

**HIT Standards Committee  
HIT Policy Committee  
Implementation and Usability Hearing Follow-up  
In-Person Meeting  
Transcript  
July 24, 2013**

**Presentation**

**Michelle Consolazio – Office of the National Coordinator**

Thank you. Good morning, this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Standards Committee's Implementation Workgroup, Health IT Policy Committee's Meaningful Use Workgroup and Certification and Adoption Workgroup as a follow-up to the Usability and Implementation Hearing yesterday. This is a public call and there will be time for public comments at the end of the call. When speaking, please make sure that you announce yourself for this transcript. And again today, let's just go around the room because we do have three workgroups participating.

**Carl Dvorak – Chief Operating Officer – Epic Systems**

Carl Dvorak with Epic Systems.

**Joan Ash, PhD, MLS, MS, MBA – Professor and Vice Chair, Department of Medical Informatics and Clinical Epidemiology – Oregon Health & Science University School of Medicine**

Joan Ash with Oregon Health and Science University and the Adoption and Certification Workgroup.

**Greg Pace – Deputy CIO – Social Security Administration**

Good morning, Greg Pace, Meaningful Use Workgroup.

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

Good morning, Mike Zaroukian, Sparrow Health System and the Meaningful Use Workgroup.

**Joseph M. Heyman, MD – Whittier IPA**

Joe Heyman, Adoption and Certification and Implementation Workgroups.

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

Charlene Underwood, Siemens, Meaningful Use Workgroup.

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

George Hripcsak, Meaningful Use.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

Cris Ross, Implementation Workgroup.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Liz Johnson, Implementation Workgroup and Certification and Adoption.

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

Larry Wolf, Certification and Adoption Workgroup.

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

Mark Probst with the Certification and Adoption Workgroup.

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

Anne Castro, Implementation Workgroup.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Wes Rishel, Implementation Workgroup.

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

John Travis, Implementation Workgroup.

**David Kates – Senior Vice President, Clinical Strategy – NaviNet**

Dave Kates, Implementation Workgroup.

**Joseph Bormel, MD, MPH – Medical Officer, Director of Health Outcomes – Office of the National Coordinator**

Joe Bormel, ONC.

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs and Policy – Office of the National Coordinator**

Judy Murphy, ONC.

**Scott Purnell-Saunders – Office of the National Coordinator**

Scott Purnell-Saunders, ONC.

**MacKenzie Robertson – Office of the National Coordinator**

MacKenzie Robertson, ONC.

**Michelle Consolazio – Office of the National Coordinator**

And do we have any workgroup members on the line?

**Kevin Brady – Group Leader, ITL Interoperability Group – National Institute of Standards and Technology**

Kevin Brady, Implementation Workgroup.

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

Leslie Kelly Hall, Standards Committee, Meaningful Use Workgroup and Consumer Workgroup.

**Martin Rice, MS, BSN – Deputy Director, Office of Health IT & Quality – Health Resources and Services Administration**

Marty Rice, Certification and Adoption Workgroup.

**Michelle Consolazio – Office of the National Coordinator**

Okay, thank you everyone and I'll pass it over to Liz for some opening remarks.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Good morning. Thank you all. Yesterday I think we had a very productive hearing and now we have the challenge in front of us of trying to take many hours of terrific information and consolidating it into some recommendations. And to inform the Meaningful Use Group particularly related to Stage 3, as well as the other workgroups and some things we want to take forward as next steps. So you have in front of you an agenda, we're going to try and stay within these time frames in order to be able to complete our work and have time for public comment around 12:00 today.

So the first thing we want to do is overall impressions, which are general themes. We have an opportunity to do a dive on each one of the individual workgroups when we complete this process. But I would like to hear, and I know Paul Tang has not had the opportunity to join us. We would like to hear from you your general themes. I'm going to ask you to please think – not to give us really the deep dive behind what you came to in terms of consensus, but instead just two or three themes so we can capture those and then move into more detail. And we'll start with David Kates.

**David Kates – Senior Vice President, Clinical Strategy – NaviNet**

So I was here for only the morning portion of the session, so I'll give my impressions from that. What I heard as common themes was increasing needs for standards and support around interoperability. A specific focus, at least in my area of interest around quality reporting, both the measures that are – or those that ought to be focused on and the mechanics for getting those submitted. And then broadly what we could do around improving the usability of these products, in terms of both the performance of the products, but also in terms of safety and cognitive ability to support the workloads within the practices and within the health systems.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Terrific, thank you. John?

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

I think two general themes I noted. One was the whole discussion of usability and somehow tying that to a set of pick your term, recommended practices, workflow, clinical practice guideline, it almost made me think about the normalization or the variation in medical practice across the country, the Duke Survey of – experiences and things like that and what contributes to that. We're almost saying similar thing about – to fairly test usability to be able to say there should be a common context of clinical workflow against which it's judged. That may very well be in the eye of the beholder and may be very hard to realize, but to move beyond where safety enhanced design and UCD testing is for certification now, it seems if you're going to do something, you're going to need to account for that.

The other thing that struck me a bit was how you then would evolve the certification side of things to account for things that might be implementation. So a lot of what we were hearing about usability and clinical workflow and physician satisfaction and adoption all tied kind of tied together in something that to me haven't been very near our certification process at Cerner for years. It's something that isn't really ever been tested and that is the implementation methodology or the approach or what the vendor does to provide guidance on standard implementation practice to their clients to assure the best chance for successful implementation. That would be very interesting new ground to get into, but I wonder if that's not really what we're opening up by talking about usability under the covers it's really either extending certification to how a system's actually implemented or extending it at least to how a vendor recommends implementation practice or guidance.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Great. Thank you. Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

To paraphrase someone I was talking to this morning, what you hear kind of depends on where you sit. But I think two insights, or at least highlighted points I thought were very important were one, that the usability issue for enterprise-level systems depends a lot on how they are implemented rather than how the system is designed. Not that system design isn't important but – and I was a vendor years ago, I call myself a recovering vendor now, and I put in all kinds of flexibility because I didn't know what the users wanted and it was amazing how poorly some users used that flexibility later on. And I think our ability to certify has to be informed by this two-level process for enterprise systems and perhaps less so for some kind of – hosted systems.

The other thing that I – impression I had was that there is – I still have yet to hear any proven science that it's possible to do objective certification of the usability of systems. Everybody says, oh, we're working on it, it's going to be great, but I've heard that before about other products. What I did hear, that was important, was that there are the potential for some kinds of certification-based on the process that the vendor goes through that may be an interim step, so the indefinite time and the period when we can be more objective about evaluating usability.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Anne?

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

The thing that I heard the most was the conflict of the fast pace of the timeline of meaningful use implementation versus usability. Meaning compliance is the focus so therefore, usability is the thing that's not addressed and there's never a time to go back and address it, so it's going to be a while before anybody can get to that. So I heard that from the physicians and I heard that from the hospital side. Of course, the vendors didn't have any trouble with usability, though. I also heard consistently from each group that sharing amongst the vendors should take place, some sort of information sharing, maybe user group kind of thing or capability or something that gets them to have something a little more in common than jarring differences between products.

And then the biggest one, and gosh, I take this as almost a challenge to us directly and that is one standard for interoperability. We've had this argument for four years, and we've been plagued with that issue and plug-and-play interoperability is the only way we're going to actually get that, so that we can achieve the goals that have been set out from the get go, which is care coordination. So if we could do anything about that, I think that would be the most important thing we could do. So those are the things that rose to the top for me and not the other 17 things I have on my list.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Marc?

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

Well, so there are common themes I guess coming through. One, I didn't see a common, or at least a commonly understood definition of UCD and kind of hard if it's not defined to actually do anything about it. Standards were clearly high on the list and it was interesting to see the correlation between the need for standards and usability and actually, through yesterday it became a little more clear to me the importance of having some of these standards in place. I think it's unclear and we need to talk about who's responsible for usability and was that – is it the vendor's responsibility or is it their responsibility to create tools and usability happens at a different level.

That was the third one, let's see, the timeframe for the whole Meaningful Use Program came up a lot. And I think as you align it to usability that folks are having a hard time just installing the base system, let alone taking the time to make it more usable within their institutions, so that was – and as part of that, I was thinking about a – is there a more project-like approach to setting the timeframes? So our timeframes were set in these two-year increments, yet now we've created all these functions, I'm not sure we ever really went backwards and said, okay, how long is it going to take a vendor to create it, how long is it going to take to implement it? There may be a more project-like approach to looking at the rollout of meaningful use. And then the last one that kind of came out with the CIOs was this vision. I think a lot of work has been done on a vision, but maybe it's just not clearly enough communicated, what the endgame is for meaningful use and this program.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Thank you. Larry?

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

Okay, so unfortunately my list keeps growing. So, on the usability front, the notion of mass customization that I put out as a question still strikes me today as an important one that tries to balance what's in product and what people implement. Because there was clearly a theme of what's being certified? And Marc touched on that, but it was – I think it's a big question as well. We have products that go through a certification process; we have implementation cycles that are essential today for how we implement these products. But take the product away from what was certified to what's now being installed and trained and used and can create all kinds of havoc from the fine set up to pass certifications and now what we've implemented.

I was intrigued with sort of the plea around cross product learning that we got, that there are lots of things that maybe could be shared across vendors. And maybe there's a way to set up a neutral environment in which that can happen so that both vendors and customers, implementation crews and providers could all learn and really move us forward in many references to everything from aviation to cars to even cell phones. The things that we use in our daily lives that have a very visible artifact has converged on some certain things that seem to work really well. And we pick up a new phone or a new operating system or a new something and we sort of can find our way around at least for the basics. Timeframe. So timeframe came up in several ways, Marc referenced and a couple of other people referenced some of those around the time it takes for stuff to settle down so you can get it right and the time for rapid cycle improvement and how do you build that in?

I think we have a conflict between kind of the rigidness or regulations and sort of the agile methodologies that we see very successful in the world of incremental changes based on trying things and seeing what works. And how to do that within the regulatory framework that has very fixed gates that you need to get through. And I'm reminded again from some of the comments about things that we put in to the meaningful use requirements as floors that people are interpreting as ceilings or interpreting as best practice, and that's not the intention at all. But that certainly seems to be an unintended consequence of some of the things we've put in place.

And finally, on the notion of some alternative approaches to certification. I think we should take seriously the challenge of a learning health system and what would a learning health system look like? And how would the technology would be used? And how would we know that an organization was a learning health system? Presumably, they would have good outcomes, but they would have outcomes that also got better. Presumably, they would be making good use of technology, but maybe in specific ways they would understand maybe something about statistical process control, to pick one technical piece. But I also don't want to rollout a zillion statisticians that are disconnected from the reality of clinical practice. So I think that that's a great thing for us to take on seriously, as we look forward and maybe think about the stages of that, that maybe it isn't a major shift in Stage 3, but maybe the beginnings of an alternate in Stage 3.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Great, thank you. I'll bring up three additional kinds of things that I heard. The first one was, I think that it was clear, and we know this, and we're not responsible and I think we ought to somehow reach into recommendations and that's the harmonization between what's required for the regulatory bodies for quality reporting. It comes up over and over, it's a real issue for us and I look to the group for innovative ways to solve that problem. The second thing is I think there is beginning to be a clear focus on outcomes. When we talk about unintended consequences, what you heard all the panels going toward was, move to the outcome because that's where we get the real benefit of this. So if we can move there, and I thought Paul's suggestion around deeming and really giving them credit, that was the first time I saw really faces light up and people start to go, they get it, they understand what we are trying to say. SO I thought that was extremely positive.

And then I think we need to look at innovation to improve the exchange and connectiveness to, should there be such a word, to our patients. We recognized I think yesterday as many of us already did, that there is no easy way through a portal or a PHR or any of those things to get a consolidated place to store patient information for clinical care. So as we think about our future, is there anything we can do in Meaningful Use 3 that helps drive that as a priority so that patients can truly be engaged in their care and can inform their care. So those are the things – the three things I heard. Paul?

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

Thanks Liz. The three things I heard, one is workload's king, in the usability panel I think it's in the bin 2 where they characterized it, bin 1 being more the software and bin 2 is the whole workflow. Although NIST seemed to feel that there is a usability test, since so much is on the implementation for this set of – kinds of product, I'm not sure that that's a full set, it certainly doesn't cover bin 2 as well. The interesting thing that I heard was the comparison with other industries and other industries vendors get to see each other's products and you can see raising the ante for everyone, it's really the floating all the boats. You can see that in smartphones for example. I don't think we're getting the advantage of that at all. One of the panelists was talking about he has one vendor for inpatient and one for outpatient and there are good things here and there are good things here, but it doesn't connect. I think that's probably a missed opportunity. So if there were ways that we – we've heard about these contracts, if there are ways that we have much easier sharing of what's going on in the industry, so that the whole industry can be better. Because I think, we could benefit from the whole industry getting better and I think the vendors would agree to that, or agree that we need the whole industry to get better.

But, the second point is the quality measures and everybody talked about that. That probably is one of the biggest challenges providers have and vendors. And going back to the certification and – the quality measures and usability, we may need to relook at this whole certification process. Because both the timing and the way that vendors have to get certified and then providers have to use the certified functions, maybe hardwiring some of these deficiencies. So inadvertently, vendors are really hardwiring workflows for us, and that's again the root of the problem, and then in order to comply with certification testing and then whether it's the best or not, must deliver that to the end-user in that way – and it seems like we're all really tethered to however the test scripts have been written. That may be something we need to loosen up on and be more flexible and give people the function, which was the intent of the Meaningful Use Program, what's the function we need to accomplish, not exactly what's the workload that gets wired in to a piece of – a feature in a software product. That may be an opportunity for us.

And finally on HIE, it's clear that we need – in addition to Direct; we need the query-based exchange. We need more than transmitting inform – transmitting data, we need sharing – incorporation of information in all of the places it goes to, so that we can act on it again. I was a little disturbed that multiple people raised the point that vendors don't easily or willingly connect to each other. So in the absence of an HIE that does some of that, people who have a vendor – they're one vendor and trying to talk to a trading partner with a different – at least multiple people reported that that was an issue. So that might be something where we also need to find ways to encourage. And then multiple people brought up the National ID, the patient IF, that seems to be a root issue with good exchange, accurate exchange.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Right. Cris?

