



## HIT Policy Committee Final Transcript August 6, 2014

Attendance (See Below)

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. As a reminder, if you have your computer speakers on, please mute them. This is the 59<sup>th</sup> meeting of the Health IT Policy Committee. 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. Karen DeSalvo.

### Karen DeSalvo, MD, MPH, MSc – National Coordinator – Office of the National Coordinator for Health Information Technology – Department of Health & Human Services

Present.

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

Hi, Karen. 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. Alicia Staley? Aury Nagy? Charles Kennedy? Chelsea Richards? Christine Bechtel?

### Christine Bechtel, MA – Vice President – National Partnership for Women & Families

Good morning.

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

Hi, Christine.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Hi.

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

Chris Lehmann?

**Christoph U. Lehmann, MD, FACMI, FAAP – Professor, Pediatrics & Biomedical Informatics – Vanderbilt University School of Medicine**

Good morning.

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

Hi, Chris. David Kotz?

**David F. Kotz, PhD – Associate Dean of the Faculty for the Sciences – Dartmouth College**

I'm here.

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

Hi, David. David Lansky?

**David Lansky, MD, PhD – President & Chief Executive Officer – Pacific Business Group on Health**

Here.

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

Hi, David. David Bates? Deven McGraw?

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Here.

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

Hi, Deven. Devin Mann? Gayle Harrell? Josh Sharfstein?

**Joshua Sharfstein, MD – Secretary – Department of Health & Mental Hygiene, Maryland**

I'm here and...

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

Hi, Josh.

**Joshua Sharfstein, MD – Secretary – Department of Health & Mental Hygiene, Maryland**

Can you hear me?

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

Yup, I can hear you.

**Joshua Sharfstein, MD – Secretary – Department of Health & Mental Hygiene, Maryland**

Hi, I just wanted say I may be going on and off because I'm driving out to Cumberland, Maryland where the Governor is doing a big event on our Health Information Exchange.

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

Okay, thank you Josh. Kim Schofield? Madhu Agarawal? Is Terry Cullen in for...?

**Theresa Cullen, MD, MS – Director, Health Informatics – Veterans Health Administration**

I am. I'm on.

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

Hi, Terry. Marc Probst?

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Here.

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

Hi, Marc. Neal Patterson?

**Neal Patterson, MBA – Chairman of the Board and Chief Executive Officer – Cerner Corporation**

Here.

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

Hi, Neal. Patrick Conway? Paul Egerman?

**Paul Egerman – Businessman/Software Entrepreneur**

Here.

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

Hi, Paul. Scott Gottlieb? Thomas Greig? And Troy Seagondollar?

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

I am here.

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

And again, as a reminder...

**Kim J. Schofield – Advocacy Chair – Lupus Foundation of America**

Kim Schofield is here.

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

...please mute your computer speakers as we are getting feedback. Was that Gayle who just announced herself?

**Kim J. Schofield – Advocacy Chair – Lupus Foundation of America**

Kim Schofield.

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

Hi, Kim, good morning.

**Kim J. Schofield – Advocacy Chair – Lupus Foundation of America**

Hi, good morning.

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

And with that, I'll turn it to you Karen for some opening remarks.

**Karen DeSalvo, MD, MPH, MSc – National Coordinator – Office of the National Coordinator for Health Information Technology – Department of Health & Human Services**

Sure, well good morning everybody and happy summer. I just wanted to put a couple of things into context that we'll be talking about today and that are sort of a prelude to topics of conversation in the next couple of FACA meetings. The first is just to remind everybody that at this 10-year inflection point of ONC, we have a few things that we're doing internally which are, as you know, taking a reflective look about our organizational structure to meet the future demands of health IT. And to be certain that we can also meet today's expectations around programs like Meaningful Use or quality and safety and the standards and technology work.

Today you're going to hear from Steve Posnack, who's going to share with you what he's been sharing with the Standards Committee about work that he and his team are doing in the Office of Standards and Technology, to take a look at what the portfolio is and help to prioritize that based upon the today and future expectations. And they're doing some really tremendous work so really appreciate that and I know he's looking forward to your feedback. Within that bucket is also improvements related to our Certification Program, which he's going to, I hope, share with you some work they're doing in open testing.

And as I hope you all remember, we are in the process refreshing the Federal Health IT Strategic Priorities or Strategic Plan for the federal government. We've had some very active, terrific participation from our partners in the federal government, from VA, from DoD, from SSA, IHS and other members of the HHS family, but then across government such as the FTC and the FCC. And we really have appreciated all their valuable input as we're thinking about aligning ourselves into this new Federal HIT Strategic Plan. It is our goal to have this available for public comment and feedback from you all and others by the fall. So, right around the corner.

We also have been, as you know, going deep on interoperability very early, because there has been so much demand to have a roadmap that would be a shared effort between the public and private sector that would help us know where we're going to get when and how quickly we can do that building upon the best of the best. That's already been made available to the country and considering how we can get ourselves aligned from the policy level all the way to the standards level. So Erica Galvez, the Portfolio Manager for Health...for Interoperability, is going to share with you where we are right now in that process and some of the activities we have underway to more actively engage with partners to hear about best ideas now and into the future.

And we'll be spending time at our Joint FACA meeting in the fall with Standards to really go a lot more deeply into interoperability, including hearing back from the special task teams in interoperability that are hard at work already. The one looking at JASON and another that's getting started, taking a look at governance. So thanks to everybody who's already been working on the interoperability space and thanks to the policy and standards folks who are going to be prepared to really give us some good feedback in October.

Just to be clear also though, we will formally go out for public comment on the interoperability roadmap sometime in the winter. And everyone will have a chance to formally weigh in, because underscore that this is for all of us and we want to make sure though that we're iteratively developing it. And that's when we have a product for public comment that it reflects already some thinking and best practices from our partners in the private sector as well as the public sector. So, those were just the general shaping comments I wanted to make and to thank you all again for your active participation and 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**

Thanks Karen and thank you everyone for participating in this summer August month. This is just a 2-1/2 hour meeting so...and primarily we're going to focus on updates from ONC, as Karen mentioned, starting out with Erica Galvez on the interoperability, as Karen mentioned. She's going to talk about building blocks in the vision that ONC has for how you construct the framework for interoperability, have some asks for us and the public in terms of priorities and use cases, critical actions. And as Karen mentioned, we're leading up to a concentrated focus time between both the HIT Policy Committee and Standards Committee on October 15, and hope you'll all be able to join us then.

Steve Posnack in his new role is going to update us on the Standards and Technology activities. And as Karen mentioned, the open test procedure pilot is something he's going to focus on in his update today. And finally, we'll be receiving updates, from a data point of view, from Beth Meyers at CMS and Vaishali Patel from ONC, taking Jennifer King's position. And CMS will be talking about some of their new numbers, they are not going to be talking about any hardship numbers this time as may have been alluded to in other publications.

With that, any additions to the agenda and then I'm going to ask for a movement...move...motion on the minutes. You've all had draft of the minutes, if...I know Neal Patterson submitted an update and I did as well, any other updates to the minutes? I'll entertain a motion to approve the minutes, please.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

It's Deven, I so move.

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

Thank you.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

It's Christine, I'll second that.

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

Thank you. Any further comments?

**Karen DeSalvo, MD, MPH, MSc – National Coordinator – Office of the National Coordinator for Health Information Technology – Department of Health & Human Services**

Hey Paul, this is Karen. I had wanted to mention to the group that National Health IT week is the week of September 15<sup>th</sup>, and for those who might be interested on that Monday, the 15<sup>th</sup>, we're having our T Third Annual Consumer Health IT Summit. And we sent out some information about that a few days ago, but we'll certainly get...wanted to direct people to that in case they want to sign up, it's sort of a first come, first serve basis. But that's right around the corner, so just for visibility I wanted folks to know that was happening.

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

Thank you. Okay, all in favor of approval for the minutes, please.

**Multiple speakers**

Aye.

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

And any abstain or opposed? Thank you very much. So we'll begin our agenda for updates from ONC and CMS and we'll start out with Erica Galvez on interoperability.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Thanks so much and thanks for having me today everybody. A quick update that I'd like to provide on the roadmap activities that we have underway related interoperability, a little bit of context based on the vision paper that we put out a few months ago. And as Paul noted, a request generally for input toward the end. So to get started on the next slide, I usually find it useful as we enter a conversation about inoperability to briefly revisit what it is we're talking about.

ONC has formally adopted the IEEE definition of interoperability, which has two principle components, one around the exchange of information and the other around the use of the information that has been exchanged. In simple terms, we're really talking about the right person having the right information at the right time to accomplish really important things like coordinated health management. Next slide.

So in the 10-year interoperability vision paper that we put out this spring, we talked about several, not only aspirational goals but principles for achieving those goals and some important points that I think will ground our conversation about a roadmap. I think you have all heard Dr. DeSalvo wax poetically about this vision, so I won't...I certainly won't read through all of it. But I think it is important to remember it's a vision in which the sharing and use of information support and formed an evidence-based decision making to not only improve healthcare quality, but use of information to pinpoint and reduce waste that should help us lower costs and the improvement of our overall population health. We can begin to connect the dots in this vision beyond the care delivery system to support health, because we know so many of the social determinants of health reside actually outside of the care delivery system. I think we also make an important point that Meaningful Use has established a critical foundation for the vision, but in order to achieve the goals that we describe in the paper, we will have to move beyond Meaningful Use not only from a technical perspective, but also from a policy perspective. And that will be an important point of conversation, I think, as we go through our roadmap discussion.

We also identify that the path will have to be incremental over time. It is not going to happen overnight. I know the hope of many is that interoperability will happen rapidly and we hope that is the case also, but there is quite a bit of work that has to go into this, again from both the policy and technology perspectives. And we recognize that will take time and there's a tension I think that we will have to balance between making rapid progress and being realistic about timeframes.

We also talked generally about establishing a best minimum possible interoperability, making sure that no one is left on the wrong side of the digital divide. We think that establishing that kind of floor across the board actually creates room for innovation and opportunities for interesting and unanticipated things to happen. So that's another important component of this. And last, but certainly not least, the vision is an individual centered or a patient centered vision where individuals are not only the users of health information, but are actually contributors of information in a virtuous cycle. Next slide.

