...

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

So this is Mike, can you guys hear me okay?

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

Yeah.

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

Yeah. Okay, I had my hand up so...watch that.

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

Yeah, could I...Altatum, could I get the hands shown to me, please? Thanks.

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

Great, thanks. So I just want to, from a primary care perspective, you know certainly primary care physicians like myself often try to be...at least a single consolidated care plan and we try to share that back with others and try to continue to coordinate the absence of this electronically sharable and contributable care plan. So I think also we have to be careful about what will providers and caregivers and others recognize, resonate with...contribute to and be part of.

Christine's point I think is a really good one, but it's also a term I've never heard of and I have a feeling most primary care physicians wouldn't know what it is or wouldn't know if that's anything that they should relate to. So I do think that one of the beauties of the notion of a care plan, whether it's self-care, whether it's health professional's care is that it's easily understood even if it's not precisely defined.

So I think it's important, whatever we end up with be...the bottom line goal which is, whenever somebody is involved in the care or health of a person makes recommendations that a patient agrees to with shared decision making, that ends up in a unified plan that people see as the current source of truth, that they can then contribute to, modify, remove...etcetera, that the patient can have some input into...version of as well. So I want to make sure...kind of uses the, what...as the end goal.

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

I think we got most of it Mike, you are...you do have a bad connection. But, is it okay if I try to describe this noun and verb in terms of the...what we're...what our goal is. And as I say, I think that's a little off topic for the Interoperability Task Force, but it is something that is of intense interest to the Advanced Health Models Workgroup.

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

Well and Paul, remember too that the Consumer Workgroup did also some work on this, Clarke Ross, who is an expert in this is part of that group and so it's...I think it's consistent with both workgroups really.

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

Yeah, that's fine. Yeah. Okay, so this activity, I think we would...we have already recommended that there be some convening function around this topic and I think it has to do with budget and stuff, but that's already been a recommendation that's come from probably more than one workgroup. All right, can we move to the next slide, please?

All right, so we're now going to start talking about some of the themes we have from our series of hearings and discussions. One is it seems pretty clear from almost every panel that people believe that not only is there motivation, but it seems to be widely acknowledged in most areas of healthcare that we are moving from volume to value, that we're focusing in on the health of a population and improving that. What's not as clear maybe are what are the specific actions that are required by whom and when, because if we knew that then that would drive the requirement for moving in that specified direction and that...and the lack of that clarity does cause some market hesitation and slowness.

The Secretary has defined a timeline and that I think for me has been extremely helpful. It is aggressive, I think but reachable. And it think people would agree that the pace of change in this interoperability space probably is not fast enough to adequately support the timeline needed for effective delivery system reform.

We talked about where we learned, both in and outside of healthcare, and some of the examples include electronic prescribing where you have a clear use case. You know who the players are, both old and emerging, and the financial incentives was real, for example, there was a law and providers got incentives and later penalties for meeting that. A small number of stakeholders that need to engage in order to create that critical mass, there were limited competitors in that space and with sort of a few numbers driving it; the standards could arise organically to address the needs as they arose. Surescripts is probably the dominant player here and so a lot of people are using them. Next slide, please.

So while that's a good example of something that is more narrow in scope and did progress...has progressed, it actually still took a lot of time. Another thing that was brought up is the definition, like in most hard things or complex issues, there really isn't a clear definition and is it a national...universal national platform or is it a bridging of networks and common services that create nationwide interoperability? Defining that, and I think the group seemed to settle upon the latter which is the bridging network rather than a single network.

So one of the things we wanted to point out is that interoperability is very complex, there's probably no single reason that's holding up the whole process. And the notion is that there has to be collective action on a number of areas, and unfortunately it has to happen in synchrony. So we...with our Meaningful Use example, even if one organization has both the technology and the willingness and the desire to exchange, if you don't have somebody else to receive that information and incorporate that information in their EHR, it's still not an effective exchange. So to the second point, you may be able to send, you might be...willing...able to and willing to receive, but you need to send, receive, integrate and use in order to have a meaningful impact on the health of individuals you serve.

Cost has been raised, in addition to cost, even if you had the money, you still have limited human resources, and so competing priorities always play a role. And technology and standards were raised; they probably weren't raised as much as some of the other elements. So we just want to put in context interoperability although it sounds like a technical term, is really a sociotechnical issue. Next slide, please.

So certification seems like something that would have a big role, and it does. And again, drawing on some of our experience both in Meaningful Use and in other areas, there's a delicate balance to play between uniformity that you would like to have and the specificity you'd like to have that would say...tell everybody, this is what you have to do. Versus the prescriptive nature of saying exactly what you have to do and the unintended side effects on the work flow and on hampering innovation, new ideas that people might have. So there's sort of a just ongoing balance and tension; so one of the suggestions that we talked about is modular standards so you really focus in on some high value workflows and rigorous method of saying, well, everybody is obeying the standards as needed and so we should be able to exchange information with people who adhere to those standards.