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

Thanks. I think we're at the point in the table where we're starting to repeat ideas. I'll use that as my excuse anyway. With respect to EP and EH, I guess what I heard was most of the issues and concerns were not related around implementation of core activities or core products, CPOE, med rec, those kinds of things. But instead around the things that were either added in Stage 2 or were peripheral to core certified EHR technology, like HIE, patient portals, quality reporting, so on and so forth. There was some energy around deeming as well. There was some commentary around concern about pace and even some suggestions that delay in the schedule would make sense. I honestly didn't hear what delay would achieve specifically relative to the loss of activation, energy and momentum that we would currently have. So I think it would be useful to understand what specifically would people do with an extra number of months to move forward.

With respect to usability, I thought there were two really clear messages. One was, we're behind other

industries, and the second was, and we heard this both from the research panel and experts panel that other industries usually certify by the presence of a process, not by some objective measure of usability, so it would be interesting to understand how that is structured in the industries as described by the panelists. It also seemed as though that sort of certification by presence of a process might in some way be farewell to the idea around deeming, focus on the outcome plus the presence of a process perhaps gives a usable result. Others said some great things about usability I agree with as well. With respect to HIE, I think we heard that there was energy around both Direct and exchange and that there were distinct use cases for both. But I would reiterate what Paul said, I think we heard a lot about a commitment to openness, even playing field, ability to move data in a fairly liquid fashion and so on.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Great. George?

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

So at the highest level, I came into the year thinking that meaningful use was uniquely tasked to do patient engagement and HIE. And now I'm kind of feeling like patient engagement, we're not there yet but we're on a track and I understand and I think it's going well. And HIE is the key linchpin that is going to make this whole thing work or not work. So that needs to be the biggest focus of our efforts. On usability, pretty much what Paul said, I had the same thin – it's a workflow and some kind of transparency. I understand they can't just expect the vendors to give up their competitive edge on the one hand, but we have to do something to make it so that you don't start from scratch in every implementation.

And then the interesting comment that stuck with me was from Nancy at the last panel, about stating a clearer direction, and not just that the direction is – see on the one hand we've been trying to say the direction is high-quality, efficient healthcare period. And then we let the industry kind of take us there through the right path and we don't want to constrain innovation. And what Nancy was saying is, well I need a little more direction than that. I want to here, are you expecting a national EHR, is that what it's going to look like? Are you expecting this, expecting that? So I don't know what to do there, but it was an interesting comment that she wants – like is the learning healthcare system and that – what is the vision at the next level or level from high-quality healthcare? So, that was interesting to me.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Charlene?

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

Okay, my comments are going to be based on reading the testimony and a little bit of feedback that I was able to discern after the meeting yesterday. One of the key themes certainly that seemed to be pretty consistent from the vendor perspective is again to get to usable systems. One of the things, usable systems that meet meaningful use requirements or that are meaningful to use if you will, is – we need to tell the vendors what, not how. So it needs to be much less prescriptive. And as Paul mentioned, when you get to the prescription of having to meet the test scripts, sometimes they're not in line with the most usable systems. So again, that's just a process issue that's in place now so as we think about moving forward, the more we can say what and not how I think is going to lead us to better usability.

On the point of usability, I would concur with Marc in terms of well what is the definition of usability. And often in my view, it's really about the work that the user has to accomplish and sometimes it is as simple as, and we've done this, to be able to complete the task, how long does it take to complete a task? So again, we really need to be clear in terms of how we want to incent and motivate usability. To that end, one of the comments yesterday was transparency. And I would argue that I think transparency is really important, but there are market forces now. Because of the rollout of electronic health records and the fact that usability is such a hot topic that are creating lots of transparency around usability, KLAS does it, that type of thing. So you may not have to prescribe that as a regulatory action, that may come as an outcome of the focus of the government in terms of saying, this is really important and the market's saying, okay, these are criteria of usable systems. So I would suggest we use the market in that particular pace.

And then the other point was again, just the point about there's just too much too fast, across all the different ranges. And as we listen – as I read the testimony and looked at the focus in terms of the value that interoperability would bring, recognizing in Stage 1 we really didn't have robust standards. They're going to be more robust in Stage 2, if we could focus on fewer things and doing them really well, and you might get more two-fers out of that because you might get more usable systems because you can actually see and integrate patient data a little more effectively than trying to do a lot of different things. And I think we have to look broadly in terms of quality measures, as well as interoperability and says how can we narrow the focus a little bit to get really good things to happen, because I think that will help improve interoperability – usability and meaningful use of systems overall.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

All right. Joe?

**Joseph M. Heyman, MD – Whittier IPA**

So I've been thinking about this process and the last time we did this and I think in addition to simplifying all the things we're talking about simplifying, it would do good to simplify this a little bit. In a way that would be, instead of making 30 recommendations, if we could make two or three really meaningful recommendations that actually might be used and change the direction. It seems to me that would be much more meaningful than sitting here and listening to everything that we heard and then not actually having very much happen because of it, so that would be one thing. If we could actually use the process to change one or two things, that would be a wonderful thing.

The standard interoperability, plug-and-play somebody suggested, if we're going to have these tremendous costs, an HIE doesn't solve the problem because even when you have the HIE, you have to connect to the HIE. And in order to connect to the HIE, you have to spend money and its money on top of what you've already spent and usually it's a lot of money. So if there was some way that we could make certain that everybody sent the same CDA, or something like, so that everybody could use just that document and use it by parsing it, not just taking it as a PDF, that would be one wonderful thing. And if there is going to be a cost attached to it, then maybe the cost should be built into the cost of the medical record in the first place, so people don't view it as something that's a barrier to going into HIE.

I also heard that there ought to be more catering toward specialty MDs. For a lot of MDs, meaningful use is not meaningful at all. As a matter of fact, in Massachusetts we passed this inane law that in order to get a license you have to be able to be meaningful using these electronics and most of us are interpreting that, as you have to attest for meaningful use. The Medical Society has looked at how many physicians would actually be affected by this and 3,600 physicians in Massachusetts would lose their license if we had to actually abide by this law. And we have about 20,000 physicians in Massachusetts, so we're talking about a very sizable portion of the physician population.

We also heard that there are problems with the audit process. We heard that people feel that you're getting punished for doing a good deed instead of being rewarded for doing a good deed and I think somehow we need to do something about that. And then also the timeline again. It sounded to me like a lot of – there was sort of general acceptance that the timeline is too fast and that its making things – its giving us unintended consequences.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tent Healthcare Corporation**

Great, thank you. Amy?

**Amy Zimmerman, MPH – State HIT Coordinator – Rhode Island Department of Health & Human Services**

Yeah, I'll try not to repeat what I heard. I think – a couple of things struck me. One was, and I don't know if this was mentioned before, this – I heard inconsistency and real tension on the usability side between sort of vendors putting in the products what we need because we don't necessarily know what we need when they look at workflow and observe from a distance versus us driving that, us meaning providers. And I was really struck by the variation in opinions that we sort of heard throughout the day on that, I don't quite know what to do with that. But I really got this sense that we'll make it work if you just give it to us and if you've got good usability processes in place, you may pick up things that we don't realize we need until we start needing it versus we want to tell you and customize.

And then that led into, and I think I talked about this a little bit, this sort of real tension between structured, unstructured, consistency and variation. And I think until we really think about how to address those, it's going to be very hard to meet all of the different things we want from quality reporting to patient care. So there seems to really still be some tension and issues and I don't have any recommendations or answers now, I just think we really have to consider that.

I was happy to see audit come up as much as it did, particularly from my perspective since I'm in a state and responsible for the EHR Incentive Program in Medicaid, I am always thinking about what does this mean on those – well the federal agencies, but the state agencies as well. But have to be able to do the audits and how complicated things are and documentation, so that was – I was glad to see that come up and I think we need to give some thought to that. And again, from both sides, not just from what the providers need, but we've got a whole bunch of programs and states out there, on at least the Medicaid side that need to be able to be able to support and implement this and work with providers in that way. You've already mentioned workflow and I think transitions of care, patient portal, HIE, quality reporting were the big themes in terms of the major barriers that I heard come up.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Mike?

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

So I'm going to take maybe a little bit different tact. I was on the AHRQ workgroup that did the usability thing in 2009, so that was a fascinating process. I'm struck by how much of it is repeated in 2013 and therefore a little bit disheartened by the fact that we haven't anchored on a few things. So I'm going to start with maybe Marc's comment, which I think is a really important one and that is, whether we have shared definitions of user-centered design, even usability. Peter Basch and I were talking a little bit yesterday about what he would call the useful ability aspect of usability and whether that's actually different. I think one of the biggest – I'm going to talk about a number of elephants in the room, but one of them is the degree to which fiercely independent physicians will tell you they will – that they know what usability looks like and that lacking a science with expert opinion and local opinion leaders to support it, useful ability will be a swirl and customization will continue to be both the enemy of implementation and optimization and also the birthplace of innovation. So that's really the tension among many tensions that we live with when we live in the world of unclear aspects of usability.

Having said that, I also live in a world where four, five or six of my e-mails or phone calls a day are on somebody telling me something that is a pretty clear usability principle, that if we had them follow the training they were given, they would find more usable, underscoring that point. Or if we adapted the system to be one where you're not chasing all over for the accept button, and then you would find it more usable from that perspective as well. So the surprise and delight me factor of usability, the fact that anything you brought here that you didn't need to bring here must be pretty useful and usable to you or else you wouldn't have brought it. Those kinds of features I think are some of the sort of common sense anchor points I think we can do for docs. But because of their fierce independence without data, the good news is they're very data driven and they are willing to listen to the experience of others if they're sufficiently like them. Then they will, indeed, be more willing to look at, well if 250 other customers did this and 60 of them were orthopedic groups and they found this, then we're going to give it a try as opposed to the free-for-all that exists when someone can't show them the data.

So the other thing I would just say, in terms of some of the other elephants, we talked about the economic elephant in the room and we all know that until we can change some of the perverse incentives, we're going to struggle with some this. Another one is the inertia about exchange. So I don't know how many of you have ever been in an emergency department outside of your own hometown offering to give the emergency department physician immediate access to your records and they say, no thanks, we'll just order your test. So while I'd love to think that improving interoperability and exchange is going to lead to massive changes, we have more usability issues to deal with there in order to make sure that the information follows Clem McDonald's rule of if it's more than one click, it's probably not going to happen and therefore presenting it to them is important.

The other elephants in the room are the Mayo Clinic's theory of unhurried assessment with time – examinations with time to listen to the patient. We lack that in healthcare right now, we don't incent that in healthcare right now and so it's no surprise when progress notes are sort of considered an afterthought and already perfect and we don't need to structure them and so on. So, putting my former residency director hat on in my medical school curriculum committee hat on, we all know that, and we learned in medical school that there aspects of history and physical and assessments and plans that are indeed driving factors for future decisions. We are currently burying them in note bloat, so we have that usability issue. We are also undervaluing them in terms of the – whether and to what degree what parts are options, but there'll always be tension between those two, so I think we have to be honest about that and then determine what aspects are important to structure and what mechanisms can automate that process.

I guess I wanted to make one thing come up from that note, and I've talked about this with some folks, I have an uncertain sense about progress notes in Stage 3. I think moving the progress notes is certainly a little curb to climb and that would be useful, but I think Steve Stack did a nice job yesterday of describing what it is that we docs who are seeing patients on a rapid basis need, which is where the heck is the assessment and plan? Was it informative? Did it have information that actually tied the medications, the orders, the results, the actual impressions to that problem? And if I need the rest, I can reference the rest. So, one of the things that I would like to see us talk about is making assessment and plans have certification in standards components that do those highly usable things that make doctors want to use the assessment and plan. And then also expect them to do that because if they do nothing else right or well, having an assessment and plan that's done well will be important. And I think I'll leave it at that. Thanks – and you're probably grateful.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**  
Greg.

**Greg Pace – Deputy CIO – Social Security Administration**

I too won't repeat everything that's already been said, but I just want to add a few things about standards and usability. What struck me as intriguing was one of the panelists mentioned the possibility of using icons that are the same. Because I'm thinking about usability not only crossing what happens within a given product, but we all are familiar with the Macs and the Windows-type environments and you know what a certain icon means when you look at it. And I'm thinking in terms of both the practitioner as well as the patient as well as the service provider, if they were the same or similar, at least you'd look at it and know, this is what I'm doing. And the reason why I bring that up is it seems to me that in emergency situations where a physician or someone may be in a different locale than what they are accustomed to at their local hospital, maybe on the other side of the country, they can go in and be of help because they're now looking at something that looks like, acts like what I'm accustomed to.

The other thing I thought was the tension – which leads to this other thing, the tension between interoperability and the need for it and vendor dependency. Because as we become dependent upon certain vendor's solutions, that vendor may lock you into a certain approach that may not allow you to be interoperable and I thought the gentleman that mentioned that he had two vendors to support two different things was an example of that. And if we're going try to have meaningful use going forward, we've got to find a way somehow of encouraging vendors to share and also open up the books, so to speak. I know that's going to be difficult because, after all, the bottom line is money.

The other thing I want to talk about is the need for Direct and query exchange. That to us is extremely important because when we're looking for information about a patient, we want to hear everything or at least find out what is available about that patient in a given setting, hospital or whatever. As opposed to I know that you, for example, treated this patient but I didn't know that you also referred to someone else. So on our end of it, query exchange and Direct both play a role. And the last thing I was intrigued about, which I think will take some time to pull off is the public-private partnership. The reason why I bring it up is to sustain what we put in place for this thing to continue on down the road after we've got this up and operating, there has to be some agreement, some recognition that it has to sustain itself. And I think both the people from the public side in terms of policy, etcetera, and the folks from not only providing the care but the vendors building the kind of systems, there needs to be some type of partnership put together that would allow this to continue. The last thing is the need for a national ID.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Yeah. Great. Joan?