There are three large timeframes that we discussed in the concept paper, a three, six and 10 year set of milestones that really focus on starting with that ubiquitous ability to send, receive, find and use a basic set of health information. And then expanding from that over time, both as sources of information that are interoperable and the users of that information. Thinking in the six-year timeframe about increasing things like automated decision support, our ability to look at quality in new and important ways, medical device data being incorporated into our interoperability vision, patient generated health data. Which I think is likely to come into the picture before six years, but certainly by six years. Our vision would be that that would be a ubiquitous ability across the country.

And then moving in the 10-year time frame toward what has been described as the learning health system, really the virtuous cycle of information...excuse me, clinical information moving from the care delivery system into our research communities. Where we can ask important questions of the data, develop answers, feed that back into the care delivery system so that there is this cycle of evidence and accurate and timely information that supports again, decision-making and the system as a whole.

The second important construct that we describe in the concept paper is a construct around building blocks. There are five building blocks that we describe in paper that we believe represent the large areas where work has to be done in order to accomplish the 10-year vision. Those building blocks range from core technical standards and functions to certification of those products and services, privacy and security protection, the support of business, clinical, cultural and regulatory environment. This is the category where we talk quite a bit about policy levers. And then finally rules of engagement and governance. The roadmap will reflect these two constructs. On the next slide I can give out some details about that.

Let's see, yeah. So in the concept paper we did commit to leading the development of a shared national interoperability roadmap. It will be a companion document to the vision paper and really focus on chartering a course toward the vision. That means not so much a focus on what, that's what the concept paper describes, but a focus on how we get there collectively. This will include actions that we think need to be taken by federal government, but we will include a description of what other stakeholder groups need to do also, those may be states, those may be technology developers, they may be users of technology. We will adhere to the guiding principles that we describe in the concept or vision paper. And as I mentioned, the structure will be based on not only the vision in the paper, but the building blocks as critical elements and the timeline milestones that we describe. Next slide.

So why a National Roadmap? We believe the roadmap will help provide a path forward. It's something that everyone can rally behind and perhaps even more importantly, something that we can collectively update over time. We anticipate this being a living document, something that we will revisit on a regular basis, gather input on and make updates to, given it is supposed to charter a course over the next 10 years. And we recognize there are things that will be unanticipated, unexpected over that period of time. We anticipate addressing elements like what are the critical technologies and policies that are required to achieve the vision? Governance will certainly be part of that. Who needs to do what and by when? And, as I mentioned, how will the roadmap be updated over time and at what frequency? Next slide.

There are nine guiding principles that we describe in the vision paper. We are leaning on these heavily as we begin to draft the substance of the roadmap. And one thing I wanted to point out about these, I think they're a very, very good set of principles, they have been very useful so far. There is, of course, some tension between some of the guiding principles and this is something we will wrestle with as we begin to draft a first version, and actually something that I anticipate we will probably as for input from both the Health IT Policy and Standards Committees as we bring forward a draft later in the fall.

A couple of examples that I wanted to call out for folks. We indicate...one guiding principle should be building on existing health IT infrastructure. Another guiding principle that has been a longstanding principle for ONC is maintaining modularity, particularly in our technology. There's a little bit of tension between these two guiding principles in part because not all of our existing infrastructure is modular and not all of it can be updated in a module manner. And so there are some trade-offs and I think some real tension between those guiding principles that we will have to consider.

Another example may be focusing on simplifying, to the extent possible, really not introducing any more complexity into our interoperability plans than already inherently exist. Some tension between that and considering the current environment and support for multiple levels of advancement. In that guiding principle we talk about the reality that not every healthcare provider over the next three or even six years will have an EHR, and needing to make sure that those providers are part of this conversation, part of this vision. There's some tension between that...the complexity that's introduced in that type of environment and recognizing the need to address that with this guiding principle around simplifying. There are a number of other tensions that exist amongst the guiding principles. Again, I wanted to call this out for this group early, just so that this is on your radar, it's something that you're thinking about and something that you're perhaps prepared for when we bring forward a draft in the fall. Next slide.

So quick overview of the roadmap process and high-level timeline. We are at the top of this list currently, initial roadmap development. There are a number of inputs that are going into the initial development of the roadmap. We will be launching an online community forum that I'll talk about in greater depth in a moment. We have a group, Audacious Inquiry, pulling together some reports for us based on input from a number of subject matter experts across the five building blocks. A couple of different federal workgroups that are providing input through both the Federal Health Architecture and the Federal Health IT Advisory Council. We have a state engagement underway, focused on state government, in particular because we know a lot of the health reform activities that depend on interoperability and several important components of the care delivery system are either overseen or reside at the state level. So gathering input from those folks. And then a couple of FACA Workgroups underway that we anticipate informing, a couple actually of the building blocks.

This is serving almost like a funnel here at the beginning of the process, a lot of different points of input will...are coming into us currently and will continue to come in. We're working with that input, developing an initial draft. We will bring forward a draft in the October timeframe, as Karen mentioned, to both the HIT Policy and Standards Committee and ask for a review. And the handful of recommendations on some specific questions that we'll tee up at that point.

A couple of things that we already anticipate asking about, for example are, are the best ways to incorporate recommendations that come out of the JASON Task Force and recommendations that come out of the recently launched governance sub-workgroup. I think probably everyone is familiar with that sub-workgroup, if you're not, as I mentioned, it was recently launched. It's a subgroup under the Interoperability and Health Information Exchange Workgroup established to identify the substance, scope and process for the development of rules of the road needed for information to flow efficiently across networks. That group we anticipate really informing building block five of the building block structure that I talked about a moment ago.

Recommendations from those two groups are probably not coming forward until the October timeframe. And so we won't have the luxury of incorporating those in the first draft of the roadmap. We want to make sure we capture those, though, and so that's something we will ask for input on in the October timeframe. The other thing that we're teeing up through the federally funded Research and Development Center with MITRE is some work to address both building blocks four and five. Building block four focused on business environment, regulatory levers. And again building block five focused on rules of the road and governance. We will have to do some work to incorporate that feedback in the October to December timeframe.

Once we get feedback from our Federal Advisory Committees and have an opportunity to look at the work that we're hoping MITRE will do, we will make additional updates to the roadmap. We anticipate posting that roadmap then in early 2015, hopefully January, for public comment. Once public comment, we'll do a 30-day public comment period, synthesize that input, make updates to the roadmap again and plan to publish a version 1.0 in the spring, hopefully in the March timeframe.

And last note is really on the last slide, a request for input. One of the important input mechanisms we are teeing up is an online community forum. We will be launching that today. Keep an eye out for the Health IT Buzz Blog that will contain a link and talk about the forum, but this is really intended to be a general solicitation for input. An opportunity for anyone who wants to provide feedback on what they think should be in the roadmap, the critical issues the roadmap should address, this is the venue in which that feedback can be provided.

We've teed up several specific questions focused on priorities for interoperability, use cases. We think those will help identify and validate requirements from a technology and policy perspective, and also ask a few questions about the critical actions that folks think need to be taken across the building blocks. As I said, that is launching today. Our general request would be for anyone interested in providing input, to check out the website, submit your feedback, we take it very seriously. We will incorporate it to the extent that we can in the draft roadmap that we put forward in October. And with that, I think I've covered my updates. Any questions or reactions, thoughts?

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

Thank you, Erica. Questions, thoughts from the committee? Really appreciate that update, it was very clear...

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

Paul, there are...

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

...and I especially liked...

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

...a couple of people with...sorry.

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

Will do. Really appreciate especially that last slide that shows the timeline, was very helpful. And just to be clear, that first branch point is the presentation of the draft roadmap at the October 15 joint meeting, correct?

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

That's correct.

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

Okay, great. So questions from Paul Egerman, then Marc Probst? Paul?

**Paul Egerman – Businessman/Software Entrepreneur**

Yes. Thank you Erica, very good presentation. And the topic...interoperability...something that's really, really hard to do. I mean, I hope people understand...

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

Paul, it's very hard to hear you.

**Paul Egerman – Businessman/Software Entrepreneur**

Can you hear me now?

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

Much better.

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

Much better.

**Paul Egerman – Businessman/Software Entrepreneur**

Okay. So I'll start over and say Erica, great presentation, thank you very much. And what you're trying to do here, what interoperability is all about is a very, very hard issue, especially if you define it broadly. And I had a question about your very first slide where you did the definition. And you...in your first slide you referred to the IEEE definition of interoperability, which really talks about two systems or two components communicating with each other. But then you go to a next bullet where you talk about individuals and families and providers having access to information. And that seems to me that's even broader than the IEEE definition, I mean, an individual accessing their own data, that's not a component or a system. And so my question is, is this really what we want to do with a definition of interoperability?

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Yeah, it's a, I think a really important question that you're raising. The concept of accessing health information and doing something with it, we have been thinking about as an extension of...or the practical aspect of the use component of the IEEE definition. So not thinking about use just in terms of computability of information, but use in very practical terms, information that is actionable that can be put to a specific purpose. So that's where, at least in my mind, the connection is and that's how we've been thinking about the real world implications of interoperability.

**Paul Egerman – Businessman/Software Entrepreneur**

And...this is Paul again, and that's fine, it's just my observation is, I mean certainly individuals accessing their data, that's critically important. But when you layer that on to interoperability, I think it's making a job that's hard even harder. And that's also my comment about being concerned about the physicians or the providers who do not have computer systems or not have EHR systems. If we just get the systems themselves to talk to each other that would be such a huge accomplishment. And so, that's just my observation is that perhaps you're making this harder than we need to make it, and it's already pretty hard.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Point well taken. Thank you for that.

**Paul Egerman – Businessman/Software Entrepreneur**

Thank you.

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

Marc Probst?

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Yes and Erica, thank you. And Paul, thanks for this opportunity. So my question or comment might be pretty similar to Paul's in that when I looked at the guiding principles, I mean it seems like we're trying to do too much. There's a technical issue out there of interoperability as...it just seems to me that things like empowering individuals or maintaining modularity or focus on value, those are how we would use interoperability, if we had it. But that if we could focus first on getting interoperability, I don't know that we have to burden this plan or this roadmap with empowering individuals. If it connects, then the systems themselves ought to be able to do those things. So that was one comment, I don't know if it's exactly similar to Paul, I won't...but anyway.