We also felt that we need an informed market in order to both point out to folks that are and aren't engaging and contributing to the things necessary to have effective information exchange. So what are actionable, transparent metrics that provide choice to the market and with the shared understanding, have the market improve? We described two kinds of measures, one is HIE sensitive measures that matter to consumers and patients that providers would pay attention to, but also HIE sensitive measures about product effectiveness that vendors would pay attention to, and other people who make selections and influence vendors. So that was a new addition to measurement. Next slide, please.

Okay, so we had two major recommendation areas and the first was...builds off on this complex, multi-stakeholder issue or topic of interoperability and not...and it may not be clear that everybody knows who else needs to be involved and not everybody's involved clearly at the same time. So we felt that we had...we...that we needed a convening of the multiple players at a very high level so that we have a shared understanding, much clearer shared goals and have a shared action plan on how to accelerate our ability to get to effective interoperability and exchange of information.

We thought the federal government was in a unique role to bring able...to bring the parties to bear to create this collective action. Yet we didn't think that the federal government would run the thing, in a sense, we needed the enduring private sector business interest to be able to sustain the effort. There's a combination of start the effort, not that it hasn't started, but it's started in many places and we need a much more shared vision and shared action plan and an ongoing fora for the private sector to continue developing those things necessary to get meaningful exchange.

The question is, and we said ourselves, I mean, that's been done before meaning we recognize a problem, there's all kinds of contributors to that problem, why is now so different? Why should we call for a special convening function now? Well we think the landscape has changed dramatically, as recent as 3 or 5 years ago, almost nobody had EHRs, now the majority of folks do and that was driven by regulation and incentive programs like Meaningful Use. We didn't have the alternative payment model that is coming into force now and whose timetable has been described and will really cause market change. And we didn't have a roadmap such as that from the ONC. So we didn't have the market pressures, we didn't have sort of a direction and we didn't even have the tools, like EHRs, before. So that's why we think now is the time to make a major move like this and that we need a kick start in the name of convening of the multiple stakeholders. Next slide, please.

And the second side, so that's sort of a kick start and push side; the other thing we thought was necessary is sort of a pull side that is, true measures of how...of the outcomes we're seeking for, that's why we had the goal statement. And that that be transparent or publically reported and be part of the payment mechanism. So one is to define what we mean by interoperabil...nationwide interoperability, what are the services needed to support the high priority use cases and that we need development of new kinds of measures, measures that matter to consumers and patients much more than some of the process measures that we've had in the past.

Those would exemplify or measure potentially indirectly probably...it's hard to measure directly the accomplishment of coordinated care, of having affordable care. An example that was brought up was if we looked at the concept of no reimbursement for medically unnecessary duplicate orders, you can see one; that seems like a reasonable challenge, but two; you can't possibly effectively work on this goal without having meaningful interoperability.

The second, the measure of vendor performance; we gave some examples. You can't take one of these measures, you really have to add them up, so there's...we often look at the number of exchanges and that's often cited, but that really is just the denominator. You need to know what is actually viewed, which is the numerator and more so, like to see how the information is viewed and acted upon. So it could be incorporated and used for let's say medication or problem list reconciliation; that would have meaning. But if you actually changed orders, you changed the decisions that are made, that's much closer to changing outcome and that would be a demonstration of impact.

I think that's the final prepared slide as...why don't we go one more, which is sort of a summary. So we're saying the market has got the signals, it's moving, it's directionally correct; the pace is not fast enough. Our goal is to have affordable, high quality care for all and that we're working with a very complex, multi-stakeholder problem whose solution has to be synchronous and that causes us to think that we really need to convene a deliberate multi-stakeholder process that produces action, sustained action that moves us in that direction at a faster pace. And that in order to know...recognize the goal and know how we're making progress along the goal, we need to have clear and aligned measurable incentives that would convert the sporadic and siloed activities into one with meaningful impact.

That's sort of my attempt to try to put into words what we've been discussing and totally open to your feedback and corrections and additions. Comments? Questions?

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

I guess we're all on mute, I'll jump in; its Larry. So, you know, there's a lot here and I think you've really summarized a lot of what we've covered. I wonder if others are feeling the same; I'm feeling like it's such a good summary but I'm not electrified and I don't know that I need to be electrified, but...

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

Okay, well let's...

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

...you know, and calm in response to some of the hype that's out there is probably a really good thing, so I'm not necessarily saying this should be more challenging. I think the call for a summit actually is a very actionable thing that would get everybody together on an ongoing basis and that that's actually a big piece of what we're trying to get done, so.