**Joan Ash, PhD, MLS, MS, MBA – Professor and Vice Chair, Department of Medical Informatics and Clinical Epidemiology – Oregon Health & Science University School of Medicine**

Well as the next to last person, maybe I can provide some uber themes from what I've heard and from what I heard yesterday. But I think first we should differentiate between what we asked about and what grew spontaneously out of the conversation yesterday. And I think the things we asked about, for example deeming, groundswell of support. Patient engagement, definitely we need to go in that direction. They need help with audits and audits are scary. The recs are good, we didn't actually ask about that, but that came out of the conversation as well. And there's progress in HIE, actually a surprising, to me, amount of progress, so I think we heard different things from the HIE folks.

But as far as the spontaneous themes that came out of this, there really was a plea for simplification and standardization together, so that – that even includes the CCD, some standards for CCD, quality reporting, interoperability, usability, the idea of having just a few standard design elements, like the icons a very positive thing, patient ID and identifiers. That was something that obviously we did not ask about but definitely came through in the conversation. And the other two big ones were the timing and the conversation, the need for a multi-way conversation that's open and transparent, vendor-to-vendor, customer to customer and customer to vendor. So, that's my summary.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

All right, thank you. Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Thank you. I found the testimony interesting to review in detail and again at the risk of trying not to be repetitive here, clearly one of the things that was significant was the difference between the – in the KLAS data, where they talked about having the same vendor but very different usability perceptions. And having been in front of a raging physician who is so upset about the fact that the system is unusable because they took away verbal orders, you understand that there's a lot of mechanics behind that. So I thought that was important to remember. I think – there obviously are some hard truths, so where a community might have two or three different systems, although you can move CCDs among those computer systems, the fact that the patients have different portals that they may need to interact with, obviously represents one of the ongoing difficulties.

One thing that I'm always surprised by is the presumption of excellence in other industries. Some of the folks discussed the airline industry and yet just a week or so ago they crashed an Asiana plane with a pilot who only had 35 hours of training on that plane. And if you Google airline cockpits, you'll see that they're more different than the same. There are some common elements, but there are substantial differences and the number in buttons and placement of buttons is phenomenal. I for the thousandth time have pushed the word English on the ATM, and it still, I bet you money, will ask me again next time if I speak English or Spanish. So I think these other industries, from where we sit, we maybe presume

Excellence, but I'm not so sure that there's a model there that lends itself well to what we're doing here.

I thought the deeming concept was interesting, on one hand it seems like maybe it's just an admission of the failure of the program and we should just take it on faith that if the place is good, they'll be okay. On the positive side, it seems like a rational and thoughtful thing to do, although I can imagine the deeming workgroup and deeming regulations and the deeming measures that would probably naturally ensue from it and how complicated that would be.

I guess in – one theme that I saw explicitly, and you can infer from a couple of other comments was, the role that content plays in usability. A couple of people brought that up explicitly and I do think that with the power and the resources and the funding behind the National Library of Medicine, the NIH, we could maybe as a nation take a more thoughtful approach to where and how a content be authored. Is it the responsibility of each individual health system? Do the computer programmers who build your EHR, are they a natural source for clinical content? Probably not. Third parties, what's the role for content curation and dissemination through these technologies? Clearly the early adopters of health systems were large health organizations that typically had informatics people that had the infrastructure to build out content. When you put an EMR into a 200-bed community hospital that's freestanding, they don't have the resources to build and maintain the clinical content at the same level that a Kaiser or Sutter or Mayo might have.

And then – I think the last thing I'll comment on is the need for agility and it think these committees have really two very powerful tools at their disposal. One is the ability to ask ONC and CMS to ultimately write a set of regulations around the topic. And probably the other equally powerful tool is the ability to ask ONC and CMS to not write regulations around a specific topic and thoughtful use of both of those tools, I think, are important as we go into the next stages. And I'll end with that.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Christine, I know we left you out, and also, there are a couple of people on the phone. Just in terms of the agenda, so that people can take a deep breath, I think a lot of the things that we've talked about as the general themes, we'll limit our discussions about individual panels, I think Joe's right. So when we get to that part it will simply be, if you didn't hear something in the themes that you thought was critical related to one of the panels, that informs this discussion, not just the opportunity to talk but that it got said, but how does it inform where we move forward and next steps, which is what we'll be looking for in that part of it. So, Christine?

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

Thank you, and I'm sorry to be late, I had another meeting, but I appreciate you coming back to me. So I heard a lot of really interesting things. On the usability piece, I think the question I have is whether it's possible to separate out usability for meaningful use and put it on a parallel track much like certification is and what a usability program might look like. It seems to me that there – it felt like there should be some sort of rebalancing of the market, and I understand that vendors are – have a lot to do, but it's very difficult I think, for one hospital or one practice to sort of keep coming back and talking about usability issues and to get their voice really heard in a way that the vendors can accommodate. So it started me thinking on how to we kind of carve out usability and really put some attention on it, but I think it's separate from meaningful use in my head. Also heard a lot of support for the RECs too, which I think is great, and a lot of concern that they're funding is coming to a close, and I think that's something that we need to really pay attention to and perhaps take a position on in our recommendations in meaningful use that are forthcoming.

I heard also some real implementation issues. I was surprised to hear some folks who have been in and around these rooms for a fairly long time to say oh, 50 percent of patients need to be online, I mean, like no no, it's an offer. And I think – we were talking as well with Mike about the after visit summary in Stage 2 and we really intended for people to be able to sort of leave some information out and customize it, but they can't really do that in Stage 2, it turns out. They have the ability to customize it, but you still have to have the same content in. So there are some, I think, implementation issues and it really raised a question in my mind in how we could be helpful in implementation. Because in some ways, while we're not the oversight body for implementation, we are very close to sort of what the public thinks and we've had a lot of deliberations, we know a lot. I think there's a way that we could be more helpful in implementation earlier and I just am not sure what that is, but I'm very interested in exploring that.

I hear a lot of support for patient engagement, of course. I think in terms of the issues that I heard, information exchange certainly – and it kept always coming back to me for reimbursement issues and scalability of the technical solutions. I also heard a lot of concern about patients having too many portals, that's one I've raised before. And it is something I think we need to pay attention to and see if there are ways that we can – we need to help people understand, here's what happens when you have too many portals. We need to get the Auto Blue Button out there so that they can get those auto feeds into one place. I'm worried about, well what if I want to use my primary care doctors portal as my essential PHR, how can I upload into that? So, there are some, I think, issues around that that we need to pay attention to in a big way.

In terms of the timing issue, I have very mixed feelings about it. And I think the number one request I would have – I mean I heard the message yesterday loud and clear, it's the same message we heard in Stage 1, right? It's the same reason we gave the one-year extension to the first year group, or we recommended that anyway. And I think I go back and forth between understanding and being really concerned about the trade-offs that would happen if Stage 3 was delayed and Stage 2 was extended in terms of providers ability to be ready for new models of care that are – I mean, the first results of Pioneers are in, right. So we've got a lot of new models that are going to be hitting the streets I think faster than they realize and I don't think Stage 2 EHRs are ready for them. I don't think they can fully support what providers need to succeed.

So I'm struggling between taking that long view, knowing that it may be difficult for some on that timeline and then thinking, well gee, if we had to give the year group one the extra year, maybe this is really a three-year thing. Maybe it really does take three years, even though I'm having a hard time with that, to upgrade a system and implement those upgrades and go through the training process and give vendors, of course, the time to make that – to support that. I don't know, I'm having a difficult time sort of buying that idea, but you can't kind of ignore the trends at the same time, so, that's something I think it would be very helpful to understand from ONC and CMS, what are the specific trade-offs and impacts of extending Stage 2 and delaying Stage 3. What happens in the program? The penalties are tied to a calendar year right, not a meaningful use cycle. So I think we need to understand at a very detailed level, what happens before we make a recommendation. Anyway, I also want to say to the folks who organized the panels and asked the questions, I felt like the questions were right on point and you all did a great job, so thank you.

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

That's Liz.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Thank you. Leslie, I know you're on the call and I there may be another workgroup, I just don't want to leave one of the workgroup members off that's on the phone. Michelle? I know Leslie's on –

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

This is Leslie, I'll just be brief. I think we do have an opportunity in patient engagement because we're really just beginning this whole process. So I would encourage us to really solidify standards. Really make sure that we have very, very detailed and prescriptive standards work, interoperability with patients for patient-generated health data so that we don't end up with the same condition we've ended up in the provider world, do this very, very quickly, so that we have the opportunity for better patient engagement and care coordination. And back to I think Joe's point of doing something very, very well. We do have an opportunity to harmonize all these separate – in the next year. I think that might help with usability because as we have the patient and their care teams participate in the HIT ecosystem, we come in in a very solid way. So, I think there are some lessons learned from how we worked – (Indiscernible) that we can now integrate with patient's tethered or not tethered EHRs.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Great, thank you. Michelle, is there anyone else?

**Michelle Consolazio – Office of the National Coordinator**

There's Kevin Brady and I believe Marty Rice on the phone, if either one have a comment.

**Kevin Brady – Group Leader, ITL Interoperability Group – National Institute of Standards and Technology**

Kevin Brady, I have no comment.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Okay, hearing no other comment – Paul's going to lead the next section. I think we're all intrigued so this would not be unlike us to go off agenda, right? I'm very intrigued, I think all of us are, by Joe's suggestion that in order to get really meaningful input, while we're talking about meaningful use, meaningful input out of this – I have 44 themes down here and I agree with Joe, that to try and synthesize that in the next couple of hours, if we go through each one of them, we're not going to get there. So maybe we need to move quickly to a synthesization kind of process and really talk about what is critical.

Christine, I thought your comment about timing, it came up over and over, but you're right. There's no question that the timing is tied directly to the penalties and there may be some – even if there are three or four items that we have to get more information. We've got Jodi, we've got Judy, we've got others that may be able to help us if we have specific question, so maybe we can get there today. But I think Paul, if you want to lead to try to and get us to a consolidation.

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

Okay, thanks. I agree Liz. First of all, I think we've stuck to the agenda, we just finished early in the sense of in this comprehensive summary, we've essentially gone through all of the panels and summarized them, which was next on the agenda. So I think Joe's advice was really a good one, as a fellow lumper, getting to some few – critical few that we can pass off to the various workgroups would be very helpful and much more likely to have an impact than 44. I'm going to give an example of something where it sort of cuts across all the themes and that was this whole – the workflow, but I think the impact of certification process and criteria on that is sort of a root cause. So what I mean by that is, I think a combination of the timing and the test scripts, etcetera, have caused developers to hardwire things into their products, inadvertently. They're just following the rules and then we are just following the rules because we have to use exactly that process that was certifi – it just has such a downstream effect. So what are the – it seems like we could find some way of thinking about the what, as Charlene was saying, more than the how and that would serve the vendors, it serves the users, most of all, much better and eventually it serves the patient. So that might be one of those crosscutting things that we could think about, how could we re-explore, reexamine the certification process, getting certified so that a provider can qualify for meaningful use in a way that doesn't unduly or inadvertently tie their hands and really foul up workflow. John?

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

Thanks Paul. One thing I probably should have mentioned and I had a little conversation with Alisa Ray after the hearing yesterday and was going back and reading in the Permanent Certification Program Rule. Something that's going to make that very important is that the ONC ACBs are all being asked to file their surveillance plans with ONC very soon, which is partly going to be predicated on doing some manner of use validation in the field for all the respective vendors that are certified products. So one thing that concerns me or that is definitely important to the development of those surveillance programs is, I think it's always been said that certification or the way things are tested is not a prescription for use. However, I'm very interested to see on how that carries over into surveillance, what colors the expectations of the ONC ACBs as they do their surveillance, to assure a product is behaving as it was intended to behave as a certified product, especially in light of customization. I've never seen a real good interpretation of what guidance operates in the realm of what's a permissible customization. I know CMS and ONC have said, yes, there is room for adaptation that's reasonable of course there is; however, is there a test to identify where you've gone beyond customization and begun to do modification of the nature of the certified product? I think that's very important to surveillance and every vendor's going to be interested to know the answer to that one.

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

Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Yeah, just one or two points here about overriding themes. We support ONC and CMS in struggling with a constant trade-off between improving the industry through these efforts and making sure that the taxpayers got the value for their money, in terms of incentive funding. Or – if you argue that, when we get to disincentives, the arguments are different, but you get to the same point anyway. If we're going to talk about certifying the what rather than the how, we need to think about how objectively that can be done in order to meet the second obligation. Then I just wanted to come back to the overriding issue of transparency. And I might rephrase that as anti-transparency tactics on the part of vendors as opposed to transparency, that our concern is not – the concern we heard from the panel was not that there wasn't plenty of desire to share information about usability issues, it was about contractual restrictions that kept them from doing that. And that may, in fact, be something that is subject to certification by a vendor that is the lack of those contractual restrictions. Thanks

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

Other – Cris.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

So Paul, I don't know where you want to go with this conversation, I think I wanted to add something that builds on what John talked about. And so if we're going down the theme that you teed up of what are the one or two sort of things we can do –

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

Right.

**Cris Ross, MBA – Chief Information Officer – Mayo Clinic**

I guess I would try to make a pitch for, to the degree to which we can, to tie that into momentum we are ready have in place. So comments about the realism that John raised around certification makes me think about work the Implementation Workgroup is doing around scenario-based testing rather than purely testing by script. And it feels like we harvested only a part of the value of that approach, I think we took the right step with ONCs guidance on how to get part way down that road for Stage 2. The Standards Committee's going to be reviewing that at next month's meeting and Scott Purnell-Saunders may want to comment on this, or Liz may want to as well. But I think that kind of concept is something that could be applicable to a couple of the themes that have been raised, and if we could try to do things built on past momentum, I think we'll have better future success.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

So thank you Cris, this is Liz. I do agree with that and I think the challenge that we need to work with in working with the ONC is, one of the things we ran into as we created the clinical scenarios, which we're doing what we talked about, which was looking at workflow first and looking at testing second, which is I think what we're saying. We still ran into the requirement that every test had to be completed. So working with the ONC, we need to talk about that because we are balancing, and several of you work with us on that group. We were balancing really promoting the workflow versus making sure every test button got hit, and for those who weren't involved in that detail, that may or may not be clear to you, but that was a requirement that was put in front of us. So we're going to work with ONC, if that is rendered as one of the focuses here, to see if there is anything about that testing that can lead more to getting to the what than the how. Because we spent a lot of time – we got a lot of time on what, what was the workflow, but then we got hung in the how. This test has to be run, this test has be run and we can certainly, not today, but in the future, we actually tied all those things together in visual representations so people could understand the concept. Agree Cris?