And the second one was more just global. I understand the vision and rallying around the vision, but in the end, who's going to oversee achievement of this? Where's the teeth in this roadmap? Is that defined or is that something to be defined?

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

I think that's something to be defined and it's something that we will be thinking critically about under building block four, in particular, of the building block construct that I just briefly talked about. It's...this is going to be, for all intents and purposes, a voluntary document. There are other policy levers and other reinforcement mechanisms that we will have to think about and that we will have to collaborate on, not only with other federal agencies but our state colleagues and even private sector colleagues to a certain extent. To think about where are the teeth and how do we reinforce the path that we charter. It's a good question, it's not an easy one to answer.

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Yeah, so this is Marc again. And just a comment on that, this is been done before, it's been done lots of times before, in fact, this is being done in parallel by multiple organizations. If we don't put teeth in this thing, this could be a really good vision to rally around and we'll be right where we are 10 years from now. So, that was my comment. Thank you.

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

This is Paul Tang. I think these are good comments and I wonder if in preparation for the October update...presentation of the draft, maybe Erica you could include addressing some of these comments. I think it's fair from people who have been around the block before.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Absolutely, hap...

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

Thanks, Erica. And just to remind folks on the committee to raise your hand if you want to speak and that's how we're maintaining the queue. And next on the list is Neal Patterson, please.

**Neal Patterson, MBA – Chairman of the Board and Chief Executive Officer – Cerner Corporation**

Thanks, Paul. Erica, nice presentation. I think the subject is incredibly important. I don't think we...this is a cannot fail, it's is too important. Two, I have really two questions, so just like to hear your comments on. One is, and this will probably sound like a broken record but, it seems to me that we can't have true interoperability without having identification of who's record we're sending between point A and point B. And I don't see anything in there that basically addresses that fundamental capability. And secondly, this country has prior strategies have invested a lot in local and regional HIEs and I'd just love to hear your comment as to how you see their future role.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Great questions. So to the first one, I don't have anything in this slide deck that talks specifically about patient matching, patient identification/patient matching. That is something that we talk about in the vision paper and is absolutely, you're right, fundamental to achieving not only interoperability from a technical perspective, but again from a practical, real world, can I use the information and do something that helps advance decision making or my other goals. It is critical and that is part of the conversation we're having. That is something that you will see I think heavily addressed in the draft roadmap that will be put forward in October.

In terms of the role of a regional HIEs or HIOs, we describe particularly in the three-year timeframe of the concept paper leveraging the existing infrastructure to advance interoperability and grow from there. I absolutely think HIEs and HIOs are part of that, they're existing assets, and it is existing technical infrastructure that to the extent we can use an...we should. And so that is...exactly how, I don't have an answer to, but that's one of the critical questions that I think we will try to think through, at least in terms of potentials or possibilities through the...process.

**Neal Patterson, MBA – Chairman of the Board and Chief Executive Officer – Cerner Corporation**

If I might, I'd just comment on that. I grew up in a very rural area of this country, and I'm old enough, it was quite a while ago. There was a lady in the local area that was a switchboard operator so to call from one side of the highway to the other you had to go through her house. I think trying to preserve the HIEs, if that's a fundamental assumption, and if that's what infrastructure you're referring to, I think we're...I'm not...I think I would disagree with that. I'll just leave it there.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Thank you for that and let me clarify. We are not going into this with an assumption that an HIE or HIO model is the only path forward. What I'm suggesting is that we're going into the process with an assumption that there are valuable technical and policy assets that exist and we should think critically about how to leverage those. So, more to come on that. Thank you for those comments, though, that's helpful.

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

Thank you. And Charles Kennedy is up with a comment.

**Charles Kennedy, MD, MBA – Chief Executive Officer – Accountable Care Solutions – Aetna**

First of all, very nice presentation, let me add on my congratulations as well. A couple of comments, first, when we talk about interoperability and as I look at the definition on one of your first slides, I think it's very important that we address both the syntactic as well as the semantics. And ensuring that when a...the notion of a system receiving data, that it's not just a static piece of data in a container, but rather that the meaning is preserved from source system to the receiving system.

And the reason I say that is that when I look at interoperability, the definition kind of leaves me a little unsatisfied just from one perspective, which is interoperability to what end? In other words, I think it's very important that we, as we talk about interoperability, we keep a focus on what are the specific problems we're trying to solve? And speaking from the health plan industry perspective, the number one problem we would need support in solving is chronic disease management. And so I know there were earlier comments talking about, it may be easier or simpler to think of interoperability and exclude the patient or family from it. I'd just like to offer a counter opinion that from the, I think, the health plan industry's perspective. The individual and the family's access to this information, and not just in a static way, but in a way that interoperates with the wide variety of systems where their data may be stored, may be pretty critical for solving the number one problems in terms of affordability and disease prevention. So, just like to offer that comment as a support for the inclusion of families and patients.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Thank you for that. That's very helpful. Can I just add maybe one point that I didn't mention earlier partially because it is so fundamental to how I think about interoperability I forget to make it explicit, but it is, perhaps, worth making explicit in follow up to the last set of comments. And that is, interoperability really is a means to an end and that is absolutely how we are thinking about the roadmap and it think that is what we tried to communicate in the vision paper. So it is...we are not pursuing interoperability just for sake of interoperability, but it really is to achieve some of these larger goals that we absolutely have to get around to improved population health, lowered healthcare costs, better quality, etcetera.

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

Thank you. And Paul Egerman had another comment.

**Paul Egerman – Businessman/Software Entrepreneur**

Yes, thank you Paul. And Erica, I was just going to say that I agree with the comments from Neal Patterson about the HIEs. When I saw the slide that said maintain the existing HIT infrastructure, I'd liked that part a lot, but I thought it meant something totally different. I thought it meant that whenever possible as you go forward, you use technology that exists and is proven as opposed to creating new technology or new standards. You would simply standardize in situations where perhaps there's like five...two or three or four or five or six different ways of doing things, that you would choose one of those, which is a good thing for the government to be doing to help move things forward. But I agree with what Neal Patterson said and perhaps it's a coincidence, but I also grew up in a rural area.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

That's helpful, thank you.

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

Thank you. David Kotz?

**David F. Kotz, PhD – Associate Dean of the Faculty for the Sciences – Dartmouth College**

Yeah, this is David Kotz. I found the...your presentation really interesting and very helpful. I notice that the roadmap is expected to span about 10 years, which is a very long time and I'm sure that there will be a lot of policy and technology questions that come up in designing the roadmap and eventually the technology. And I guess what I'm wondering is whether it might be possible to identify, as early as possible, the questions that require some underlying research in order to be answered. So in some cases, it's a matter of picking among existing technologies or standards or wrestling with the policy issue. But in other cases, it might be necessary to do some research to develop the technology or to identify the policy alternatives. And speaking, I guess, as a member of the research community, I would love to see those research questions identified as clearly and as early as possible so that the research community can actually help this process move forward.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

That's a great point. I think we have some of those questions already pulled together, and those are certainly things that we can share...some of the other questions that I think you're alluding to are questions that will either present themselves through the course of the development process. And we will have to build in some allowance for addressing those questions in the actual roadmap. And then I think there are actually other questions that we are not anticipating at this point and probably won't be known until some point in the future. And that's another critical reason for this to be a living document that we update on a regular basis. Your point is very well taken, thank you.

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

Thank you. Troy Seagondollar?

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Thank you Paul, appreciate it. Great presentation, I really like the direction you're going. I wanted to take a step back and look at Marc's comment. I'm curious, I think we're at a tipping point here between market forces and defining regulatory requirements for interoperability. And I'm just curious, the...and maybe this is something we can talk about in the October meeting a little bit more in depth. But what types of discussions around interoperability in regards to regulatory requirements were discussed? Or is it more of a push towards talking about the benefit of interoperability, which is what I see a lot within your blocks? Versus pushing that?

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

So there's a real balance to be struck, right...

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Right.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

...between requirements that may present in the form of policy or regulation or contracts or any other number of levers versus the benefits of doing something being so obvious and compelling that those types of requirements are not needed. I think there's a balance between both that we have to strike and those are the conversations that we have been having for some time and are really in earnest pursuing as part of the roadmap development process, particularly again, for that building block number four. I think it's something that we will put forward some material to really drive a conversation in October and look for feedback from all of you on, are we striking the right balance? Are there other things that we should be thinking about? Are we leaning too far in one direction or the other?

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Thank you, I appreciate that.

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

Thanks. Are there any other questions or comments from the group? I want to thank Erica so much; that was a wonderful presentation. It was very clear. It's an active initiative that, as Karen pointed out at the start, is involving a lot of the federal agencies and this series of iterations where they incorporate both the FACA comments and the public comments is very, very engaging.

So we look forward to...I want to put another pitch up...appeal for everyone to attend the joint October 15 meeting where interoperability will be front and center. The results of the iteration so far will be presented, we'll hear from the JASON Task Force and the Governance sub-group and then the Interoperability Workgroup will be charged with incorporating that into feedback on the draft roadmap. This is a very collaborative process, by design and I think you certainly have the engagement of this committee. And thank you so much Erika. Any other final comments? We're ahead of schedule. Okay, well thanks so much Erica, and we look forward to talking to you in October if not sooner.

**Erica Galvez, MA – Interoperability Portfolio Manager – Office of the National Coordinator for Health Information Technology**

Fabulous. Thank you all so much.

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

Thanks. Okay, is Steve on the line?

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

I am.

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

Okay, great. Thanks Steve. I your first debut in your new role, would you please bring us up-to-date on Standards and Technology initiatives, including the open test procedure pilot?

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

Sure, so that's going to be my brief update today. Thank you for having me and I'm sure I will do many additional updates for the committee as time goes on. I don't have any slides, so you'll have to resist the urge to multitask while I'm talking. But I will try to keep you entertained and enthralled in the updates that I have.