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

Okay. Other comments?

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

It's Christine, Paul; I think it's a good summary. I think we have a lot more inputs coming also, so I'm not worried yet Larry about electrifying. I think that's a good starting point to get early feedback from the Policy Committee. I had a couple of comments specific to particular slides...

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

Um hmm.

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

...should I try and make those now quickly?

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

Yeah, go ahead.

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

On slide 8, I think there's a missing goal here which is something around the learning health system; it's what the ONC roadmap is really anchored in and so I wanted to propose that we consider that in addition to what's on the slide.

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

Okay. Thank you.

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

Slide 9, I wondered if under the barriers component, so let me get back to it, sorry; there we go. Under the...you know, so it's like motivation exists and then we've got some sort of barriers in the two sub-bullets. The one that I felt like we heard that we haven't really said here is payment, right, like sort of payment incentivizing things that require information exchange. And I want to suggest we add that here because it sets us up to talk about HIE enabled measures in our recommendations later. I think it's definitely...

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

So what, you would put it under motivation?

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

Yeah...well, what's under motivation isn't motivation necessarily, right? What we're saying is pace of change isn't fast enough to support the timeframe for delivery system reform; the market is hesitant and slow. But I think part of the reason is that we heard, is, I don't really have an incentive to go through the hard work of making my system talk to the system down the street because I don't get paid to coordinate with them.

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

Okay. Okay, yeah.

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

And I don't know if it's here or where it is again once you translate from a slide deck to a written report; obviously it will be somewhere. On the e-Prescribing bullet, I wondered if it was useful sometime in the next six weeks for someone, and I'm happy to volunteer if needed, or someone from ONC, to actually talk to some of the players that were involved in e-Prescribing in the whole history of it. Because I really think it's an important example and I don't think we dug deep enough to really draw the right parallels. I don't disagree necessarily with what's written here, but I remember that it was actually two competitors, not one.

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

Right.

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

There wasn't one dominant player, right, there were two and that was in like probably 2000. I know they merged in 2008. Financial incentives came into play, but it...this I think slide leaves it to your imagination when that happened. And I think it's much more akin to Meaningful Use than we perhaps realized because I remember Surescripts and RxHub, like they were lobbying to create those incentives; that was a huge reason that I think they ultimately did come together.

And they used to issue an annual report on e-Prescribing; we talked about that last time as part of not the summit, but what we're now calling an ongoing process. So I just wanted to think about what more we could learn from some of those players who were around through all of that.

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

Um hmm.

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

Okay, so just two more quick things; one is on slide 10, I'm still...I know I raised this last time and maybe folks just disagree, which I'm happy to accept. I've just been struggling with continuing to say we need a definition of nationwide interoperability. I feel like what we're trying to say here is...need a pathway, right? We need some specific like here, we got to do this and this and this; I think we defined interoperability, ONC has a definition, IHE has a definition. I'm not sure that the technical like definition of what interoperability is is really what we mean here. Do you want to say anything about that before I move on, Paul?

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

I'll turn it to Micky, he...that was an idea he wanted to put forward and he probably can best address your question.

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

Yeah, so I wonder Christine, would it help if we added operational to that to say we need a clear operational definition? Because I agree, I mean there are these, you know you can certainly go back all the way back to NAHIT in 2009 or 2008, right, and there were these...

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

Right.

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

...definitions out there, IEEE and everyone's got a definition and the interoperability roadmap has the learning health system; it still doesn't tell us great, what does that mean today and 360 days from now. So I wonder if it helps to just say that we need a clear operational definition or practical operational definition or something like that.

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

Umm, so do you mean...when you say, what does it mean 365 days from now, do you mean like what does it look like? What are we trying to accomplish? Because I feel like the word operational does still speak to the IEEE kind of like, here, look here's our one paragraph, very nerdy, technical definition like we have those. So what do you mean?

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

Yeah no, yeah, I mean I...so when I say operational definition I would mean something a little bit more specific like if we said that you could pick one transaction type or pick one type of functionality, but if you based it on that idea of bridging networks and common services coming out of the JASON Task Force, it might be that there is a...that within a year we would like the large networks to have some kind of common concept of patient matching across networks, right?

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

Oh, I see.

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

And if that's, right, that would be an operational concrete thing that said, oh okay, that's something we can look at in a year from now, we'll be able to ask ourselves, did we accomplish that or not.

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

Oh, that makes a lot more sense. So it's almost like an operational approach or the strategies for doing this like, you know patient matching and things like that. That makes more sense, I think we just need to clarify that so people don't look at it and say, oh, but we have...here's my one paragraph, so...

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

Right, right, yup.

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

...that makes a lot of sense, Micky.

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

Okay.

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

So is that more a strategy though, Micky rather than a definition of nationwide interoperability?