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

Is there a way to descry – for the rest of us to describe the scenario-based testing certification a little bit more?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

So what we did was took a care environment, for example the emergency room. And we literally did a case-type use case study that would say, when the patient comes in what happens, what is their interaction with the care providers, what kind of documentation would be required. And then we moved them through that encounter to say what would happen next, how would this interplay with meaningful use. And I think one of our challenges was, when we heard it yesterday, as we developed that, we took them for when they showed up at the door until they went through the discharge process and there was a transition of care document.

What we ran into was – what got expressed yesterday was often going back to the meaningful use elements and making sure they got captured in lieu of making sure all of the care documentation took place. So what we – I think what we want to do as we look at them – we certainly have to capture that and we balanced it because if we put it in a testing scenario, and you certify by the scenario, and we add additional requirements and then you get tested in the certified body for something that's not required by meaningful use, and Joe's one of our strong speakers on those calls saying please don't clear a scenario because if they test for it, I'm going to have to create a form in my office that I have to fill out to capture the document. So that was the balance that we had. But we literally would take an environment of care and start from the moment you entered that environment, inpatient, ED, ambulatory and what were the things that happened with you where you interacted with information collection to the point you were discharged.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

So may I just – that I agree with everything that Liz said. The practical purpose for scenario-based testing in its initial incarnation was number one, to ease the process for vendor certification, particularly around the issue of having to reload data for every test script, the ability to move through it in a clean fashion would make the testing process easier. The second was to validate are we testing elements that are even at the script level that are clinically correct. There were instances in Stage 1 where we were testing and they just weren't correct. The third was then to get to all of the issues that Liz talks about, around blending those together. But It feels like that sort of release 1.0 of scenario-based testing and if we're serious about exploring things like deeming, for example, how version 2.0 of scenario testing might be congenial with that kind of outcome. And I don't know, again I'm looking at ONC staff and I see Scott has his card up. I don't want to get too far down the rails here, but I think there's some really interesting work there.

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

Yeah, this is Scott Purnell-Saunders from ONC. Certainly our initial goal was to figure out a way to link these unit-based tests, which were required for Stage 1. Certainly in Stage 2, scenario -based testing is optional in that we're going to offer this, or once it's built, to allow vendors to go through this process that mimics a clinically plausible workflow. Where that, looks like a – as Liz said, an emergency room or looks like a care delivery or what have you in these various scenarios that we're building currently. What it does not do yet – it cannot enforce that we add additional requirements to the current version of certification that exists now. Certainly unit-based testing requires traceability back to that individualized test. So entering the data at one stage in the unit-based test might happen say 20 or 30 times with the same information, depending upon how that test was done and what order it was operated in.

So one of the advantages of scenario-based testing is that that repetitive input isn't needed; one thing we learned – so we did a demonstration with a couple of vendors this spring. And just running through the draft scenario that was completed, and they saw that they would be able to increase testing speed. The idea being that they could go from possibly a two-day process down to one. This is kind of a preview we're going to through a presentation to the Standards Committee in August, with kind of the current stages of the testing scenario process and where we plan to go for September, October and November of this year. But certainly our goal is to try to – as they say, skate where the puck is going to go and not where the puck has been. Certainly understanding that this is our first crack at this, it's not going to be perfect. But hopefully this will improve what certification needs to be, certainly in the future unit-based testing may be something that's optional and scenarios may be required, we don't know. But this is why we're trying to do this now, to ensure we can try to meet the needs of providers and vendors are as a whole and improve care as it needs to be.

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

Well the concept sounds very interes – I mean, all of us are familiar with scenario-based blank, scenario-based demos, etcetera, and it just makes more sense and it builds the workflow into the assessment. If you could add quality meas – so as part of that, what would – how would that show up in a numerator or Denominator, that could get us closer to saying, okay, there's workflow in quality reporting as well and how do we capture that? Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

And I'm not certain if this is already maybe happening, but I think one of the things that we should be very thoughtful of is to ensure that the audit list is done in concert with the testing list and with these meaningful use criteria. The audits that some of our sites have run into, I think they're done by contractors, they're not particularly nuanced or thoughtful in terms of what's really going on. It's very mechanically oriented. And I would think that as we think about how we're going to do this testing, we might want to, while we're writing the testing, write the audit guide that's the companion to it rather than let that be left to someone else's discretion later. And I think with Stage 2, a really eager auditor will probably find many places where people tripped, maybe in very minor ways. I think we'll probably for the first time in Stage 2 come up against, what if you're 99.9 percent of the way there, and you actually thought you were doing just fine. So I do think that audit process in concert with the testing process is good to do and maybe you're already doing it, I don't know.

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

Really good point and that ties in what was said yesterday, so if we can get the workflow into the object – objectives, the quality and the audit, then it – it's a different assumption. Judy?

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs and Policy – Office of the National Coordinator**

Judy Murphy, ONC. So I think we did hear a fair amount about audits yesterday and I would encourage the group not just to think about that related to Stage 3 and tying this all together, but maybe making some very formal recommendations back, based on the experiences of Stage 1 already. Because I'm not sure where that input will come from otherwise.

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

So this is a great – is that another card? Oh, okay. This is a great discussion and I think a great example of taking a cross cutting recommendation – a recommendation that crosscuts a lot of the themes and addresses the underlying thing, like workflow, the audit, the testing and the hardwiring. So – and fortunately you've already started working on this. And then Judy's point is, well don't wait until 2016. So let me see if I can summarize that and see if there is even an action. So we're talking about re-exploring the certification process and tying with that the auditing process, they should go hand-in-hand because, I mean, you don't want a separate thread, which was how it was described. And building the workflow consideration into that process and focusing on more of the what than the how. The proposal that has already been started is scenario-based certification and auditing. And so a drafting, and we can take back to Meaningful Use Workgroup is to recommend that the Standards Committee make propose – make recommendations around the idea to ONC. And it doesn't have to be limited, of course, to Stage 3. Is that – is that –

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs and Policy – Office of the National Coordinator**

Yeah and I think the only thing I would add to what you said Paul is that we get the Quality Measures in, I think that's brilliant. I mean, because that – it's a mountain but I think that adding, like you said, all those components, critical and not wait, and maybe take audit separately.

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

Quality Measures probably has been cited as one of the most challenging and sometimes one of the most frustrating, so if we can build workflow into that. Judy?

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs and Policy – Office of the National Coordinator**

Yeah, Judy Murphy, ONC. So just to clarify, what I was specifically referencing was, if there are some experiences that people are having with the existing audits in Stage 1, you all may want to collect some of that data and make some narrow comments or recommendations related to that, because I'm not sure what that cycle would be otherwise. Okay, so that's like one set of things. Then when we look ahead, if we're really going to make recommendations about certification, that of course does have to be Stage 3 and thinking about what are we certifying, which is exactly what you all were talking about, are we certifying just the products and the functions or are we certifying the work flows? And I think that's kind of the question on the table here that where you were going with – where do we go with the workflows and how tight do we try to link that with the functionality, because we focused on functionality, I think, traditionally in the past.

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

And I think John's comment about the – it's almost post-marketing – post certification surveillance would be really helpful. So the feedback on that, the feedback on auditing, the feedback on quality measures, would be – we don't have that right now, is that right? It's just an ad hoc sort of, we get comments, so that's another potential recommendation.

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs and Policy – Office of the National Coordinator**

So I think it wouldn't be outside of the purview of this group to potentially make some recommendations about the kinds of things that the ACBs could be looking at during their post surveillance auditing, right? Because you can make recommendations to that, just some thoughts on it.

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

Okay. So I think it's Carl, Cris and Larry.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

We could try to make sure that the scenario-based testing can be instead of rather than in addition to the other testing, it's just quite a growing burden and very expensive burden. And then secondly I think it's still important to realize and remember that clarifications continue to come out. We're already certified Stage 2 on a version of the application and now we're having discussions about the halo effect with regard physician messaging or is paper really allowed for an electronic transition of care document. And having to rewire certain things to follow new rules in terms of how to measure these appropriately. And to whatever extent possible, if that could be short-circuited and not have to retest for some of those things. Maybe it's a form of deeming on certification, but if it's perceived as a simplification or a step down in a measure to just go and trust that people would likely do that correctly or a worst case, have a heightened measure if there was a problem.

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

Scott Purnell-Saunders from ONC. We've – the scenario-based testing would be instead of as opposed to in addition to and we're designing it in such a way that it could be done in concert. So for example, if a product may not particularly meet all of the various scenarios, it could be done in combination with unit-based testing that needs to have an operation to be certified as properly.

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

Okay. Cris?

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

I just wanted to respond a little bit. Two things, one is the scenario-based testing so far has been for certification of EHRs and not for attestation of practice, but it could be. Second is, I wanted to just respond to Judy's point about are we going to certify workflow or certify process? I guess, I would think there's potentially a middle ground, which is that we would use workflow as a way of certifying capability. Because I could see all sorts of problems we could run into if you tried to literally certify workflow, could be a problem. And that may not sound like a nuance but I think I'm trying to make a more distinct point. And again, I think that that aligns in some interesting ways with what the intent seems to be around deeming and could be what the intent would be around quality reporting, which I know for our organization is just a thing we're heavily focused on. But it's also really, really complicated to try to put all of the potential quality measures you might have to hit in one grid and manage against them in a consistent fashion is challenging.

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

Umm, Larry?

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

So I'll jump on the bandwagon that scenario testing seems like a really good thing. And I wonder, in fact, I know there has been some very explicit work to tie the CMS regs on meaningful use ONC regs on certification. But it sounds like, in fact, this process should be extended back into the regulatory development process as well, as a cross check. That the things going into the use side and what's required on the product side really do lineup and if they do make clinical sense, and that particularly around things like quality measures that are part of the output of this whole process that they also need to tie in in a useful way. And maybe that would start to get us towards this next generation of measures that actually are going to have solid ways to be consistently documented and can be automatically extracted from the EHRs and not create these crazy add check boxes. And we know you just gave us your freeform note, but now you have to fill in these structured things. Or you did the structured things and now try to figure out what you left out to put into your freeform note. We're creating all kinds of binds for people because we don't have a consistent model that we play through the whole thing.

Having said that, I think there's also the balance of – there's tremendous wisdom in the real-life experience that happens by people using these systems to provide care and all the variation that's out there. And so I think we also need, maybe with a broader view than post-surveillance – post certification surveillance, post implementation surveillance, to really have ongoing programs that are bringing back the experience from the field. I know the vendors do this to a large extent in many ways with tools in their systems to say what happened. And user groups and a whole history of ways in which they learn from their customers that we need to figure out how – what are the things that we care about learning and how do we learn from the experience in the field in a more systematic way.

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

Thanks. David?

**David Kates – Senior Vice President, Clinical Strategy – NaviNet**

Thanks. Yeah, just an observation or a question for us to consider, as we do move towards more of the scenario-based testing, which I think adds an element of sort of how in vivo these products are going to be used, tying it back to some of the usability discussion that we had. And even if – seeking some guidance from the UCD experts as well as part of attestation, maybe on a voluntary basis or just as a data-gathering instrument to gather proxies for usability like the number of clicks, the number of pages, albeit we don't want to stipulate what those need to be. But as a data-gathering thing for us to then determine whether those are legitimate, useful measures or criteria, even if it's just for transparency, not necessarily as the criteria.

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

Good. Good suggestion. Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

I see everybody nodding their heads and I'm going to shake mine. I guess I'm a curmudgeon. A couple of points; one, I think we started off in the Meaningful Use Program understanding that certification basically provided some information about whether a product could do something. And the Meaningful Use Measures provided some certification of whether an eligible provider or eligible hospital did do something. And we deliberately scaled-back certification compared to what it had been on CCHIT before, because we knew we could rely on the meaningful use. That we weren't trying to really extrapolate how users used it from the certification process. And even so, certification is a substantial burden on vendors. The cost of certification is easily three to six times what they actually pay the certification body, particularly for an enterprise vendor or a new vendor that hasn't really learned the process yet. I think we should be very open to discussions that make the testing more comprehensible to the vendors for certification and reduce the cost, and I think scenario-based testing is that.

When it comes to this issue about how much a given functionality is provided through workflow versus some other fixed elements of the CPR, I think we're way overboard. I think that in fact the way these systems are implemented is often – depends on the product, but some products are implemented very much by workflow. And it's the vendor's job to show a workflow that works in certification, not to show a workflow that would meet the needs of all users, all the time. So I think we need to be careful in certification that we stay within the boundaries of determining what a product can do rather than determining how it's implemented.

With regards to auditing, auditors by their nature are very literal-minded, in fact, you could argue that you want someone to do that job because my God you're doing a lot of it yourself, but it needs to be done. And we can't expect auditors to be very subjective in deciding, oh it's close enough and things like that. What we can do and what we should consider is providing literal instructions to auditors that limit their forays into interpretation and that in particular I think if we focus on auditing with respect to the measures rather than the capability of systems, then we have the opportunity to be more concrete to our instructions to the auditors.

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

Marc, Jacob, Scott and Carl.