So I'm going to talk to you a little bit today about the Open Test Method Development Pilot Program that we kicked off in the middle of July. Our regulatory, just to give you a little bit of context...historical context on the ONC Certification Program. Our regulatory framework for the program has always had what I would say an open door policy when it comes to testing materials, so that includes test procedures and test data, as well as the test tools. Provided that certain basic process characteristics are met, any stakeholder or group of stakeholders could submit test procedures and tools to an actual coordinator for approval for use as part of the program.

To date we had the temporary certification program, which many of you may recall which got initiated very quickly in 2010. ONC worked with our colleagues at NIST to develop the initial round of test procedures for the...what we called the 2011 edition certification criteria now. And we did not receive any outside stakeholder submissions at the time. We went through a round of public comment on those test procedures that we worked with our colleagues at NIST to develop, but they were largely driven by the federal agencies that have been involved and committed to the programs operation. In our infrastructure and our testing approach development has followed that model with the 2014 edition test procedures, which came out a year or so ago. Again, did not receive any additional outside submissions.

But, nonetheless, as we've looked at the feedback that we received from this committee as well as the Standards Committee and many others, looking at new areas where we can expand the reach of the feedback that we get and the input that we get from stakeholders out in the field. And our approach thus far has not been without its critiques and I think as everyone both on the provider side as well as the EHR technology developer side have experienced going through the certification program now twice likely for many. That there have been critiques relative to the testing procedures and what they focus on not necessarily reflecting what stakeholders believe are the necessary tests, so the right clinical aspects to test, in terms of EHR functionality or that we don't have the appropriate test data or scenarios baked in.

So as we've been looking at the HIT Certification Program overall, finding a way to expand stakeholder engagement in testing, resource development seemed like one area that we could immediately improve. So we kicked off, in the middle of July, this pilot program that we again are calling the Open Test Method Development Pilot Program. Instead of ONC being the initiator and developer of the test procedures, the steps, the data, etcetera and then making them available for public comment. We're actually looking for more of a bottom up approach where the industry at large can throw their collective wisdom at the testing process and the procedure development.

The pilot program is open to all stakeholders willing to contribute their expertise. And ultimately, this could be the method that we use going forward for the Certification Program overall, to make sure that we get broader stakeholder input. And this hopefully will allow us to test in an iterative way, the ability to get an expanded set of views from in the field experience relative to EHR technology performance and testing. Since we kicked it off in the middle of July, we now are at the third stage of our five kind of steps of our process.

The first step was obviously kicking off the pilot program, which also included the community's ability to select two certification criteria that they were going to put through this iterative process. The two certification criteria thankfully given the timing of this meeting, have now been selected by the community and they are going to be ePrescribing and clinical decision support. So, the groups of folks that are interested in participating, which again is open for everyone to participate in, will be focusing for the next couple of months on creating the best test procedure they can for ePrescribing and clinical decision support .

At this point we're at our third phase, which is an evaluation for the next couple of weeks on the actual template and structure of the test procedures and whether or not stakeholders believe there's a better way to structure the test procedures that are simpler, clearer, more efficient, more effective, easier to understand, less ambiguous, etcetera, etcetera.

After that period of time, which is scheduled to end August 15, that's when the real work is going to begin for the community to dig into the testing requirements. And it's really a little bit of choose your own adventure as we had a kickoff call yesterday for anyone that was able to join that's interested in working at this stage of the pilot program. There's another one tomorrow for anyone, it's going to be the same information that was covered on Tuesday. But this is the choose your own adventure part, if the group decides to make the testing complex, then that will be the result. If they decide to find a way to make it simpler or aimed at a different dimension or angle, then that's going to be their opportunity as well.

ONC and its contract subject matter experts are here to help the community navigate its way through this process and providing the support and logistics and making sure that it's consistent with the regulatory requirements and that those are met. But other than that, we hope to have this process complete by the end of October. And we'll go through a review and evaluation of the process at large, as well as how it can be scaled, given that we have more than three certification criteria, recognizing that there will be time necessary to go through this process if this is what we ultimately decide to do for the future.

So that's my update in a nutshell, very much appreciate the opportunity to come and brief you on that today. And I think I will continue the trend of making this an efficient meeting.

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

Good, thanks Steve. I have to say, ONC has been very responsive. We all know that there has been vigorous feedback on the Certification Program and ONC is showing that it's being very responsive to that and trying to incorporate more of the public and the stakeholder's views on this as you pointed out. And I didn't realize that the existing Certification Program has had an open door policy of which...through which no one has entered.

But really ONC is making available this open, let's see Open Test Method Pilot so that people can really participate in, well what does a test script, what does the template look like. And as Steve pointed out, it's sort of choose your own adventure, but be careful what you wish for. So, I hope the community will participate and help design a better, more efficient and more effective and fruitful for all of us process. So let me open it up to feedback from the committee. They may all be wowed by your presentation, Steve.

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

Or they are multitasking from my first point. Very good and I'm sure there, as Karen alluded to, there will be other updates that I'll be able to provide in addition to my new role. And one of the reasons why I'm presenting on the Open Test Method Development Pilot is because as part of our restructuring over at ONC, the Certification Program now reports to me under my leadership as the Director of the Office of Standards and Technology.

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

That's great. So just to recap, you've chosen two, or maybe the community has chosen a couple of criteria to start with, electronic prescribing and clinical decision support, really important criteria to help you work out, how do you even structure these...the test procedures? And then you'll have to scale it to the rest of the criteria.

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

Correct...

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

...got it. Final call for any comments or questions.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Paul, its Deven.

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

Go ahead, Deven.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Just and not...I haven't read the OIG report that came out regarding certification and testing bodies. I would imagine that Steve, that you guys are still digesting it, too, but do you see this test program as helping to ameliorate some of the concerns that were raised in that report or are we really talking apples and oranges?

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

I think there is a little bit of different fruit comparison.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Okay.

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

I think, we are certainly reviewing the OIGs report and the concerns that it expressed. To the degree that stakeholders, as you have familiarity Deven, with the privacy and security criteria that we have...

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Yup.

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

...if there are areas of the test procedure if we choose to kind of follow this open process or some hybrid of it to try and get more expanded stakeholder engagement. That's certainly an area where maybe previously information security experts in the healthcare field haven't been aware of the availability of the public comment process, when we've initiated the test procedures. But that would be an opportunity for them to provide their wisdom and if it's a matter of tweaking the test procedure or making it clearer about what specific requirements would be permitted versus not permitted, those would be certain areas of feedback that they could then provide.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Okay. Thanks.

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

Thank you. Any other comments or questions? Okay Steve, you said you're going to publish what at the end of October?

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

So that's when we hope the community...we've kind of given like roughly 120 days to do this pilot project in our minds logistically. So we're looking to the end of October to be the culmination of this kind of rapid-cycle, iterative process to have two new test procedures for ePrescribing and clinical decision support that the community has developed.

At that point then I'll do the kind of pounding the pavement work with one of our...or more, of our accredited testing labs through the NIST NVLAP Program, and I can say that acronym if folks want, as well as looking at one of our ONC authorized certification bodies to perhaps test this out. We had a lot of great enthusiasm on the call yesterday for one of the kickoff...kickoff call number one. I think there were 40 or 50 people on it and I expect that the call tomorrow will have a similar amount of interest and enthusiasm. So very much please for those of you listening that participated yesterday, excited about the interest in everyone providing their wisdom and feedback to the process.

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

Will you be working with providers along with the testing facilities to see how it might...how the new methods might work out?

**Steven Posnack, MHS, MS, CISSP – Director, Office of Standards and Technology – Office of the National Coordinator for Health Information Technology**

Yes. As much as we can get, and that's part of this process as well. I know providers that see patients every day might not have the availability to chime in on this process. But, we're trying to use open tools for collaboration on the web, and that's how the site is developed, so as people have time asynchronously, they can go in and look at feedback from the community and leave their feedback or comments relative to what's going on in the process. And it's...as I said...as I mentioned earlier, anyone can participate at any time and scrub in as they so need or desire.

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

Thank you. All right, well thank you very much and we'll look forward to future results and really looking forward to what comes out of this process. Thank you, Steve. And finally we'll have our data review, both from CMS and ONC. And I think we'll start out with Beth Meyers. Beth, are you on the line or on mute? We're so early so...

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

It doesn't look like we have Beth yet, Paul. So, maybe we should have Vaishali present first and hopefully after Vaishali presents, we'll have Beth.

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

Sure.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Okay, great. Please pull up my slides.

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

Yes, we're turning to them right now.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Okay, great. Okay, good morning. Unlike Erica and Steve, I'm going to be making up for the fact that they were both efficient by throwing a whole bunch of slides here at you all. So I apologize ahead of time for that. But, I'm going to be providing a data update on the National Health Information Exchange and Interoperability Landscape. And specifically I'm going to be presenting information on health information exchange capability and activity amongst office-based physicians and hospitals, individuals, state HIE program grantees as well as discussing ONCs future measurement plans around interoperability. Next slide, please.

So some of the key takeaways, so in...most of this data is primarily from 2013, so baseline prior to Stage 2 of Meaningful Use shows that there's quite a bit of variation in exchange activity and capability. I'll be presenting information on physician exchange activity with outside providers and the fact that it was limited in 2013. But hospital exchange activity, in contrast, has grown significantly since 2008 and is substantially higher than physician exchange activity with outside providers. However, exchange of data during transitions is limited for both hospitals and physicians, as evidenced by survey data as well as some of the early Stage 2 Meaningful Use data, which you've all seen in previous data updates.

And this is had a tangible impact on individuals. A significant number of individuals report experiencing gaps in information sharing; however, among those who do obtain access to their online health information, we found that a substantial portion do view, download and share their data. And state HIE Program grantees have increased capabilities for query-based and directed exchange as well as increased the ability to support exchange through the provision of key services. Although the distribution of exchange activity across grantees is uneven. So overall the data show, I'll be presenting on how the data shows that the exchange capability and activity there's growth, but there's also substantial room for improvement and that interoperability measurement will be a focus going forward. Next slide, please.

So the data sources are primarily comprised of data collected in 2013 based on survey data collected across physicians, hospitals, as well as individuals and self-reported data by state HIE program grantees, in addition to some Meaningful Use data, which I'll be touching on. Next slide, please. So first I'll be discussing overall trends and patterns regarding exchange amongst hospitals and physicians. Next slide.