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

Um hmm.

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

Umm, I guess I wouldn't think of that as strategy which is more high level concept. I mean to me, the opera...the idea of the opera...and we have...but we have plenty of those. I guess to me it feels a little bit more li...and I keep coming back to operational; I'm trying to think of a different word that's not operational, but a very practical set of things that we could point to and say, here's a high level concept, take learning health system or IEEE, whatever it is and that has, you know, how would we know it when we see it? Well, maybe it's these four or five types of transactions or types of functions, if we were able to say that they are, by some measure, ubiquitously available across all relevant clinical settings, across the country, that would mean that we have defined that or that we have the interoperability foundation to accomplish that goal, for example.

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

Is it more like approaches to the core elements of interoperability like patient matching, like the particular use cases and transactions, you know so it's really we need agreed upon or defined practical approaches to those essential elements? And I think part of where we're struggling is we're trying to do it in a bullet when I think we don't quite have the right two words. So maybe we kind of expand on it and write out more of what we need and using examples.

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

Um hmm.

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

Mike Zaroukian?

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

Yeah, again, let me know if you can't hear me but sort of thinking about the telephone analogy that was used earlier and then also thinking about what we're...with those who are actually supposed to use the interoperable information, I think...I'm not sure whether it's in the definition or in the use case, but the notion that says anytime I'm caring for a patient or a patient is doing some self-care, they can access information from anywhere they have received care, whether community or health system, etcetera, as if they were in the system that they usually use for that. And be able to use the information, send, receive, understand each other, etcetera, etcetera.

So I think one of the things we ought to be careful of it's the like criticism that has been forwarded by providers and caregivers, sorry, I use that for clinical caregivers; in the past I'd say, we have the technical specifications for doing this, we have a certified system, we still can't share information...in the future. So I think in the end we really have to end up being focused on when a system is interoperable, you have problem list information elsewhere, I can always get it, no matter where it is, I can call it up if you will.

If somebody else took care of me, I can find that somebody else in the system and the information that they have and so that notion of a ubiquitous approach to being able to send, receive and share is at the heart and soul of all of this, and to me, that's at least the operational definition. So I really resonate with Micky's comment about the notion that however this...operational, it needs to resonate with frontline providers and other clinicians in terms of this being what they were thinking about when we're asking for interoperability.

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

So Paul, perhaps...this is Micky again; perhaps the way to bridge that, what we've been talking about in the words that you were using is we've got sort of the vision of interoperability, which is some of those definitions that we've been kicking around. But this is, coming back to your term strategy, I'm now understanding how you were sort of framing that the strategy of accomplishing that vision would say, okay, there are five transaction types that we believe need to be available universally across the country, across all relevant care settings that...if we...and that is our strategy for meeting that vision. We're not saying what those five are, but we're saying that that's the kind of strategy that needs to be articulated in order for us to be able to move forward meaningfully.

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

Okay. Certainly use that as an example. Other comments on the...

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

So...

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

...go ahead.

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

Paul, sorry, just the very last thing is on slide 12; I thought this was a great slide, I thought it was very helpful. I only wondered if maybe in the second part of it we want to say something about the process being focused on interoperability, because I wonder if some folks on the Policy Committee might have the same reaction that we did when we were discussing it last time which is, well but wait a minute, we have the Health IT Policy Committee or we have the Standards Committee or we had AHIC, but this is very focused on interoperability and I think that's another important distinction.

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

This meaning this convening?

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

Yes, yes.

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

Okay. Other comments? So I'll ask different kinds of questions; one, do you think this inclu...do you think this summary includes the major things we heard and discussed that are relevant to making recommendations?

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

Yes, I do; its Christine.

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

Yes agree, Mike.

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

And the next...thank you. And the next step is the approach that's being taken here is to sort of go with some small number of something actionable. It doesn't say it's actionable by Congress, but sort of actions that need to be taken, Congress could have a role in funding such actions, but it's really people needing to endorse these as potentially breakthrough, I don't mean in a major way, but things that would get us to move faster to meaningful interoperability. Are these the right two, it's sort of a kick start push and pull?

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

I'm sorry, when...Paul, this is Micky. When you say two, which two are you referring to?

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

So it's the two...so the draft recommendations, one is on your screen...

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

Yup.

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

...and that's the convene this multiple stakeholders, I just...I don't know that everybody has a...I'm pretty sure people don't have a shared understanding of one, the problem to solve; two, who has to play a role and three, the synchronicity. And that's sort of recommendation topic one.

And if we move to the next slide, please, then recommendation topic two is to have transparent, meaningful measures of where we're headed and how we are making progress. I don't think we have those either. And of course you would piggyback what I think Christine's point, the meaningful and real financial incentives would piggyback on these meaningful HIE sensitive measures for both providers and vendors.