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

Okay and not to try and agree with Wes too much, but I'm a little concerned not about scenario-based testing, because I agree that's a logical way of going through and testing a system and seeing what it can do. But I'm concerned with how dynamic our industry is right now, how different all the – and we heard that from the panels yesterday, how different each specialty was, how different each organization, even geographically and how the systems. And if we're not careful with scenario-based testing, we're presupposing that a vendor knows all these nuances. And I don't make that supposition, I think they know how to make good tools, but a lot of the workflow, a lot of the usability actually is the responsibility much closer to the end use of those systems. So I think we just have to be careful that if scenario-based testing is, this is how you do a note and that you don't have to use a bunch of check boxes, then that's okay. If a scenario-based testing is, this is the best way to do some type of encounter in the ED, then you've got – but where do you draw that line, right, to where scenario-based testing happens. I really agree with the alignment between what we say is certified and what should be audited, that would be really helpful on the backend of this. So those were two thoughts that went through my mind, and then the third is, and I think this is a good discussion, but I heard other broader things around timing and standards and those kind of – I think we have to address those and that this doesn't necessarily address those broader themes. But anyway –

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Trying to move on –

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

– no, I don't want to move on, I'm not saying, we have plenty of time, we blew right –

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

Just a point of clarification, I saw Liz nod. So this is not going to take this massive jump and saying all of a sudden were going to prescribe scenarios of any kind – workflows of any kind, it's going to be bounded by the meaningful use objectives. In other words, we're designed it to be a floor, it by no means is a complete certification of an EHR and neither should the scenario for this purpose. So thanks for raising that, though. Jacob?

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

Going back to what Cris was talked about at the very beginning yesterday, I think, and I'll paraphrase, we need to give ONC and CMS very tangible tactical guidance on what to do next and maybe channeling some of Carl's thoughts about where we write and don't write regulations. A goal for the usability component of the hearing yesterday was to capture some guidance for this group that would then channel toward us. And I can tell you as the character who attempted to coalesce from the last usability hearing, guidance that went into regulations that we did and did not write, I can tell you that it was hard. The guidance and I think Larry, you were the author but probably not the only author of that note, so this is a little bit of inside the sausage factory, right. So we read the guidance from the advisory committee and then try and figure out exactly what we ought to do. And I can tell you that that letter basically said usability is important, figure it out. And I think that in the time that has passed, we as a nation and we as a community have learned a lot, some through research that the federal government has sponsored, and that was some of what we heard yesterday. But I really want to remind this group of what Cris said yesterday, we need very explicit guidance from you about what you think we should and should not do. There were some things that came up both today and yesterday that I would say we don't need. We don't need a definition of usability, it's in our reg. It's – NIST has been very clear about it, so if you think we're wrong, tell us you think we're wrong, but we actually have been fairly explicit about the definition of usability. User centered design is also something that we expressed, perhaps not clearly enough in our reg. If you think we need to express that more clearly, I can tell you that based on the panels yesterday, assumed knowledge of that definition but did not explicitly revisit that definition. And so I think in the room that was not well defined I would agree. So if you think we need to define it better, please say so, but we did spend a couple of paragraphs at least in our reg defining it.

I heard yesterday and I haven't heard discussion today of the vendor community representative talked some and some of the human factors folks talked some about usability testing and today you spent some time talking about scenario-based testing. In fact, I heard an opportunity to kill two birds with one stone and they're actually, I think, enthusiastic about that. So if you think that there is resonance there. So in usability testing, there are scenarios, right, so we heard talk about potentially sharing those scenarios across vendors and I gather that there is some enthusiasm there, I'm looking at the two vendors in the room. But they're not nodding, well one just half-nodded. So, if there were scenarios that were shared among vendors that would allow them to test the usability, so I – and it's not, to Charlene's point earlier, it's not just about speed, right, it's about effectiveness. And again, please revisit the NIST definition or the ISO definition of usability, it's not just speed because speed sometimes kills, right, so if it's really fast and wrong, it's worse than slower and safe.

So I guess I'd just like the group to think about if there might be opportunities for us to invest in usability testing use cases, scenarios that then would flow into scenario-based certification testing. That I agree with the Larry's comments, would also need to be an umbrella for and include things that would apply to the Meaningful Use Incentive Program and perhaps other programs. Right, because certification is certification it's not necessarily just for MU.

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

Scott?

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

To follow-up on – this is Scott Purnell-Saunders from ONC. To follow up on a statement that Wes made, our design for scenario-based testing is just as a first cut, essentially it's a baseline. Certification in general has been a program where we try to get products to meet a minimum number of requirements. What we've seen over the course of time is that when products meet certification, some of them decide to go for that bare-cut, they cover exactly what's necessary, exactly what's in the rules, exactly what's in the regs and that's it. Certainly we're trying to encourage more than that, but we need, and I would echo a bit of Jacob here, we need the input from the public and especially from you guys to say here's what we're seeing, here's where we can move that forward. Certainly we cannot add or say well this is great to do, but it would be nice if you did this, too. The rules and regs don't say they can – that we can require it, we can't require it. So that's certainly something I wanted to echo.

Second, I guess we've seen something a little bit different in 2014 certification, as Judy mentioned earlier. We haven't seen a ton of products come through yet, certainly we understand that the test was tightened a bit. Certainly you talked before about the number of test data sets used, the number of standards that were increased and what not, and that has shown a significant – well, some would call a significant, a pretty big drop in the amount of products that have passed certification to date. We feel that that will increase moving forward, certainly towards the end of the year, but that's something we all have to keep in mind that as we certainly try to improve and move things forward, there's going to be an impact in the marketplace as a whole. So we have to balance that, certainly we know – we heard earlier that some of the tests were dropped a bit when CCHIT was not – when it moved to more a governmental program. But we still have to ensure that patients are provided in the best way possible through these products.

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

Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

A couple of things. One a little bit earlier, I want to reinforce Wes' point and maybe add a little extra to it. The cost of certification is way more than just the certification fees, which are very expensive. Typically what you'll see vendors doing, and this is from working with the vendors in the other – other vendors in the association is, you typically are programming right now on a version that will be released in the future. You've typically just released a version, probably not too long ago, and many of your customers might still be on one old version. So whenever a vendor implements meaningful use, they're typically moving it to at least two versions, if not three versions to make it easier for customers to adapt to it, so the retrofit the meaningful use requirements back into older versions. That alone creates a little bit of usability contortion because you're referencing a new idea back to an old flow. So clearly an individual meaningful use requirement will look better in the newest version, maybe look okay in the current and be a little bit contorted when you shove it back two versions old. But it is very expensive to do that and yet if we don't do that, the customers would have to go through major upgrades and for many people, this is not the only thing we're doing. There are ACO requirements, a lot of work in that space that a vendor needs to do on population management.

We mentioned timelines, no one uttered the ICD-10 word. That's also weighing very heavily on people right now and is creating in many situations, very, very rushed implementations. And I've – never before in my 25 or 26 years, have I seen people rush implementations at this kind of a pace. And again, it's meaningful use and ICD-10, and those timelines and rollouts especially at larger health systems that have a lot of pieces and parts to deal with. For the first time we're also hearing larger health systems say we're going to strategically select these three hospitals to not do meaningful use, because we want to save our energy for ICD-10, we'll do meaningful use at the big places where there's big money. So that's started to pop up.

And then back on the scenario-based testing. My understanding from early days was that the certification requirements existed so that there would at least be a possible way to accomplish the meaningful use requirements. And that it wouldn't restrict the healthcare organization to use only that method, they could use other methods if it met their meaningful use requirements. The certification provided at least a floor that there would at least be a possible path that would be in compliance. I saw in the ONC Safety Plan a comment about JCAHO being awarded a contract to inspect, inside of a health system, to see if they're using safety features. And one of the curiosities I think we should probably explore and be explicit about is, does that imply that you will use it exactly the way the vendor certified it, will be alternatives allowed there? I'm curious how that'll play out with regard to certified methods, what customers implement and what kind of variation would be expected or allowed.

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

Okay. So I'm told we need a bio-break, but let me see if Mike and John had comments about this topic, otherwise we'll close out the certification and start talking about other crosscutting themes.

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

So for me, just a quick comment on the sort of practicalities of scenario-based certification, just thinking again from both the vendor and the provider perspective, the notion of how many scenarios is enough scenarios to have credibility for what you're trying to do. And really I think about that as much from the provider perspective as others, because I hate to have my orthopedist come back to me and say, well I know you guys certified against it, but it was smoking hyperdiabetesity, which is great for internal medicine, but it wasn't a total hip replacement that I needed it to be to know if it's really relevant. So I don't know that I have an answer for that, but I would just encourage that we think carefully about that when we think about the overall net burden to certification and the relevance of it to the stakeholders.

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

And John?

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

Yeah, the one thing I'd add, and maybe it's a necessary reminder is, for the scenario-based testing that we've contemplated thus far, I don't think it was designed with usability in mind per se. I think it's a completely fresh exercise, it echo's a lot what Michael said. For our part, I think we'd be very willing to participate in development, sharing of recommended guidance. It emerges more on the EP side than it does on the hospital side to account for variations potentially, I mean, depending on what you come up with, but it definitely is its own development and we haven't touched upon it yet. And I do tie into the surveillance side of things that perhaps this – it's not just a feedback loop from surveillance, it may be an informative help to surveillance. What is going to be surveilled? So if usability is to be part of that, I think there needs to be some guidance given to that and right now what we have are eight test proce – eight criteria that are subject to that, but there's not really a harmonization of what would be surveilled for the sake of usability.

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

Good point. Okay, oh Joan? Oh, I'm sorry.

**Joan Ash, PhD, MLS, MS, MBA – Professor and Vice Chair, Department of Medical Informatics and Clinical Epidemiology – Oregon Health & Science University School of Medicine**

I just wanted to make a comment on the surveillance plan to start with. And as I understand it I don't think the Joint Commission is going to go in and actually look at how the system is operating. I think that perhaps they'll be doing some consulting, thinking about HIT safety and that kind of thing. But at least as I understand that contract, that's not what the Joint Commission is supposed to be doing.

But also on the topic of HIT safety, I'm thinking the scenario-based plan, which I'm all in favor of, might also include something to do with the standard icon list for example, or something simple like that. It sounds like that would be low hanging fruit. And if that could focus on HIT safety, so that there were some standards for example. Now, I think, usually patient identifiers go in the upper left-hand corner, but I don't think that's any kind of mandate, it's just the kind of thing where there could be some standards that could be part of the scenario-based testing that will move along our agenda for HIT safety.

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

Charlene?

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

I just wanted to make kind of one comment aligned with the fact that were trying to move to this learning health system and we're thinking about scenario planning, and rethinking the certification process. The fact that the certification process is a point in time I think is a problem, because it's only that current state. And we have new measures that are rolling out every day, we have interoperability standards that are rolling out and if we link the whole process to these points in time, that's not going to advance the industry. So the more we can get to a process, which is automated, dynamic, that is less labor-intensive for the vendors, as we're thinking through certification, I think certification will continue to exist. But to those things that really are the things that are going to advance the industry, be it interoperability, I think that's something that we need to consider as we're redesigning this process, and eventually maybe it's public-private and the government can get out of the business and all those great things.

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

Good. Okay, so we'll take a 10-minute break and then we'll go on to another crosscutting theme. So return back, we'll start at 10:30. Start getting back to our seats please.

**Michelle Consolazio – Office of the National Coordinator**

We're going to get started in a minute, if everyone can take their seats.

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

We're reconvening. People are going to start leaving for airplanes, so we want to get through more discussion. And we're on Joe's – if Joe would get seated, then we will continue on his agenda. Okay, so the next crosscutting theme I heard was from Wes, I think. Where's Wes – there we go – and that was around things that were brought up, things that ge – transparency basically. And that was brought up a number of times and it's sort of a crosscutting solution that –

**Joseph M. Heyman, MD – Whittier IPA**

I'm sorry to interrupt but, could you list all the crosscutting themes so that we can sort of know where we're going to?

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

Right now I'm only going – okay. So far we had the certification process. Then another one that came up in the discussion was transparency. And a third one was usability testing, Jacob raised that. I'm going to keep a list going –

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Yeah.

**Joseph M. Heyman, MD – Whittier IPA**

– other few more possibilities?

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

But you said we were only allowed three.

**Joseph M. Heyman, MD – Whittier IPA**

I know, I know, but at least I'd like to bring – we have to choose among them so I'm worried that – where if we don't at least get it on the list, then we'll never address it.

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

The list is not closed. But go ahead and –

**Joseph M. Heyman, MD – Whittier IPA**

All right. One of them is the – that issue about audits, I still would like to discuss that. And the other is about exchanging information, the query-based stuff and the cost. Those are two things that I would like to at least address.

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

Okay.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

And just to make your life more difficult, I would hate for us to ignore timing.

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

Yeah, timing – I'm sorry, timing is on the list.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Because we used a lot of time for the first one.

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

Okay. So the next one was transparency as sort of a cost-cutting approach, so you can do the regulation side, you can do the free market, you could do transparency, which helps on the self-regulation kind of side. And the specific topic that Wes echoed from a couple of folks on the panel is the prevention – so usability's the big issue, people are aware of the issue, they're not able to discuss it in a free-form because of vendor prohibitions in their contracts. So, let's have discussions on that, that's come up certainly in the

IOM report, it's come up in the Safety Plan, etcetera. So let's talk about that, it's not just a safety issue, it's a usability issue as well. Further discussion, or Wes' suggestion is something related to, it would be nice if somehow certification would either prohibit these contractual terms or you would be certified if you didn't have contractual terms. Further – Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

I think the overriding issue that we generally get to in this process is what policy levers are available. And I'm not sure that it's possible actually – I mean, I did say certification but, I never know whether I agree it myself until I hear myself say it. And I'm not sure it's possible to certify what a vendor does in all of their contracts, so I think it's possible that there be some kind of attestation or something like that. The question is, is there a policy lever that we can require that? I think ONC has already been using the bully pulpit in this regard, but it's possible there are other bullier pulpits available to ONC, short of a policy lever. Nonetheless, I think we need to work on various ways of preventing this. I mean, it's always an issue for anyone selling a product, the balance between their trade secrets and having their competitors fully understand the details of their product and what's necessary to reveal for public safety. I think we want to make it clear that this is one of those issues that is reviewed for public safety and then find whatever policy levers we can.