So in 2013, so prior to Stage 2 Meaningful Use, about 4 in 10 physicians exchanged...reported that they exchanged patient health information electronically with other providers. Far fewer exchanged data outside of their organization, as you can see in the purple bars at the bottom. About 14% exchanged data with either unaffiliated hospitals or with other ambulatory care providers outside their practice. Next slide, please.

And the majority of physicians who electronically exchanged data with other providers, about 8 in 10 physicians reported quality and efficiency benefits from exchanging data. However, a significant proportion also reported that cost and complexity of exchange were barriers. Specifically, that exchanging data electronically with other providers increased their practices vendor costs or that required the use of multiple systems or portals. Next slide, please.

So in contrast to physicians, hospital exchange activity with outside providers grew significantly, and a large proportion of hospitals, about 6 in 10 in 2013, reported exchanging data with outside providers. And that has grown by over 50% since 2008. Most of the exchange occurs...outside exchange occurs with ambulatory care providers although 4 in 10 hospitals do report that they exchange with unaffiliated hospitals. Next slide, please.

So in 2013, prior to Stage 2, half of hospitals reported the capability to query and about 4 in 10 reported the ability to send secure messages. And this again, just to clarify, speaks to their capabilities to do query and send secure messages, not actual their activity levels. Next slide, please.

So I'll be now talking about health information exchange activity across physicians and hospitals varies by the type of data exchanged and also during transitions. Next slide. So physician exchange activity in 2013, as you can see here, didn't really vary too much by the type of data being exchanged. About one third of physicians exchanged lab results, imaging reports, problem lists, medication lists and med allergy lists electronically.

With regards to transitions, in 2012, half of physicians reported they received discharge data routinely, but only a quarter received that data electronically. And I think this suggests that the exchange of data during transitions is limited, regardless of whether it's occurring through paper means or electronic means. Next slide, please.

And I think you've seen this slide before which shows the Stage 2 Meaningful Use performance amongst eligible providers. But I just wanted to highlight that the survey data corroborates a pattern of sort of lower levels of performance on the summary of care measures that we see here with the high exclusion rates and the lower performance levels. I'd also like to point out that the view download transmit measures here, compared to many...the performance on many of the other measures, is also a bit lower, and I'll be discussing that point a bit more later in the presentation. Next slide, please.

So on the hospital side, in contrast to physicians, there is greater variability in the level of exchange that's occurring by the various types of data. So you can see here that care summary exchange is less compared...is less compared to lab exchange and radiology reports. But it also has grown significantly since 2008. And hospital's capability to exchange care summaries in a structured format is higher than their current levels of activity, about 70% of the hospitals report that they have the capability to send summaries in a structured format. About half report that they have the capability to send care summaries to outside organizations using a different EHR but as of 2013, about 42% reported that they actually exchanged clinical care summaries with outside providers. Next slide, please.

Again the survey data corroborate what we see in the performance levels to date related to Stage 2. You can see here the lower levels of performance on the summary of care measure and again, I also just wanted to point out that the view download transmit performance is a bit lower than some of the other measures...performance in some of the other items that we're seeing here. And I'll be talking about that a little bit more later in the presentation. Next slide, please.

And another area that we are beginning to monitor that I wanted to share with you all is electronic ED notifications. We're witnessing a growth in hospitals providing electronic ED notification to primary care physicians although currently it's still primarily sent to affiliated physicians. This is an area that we'll be continuing to monitor. Next slide, please.

So now I'll be talking about health information exchange activity as it relates to individuals. Next slide. We've seen on both the hospital side and the physician side there's definitely room for improvement in exchange activity. And that has definitely had an impact...impact on the individuals. When surveying Individuals nationwide, we found that approximately one in three individuals reported that they had experienced at least one of the following gaps in information exchange that are listed on the right side of the slide.

So for example, 18% reported that they had to provide their medical history again because the provider hadn't received records from another provider. Another 18% reported that they had to bring the medical test results themselves to a doctor. And about 10% had to wait longer than reasonable for the results of the tests because they hadn't received it. And these patterns are consistent with results that we saw in 2012 as well, so they haven't really moved significantly in one direction or another. So, next slide please.

So how does viewing, downloading and transmitting capabilities potentially affect consumer's role in addressing some of the information exchange gaps? So in the same survey, 28% of individuals reported that they had been given access to their online medical record by either a healthcare provider or insurer and there was quite a bit of activity amongst those that were offered accessed. Almost half, about 46%, reported that they had at least viewed their data once. About 40% had downloaded their data or had shared their data from their online record with someone else, either a family member or a healthcare provider, not necessarily electronically, I should point out. Far fewer, about 11% sent...reported that they had sent their data from their online medical record to an App or a PHR. Next slide, please.

So I'll be talking now about the state HIE program grantees and exchange capabilities related to that. Next slide. So as shown on this map in the areas that are bright orange, about 28 states and Washington, DC, reported that they had directed and query-based exchange broadly available meaning that regional and state level entities that facilitate exchange across affiliated organizations exist within their geographic region and can be subscribed to for either directed and/or query-based exchange. Next slide, please.

So in addition to enabling exchange broadly across the geographic regions, we also took a look at the types of services that enable exchange. And we found that the operational HIE core infrastructure services, so that includes things such as provider directory services, provider authentication, being able to provide an operational master patient index, these all grew across the 50 states and Washington DC between 2012 and 2013, across the grantees. And this is all based on self-reported data. I should also point out that exchange activity is measured by the volume of directed exchange and query-based exchange also grew during this same period; however the distribution of the activity was uneven across the states. Next slide, please.

So I'll finally be talking about interoperability and future measurement. Next slide, please. So as you have listened to my talk, most of our current measurement activity really has focused on health information exchange to date. And that is going to change going forward, we're trying to pivot our measurement activities to align more closely with ONC's new strategic vision that Erica described earlier and be able to measure sending, receiving, finding and using essential health information across the care continuum, including individuals and we'll be trying to build those measures into our surveys. But in addition, trying to identify additional data sources to compliment the survey data that I presented today so that we could report on transaction level data, the adoption of standards, availability of services that enable exchange, which will provide a much more rich and complex portrait than I presented today on exchange and interoperability going forward. So, next slide.

And just to reiterate some of the key takeaways that I presented. So based primarily on 2013 data, the baseline prior to Stage 2 of Meaningful Use shows variation in exchange activity and capability. As I discussed, physician exchange activity with outside providers was quite limited in 2013 with about 14% reporting that they exchanges either with an ambulatory care provider or an unaffiliated hospital.

In contrast, hospital exchange activity is substantially higher and has grown significantly since 2008 with about 6 in 10 hospitals reporting that they exchange data with outside providers. However, exchange of data during transitions is limited for both hospitals and physicians and that's demonstrated by both the survey data that I presented and is seen in the early Stage 2 performance data that you all have seen previously as well. And this all has a concrete and tangible impact on individuals. A significant number of individuals report experiencing gaps in information; however, amongst those individuals who do obtain access to their online information, a substantial portion do view, download and share their data.

And with regards to the state HIE grantees, a large proportion reported that they have increased capability for query-based and directed exchange, about 28 out of...28 grantees reported this. And a large proportion reported an increased ability to support exchange through the provision of key services. However, exchange activity across the grantees is unevenly distributed.

So overall the data show that growth in exchange capability and activity, there is growth there, but there's also quite a bit in terms of room for improvement. And that interoperability measurements going forwards will be a really key priority of making sure we align our measurement activities to our strategic vision, so we can measure and monitor progress going forward.

So, I'll stop there. There are some additional slides with other data regarding behavioral health and long-term care, but I will stop here and answer questions. Thank you.

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

Thank you very much, Vaishali. That was very helpful, a lot of data to absorb, but a lot of good data, so really appreciate that. I might suggest if there's a way to connect the dots between functionality, as you did sort of verbally, but maybe some graphic way to connect the dots between the functionality that people have and the end result in terms of satisfying information needs, that might help, as I say, connect the dots. But really a lot of good information and good for us to track.

I might open up with a question that I had on your, let's see, the patient's access to information. You said only 28% of people were offered and then...offered the access and then half viewed their information. I'm wondering why it is as low as 28% since I think most EHR vendors provide a patient

portal as part of their product, so wouldn't it be closer to 100% that are being offered it?

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

So this is a population-based survey, it's not a clinic-based survey so it's not surveying patients say for example, after they've gone to a doctor's visit.

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

Got it.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

This is across the population, so not everybody will have gone to see...in fact, maybe a good chunk of the population hasn't gone to see their doctor within the past year, depending on their health. So that's why you might be seeing a difference between what you were describing versus just asking a broad...people across the board nationally as to whether they were given access to their online information by a healthcare provider...

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

Got it, thank you very much.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

...or a health insurer.

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

Thank you for explaining that. So I have a number of folks with their hands up. Marc Probst is first, please.

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Okay, thank you, just two quick questions. And I agree, this is really a helpful and clear presentation, so thank you. The first one, is there any way to determine or discern the impact of like an integrated system where all the hospitals and the providers are on the same system and they're exchanging data versus true interoperability, where we're interoperating between discrete systems? I'm not sure if the percentages show that or if they're all kind of mixed together. That's the first question. And the second question had to do with slide 17, the percentages were...I mean they weren't low, but they were relatively low in the gaps of the experience they were having, the people you polled. And I was wondering, I mean, can I assume the flipside, you know where it said 18% had found gaps that what, 82% or 72...I guess 82% had a positive experience? Or kind of what was the flipside of those statistics on slide 17? That's it.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

I will bring up 17 again, just so I have it...we have it up for everyone to look at. So I'll answer the first question, with regards to comparing exchange rates say within an integrated delivery system versus with outside...outside the organization, I think...I mean, one could potentially break out the data, although I don't...we don't specifically ask whether...on the survey, whether physicians are part of an integrated delivery system.