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

Which Paul I actually think is a point that we probably should add as a third recommendation, but it's like get everybody together, get some real agreement to clear some of these barriers around the technical standards and governance and the, I think maybe pulling Micky's comment about the real operational strategies and approaches. That that all kind of lives under some kind of initiative, but then it builds on that, you know get the right measures in place and then you've got to pay for them.

I mean, you just do and you have to send a signal that you're going to pay for them because otherwise people...and you're going to pay for things like it might be an opportunity to bring back in the integrated, you know whatever we call it, person-centered planning process or whatever we call that.

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

Uh huh, yeah, yeah.

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

But to start to bring the earlier findings more reflective into the recommendation might give it some more cohesion and some of the pop Larry's looking for.

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

Okay, so you're suggesting the third topical area is it sort of builds on number two which is, measure what we're doing and that we're improving, but three, drive it by two things; one, funding of number one which are sort of the actions needed...activities needed and two, rewarding the behaviors that achieve that. Is that what you're saying?

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

Yes.

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

Okay.

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

Exactly because remember that Congress can do things like put in the law, the Secretary shall create the right measures for the...to get at these things and the Secretary shall establish the methods by which they will pay for them or pilot them or whatever it is that they're going...they can take a CIMI approach, they can do all kinds of stuff but I think we should be really explicit that that third leg of the stool, you actually do have to pay for it.

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

Okay. Others agree?

**Larry Wolf – Health IT Strategist - Kindred Healthcare**

I think in su...yeah, I do. I think in support of that, the various incentives for physicians to do care coordination, in addition to a lot of the ACO and bundled payment things, are really driving a need for a notification service and I'm seeing that happen out there in the real world.

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

Um hmm.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

So, it's a very tiny piece of interoperability, but it is sort of a very focused example of a payment that doesn't talk about interoperability that's driving some automated notification. So, I'd be in support that recommendation three is talking about revisiting the payment alignment.

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

Okay. Good.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

I also have this recurring thought about the hourglass that's often shown with the you need to get standards at the right level with the right level of specificity so that they're not in the bottom part, they're so detailed that they're too narrow and you actually could support multiple standards and then above the neck of the hourglass, you want to enable a lot of capabilities and so you don't want to overly define that in that neck of exactly what it is you're enabling above you because you don't want it to be singular, you want it to be really broad.

And I keep coming back to that in my mind about how do we get that right? How do we get focused around what it is we're trying to enable? And maybe that's when I say that I'm missing some pop, maybe it's that sense of trying to get clear about what would be enabling. And so it's not just about specific use cases that enable, because they become the instances that drive that core thing.

So I guess I'm just sharing my muddle-headedness around this. I don't have a clarity of what we should be proposing, but it seems like it's sort of all the pieces we try to be helpful in what we're hearing and what the barriers are and it feels like we're still missing that triggering enabler of the couple of standards and technologies that come together. We've talked about it in terms of how things have changed with adoption of health IT, but I sort of feel like we're just on the verge of Apple iTunes being the magic ingredient to change how people pay for music and the whole growth of the buying music by the song.

Where's a similar thing that when we've got it on the healthcare side we would say yes, that was successful? But if you look back, there were a few enabling standards that Apple built on and a few enabling core technologies that brought together things that the market it was sort of like churning and incubating and maybe even supersaturated around and kind of offered a crystal that things could build around.

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

Well we're certainly looking for that magic. One might argue that that would happen in the private sector but there needs to be some kind of, well, we're thinking and we're debating whether there's some enabling steps that the public sector can make, the federal government can make that would make it easier for that to happen. Mike has his hand up.

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

Yeah, I wanted to go back quickly if we could to the combination of the convening and then coming up with meaningful measures of HIE sensitive outcomes. Using again the Surescripts example once we think about example that you have here of no reimbursements for medically unnecessary duplicate orders; I think conceptually that's a really good idea. I think the two problems that run into it is, and it's a great test of interoperability is how do I know if a duplicate order is out there. And so for example one of the use cases might be a national approach to know that if a patient had an imaging test anywhere, I can access it and that would be helpful.

The Surescripts analogy is a clear example where Surescripts doesn't have all the medications a patient was prescribed in its system so it...it's a great example of a system...the gap. So if we had to rely on Surescripts for where all the medications that a patient had actually filled then it might be taking our list that that would not meet the needs therefore it was challenging to have an outcome based on a network that has that limitation. So I think as we go forward with some of these, we probably do need to have good examples of that.

The other part of it is that medically unnecessary duplicate orders is a tough one to get consensus around so I'm wondering, without having thought through it completely, the example where professional societies keeps choosing wisely to define for themselves what are unnecessary tests to treat...so on and so forth, and particularly where getting information from other systems to help inform something like choosing wisely guideline might be another way of getting closer to examples that could be put in place in the near term.