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

Okay. Further thoughts? Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I think that the puzzle is a very intense and interesting puzzle. The notion that you wouldn't be able to prevent someone from disclosing your entire blueprint on the Internet is sort of a life or death issue in many ways. One of the challenges we face is, if that were to happen basically people would offshore development to China, it would be variously done if someone had the legal authority to publish the entire blueprint. So somewhere between sharing information of best practices and publishing the blueprint, the devil's in the details.

So I think there is a lot of learning and collaboration that the EHR Vendor Association works are very closely together. There's a tremendous amount of collaboration are around a variety of topics, you could argue, some may not be fast enough, some are quite impressively fast. So I think this is much deeper than it sounds like on the surface. This isn't about agreeing that a trashcan icon should be a trashcan icon. Mostly those types of things are already actually there, there are a lot of common standards and common interface elements and common approaches, respecting us for our differences. So I think as we have that discussion, one thing we have to face up to is what happens in a world where all the blueprints are published on the Internet and is it worth the time and energy for American companies to be in that space if everything that they innovate is knocked off almost immediately by someone overseas.

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

Well maybe for the purpose of this discussion, let's have a default assumption and this is what's been stated in the IOM report and in other reports, it's screenshots, I don't think anybody was talking about blueprints or trade secrets, because those are understandable. So I think the notion that screenshots can illustrate usability, can illustrate safety concerns, etcetera, and those are the things that people would like to discuss across vendors and even customers of the same vendors. So that's –

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Screenshots are fundamentally the blueprint. When I say blueprint from here on in I'll mean it to include screenshots specifically .

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

Okay, so I guess that's the point of the discussion. Marc?

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

So Paul, from a policy perspective, this sharing, this transparency, what's the problem we're trying to solve?

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

It's shared lessons learned. So it appea – even users of the same product don't – aren't communicating the lessons that they learned, so that – for the benefit of other customers of the same product, and they certainly aren't crossing vendor customers. So everybody's been reciting this one panelist who said they had an inpatient by one vendor and an outpatient system by another. And there are some best practices she could learn on one side to cross-fertilize and that's prohibited by contract, and couldn't we raise the level for everybody just like in smart phones, for example?

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

It seems to me we can do that, and part of it feels like – and I'm not trying to be negative, but maybe

I am. Well, it just feels like we're trying to decide where the gauges on the front of the dashboard in the car should be and we're still allowing the steering wheel to be on the other side of the car. Or – I mean, some of these very basic standards that we haven't tackled as a country are getting in the way of usability. And the fact that – I like the concept of being able to look at one system and have the icons be the same, but a big part of me is I want Carl and his company to be working on the next version of an icon that's even better and Charlene and those companies. But we haven't created the platform to allow them to happen because we can't share data between those systems. And, I don't know, to me it sounds like we're dealing with some of these more peripher – or more surface kind of issues versus the core issues that sit out there that are really hampering usability. And I just solved no problems, but I feel better.

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

Other comments? Oh, Liz?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

I was going to ask some questions, Marc, maybe you can answer. I'm confused because I'm thinking that we're saying that it would be easier when we wanted to use any systems, I use the Microsoft model. So when I go in to close a screen in Microsoft, I go to the upper right-hand corner, I hit the X and I close it. Well, in all frankness, because we have, at Tenet, we have a lot of opportunities to deal with many, many vendors, right. So I can tell you that is not consistent, and so when we're trying to teach people how to use things, it's a real problem. Now that's really down in the weeds and I understand that. But are you asking and am I asking is that the problem we're trying to solve? And I realize that we are also touching across lines of proprietary information and competitive markets and, I get it. But I'm trying to figure out Paul how we – I'm like everybody else, I want to get there but I don't know what do we – what is the policy and what is – how do we do that?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I think it would be a mistake, personally, for – to list this concept. You could also go to the upper left-hand corner, touch that icon, pull down the menu and press close or you could do all that and make the window go away.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Well, yeah and I'm sorry Carl, good point. I didn't mean to infer that was the answer, I was trying to give the railroad track example for the gauge of the railroad tracks and how we were able to cross the United States back into a healthcare application at the bedside, so thank you for that.

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

Okay, if this was my problem to fix –

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

It is.

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

I think this is the best thing to push back out to the industry and to the people who use the systems. I don't think we have a shot of standardizing anything on the usability aspects if there is a – excuse me, if there is a health concern, I think that should come to us, but it should come to us as a health concern – a safety concern I guess is the way to put it. But I don't think we stand a chance of doing that and if we haven't already figured out how to do standards for interoperability, I don't know how usability gets to the top of anybody's list. I get that this is a usability meeting and it's to get all this stuff to flesh up to help us understand if this is something that's so critical that we've got to have that be on the top of the list. But I think this is a good one to push out back to the industry and the user groups and to let that be regulated that way. My opinion, my resolution.

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

Amy?

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

I do feel better, thank you.

**Amy Zimmerman, MPH – State HIT Coordinator – Rhode Island Department of Health & Human Services**

Well I was kind of going in that direction a little bit, thinking is there a way to incent the collaboration versus regulate it. And I think – and maybe that's not a recommendation for us, but just to ONC or someone in general to think about, incenting this collaboration. I mean – because we are getting – when you go to buy a product, as individuals we like to have choice. And again, this is the tension I was talking about between – before, how much choice versus how much standardization. But if we can incent collaboration to make – to try to incent the desire to do this from the industry, we may be able to get further than trying to do it some other way. Now I don't know exactly how we would incent it, but I think that that would perhaps be – get us better traction than trying to do it some other way. Because I think we're going to keep running into what are vendors competing on? Do we want to take away the fact that they're competing on the product and they're competing more on the services and delivery of the services? But I think – I don't know how much we're going to be able to interject on competing on the product per se.

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

Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

I'd like to distinguish a couple of points. One, in terms of standard icons and the NHS common user interface elements, it's not by accident that NHS is withdrawing that. I mean, it's by the fact that it was clear attempt at overregulation. And, by the way, despite claims to the contrary, it built a specific technology into the standards, the Microsoft technology. I think that we want vendors to collaborate to a certain extent and compete on usability. That is, we want customers to have enough information to decide about the usability of this product versus that product and we achieve that primarily by transparency, as opposed to by attempting to do detailed regulations. So that's why I've been – not to jump us back, not have the records get back to the last track, but that's the reason I've been pushing transparency.

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

Carl, I would be interested in your opinion on what he said. So basically it's saying, what would be against and how wouldn't it facilitate competition if, just like the smart phones, you say, hey, this does this and this does this and why wouldn't both try to outcompete each other on the –

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

A couple of things. One is I want to go back to this presumption of false excellence, how you close a window is a great example. Three ways in windows, not even counting accept, cancel and other buttons that one might put on the window itself, in the Mac it's different, it's command Q and sometimes the app closes and sometimes not, just depends on how you set things up. And on iPad you take four fingers and squish it down and maybe it goes away, but if not, not you double push the home button and go down to that little tray and hold one of them and then the little X comes up and you can pop the X and make it go away, Android completely different again. And yet we adapt and we enjoy and we see that hybrid vigor as people keep their secrets secret and evolve things.

I think this presumption also, another false assumption is that by publishing that, you'd create this spiral up. I think instead you'd actually create a spiral down to a lowest common denominator and people wouldn't focus on that because it wouldn't be a differentiator. And if you killed yourself to make a new cool thing, you don't have any benefit from it, right? It no longer becomes a thing you can compete on. And I think what you do by accident is take usability out of competition, thinking here that it would somehow be magically better. In reality, it probably would be tragically worse because there was no benefit to really innovate on that from a perspective of beating competition, which is what this is actually in large part about.

And rather than just complain about it, there are models that do seem to work. I have always been impressed with The Institute for Safe Medication Practice. And they look at many, many cases across different vendor systems and they abstract out the learning, and then they publish the learning. No sometimes the learning gets into – things and sometimes not. But they do an extraordinarily good job of gaining the learnings, broadcasting them so we can all learn from them. Our folks are wired to ISMP, when something is published by them, almost always results in some sort of system modification or tuning. So I think there's a way to accomplish the learning and the sharing of a best practice that affects safety, it's different than just publish on the Internet. And I know the forces that would desire that the reasons that many of them have, so I think there is a path. It's a path that really does work and ISMP is to me, the best example of that path.

Through the safety process and the safety report the PSOs reporting up to AHRQ might also be a conduit to extract learnings, generalize them, bleach them from specific intellectual property and publish the nut of it in a way that other people could learn from and adapt to. So I think there's a path that works and I think we're all about sharing important learnings about safety. Every once in a while we'll just call another vendor who we've noticed a problem with on an interface and share notes on how do we fix that because it seems like it leaves orders adrift or something like that. So I think you'd find vendors being very cooperative in one regard, but if you go the other path, I think you actually do more harm than you do good.

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

So can you explain a little bit – so the iPh – Apple's product and how it stimulated improvements in its competitors, how did Apple – I mean, because it's visible to all of us, how can that make it worse? I'm not following that logic.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Well remember that they exist under a regime of patents and design patents and they defend them vigorously. And if you look at the cost of everyday goods, a fair amount of it is patent cost and billions of dollars go back and forth. You can't go a day without seeing another patent war between Samsung and Apple or Apple or Microsoft or Microsoft and Google, it is a constant, constant barrage of patent wars including design patents. Apple is very protective of their secrets and very protective of getting the design patents. Healthcare is different that way, and I think we've had our bout of patents lately. It's getting to be a treacherous space in its own way. I think we're better off under the trade secret regime in the current model, than taking that away and forcing everyone to do design patents. What will happen, and there is nothing that you could do about it short of changing even more laws, is that people would keep their secrets secret until release, but they would come with a patent and no one would touch it without royalties. And I don't know that it's – I mean, maybe we could nationalize the whole EHR industry, I'm not sure, to Wes' point, that did a lot of good in England, but you're ultimately going to be stuck with those kind of issues.

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

Joan?

**Joan Ash, PhD, MLS, MS, MBA – Professor and Vice Chair, Department of Medical Informatics and Clinical Epidemiology – Oregon Health & Science University School of Medicine**

I think we're talking apples and oranges here, ha, ha, because I think what we're talking about is something very, very minimal. And my proposal just to have a standard that says the patient identifier needs to go in the upper left for safety purposes is very different from standardizing the whole EHR industry. I just think there are some very few basic safety issues that we could help to solve by setting them down in some sort of not regulatory environment, but gentle way, by having some recommendations for example, on what the screen should look like.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

In fact, I would agree also, because the requirements that, I think – I forget where they came from now, but how to represent numbers when it comes to medication dosing, vendors follow that like religion, the leading zero before a decimal point, those kind of issues. So I think we'd all be in favor of that as well.

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

Greg?

**Greg Pace – Deputy CIO – Social Security Administration**

That's pretty much where I was going is, we're not trying to suggest that there be this massive standardization no, but encourage those things that could be extremely important for safety purposes. And that's why I used the example I did of a physician moving from one side of the country to another in an emergency situation can look at something and recognize this is what I need to do, the patient's information is here – so I see what you're saying, Carl, and I agree. But it was not the intent to suggest that this is going to be standard across the board, but those things that make sense that we can encourage that kind of activity so there is some transparency as opposed to massive transparency, opening up your patents, etcetera.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I think that was actually Wes' suggestion.

**Greg Pace – Deputy CIO – Social Security Administration**

Okay.

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

Larry?

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

So Carl, thank you for bringing out the balance or conflict – between a patent-based protective system and a trade secrets approach, because I think there is merit in both of those. And I think if you look at, for example, how multi-touch revolutionized user interface that is something that would've been impossible for Apple to keep secret, right, there's no way to lease it to users and not have it out there in the environment. But I also think it's something that's very hard to protect and then really leverage their innovation in a long stream economic flow. So I recognize that inherent conflict there. But also it really was a breakthrough. Anyone who sort of remembers the touch systems before multi-touch and I would say not just multi-touch, since we are in sort of user interface design mode here, but the fact that when you move your finger on the screen the image moves with it, it also does the positioning thing, it suddenly makes it alive. So I think a changed the quality of the interaction.

There will be breakthroughs like that and we actually do want them to get widely dispersed, but we also need to recognize the economic value in them. So having said that, I think that the probably the more powerful things that we were hearing yesterday were that there also is a balance between third parties, trusted third parties, that assemble and abstract, if you will, the key learnings. And extend the balance of what's protected and what's public and that also is a model that we should look at, it does have a long history in healthcare as well.

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

Cris?

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

So I'm trying to figure out how we put this discussion into a set of recommendations that goes to ONC that ends up with regulations.

**M**

Or not, it –

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

Or not, whatever it might be. Exactly, and what exactly we are going to recommend, I kind of worry about the law of unintended consequences here. We're talking about some things that could make sense in terms of aspirational direction of uniformity of those parts of a user interface that if they were uniform, perhaps in a perfect world would not constitute either competitive advantage for a vendor, but may provide a bunch of safety values. That would be wonderful if we could parcel those up, but I'm not sure we can.

It seems to me as though the – both again, the investigator panel and the expert panel referred to a difference between certifying or certifying usability based on some sort of objective measure alternatively certifying on the basis of was this product developed using a usability process. And I think we're here talking about a third potential method which is, well let's try to encourage some form of sharing or reusability in order to catalyze the industry because that's something we've seen in other industries. Of those three, certifying against specific criteria seems really challenging to me. Our best effort's to try to catalyze sharing, if that's possible to do, it sounds interesting. I am not sure how do we recommend to ONC that that happens? It seems to me as though talking about increased reliance on vendors showing that they went through a usability process to develop their product is something that's been recommended to us by a number of experts. And I'm not sure we're putting enough weight on that particular method.

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

Okay. Jacob?