But we do parse the data out in terms of exchange within an organization versus exchange outside the organization, which I think gets back to the point that you were raising with regards to exchange occurring within a system versus outside of the system. And exchange rates within an organization are substantially higher than exchange rates outside of the organization. And that is shown in the graphics on the physician side. We do have data corresponding data on the hospital side, which I did not present today, that also show that exchange within a hospital system, meaning with providers that are affiliated with the hospital, with other hospitals that are affiliated, is higher than the rates that I showed, which focused on just outside exchange on the hospital side.

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Yes, so Marc...again. So to me there's a win in this in that through Meaningful Use we've been able to get more systems out there that allow for that exchange to occur more easily because people are on the same system. So I think that's a win, but the question I think we need data-wise is, and it more relates to our ability to achieve interoperability. If we're artificially, and I'm not saying we are, but if we are artificially bolstering the numbers because what we're including is the ability to do exchange on people that are on the same system, that problem's solved and we need to break out what's the real problem? Are people still having, we know they are, but is it statistically, are the people having a big problem with interchange between varying systems...

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

And I think you can see that, to a certain extent, because like the rates of exchanging outside the organization are substantially lower than exchanging within, which could be due to a number of different factors. One might relate to issues related to interoperability in terms of like not being able to send data to a system...to a provider who has a different EHR system, for example. It could relate to the fact that there are patterns of...their referral patterns are just focused on affiliated providers as compared to unaffiliated providers. So they just naturally don't exchange data too much with outside providers anyway. So, there could be a lot of different things going on here, but I agree that we really want to, and that's something that we're trying to do, is measure in a more refined way, what's going on with the outside exchange piece and what are some of issues that might be barriers?

And you had a second question about slide 17, which was related to individuals experiencing gaps in information exchange, and I'm sorry, but if you don't mind repeating the question specifically, I was just looking for the slide and I lost what your specific question was related to that.

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

And maybe Caitlin, could you put slide 17 on the...thank you.

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

So on slide 17 you've got 18% of provided...provide medical history again because provider hasn't gotten records, from another provider and 18% had to bring the results, those types of things. I mean, can I assume from, that the flipside that 82% didn't have to or is that a bad assumption by me.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

So let's see, so this is...yeah, this is reporting, I'm just thinking back to the specific survey question. We asked whether the individual had to provide their medical history again because the provider hadn't...I think these are individuals who had to report...we asked individuals to report whether they experienced these specific problems, when they went to visit their provider.

So yes, I think one could assume the converse. I would have to double check the question, but I think one could assume that this is...that you could assume the converse, meaning that they didn't experience that problem if they didn't report it. So there might be a certain number that are missing or something like that. But that 1 in 3 experienced at least one of these gaps.

**Marc Probst – Vice President & Chief Information Officer – Intermountain Healthcare**

Okay, thanks.

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

Thank you. And Vaishali, can I just clarify...ask a clarifying question about your response to Marc's question about exchange within the organization. I'm assuming since exchange is defined as crossing system boundary that when you say exchange within the organization, it's within the health system, let's say but not necessarily...it's not obviously in the same medical record, is that correct?

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

That's co...yeah, that's correct. I mean it could be the same medical record system, I mean we don't...it's not something that we...that's not something that we specifically have asked about. But...so it could be using the same record system or not, but across a system.

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

But I was assuming that if it's in the same medical record system, it isn't...it doesn't qualify as an "exchange," because basically you're looking up the information. Is that fair assumption?

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

That's a fair...yes, that is a fair assumption. We don't...in the race of inside exchange, I would probably lump a...lump the within system exchange, because it could be within a multi...it could be within like a larger system, it could be also...I don't think we like...we don't parse that out in a very dis...from a measurement perspective, are you just sending a record to the doctor down the hall kind of thing. We emphasize the results that we are emphasizing that we really wanted are the outside exchange, so that is not as relevant. So, I don't know, I mean, I think that's something that we will kind of more acutely define in terms of distinction. But it's not something that we've measured...we haven't asked whether it was down the hallway versus just out...within your system broadly? We measured the within a system in a broad sort of way and we focused, in terms of the monitoring piece, I mean we look at those, but our focus is on the outside exchange.

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

You might look into it a little bit because in a previous committee meeting, someone referred to a selfie and wanted to make sure that the intent of exchanging outside of the system is fulfilled rather than just a selfie down the hall.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Well actually what I'm saying is, the measure that we focused on is the outside exchange piece and that definitely does not include selfies. The inside exchange piece could potentially include some of that.

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

I guess what we're trying to say is we don't want to...we want to make sure they're not getting "credit" as part of Meaningful Use...

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Um hmm.

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

...for doing a selfie. Right, enough about those, I think. Let's go to Deven.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

Thank you very much, Paul. This is really great survey data and I very much appreciate receiving it. I wanted to remind the committee members that just a couple of months ago, the Information Exchange Workgroup presented on results of listening sessions that we did with both providers and vendors with respect to implementation of transitions of care, so sharing of care summaries among disparate providers, as well as implementation of view, download and transmit for patients.

And I think what would be really interesting would be to combine that sort of more deep dive data about the ration...that really tried to explore why some of...why entities were struggling a bit with these two critical components of Meaningful Use Stage 2, at a very early stage in the implementation process with the survey data. And I think you get a much richer picture of some of what might be behind some of these numbers that people are reporting, there are low numbers of sharing with outside organizations. What we revealed in the listening sessions is that this is less about the technology and more about the other components of interoperability like trust bundles and credentialing and HISP-to-HISP interoperability and workflow issues.

So I do think that combining that work which was done with this work potentially gives you a richer picture. Because I think there are some limitations, as we've been discussing, to the survey data. So going back to Marc's question about this slide 17 and that 18% figure, I think it's fair to say that based on what individuals reported, that 18% of them reported a problem that they had to give their medical history again, that the provider hadn't gotten records from the other provider. What does that say about the other 72%...79%, I can't do math in my head. The other part of that pie chart, does it mean that they didn't have any problems, not necessarily. It means that they didn't report any problems.

So, the survey data is helpful, but there are some limitations to it in terms of sort of deeper dives into rationales and what's behind some of those numbers. And I think the listening session data can help augment that. And, Vaishali, if you don't have that, we should make that available to you because it was presented to the Policy Committee in April of this year. Hello?

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

Good, thank you.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

I'm a...by training, in addition to doing the survey research and certainly know the value of mixed message and that the qualitative data sheds light on areas that the survey data just can't get into. And having information at a high-level is important in terms of identifying trends and bigger picture patterns, but that in terms of trying to really dig into the nitty gritty problems, qualitative data is invaluable. And I haven't seen that information, so, but obviously I can go back and take a look at the presentation that was done in April to see how we could leverage the data as part of this.

And I also agree to the broader point, and this is something that we really want to address going forward is that there are limitations to the survey data that's self-reported. It's also, to a certain degree you try to compensate for the fact that with regards to who responds to the surveys, that there are some biases inherent in that as well. So, definitely limitations to survey data and trying to identify other sources of data that complement survey data will be important going forward.

**Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP**

We'll make sure that in addition to the slide deck that presents the high-level findings, which can easily be sent to you, there are also transcripts.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Oh, okay, wonderful. Yeah, would love to take a look.

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

Thank you and I think this sort of illustrates the importance of going from capability to use to needs solved, it would be nice to look at that whole chain. Next in line is Chris Lehmann, please.

**Christoph U. Lehmann, MD, FACMI, FAAP – Professor, Pediatrics & Biomedical Informatics – Vanderbilt University School of Medicine**

Thank you Paul. This was an outstanding presentation and I have only really one short comment or question. Now one thing that is very apparent that we are dealing with process measures here. Are you exchanging? What are you exchanging? But we are not looking at outcome measures, we are not looking if the lab data obtained for an Alzheimer's patient who was in the hospital that was received by the primary physician actually reduced the likelihood that yet another hemoglobin A1C was drawn on this patient. Or that people don't undergo duplication of procedures. Now I know hard data on this will be hard to come, but I think going forward potential surveys should include at least an attempt to solicit the opinions of end users on the outcome that Health Information Exchange has on their practice. Thank you.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Great suggestion. To date I think we've been focused on the process measures because sort of that's where we are, in terms of the field like we really want to make sure that physicians are...are physicians...do they have the capability? Are they doing it? That is been, I think, the focus. And then once they're doing it regularly, then you can really start looking at the impact piece.

But I agree with your point, like among physicians who are exchanging data, for example, we had those perception related questions in there about perceptions related to impact on efficiency and quality. We could also ask about impact on reduction of duplicate testing and other types of outcomes that we...that have demonstrated impacts in kind of smaller regional studies we can include in this broader survey data as well.

**Christoph U. Lehmann, MD, FACMI, FAAP – Professor, Pediatrics & Biomedical Informatics – Vanderbilt University School of Medicine**

Yeah, if I may add to this. One of the things that we want to do is capture the heart of the mind of the general public that HIE is a good thing, and I'm not...good thing as a child that doesn't get stuck twice. So, I think this is really critical in the area of opinion building and long-term societal support for this.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Agreed. Yeah, just having some data on the value of doing this will be important from the physician and the hospital perspective, as well as others. So...

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

Thank you.

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Paul this is Troy Seagondollar, I can't put my hand up because I'm not on line, but I do have a question.

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

Okay, I'll put you in the queue, you're next after Christine Bechtel.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Thanks, Paul. This is really helpful information and I just wanted...I have comments in two specific areas. The first is around the gaps in information exchange that people say they are experiencing. I think Deven's idea is terrific and I'd love to have a follow-up communication either at our next meeting or off-line, via e-mail, whatever that helps shed some light on that particular question. And I think the one thing that I would add would be to ask if we can learn more about who those individuals are that say they are experiencing these gaps? I think Deven and others are right that I'm not sure we can assume the 82% are not experiencing gaps because I think they could be people who did not need to provide other information.

But for those who are experiencing gaps, I think it would be good to know a little bit more demographically about who they are, whether they have a chronic condition, sensitive health condition, how many providers they see. I'm not sure what demographics you guys collected, but my guess is that the people who are experiencing the gaps are the people who need the information sharing and care coordination the most. And where we could potentially see some real cost savings. So that was my first comment.