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

Thank you. Other comments? So we have three major to...recommendation topic areas; do we think we have that covered? Is there something we want to say, it is actually in the charge, is there something we want to say about certification or the role of certification?

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

So this is Mike, I'll just jump in again by echoing what's been said before which is the difference between testing of a particular system for interoperability in a lab versus out in the field. So I think there is a value to talking about certification for interoperability but making recommendations with regard to what constitutes adequate proof of interoperability, should it be done in a lab or must it be proven in the field.

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

Yeah, this is Micky; I would agree with that point and maybe there is just a statement to make, we don't have to specify it about that ongoing certification should be based on some of these vendor-specific measures which I think is what Mike was saying, but explicitly including that as a part of ongoing certification of systems.

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

So maybe add it to the second topic, which is sort of the measuring topic and the addition there is ongoing surveillance...

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

Yup.

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

...in the field. Okay.

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

Yup.

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

Other contributions? Well I think stepping back, I think these are three, one, actionable, I think there are actually some new ideas, too. For example, the whole convening and why now and what...who do you convene and around what is...hasn't been crystalized I don't think as we've stated there. The notion of measurement, measuring vendors in more the effectiveness of it, the use of it, the use of data resulting from interoperability is, I think a contribution.

And then, of course, everybody does talk about the funding side; but we did add some things that aren't necessarily going to be funded on its own and may have a role for the public sector; these measures that matter and the measures of let's say vendor performance in interoperability. Maybe encouraging CMS, as they already are...they're certainly going in this direction of both paying for and reimbursing for things related to care coordination as an example, things that depend on interoperability.

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

Paul, this is Mike, can I make one more suggestion about that transparent measures part?

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

Yeah. Sure.

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

One of things that intrigues me is the future capability of having the external results inform the clinical decision support tool that I use that then has an impact on care. So I'm wondering if there's a way to incorporate the percent where the external data interactively gets clinical decision support to impact care decisions.

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

Ah, so external data inf...that actually was part of that first...that fourth sub-bullet, percent orders changed, unless you...do you have other ideas on how to measure that automatically?

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

So for example if you...yeah, so the notion would be...yeah, the challenge is in doing it automatically but for example, if I didn't have a piece of data and I...a test to determine whether I needed to follow a particular direction. If I had a result in that triggered a clinical decision support prompt that allowed me to take a new course of action that I might not have otherwise taken, like a hemoglobin A1c suggesting the need for a change that I didn't even know existed because I'm in-taking a patient not on the diabetic front...that new information that prompts CDS to talk with me offline about how we might automate that process, but I think it's...to be able to consider how external data might become an element in a clinical decision support decision, decision point that alters care. So...

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

...as you said, we need to find a way to automate it.

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

We don't need to go back to chart review, let's put it that way.

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

Right. Right, so I'll think about that and see what...if I can come up with a reasonable...

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

Okay.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

So Paul, its Larry; on the second or I guess the third major bullet about transparent measures of vendor performance. Well I think that's really important because one of the issues we've been hearing a lot about is that vendors may or may not be creating barriers or may impact on a positive side be facilitating stuff and they should get credit for it. I'm wondering if we need something that looks more broadly than vendor performance, and I don't...I'm not sure how to make this actionable, maybe Micky sort of lives in this world of how HIEs talk about their performance.

And maybe it's the same measures that we've got listed here, but it's not so much vendor performance as maybe network performance or total performance or something. I guess I'm thinking about broad measures that talk about like the number of commuters taking different kinds of transportation that in some sense, that's sort of the goal and obviously if you get into managing highways, you need to know which highways have the bottlenecks or are the trains effective in relieving road congestion or do they address a completely different market so the two don't ever actually interact. So I'm feeling like there needs to be some measures of network or system or something; broader performance than just vendors.

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

Right. This is Micky; I ag...and it may be that there are two angles on this; one is vendor provided and one is provider provided information and, I mean in other places there are ongoing conversations going on now about how to more explicitly measure this kind of stuff and the way...at least the way I think about it is there is a set of vendor-provided data that might be more kind of operational and transactional that can tell you, we generated this many documents out of our system and we sent "X" percent of the...and of the ones that went out, we sent "X" percent of them to our own EHR systems that other people are using and we sent "Y" percent to other types of systems.

You know, they can't tell you that much more than that, they can't tell you about the clinical imperatives behind why did this particular provider organization only have 10,000 this year and another one had 100,000, but they can tell you transactional types of information. And that's vendor provided information. And then another layer might be more along the lines of provider provided information, which is a little bit more experiential.