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

Two points, one, just in the context of the patent discussion, for those of you who follow my twitter feed, you already know this, but for those who don't, the small number of you who don't, including my mom, in 1962 Volvo and an engineer at Volvo got a US patent for the three-point seat belt, which is saved over a million lives and roughly 100,000 lives per year. They patented it but then deliberately shared it with all other global auto manufacturers because they found that it was so good that they could not hold onto the patent ethically. And so the question, perhaps for the group is, are there things or if there are things that are learned that enhance safety so much, do we call on the industry sort of from an ethical perspective, maybe along the lines of what Larry was talking about with the multi-touch interface. I'm not sure it's the multi-touch interface that's the safety innovation here, but if there are things, and maybe they're aligned with ISMP guidance or certain interaction flows or patterns that are really good and really safe, maybe even though they could be patented, and perhaps they will be, which I think could be fine, maybe they should be shared. So that's just one thought, just reminder about the three-point seatbelt and in fact it was patented, but that didn't stop others from sharing that.

And the other is just a reminder, again, about what we did for Stage 2 certification and our need for explicit guidance. So what we did for Stage 2 cert was some would argue shallow, in the domain of safety-enhanced design, so we said use user centered design, here's the definition, and here are some examples of it. Either come up with your own, and we heard from Alisa yesterday that some percentage, 60 some percent used standard UCD models and then 22 percent came up with their own and 22 percent used some hybrid. So we weren't explicit and we didn't require them to use a standard ISO defined UCD process, we allowed them to get their own. So shallow and also narrow, only eight certification criteria required UCD. So the question for this group, and I'll be explicit, you don't have to answer today though, in the context of what you heard yesterday, should we keep it shallow and narrow? Should we broaden the scope more than eight criteria? So we picked those eight deliberately, but if you think we should go broader than that, I think you ought to consider that. Should it be broader than eight? And should it be deeper, should we be more explicit, I think Anne's point about exactly what we need and require for UCD or continue to allow folks to come up with their own models of UCD and give them examples of what that would be? So, food for thought, but again, request for explicit guidance.

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

So let me try to summarize the three options that I think are being discussed, and then have the final comments so that we can start getting closure. So this is sort of a – pardon me?

**Joseph M. Heyman, MD – Whittier IPA**

There's a fourth option.

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

There's a fourth option, okay, we'll yet to hear. So along the lines that Cris was saying. So one option is sort of promulgated by Wes, which is, just make what's done visible so that the market can influence further direction. The second is sort of what Jacob said and Cris, I think, have a process, it could be homegrown or it could be something standardized, a process for ensuring a more user centric design. And the third is, I think what Joan is talking about, which is pick a handful of things that we do declare as standard for everyone, just to sort of safely negotiate the interface for all vendors. So that's the buckets and if there are ways that you can speak to which bucket you think is a suitable recommendation from this group, or if Joe wants to add a fourth. So I think it was Marc, Charlene then Joe and Carl.

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

Okay, well I guess you may have obviated my point here but, if I were writing a recommendation to ONC based on what I heard yesterday, it would be around usability and this is a lot of the things I heard today. One, usability is impacted by the timeframe, and I liked what Christine said, we don't know yet the exact output, but it seems to me we can prove that, we have enough experience at this point, is timing, is what we're doing around the timeframe for Stage 2 and 3 impacting usability? And I mean I have a personal belief on that, but it should be proven out and it's something that ONC could help us to do.

Number two was usability is being impacted by a lack of standards. Now whatever that lack of standards is, I think that again can be defined, understood and plans could be put in place to fix that and take it forward. Number three, I really liked, and it wasn't something I thought we'd hear in the conversation is the audits and the purpose and approach of audits, and we've discussed that enough today. And then four, just Jacob to answer your question, I think we do have to better educate on what the definition of usability is. Because it was pretty clear from those panels that there wasn't a common definition of what usability is and that that's kind of foundational to, if we're going to make improvement in that area. So if I were writing, that's what I would write, but I am not writing it.

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

You're part of writing it. Charlene?

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

I would actually endorse what Marc says, I think that those are really sound directional statements in terms of just advancing the industry. The other piece that I would add though, that seemed to come through on the testimony was this aspect of shared responsibility. Because as much as you say I'm going to certify the products, there's an aspect of that that's accountable in terms of the providers, they've got to be educated. So we've got Joint Commission out there working on safety. So we get all these piece part people kind of working on different aspects of the problem, so the more we can make this holistic and link this into the shared accountability of vendors and providers to advance usability. Again, and that's – I know, not specific and you can't put that in the regulation.

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

How would you phrase it? We recommend that –

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

I know. Let me work on that.

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

Okay.

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

All right, but it's a give you a tactic underneath that, so I hear you. But again, I think that's something that has to be considered moving forward.

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

That's true. Joe?

**Joseph M. Heyman, MD – Whittier IPA**

So my fourth way was, let's not make it worse, okay? And as I said at the very beginning, I had a great EMR in 2001, I'm using the same EMR in 2013 and it's less usable because of meaningful use. So if we're going to make requirements, I agree completely with Marc about the timeline and all that stuff that he said, I mean, I think that's a really good recommendation that we can make. But I also think we should at least ask those who are making the decisions about meaningful use to think about what the impact on usability is of each recommendation when they're making their recommendation, not find out about it afterwards. So that if we make a recommendation that vital signs have to be counted, then we should include in that that there shouldn't be an extra click for counting them, that the software should count it at the time that the person enters the vital signs, that kind of thing. So we don't need G codes and we don't need extra clicks to count things that it's automatically done. So if we could do that every time we made a new recommendation for meaningful use that would be great.

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

Good. Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Three things. One is, I want to reinforce Joe's point, having done this for 20 years before meaningful use, you can actually see the impact of specific meaningful use requirements on usability, and I think ONC and CMS need to be very thoughtful about those specific requirements. And in particular, handling the absence of information or documenting what didn't happen and why because it now needs to be reported through a different vehicle.

Second thing, I would ask that people consider that this is in part a temporary problem in some ways. I think the massive billions of dollars of stimulus funds have led to a lot of market entrants and I think as

Scott pointed out from ONC earlier, we're going to – we're probably already seeing the early stage of shakeout as some of those entrants don't proceed into Stage 2 and ultimately into Stage 3. So I think we're going to have a lot of pain and misery as a lot of people have jumped into this market aren't going to see it through, didn't do a really thorough, thoughtful job and fallout and shakeout and fail as vendors. And I think ultimately the price of making poor decision does come back to those people who made decisions as health care providers and they'll have to replace and reinvest and have issues that they have to deal with because of choices that were made. I think that's a rational and a reasonable outcome for the program, although it's going to be painful. And what I want to be thoughtful about is that at the moment of the greatest pain that is going to come from that issue, that we don't use that pain as a reason to torture the vendors that were good actors through these processes and who actually made a living before ONC came along and before meaningful use and stimulus money came along. They're not perfect, we're not perfect, every day I wake up and I see the windshield out in front of me of all the twists and turns and stupidity that we do. And yet I think we continue to charge forward and try to make more and more usable systems and play better and better technologies like multi-touch and things like that that make a difference. So it's not that I claim perfection in any way, shape or form. But at the same time, I don't want the pain and misery and suffering of these markets entrants that rushed in and who are going to let their customers down, become a pulpit for battering the people who really are putting their heart and soul into making better and better systems through time.

Oh, and one more comment. You talked about patents. One great example is the patent for programming a pump, an infusion pump. And each of the infusion pump manufacturers have a patent in that area and they had started suing each other, and their most effective way to inflict pain was to sue the customer that used as well as the vendor made it. So we actually came to point where we told all the pump makers we will not program – we will not release functionality to program to your pump unless you promise not to sue our customers should they use it with a different pump. And we found peace in that, at least tentative peace. But those are the kinds of things I think we're going to have our hands full of if we lose track of some of what the value of the intellectual property protection schemes that we work under today really are.

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

John?

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

Just a couple of comments maybe to add to Marc's list, a few items. I was the one who kind of brought up surveillance first and I wasn't meaning it in the light of the Joint Commission going out and doing any given thing, I was very explicit on ONC's surveillance program administered through the ONC ACB, something's got to guide their behavior. My understanding of the permanent certification rule is that ONC is going to look to harmonize those surveillance practices among the ONC ACBs. I can tell you that usability is going to be taken as a grounds for complaint about certified systems and so you may as well look at it from the perspective of what surveillance programs may do on this point. It's going to will happen by default. So I think that I would add to your list of recommendations that either a) know the difference between a certified system behaving as was intended and a usability problem, or incorporate usability as a factor in your surveillance.

I think if you look at past things that ONC has looked for RFI response from the public on, I think it was Anne who said earlier, this is a ripe RFI topic. Rather than – you need an instrument to get that feedback. Potentially I think that this would be an outstanding one, particularly all the commentary we heard about clinical workflow and scenario-based approaches to usability, maybe that's a way to get at it. I really liked, I don't remember quite who said it, the inventory of the impact of the CMS and ONC requirements on workflow. I think there is a homework assignment for both of those august agencies to reconcile the impact of CQMs, of meaningful use measures. I'll add another, CMS eTemplates, they're beginning to emerge, we have power mobility assistive devices, there's another one emerging. Those eventually are going to become, I can see them as CCDA derivatives of particular implementation profiles and they're going to bear particular information requirements, so just yet another area.

And then the – a kind of a catchall of other coding right now, you have claims based reporting methods for PRS, represcribing utilization for all kinds of things that have to tie back to clinical documentation. You have therapy services where now CMS is collecting functional status and degree of impairment data. If you're a therapist that has to be reported out to the claim, so ultimately it has to map to a CPT code or HCPCS code or a modifier of a HCPCS code. So it's just usability can be buried in the informational capture requirements that are just popping up without reconciliation. So maybe it's high time to have that reconciliation. And don't ask the vendors to try to – I should say, don't expect something miraculous out of the vendors to reconcile all that when in the end, if it's been bolt-on regulatory development of information requirement, to some degree there's inevitability of the bolt-on nature of the development to respond to those. We do our best not to develop in a silo but it's very, very hard to connect all of those things into a seamless workflow. Thank you.

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

Well, let's see if we can – well either try to recommend something or not. So let me enumerate the five that I heard then. One is Wes' transparency. Two is try to certify the process of UCD with flexibility. Three is some small number of stand – try to promulgate some small number of standards that was the medical record number in the upper left-hand corner kind of thing. Four was a recommendation not spec – it's more guidance to even ourselves of considering the usability of every requirement of the program. And John, is it surveillance of usability, is that what you're recommendation is?

**John Travis, FHFMA, CPA – Senior Director and Solution Strategist, Regulatory Compliance – Cerner Corporation**

Yeah, I think it's determining if usability call out clearly what it means for surveillance so that we know it either as an element of surveillance or we know the difference between what the vendor – the surveillance is intended to mean to the status of the vendor's product as a certified product versus things that are attributable to other factors, like implementation, variance, customization, things of that nature.

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

And Liz, are you going to help us?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

I hope. What I was going to suggest to the group was that I don't think the things that you've listed are necessarily completely independent of each other or dependent on each other, either way. And so to me, I want to go back to Marc's suggestion that there's an awful lot we don't know and that there are some research components that we should put into recommendations. Because that's direct work to the ONC to say, we need back some real information about the true impact, not the anecdotal, but the true impact the measures have had on usability. Because until we get that whether, and I do agree with Joan that we need a very small group of elements might be critical, so maybe that's a secondary recommendation. But we are, I think, dealing in the world of anecdotal information versus "scientific information." So I would strongly support that recommendation.

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

Jacob, does that – is that work in progress slated or already done? Is that an addition, Liz's recommendation?

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

Okay, you caught me multitasking Paul. What's your question?

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

So basically Liz is saying a recommendation could be that ONC have research conducted on the impact of meaningful use on usability.

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

So is there research going on explicitly asking that question? No – that we have funded. Is there research in the world going on that is doing that? Perhaps. But not that we have funded.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

I mean, I just think there's – as I've listened to the very valid synthesis of what we heard, is the concern is real, we know that, it's an absolute. But where are we really creating usability problems, because we got to, it's not necessarily vendor design. And I'm not sure we can determine where it's the workflow that was chosen by the entity or provider to do the work. I mean, that could be affecting usability. But I feel like we are kind of surfacing this bit of concern without facts to get us to a place we can make a clear, strong recommendation.

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

Uh, yeah. Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

As the usual – Wes Rishel. As the usual naysayer, I'm going to be the anti-naysayer this time. So I guess, that's a double negative – I'd like to see us find a bite that we can swallow rather than try to take such a big bite that we don't get anywhere. And on a sort of related topic, I heard a question from Jacob and I think it might belong in this list, I'm not sure, which related to sort of comparing what we heard to what's already in the existing Stage 2 regul – 2014 certification regulations. I see that that's about usability testing in the regulation and we heard a lot about UCD, user centered design and I think it's worthy of exploring UCD a little more.

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

Okay. The other question Jacob asked us, what about the – essentially the NIST proposed testing, usability testing, whether that – if that's another start. But the first start is in Stage 2, which is the UCD process, basically defined either as a standardized process or something you believe will be –

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

In Stage 2, there's nothing about UCD that I can see.

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

Is there?

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

Yes.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

There's usability testing.

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

Well, it's a – so what we say is the criterion is called safety-enhanced design –

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Right.

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

– and there are two expectations. One is that you incorporate a user centered design process into eight of your certification – of the certification criteria, and we actually name a few ISO UCD defined processes that you can pick from. So is you're a Health IT vendor, you can say, oh I picked this one, FDA 80-24 or ISO whatever, I can't name all the numbers. So, pick one and use that or make up your own. We know that some of the vendors have made up their own and submitted them to the ACBs and ACBs say, oh, actually no, these are focus groups, that's not user-centered design. And in some cases they say yes, this is user-centered design based on the definition that ONC has offered us. So UCD is in – is there for that one, and then in addition, there's the expectation that they do summative testing, and there was discussion of that yesterday around – summative or formative or both that would be required in future stages.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

I withdraw what I said.