My second is first a question and that's in the area of the view download transmit. I'm hoping that you could help me, Vaishali, to understand slide 12 and 17, the ones that look at how VDT performance played out for people who attested. And I have the sort of the same disconnect that Paul raised, which is, consumers saying, you guys found that last year 28% have online access to their health information and we found, the National Partnership just finished fielding a national consumer survey and the results will come out a little bit later this year.

But we found actually it was even more than that, we found that about 49% said that they had online access to health information, which was up from 26% in 2011, which is terrific. We also found that, and this is sort of the crux of my need to understand the slides, we also found that of those who have the online access, 84% use it including, of the folks who use it, that 84%, a little more than half of them use it three times a year or more. So I'm sort of surprised with the performance objectives, but I'm wondering if I don't understand them.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Okay. So just to take your second question first, I think probably makes more sense, and correct me if I'm wrong. To compare the results of the recent survey that you conducted, that the National Partnership conducted with probably slide 18, which is about the view download transmit sort of capabilities and that in terms of like the proportion, about 28% that were offered access to their online medical record. And amongst those, the proportion that view their medical record online at least once and then downloaded their data or share their data or sent their data...excuse me, to an App or PHR, probably yeah, so that might be a better like kind of apples to apples comparison.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Yes.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

And there might be differences there because this was data that was collected, as mentioned, in 2013. And it could just depend on how the question was asked? We asked about whether they were offered access, because we wanted to see...we wanted to measure that specifically. And then amongst those that were offered, what proportion actually logged in at least once to view their medical record? And then subsequently, what they did with it? So, I mean we can talk offline and I can share the survey instrument and I can take a look at your survey instrument to see where the differences might be there.

And with regards to how it might vary based on the Stage 2 Meaningful Use data performance that providers report in comparison to what you shared, that's just...as you know, that's a small proportion of both hospitals and providers at this point so you're not really getting a national portrait as to what is occurring. So that may be...that, I think that's part of the disconnect between what you're seeing in that data, which represents a small portion of providers across the country versus looking at it nationally. Because there are more providers that are offering access to online medical records who are not necessarily participating in either Stage 1 or Stage 2, potentially. So...

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Sure.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

And then you had, yes, your question about...the first question that you had about looking at who...more closely as to who the individuals are that are experiencing the gaps? That's something that we're very interested in and actually have done some initial preliminary analyses at the bivariate level to identify some of the demographic characteristics as well as looking at the health and just practice...the patterns of visiting doctors and things like that, whether they have a chronic health condition and stuff. So, we have started to look at that and can talk to you offline about that as well.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

So if I can just jump back in, my specific question is really just to help me understand what the slide says around VDT performance?

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Oh, okay. So let me go back.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

I'm having a hard time reading it.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Okay, sorry. I guess I didn't...I had taken this from the past presentation, so I went over this very quickly

because I assumed that people were pretty familiar with this slide. So in slide 12, this is amongst eligible providers, and this is data as of May, so this is presented in a previous, I believe, Health IT Policy Committee update by Jennifer King. And what I wanted to point out here, and I'll just talk about the view download transmit, is that...so this provides the specific measures that...the performance measures, so providing patients with the ability to view, download or transmit. And you can see that most providers, if you look across the top, 40%, so that dark green number for example, the second number to the left, 40% of those who attest, are performing above 95% on that measure. And 29% report that they are performing 100% are able to provide patients the ability to view, download or transmit. So just in terms of, just trying to understand the graphic, that's how one might...one would interpret it. So, for example, for the proportion of patients that view, download or transmit, which is the second measure that's listed there, within the view download transmit, you can see where the blue arrow is, there's a large proportion of physicians who are reporting at this lower end of the spectrum. So for example, 10% of eligible providers who attest, report that between 15 and 20% of their patients have the ability to view, download and transmit...or have...sorry, have viewed, downloaded or transmitted their data. Does that make sense?

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Yeah, thank you, that was very helpful.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Yeah, it's a complex graphic and I apologize I didn't go into much detail, I just had assumed that people were...folks were familiar with it based on past presentations.

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

Okay, thank you. Troy is up next, please.

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Thank you, Paul, this is Troy. I'm not trying to...data, I mean, I know it's very difficult to compile stuff and make it meaningful in a presentation, especially when you talk about so much...my skepticism that...okay, one question first. When you say consumers, are you speaking of patients that are reporting this data or are you speaking of physician groups or physicians or providers of who are reporting this data? That's my first question and I have something else...

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

I just couldn't quite get, it's a little garbled. Sorry.

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Oh, I'm sorry. You know what, I'll...

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

I think he was asking whether the data was reported by physicians or by patients.

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Yes, that is correct.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Yeah, so it depends...yeah, It depends on...I was...so in this presentation I've reported data across a number of different types of I would say stakeholders across the continuum. I've reported based on a survey data of physicians, survey data of hospitals, survey data of individuals, self-reported data from state HIE grantees, Meaningful Use attestation data. So it depends on what you were, I guess, what's the...I presented data across a number of different...survey data across a number of different types of groups here.

**Troy Seagondollar, RN-BC, MSN, UNAC/UHCP – Regional Technology Nursing Liaison – Informatics Nurse – Kaiser Permanente**

Okay thanks, that helps me a lot. I have nothing else...I'll try next time.

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

Okay next is Paul Egerman, please.

**Paul Egerman – Businessman/Software Entrepreneur**

Yeah, thank you Paul. I just wanted to briefly make a comment about the discussion about the polling numbers that Christine discussed about why her numbers showed 49% and the ONC number shows like 28%. And I may remember this wrong, Christine, but when I read the...from what you had done, it indicated that you first asked a question of consumers as to whether or not they knew that their physician had a EHR system? And a little over half said that they did and then of those who knew they had an EHR system, you asked about access to view, download and transmit. And because there was that sort of first cut on the data, it seems to me that the data that you presented, your National Partnership has come up with is pretty close to what ONC just presented.

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

Yeah, so there...Paul thanks, I was actually trying to clarify that earlier but, so there are actually two differences, you're right. The sample that we looked at you had to be someone who first had a main doctor because we really wanted to focus on people who had experience in the healthcare system. And then the second question was, you had to know what kind of record system that your provider used. So that, I think, certainly can explain some of those differences, in addition to the timing piece. But we also did not ask about do you have a health plan portal, for example, this is really about physician provided online access. And I would just say that I do think that timing can be also another piece of that.

**Paul Egerman – Businessman/Software Entrepreneur**

Yeah, it just seemed like the numbers were pretty close. I mean, again, I might remember it wrong, but it was like 50%...

**Christine Bechtel, MA – Vice President – National Partnership for Women & Families**

They are and in fact, what I think is interesting, because when I saw the survey data I was surprised by it, was the number of people that we found that said they actually did view download. Or actually, I think we just asked about transmit, download or transmit and it's very, very similar to what ONC found, I mean it's within 5 percentage points. So I think that's pretty good.

**Paul Egerman – Businessman/Software Entrepreneur**

Yes, that's right, so in other words, you had like 50% knew that they had an EHR system and then you had another 49% that had access to the view download transmit and so that gives you like 24.5%, that's very close.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Actually, so when you...when we break it down, I'm sorry to interrupt, but when we break it down by the...because we asked about whether they were offered access by a health insurer or health provider, about 24% say they were offered by a health provider and so the other 4% is the health insurer, so that aligns very closely with what you just said. I bet if we were to probably break it down by whether the individual reported that the provider had an EHR, the numbers would probably pretty closely match with what you're talking about.

**Paul Egerman – Businessman/Software Entrepreneur**

And, yeah, anyway, my point is, I think the numbers are close, they may not be...they're within what they...as they say, the margin of error.

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

Right. Okay, well that's very confirmatory. All right, I think we...our questions here and I really do appreciate, Vaishali, your presentation. I think as you can tell, this committee has a big appetite for data. We are trying to understand how the program is going and I think the cuts that you're presenting about the data is very helpful to us. So thank you so much and we look forward to future updates.

**Vaishali Patel, MPH, PhD – Senior Advisor, Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology**

Yes, thanks for your feedback.

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

Next, is Beth on the line now, Beth Myers from CMS?

**Elisabeth Myers, MBA – Office of E-Health Standards and Services – Centers for Medicare & Medicaid Services**

Hello, yes I am.

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

Wonderful, you're up to present an update on the CMS data.

**Elisabeth Myers, MBA – Office of E-Health Standards and Services – Centers for Medicare & Medicaid Services**

Sure. This will not take very long, so just a quick update on the current payment data and then the most recent attestation numbers for 2014 participation. If we can go to the next slide, please. So, just to give you an update of how close we are to 100...exciting news. Our registered eligible hospitals, so this is eligible hospitals who have entered their information to register for the program in the registration and attestation system for the EHR Incentive Program, we are hovering just under 95% as of the end of June. Next slide, please. And eligible hospitals who have been paid in the program through the end of June is at just under 92%. Next slide, please.

Registered eligible professionals, and I do want to point out this is registration and registration is required to participate, but participation is the next step. So many providers will actually register their intent to participate, they may...it may take them a little longer to get to actually meeting Meaningful Use. But is a really good indicator of the depth of knowledge about the program among provider population. So this is good news for us that we're really expanding the knowledge about the program and you can sort of see this percentage go up, gives us an idea of how broadly the understanding of the program is reaching our audiences. So we are at just under 90% of eligible professionals who have registered for the program in the registration and attestation system. Next slide, please.

Eligible professionals who have been paid, so this is providers who have been paid through Medicare or Medicaid for meeting meaningful use or AIU, which is adopt, implement upgrade in the Medicaid program. And you can see that it is just about 75% of providers who have been paid for the program. Next slide, please.

And this is just a quick update on the 2014 attestation through August 1. We have 5365 eligible professionals who have attested so far for the 2014 EHR reporting period, 955 are new participants. So this means first time meaningful users and we have 1898 who have attested to Stage 2 so far for 2014. We have 322 eligible hospitals who have attested for the 2014 reporting period. And 131 are new participants and 78 attested to Stage 2 of Meaningful Use. Next slide, please.