And so maybe there is something that could be developed along the lines of annual KLAS-like survey, not that KLAS has to be the organization that does it, but KLAS-like surveys that are looking a little bit more at the bottom of what are providers in their settings experiencing with respect to hard and soft types of measures of interoperability from the systems they're using. And those two brought together might give us sort of the...a nice mosaic that starts to get at this over time. I mean, if you don't have a single top-down architecture, it's really hard to measure all of the stuff obviously in a sort of a really robust way and the best you can hope for is kind of a mosaic that brings it from different angles and gives you a good sense of whether things are moving forward or not.

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

I wonder if there are simpler, you know, Mike Zaroukian's exam...I mean, I know in my own, I'm thrilled when I...so, if I see somebody who's been in somebody else's ER, it's thrilling to be able to just click that and find out what the results were and the patient discharge instructions, meds, etcetera. And my clicking on that, each data element having its provenance would demonstrate that I used, because I had to take that next step, I used externally reported...externally sourced data. That might be simpler than all of these...than putting together the mosaic of the three source data and more direct.

I mean that was what I was trying to do with the fourth bullet is, how do you detect another way for decision support is when you do make something available at the point of ordering and the order is changed, that's...and you infer that information, that alert, whether it's knowledge or data, changed that per...had an impact. So the fact that I clicked on what is labeled as external data seems like would be a nice proxy for the fact that it influenced my decision making.

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

Yeah Paul, this is Mike; so I completely resonate with that and would use examples like a new blood pressure result that could lead to a change in an order example of new diagnosis added to the problem list because of what was in the system. Anything that allows you to see that, and you've got many of them listed in your example so I think that's good. But I really like the idea that it was available enough to you and you took the time and energy to view that document, should be a good example of that.

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

This is Bob; I would say that last bullet on the transparent measures of vendor performance of percent of orders changed is very difficult...a very difficult one to come to some sort of algorithm to determine since most of it...it's sort of like proving a negative; if you see data and you change your mind on what you wanted to do, it's very hard to determine what you were going to do.

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

The example I was thinking of actually was out of some work from the University of Utah, I believe that or Partners, when you're in the middle of something and you have at the time it was called interruptive alert and you changed it, so you could be ordering a test, you could be ordering a med, you could be ordering something and something popped up.

So you are already on the path of doing something and typically what happened is you cancel that order, for example. So I get a test...I order a test and I find out, hey, did you know that this was done 3 weeks ago and here's the result? If I cancel that, it's a pretty good indication that that new data influenced my decision making. And then you could drill down and say, well what was the new data? Was it that oh, it was duplicate? Oh, it...this was also done in cost? This was done at Regenstrief where you show the person the cost and they decide not to order it.

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

Can...this is Micky; maybe one way of doing this is that if we're going to go down that path of suggesting those types of measures that we just try to have the caveat that we need to be really thoughtful and parsimonious with those...

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

Yeah.

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

...because I mean, to Bob's point, each of those is going...I think we...I said this in a previous call, I mean, the balance is you just don't want to be imposing a huge amount of overhead on the vendors for how would they deal with these kinds of measures. And frankly on the providers because you could imagine with any one of these, it starts to become fraught with all of the variations in the way people practice that no...that a measure is inherently going to not fully capture it and you're going to have providers feeling like they're being looked over their shoulder and the measures are not accurately capturing what they're doing. And I think the further we go down that road, the more problematic it becomes.

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

It's fair. Other comments? Do we think we've covered some of the major actions that could be done that would, if taken, change the pace, the rate of movement towards effective interoperability? Let me compare it to some of the potential recommendations or thoughts that as a result of our hearings we may not...we didn't hear as much...so there's some view that all we have to do is specif...is get the standards right and then interoperability will happen. Is that something that you think we heard a lot about? It's certainly a component. What part of the problem space do you think that kind of a recommendation would address? Minority, majority...?

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

So this is Mike; I'll take a stab at it, it's obviously a big question and a big area, but the notion that...by telephone...a process that says, if I have a standard phone I know that if I get on any of these networks of networks, I will be able to connect with another source and get the information I need on the right patient at the right time in acceptable formats for me to take the time and energy to do that; that'll work.

So to the extent that standards can remove all of the inertia for knowing if there are data out there and if so, to be able to get them pushed to me or that I can query for them would be a huge part of success and how much of the problem it would solve, I think is significant, although I don't know that I could quantify it exactly. But right now, today certainly, I can't do that other than within the EMR system that I use that has its own nationwide network today.

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

So are there critical standards, we're going back to the five again and we talked about that I think on the last call. Can we enumerate the five that would change the world here? Or, were the five really illustrative to say, let's work together on five; they may not be the Achilles heel, but the process of working together can demonstrate ability for multiple parties to work on the same thing and make progress not just on that specific use case but on the process of working together to solve this problem. Where do you think the emphasis is?

I think your homework was to enumerate the five, right Micky? You were going to illuminate us and tell us what five...do you...when you said those, which way did you mean it? Did you mean there are five that we need to work on as ways to work together? Or do you mean that there is a magic five that would just unleash all of this flow of information?

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

Well I guess when I was speaking about it I mentioned...I guess I agreed with the concept and then I had my own list of five. Doesn't mean that everyone else agrees with the list of five but I had my own list of five. So I...but I do think that there is a small and specific set that just goes back to this question of operational definition that we ought to collectively define and that, and I think this is the point that Christine was raising, and do you want to have your HIE sensitive measures tied to those in some way or your measures for progress, some subset directly tied to those. So we have a set of five things that we say we want to accomplish and then we have a set of measures, some subset of those measures perhaps that are focused explicitly on how we're measuring our progress against those five.

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

So isn't that what the Standards Committee would be do...who could or who isn't doing that at the moment, the enumerating the five so that we can all just get on with it?

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

I mean I think, the roadmap I think sort of tries to do that, but it's a little bit...but it's so comprehensive and so longer term that I don't think it specifically enumerates, you know here are the four or five that would constitute nationwide interoperability. The JASON Task Force identifies that there probably is a subset, but it doesn't specifically say, it just speaks to the idea of bridging services as being sort of the thing that would enable those types of capabilities that one might want.

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

So do you think that these five should be enumerated as part of this convening, this working kick-off, this working summit or is it something that evolves over time after the continuing activity goes on? Is it knowable by a collective group or is it something we have to figure out?

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

Umm, I think it's something that has to be figured out. I don't know the convening function that we're talking about here with ONC, if I understand it, is really focused on the Interoperability Roadmap and how to flesh that out further. Maybe that's a part of conversation number one is how do we take this down four or five notches so that people understand that at a...in terms of an actionable this year, next year kind of framework; and maybe that is how that conversation gets started.

I don't know, otherwise there is no nationwide convening, that I'm aware of, that is trying to define those four or five. Certainly within a particular network, that's implicitly or explicitly within networks been done, right? When CommonWell defined what it was...what it's doing, it set a set of goals; it said here is what interoperability needs; we as a set of vendors believe need to be accomplished and here are the four or five types of specific transactions that we're going to enable to accomplish that vision. And Care Everywhere does the same thing and the eHealth Exchange does the same thing.

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

Yeah. Okay. The byproduct of a process, there isn't the magic five, it sounds like. Okay.

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

Unless everyone wants to adopt my magic five, which I...I'll give credit to anyone else, you can call it your own.

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

Okay, are we set with what we want to present to get feedback next week?

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

I think so. This is Micky.

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

I think so.

**Larry Wolf – Health IT Strategist – Kindred Healthcare**

Yup, I agree; it's Larry.

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

All right, good. Well, we'll make the changes that have been suggested here and we'll vet that through the Policy Committee, we'll get their feedback and then we'll work on that. Okay, could we open to public comment, please?

**Public Comment**

**Lonnie Moore – Virtual Meetings Specialist – 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. 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, we did have somebody put a public comment into the chat. Sharon Pigeon and this is related to the earlier conversation about care planning. Healthcare payers are a key stakeholder in healthcare and many barriers exist for hospitals and providers in sharing clinical data, especially for care transitions and identifying gaps in care. And Sharon is from Harvard Pilgrim Health Care. And it looks like we have no further public comment.

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

Well thank you everyone for participating in all these calls.

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

Paul?

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

Yes.

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

Paul, this is Micky; I should have done this before but I didn't. I just wanted to, just for the record, make just have sort of acknowledgement for the tragic death of Hunt Blair, who I think many people know and contributed a lot to the Health IT community over the years and if you didn't know, he died tragically over the last couple of days.

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

Oh, didn't know.

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

So Micky, this is Mike; I didn't hear who you were talking about.

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

Hunt Blair.

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

Oh dear.

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

He was...yeah, he worked in Vermont for a number of years, worked for ONC and was doing a lot of work trying to forge a national consensus of, you know of what is the learning health system and how does that connect with precision medicine. It's a real loss for the community.

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

Thank you, Micky.

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

Thank you for letting us know. All right, well thank you for raising that and sorry to hear about that.

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

Okay, great. Thank you.

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

Do appreciate everybody's time and all the thoughts you've put into this effort and we will get you back feedback from the Policy Committee. Thanks a lot and talk to you next time.

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

Thanks.

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

Thank you, everyone.

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

Thank you.

#### **Public Comment Received During the Meeting**

1. Sharon pigeon: Healthcare payers are a key stakeholder in health care and many barriers exist for hospitals and providers in sharing clinical data especially for care transitions and identifying gaps in care. Sharon Pigeon, Harvard Pilgrim Healthcare