So I wanted to put this out there. I know that most of you are all aware of what our website is, but I'm going to make a shameless plug for it. And our website on the [cms.gov/ehrincentiveprograms](http://cms.gov/ehrincentiveprograms). We also have one that is called e-Health. I just want to reiterate that both of these websites, [cms.gov/ehrincentiveprograms](http://cms.gov/ehrincentiveprograms) and [cms.gov/eHealth](http://cms.gov/eHealth) have a wealth of resources for providers, for both eligible professionals and eligible hospitals, to participate in the program. We have resources on e-Health including the e-Health University that provide educational resources at a beginner, intermediate and advanced user level. So it's everything from how to even get registered for the program to how to meet transitions of care measures for Stage 2 of Meaningful Use.

So I just wanted to take a minute here, since our data is a relatively short today, to remind everyone of that website and the resources that are available there. There is a listserv that you can sign up for on that website that will allow you to receive e-mails from CMS where we provide not only information about various deadlines for the program, but providers can also get information about resources, new tip sheets that have become available. We've started a "spotlight on" series that deals with individual policy issues related to Meaningful Use. For example, clinical decision support and how to understand how to effectively implement clinical decision support for the purposes of Meaningful Use. So I just wanted to point that out and make sure everyone is aware that that is there.

To the committee I recommend and would also request that if you have a few minutes to take a look at it, we would appreciate your feedback, given that you have such a wealth of knowledge on the Program and the subject matter. We're always looking for positive reinforcement and/or constructive criticism to help us make the resources on our website better. Next slide, please.

So that's it, just a quick update on payment numbers and attestation numbers and a plug for our website as well as a request to help us continue to improve our tools and resources by giving us your feedback on them. And if there are questions, we can take them right now.

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

Thanks, Beth. And are there questions from the committee on the information that she presented? All right, seeing none, then we will...thank you very much, Beth and we look forward to your update next month.

**Elisabeth Myers, MBA – Office of E-Health Standards and Services – Centers for Medicare & Medicaid Services**

Great, thank you very much.

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

Okay, we are ready to go for public comment, unless anybody has any pressing issues for this month? Okay, we can go to public comment, please.

**Public Comments**

**Caitlin Collins – Junior Project Manager – Altarum Institute**

If you are listening via your computer speakers, you may dial 1-877-705-6006 and press \*1 to be placed in the comment queue. If you are already on the phone and would like to make a public comment, please press \*1 at this time. We do have a comment.

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

A reminder when we...sorry Caitlin. When we go to public comment, just a reminder to those in the public that public comment is limited to 3 minutes. And the first commenter is Diane Jones.

**Diane Jones, JD – Senior Associate Director for Policy - American Hospital Association**

I appreciate the opportunity to provide comment. According to the CMS slides that were shared, there are 4993 total hospitals that are eligible for the program and therefore are eligible and subject to possible penalties beginning on October 1, 2014. And as I reflect back on the CMS presentation at the July Health IT Policy Committee meeting, at that time, CMS did report that as of July 1, there were 128 eligible hospitals that have attested in the reporting year for hospitals, fiscal year 2014. At that time 70 were new participants and 10 had attested to Stage 2, indicating that the remaining 48 hospitals had attested to Stage 1.

And as of today's presentation, there are now 322 eligible hospitals that have attested in the hospital reporting year of fiscal year 2014, 131 are new participants, 78 attested to Stage 2 and so the remaining 113 hospitals have attested to Stage 1. So progress from July to August is duly noted. However, if we consider the denominator of, as stated by CMS of 4993, then these data say that 6% of all hospitals have attested thus far in 2014. And about 1.5% have attested to Stage 2. With 10 months into the reporting year and frankly eight weeks until the end of Q4 and the end of the reporting year for hospitals, the data are concerning. And really do not support a notion that the program in its current form is on track or at least on track to an endpoint that we could all define as successful.

A study that was actually developed by ONC and academic researchers and the American Hospital Association, based on data from the AHAs annual survey, IT supplement, fielded in late 2013 and early 2014, indicates that while we see continued progress relative to EHR adoption by hospitals, the progress has not been evenly distributed. And more importantly for this committee, the study does show that fewer than 6% of hospitals surveyed are able to meet all of the Stage 2 criteria. And meeting the Stage 2 criteria is a regulatory requirement that every hospital in the program must meet.

So to that end, we are certainly urging HHS to finalize quickly their rule relative to flexibility in meeting Meaningful Use requirements in the reporting year 2014. And certainly if earlier presentations indicate performance on some of these functional objectives and measures are lower on some of the requirements, particularly those requiring and that are dependent on data exchange. And we would certainly urge continued study and examination of the performance on these particular requirements and...

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

Thank you, Diane.

**Diane Jones, JD – Senior Associate Director for Policy - American Hospital Association**

...future policy efforts.

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

I'm sorry, your 3 minutes are up.

**Diane Jones, JD – Senior Associate Director for Policy - American Hospital Association**

Thank you.

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

We have a public comment from David Kibbe.

**David Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor, American Academy of Family Physicians**

Okay, thanks...

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

Back to Diane, what's her affiliation?

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

If we still have Diane Jones, can you state your organization? Okay...

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

Anyway, go ahead David.

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

...she's no longer...sorry, David.

**David Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor, American Academy of Family Physicians**

That's fine. Good morning can you hear me?

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

We can hear you.

**David Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor, American Academy of Family Physicians**

Good. I appreciate the opportunity to make a public comment this morning and I will be making a comment as president and CEO of DirectTrust. DirectTrust is a 150 member nonprofit trade alliance supporting interoperability through the use of the Direct protocol for secure messaging. Since the second quarter of 2013, DirectTrust has been reporting interoperability metrics to ONC as a deliverable required by our cooperative agreement with ONC. And I wanted to report these metrics to you very briefly today as I believe they complement nicely the data that has been presented earlier in today's meeting, in particular bring some focus into what's happening right now, in the middle of 2014.

By way of background, DirectTrust was awarded a cooperative agreement with ONC through the Exemplar HIE Governance Program in March 2013 and that cooperative agreement was extended for another year in March of 2014. So as of March 31, 2014, approximately 19 direct service providers, accredited by DirectTrust, including HISPs operated by health information exchanges, electronic health records and stand-alone HISPs reported service to 5600 healthcare organizations. And the provisioning at that time of 190,000 Direct accounts and addresses. Cumulative Direct exchange transactions at that time were reported to be approximately 3.5 million.

The newer data from now 30 direct trust HISPs are reporting for the second quarter of 2014 as of the end of July, and although these results that I'm giving you today are preliminary, I think they're worth noting. These HISPs are now serving over 7500 healthcare organizations with Direct exchange services and have now provisioned over 400,000 Direct accounts and addresses in medical practices, hospitals and other organizations. The Direct transactions reported are several million, and I don't have a very good number yet, but we will have that within a week.

Now most this activity is associated with Stage 2 Meaningful Use onboarding by eligible physicians and other clinicians and by hospitals, so it's very forward-looking. We will report activity specific to this onboarding for July and monthly thereafter, including account of outbound Direct messages from a provider or provider organization for the purposes of transitions of care objectives of Stage 2 Meaningful Use. And I think that will give us a much better sense of the activity at the provider and hospital level associated with transitions of care for the Stage 2 Meaningful Use objectives.

I'd also like to comment very briefly, that we are doing interoperability testing at a very massive scale at this point. It's currently ongoing among approximately 35...

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

Thank you, David. I'm sorry, your time is up.

**David Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor, American Academy of Family Physicians**

Thank you.

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

Thank you. We have another comment from Kate Horle at CORHIO.

**Kate Horle, MPA – Director, State and Federal Initiatives - CORHIO**

Hi, thanks so much. I'll be very brief. I'm just curious for Beth Myers, what you are anticipating the attrition rate will be for eligible providers between Stages 1 and 2?

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

So Kate, this is a public comment period, but we can ask Beth to provide information during the next meeting, or follow up with you directly.

**Kate Horle, MPA – Director, State and Federal Initiatives - CORHIO**

Thank you.

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

And it doesn't look like we have any more public comment.

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

Good, well thank you everyone for participating on this call in August, and there was great participation both in numbers and in your comments. Appreciate the update from ONC, a lot of good data and good activity and we're going to hear a lot more in the future couple of meetings. And again, pointing out about the October 12...October 15<sup>th</sup> joint session between Standards and Policy. Karen, any other words from you?

**Karen DeSalvo, MD, MPH, MSc – National Coordinator – Office of the National Coordinator for Health Information Technology – Department of Health & Human Services**

No, I just want to echo what you said, Paul. It was a great...excuse me, great conversation today and thanks everybody for their participation.

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

Thank you. All right, so we will, as they say, see you in September. So thanks everyone and have a good August.

**Multiple speakers**

Thanks, Paul.

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

Thank you everyone.

Meeting Attendance								
Name	08/06/14	07/08/14	06/10/14	05/08/14	05/07/14	05/06/14	04/09/14	03/11/14
Alicia Staley	X	X				X	X	
Aury Nagy								
Charles Kennedy	X	X				X	X	
Chesley Richards	X					X		
Christine Bechtel	X	X	X			X	X	X
Christoph U. Lehmann	X		X					
David Kotz	X		X			X	X	X
David Lansky	X	X	X			X	X	X
David W Bates		X	X			X		
Deven McGraw	X		X			X	X	X
Devin Mann		X				X		X
Gayle B. Harrell	X	X	X			X		X
Joshua M. Sharfstein	X					X	X	X
Karen Desalvo	X	X	X			X	X	X
Kim Schofield	X	X	X					
Madhulika Agarwal	X					X	X	X

<b>Marc Probst</b>	X	X	X		X	X	X	X
<b>Neal Patterson</b>	X	X	X					
<b>Patrick Conway</b>								
<b>Paul Egerman</b>	X	X	X	X	X	X	X	X
<b>Paul Tang</b>	X	X	X	X	X	X	X	X
<b>Robert Tagalicod</b>						X	X	X
<b>Scott Gottlieb</b>		X	X				X	X
<b>Thomas W. Greig</b>	X	X	X			X	X	
<b>Troy Seagondollar</b>	X	X				X	X	X
<b>Total Attendees</b>	<b>19</b>	<b>16</b>	<b>15</b>	<b>2</b>	<b>3</b>	<b>19</b>	<b>17</b>	<b>18</b>