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

I think the closest we came to is what Liz proposed, which is to get formal assessment of the impact of the Meaningful Use Program on usability. And I suppose one way – one output will be, there'll be some, if they're going to assess it, there'll be some measure of it and maybe that can feed into the surveillance program. Okay, so I think Carl and Marc and Cris and Amy.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I had mentioned it earlier and one of the testifiers mentioned it yesterday, but I think we should make a note to remember the importance of content as it affects usability as experienced by an end user clinician. I think there's a significant amount of usability frustration that really does translate to why don't I have an order set that matches my particular specialty or use case. So that content element I think is worth making a note of and to see if there are mechanisms to harness and carry content that could fit into EHRs more readily.

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

Okay, then I said it was Marc I think.

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

And I agree with what Liz said. I would not expand upon the eight criteria that we currently have. I mean there's some point the market has a takeover in this process and if you don't like clicking in the upper of left-hand corner to close your Apple, then go buy a Microsoft, they both close the window, but how prescriptive are we going to get in policy? As I went through and we did the vendor user centered design presentation, I thought they did an excellent job. But in the back of my mind I'm saying, are we really going to prescribe to vendors how they should do UCD? No, I mean ultimately they're either going to do it, it's going to user centered and we're going to buy that product and sell it or they're not and they're going to die on the vine, likely. Or they're just – they can intuit exactly what we need in our systems. So, my sense is, I don't think we want to spend a lot of time expanding that or putting requirements on the vendors for this, more than putting out what we've learned. And again, I'll go back to, we haven't solved the basics. We haven't solved the policy things we could solve as a government and a nation to make usability better.

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

That's great. Cris.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

So I guess I agree with Marc around caution, around trying to take too much action and space, makes complete sense to me. With respect to Carl's comments about the perceived deficiency of products in this space relative to other industries, I would imagine it's the case that the best products probably are as good as products in other industries. But there are what, 550 certified vendors under meaningful use and I don't know about you all, but I've seen some pretty awful user interfaces on EHR systems and they're worrisome.

So I guess my only question is, I agree with you that the only place we got was sort of a review of the adverse effect that meaningful use may have had on EHRs. I wonder if we have any appetite, to John's point, about this being fertile ground for an RFI. At a minimum it feels to me as though this group ought to capture our five possible approaches or other summarization we have, and pass them on to ONC for their consideration. We had a really good conversation here around different approaches to advancing

usability and it would be a shame that we don't at least memorialize that and somehow, even if it's to say hey we looked at five things, maybe there's a suggestion and if you have the appetite for it ONC, to do some RFI work in this space, consider this as fodder.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

(Indiscernible) Amy was saying – I'm sorry Amy. So are you saying Chris, not to then give a very specific recommendation that we do the research, just give them options?

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

I think the research into the adverse and/or positive effect of meaningful use on usability, if that's already happening, that totally makes sense. It sounds like there's nothing wrong with doing that. But as Paul articulated the five alternatives, they weren't those. They weren't aimed at that, they were aimed at additional steps that could be taken to advance usability and we just didn't have any consensus on those five things.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Okay.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

So I guess what I'm saying is it would be a shame if we can't come to an agreement on one of those five, it would be a shame to not at least memorialize that we had a good discussion. We got good input, there were at least five approaches, maybe there are more, and I think John Travis made the point that, gosh, this seems like an interesting target for an RFI, if ONC had the interest and appetite to do more in this space.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

– I'm sorry, I'm out of sync here, but I am concerned, and we'll let everyone else speak, that we not give some specific direction. Because if we just give options and then no action is taken, shame on us. So that would –

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

I think what we're agreeing to is –

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

Liz?

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

– option you proposed, but also to include the other four.

**Cris Ross, MBA – Chief Information Officer – Mayo Clinic**

Right.

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

Liz, this is Leslie, I have a comment.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Okay, we'll tal – okay. Go ahead, Leslie.

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

I just think that perhaps what we can do is provide questions that organizations can ask of their vendors to determine good usability. Not just the process, but some best practice around how do you know it when you see it? And what are the pitfalls and what to avoid. Because I think it is very difficult to standardize and innovate at the same time through regulation in usability, we're just highly market driven. Susan Woods from the VA said we're all right now developing black-and-white TV but can envision 3-D. And I think right now our measure of usability is use, and that's what we have been tasked with meaningful use is getting it used. So I also share Anne's concern and being over-prescriptive. So, those are my comments. Thanks.

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

Thank you. Amy and then George will have the last comment on this topic.

**Amy Zimmerman, MPH – State HIT Coordinator – Rhode Island Department of Health & Human Services**

All right, well my thought may sort of tie a couple of these together. So I was going to sort of go back and make somewhat of a specific recommendation, although whether we do it through an RFI or some other process or whether it's done through part of the research. And it goes back to comments made earlier about transparency and then the example I think that was used earlier about voluntarily having some entity, agency, research, whatever, through an RFI collect really best practices and lessons learned around usability. So that – I mean the research that I heard being described was sort of the impact of meaningful use specifically on the use of EHRs, but if we can understand lessons learned and best practices. That would help us think about going forward in terms – so some process, some – whether it's through the RFI, whether it's through research, whether it's through funding an entity or something, but to actually start to formally collect that around usability. Perhaps – I mean I don't know that it can be completely devoid of meaningful use, but just in today's world the best practices and lessons learned around that, so it's a little bit of a combination but I think that might give us more information for thinking about strategies and how to go forward.

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

Thanks. George.

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

What I would recommend is, I tend toward to do the less side. I think we should continue with what we're already doing in Stage 2 in terms of user-centered design. I'd specifically commission a study to ask the very specific question, are the – so you wouldn't want vendors doing different tall man lettering, right, that would be a crazy thing. The whole point of tall man lettering in medications is to not do that. So if there are other items like tall man lettering that have – so the criteria would be, it would have to be a specific safety issue that's supportable, that has caused harm that we know of, that by standardizing across all vendors would improve safety – those are the ones we should move forward on. I expect those to be a small number.

Standardizing on where you put patient name is actually going to cost vendors a lot of money, it's like a lot more than you can imagine, it would cost. But there are some of these where in fact it might be worth it, I don't know if it's – it may be where the patient name is, if we decide that's what it is, I suspect that one's going to drop off. But tall man lettering would stay on the list. So I would have a group do a study to do find other things like tall man lettering that we ought to agree upon and standardize and with the expectation that will be a small list. And that's the only thing that we do in addition to what we are already doing in Stage 2.

I would not commission a study on the effect on usability of meaningful use. It's just kind of a way of saying let's do something around usability and let's try to limit the number of recommendations. I think we should govern ourselves and limit our recommendations, not commission a study for something that – what we really want to know is usability of the product as a whole, not what the Delta for meaningful use, that's not useful, other than in controlling ourselves. We should control ourselves. So I think I – I agree with Joe's advice that we should control ourselves, I don't think that we should do it by commissioning a study on usability. So that would be my recom – my kind of minimal, feasible recommendation that would get us forward.

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

So let's see if we can't build a little momentum behind that. So you've propose two things one is, instead of saying let's get a study about the impact of meaningful use on usability, the Delta thing, which is – doesn't make that much sense. And the proposer is agreeing. The second is George did specifically say of the options, the five options, he is actually trying to get behind the few critical things that Joan proposed. One, are people willing to accept both of those? One is a study on the impact of Meaningful Use Program, how would you do that, on usability may not make sense itself, but is certainly guidance that the Meaningful Use Workgroup in particular should take into account and there are a few of us here that are nodding. The second is, how much momentum can we build around the handful, somebody's got to define the handful of things that could be standardized across wherever the patient's – the MRN is, the patient name, the tall man lettering. Are there less than 10 of those things and could help everybody? Who's behind that? One – good –

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

I'm behind the second one, I'm not sure if I'm behind – I mean, I agree just doing report on usability doesn't make any sense. I still don't think though we've answered the questions around timing and that was clear.

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

That's another – that's the very the next topic.

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

Okay, then I agree.

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

Okay. So, it sounds like there's a second – further discussion of the motion. Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I think I'm in general agreement with it. I would modify that first part with regard to study. I think we should take a deliberate step to include physicians who have certified for Stage 1 and Stage 2, as we contemplate going forward into a third stage, if at all, and make sure that the voice of people who have gone through meaningful use is heard and heard loudly. It does have an impact on usability and whether we measure it or report on it, I'm not sure we'd like what the report said, but there is an effect and I think we should listen to that effect as we create potentially new effects. So maybe not a study but definitely a pathway for the voice of those with experience into this and future stages, if there are any.

And secondly, I think in general support of that notion, if there's a tall man lettering concept, that's good, that's the kind of stuff that I think vendors would fall in behind and support wholeheartedly. Making that list is obviously the devil's in the details, who makes a list? What's the quality of the list? And what's the latitude to implement it in meaningful way across the products? Because there is a cohesion and things do have to make sense holistically. So, support for the concepts, but with a lot of caution because, historically some of these lists have been pulled together in ways that law of unintended consequence applies.

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

Do you have a proposal for who would be tasked to make this list?

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

Yeah, I was just going to say, somebody's got to make – I think it would be good for the group task to do is to be – to include vendor, physician, so that we can balance – I mean for everything that you can improve safety, you have to consider if it offends all the vendors – if they say it's infeasible to make the change, then that's not a good one to suggest. So that's what – but I would think ONC would be commissioning the study and there would be a committee or a panel that would do it and it would include vendors, doctors, and informaticians, whatever.

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

Okay, so who's cards are really up or left over?

**Joseph M. Heyman, MD – Whittier IPA**

One second comment.

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

Okay. Joe.

**Joseph M. Heyman, MD – Whittier IPA**

I just want to suggest that you shouldn't only include doctors who've – right, because you want the ones who haven't because of why they haven't.

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

Right. Right.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

I'm just going to add a few quick comments, Paul. I know we need to get to the next subject, we've got an hour. One is it's not just doctors, it's care providers, because there are a lot of people in the care position that understand what causes us problems, and I know we all know that, but just being sure. And the second thing is, and I was verifying with Marc and I want to verify with you, I think we're saying we don't want to do a study – or we're not going to recommend a study on usability. And I understand the scoping issue, I do understand it, if we go out and do a broad sweep of what's creating a usability problem with meaningful use, we're going to come back with 5000 pages of stuff we have to get through. I just want to make sure that we don't lose that concept because I'm still uncomfortable that we're going to start making decisions and informing the Meaningful Use Group and yet not really understanding where the problems lie when the provider – just like you were talking about, you're getting through, but you are doing things now with your EMR as are we in the hospitals, that don't help care.

**Joseph M. Heyman, MD – Whittier IPA**

Right.

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

And George just wants to have a special checkbox on our checklist as we go through meaningful use. Okay. Any further discussion? So all in favor of George's motion?

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**  
(Indiscernible)

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

Go ahead George – because we talked about it a lot.

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

We suggest that ONC commission a group to look at whether our specific small group, which would be a representative group, to find a small number of things that ought to be standardized, from the point of view of usability. Using the example of tall man lettering in ordering of medications as a good example of something that is a good idea.

**Joseph M. Heyman, MD – Whittier IPA**

– Meaningful Use Workgroup control itself.

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

That's a separate issue that we – (indiscernible). Okay, all in favor of that proposal?

**Multiple speakers**

Aye.

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

Okay. Good. Okay, now the moment that Marc has been waiting for, I think the next crosscutting is the timing question. Now I doubt if we're going to – we are not going to decide that today or is it even our prerogative to decide what timing is. However, we could come up with a recommendation to the Meaningful Use Workgroup to take it up, that's an example. But I mean, so the topic is timing and Joe is first up.

**Joseph M. Heyman, MD – Whittier IPA**

Oh no, Marc is first.

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

Oh no, go ahead Joe, I'm good.

**Joseph M. Heyman, MD – Whittier IPA**

All right. I would like to suggest that we broaden the topic to flexibility in general. Okay? So I want to get back to the audit, the timeline and the meaningful use requirements, all under the topic of flexibility. So, we don't know whether or not there – if we're not going to increase the timeline so that there's more time, then it seems to me that if we aren't increasing the time, we have to increase the flexibility. One of the two has to give, because we heard almost from everybody that there were problems.

So, for example, I thought the AMA's suggestion about the audit process and the complaints that we heard from the hospital panel about the audit process, where they said that they're getting punished for achieving something that was hard to achieve instead of being rewarded for it. One way of handling that might be the AMA's suggestion that if you fail on 10 percent of whatever the audit thing showed, instead of losing everything, you're only docked that 10 percent. So that there's some flexibility around the penalties in the audit process, rather than you attested you're wrong, you shouldn't have – you were wrong and therefore you lose the whole thing, when you worked your tail off to try to achieve 100 percent, but you only achieve 90 percent. So that would be one suggestion. The other suggestion I heard from the AMA, especially surrounding the specialty situation, was there ought to be some flexibility. If we have 20 core measures, maybe you should only have to meet 75 percent of the core measures rather than all of them, because they don't all apply to everybody. And it makes it harder, so I'm sort of expanding the timeline issue to some sort of flexibility issue to make a balance.

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

Jodi?

**Jodi Daniel, JD, MPH – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

So, as you're talking about flexibility, which I think is an interesting conversation to have, there may be some things we can or can't do based on what's in the statutes. So, the percentage of core measures, we can decide what the hurdles are that folks have to jump through to avoid penalties. But I think the penalty structure is set in statute, so we may not have flexibility to say, well you had 75 percent, so you only lose – so, there may be limitations based on the statute. There are definitely options for flexibility, so I think that that's a perfectly valid conversation to have, but as far specifying what that flexibility is, we may or may not have it based on what the statute says. So, I just wanted to make sure people were clear.

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

I think Wes was next.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Marc has precedence here –

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

Go ahead.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

Okay. Everybody's trying to give the microphone to Marc.

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

I – next.

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

So, I just have a question about flexibility. If you say – Joe talks about the people who are trying hard and doing their absolute best to meet all the requirements and they just fall a little bit short, but just as soon as you give them room to fall short, doesn't that become the new target for so many people? I mean, I just want to know how it's possible to implement flexibility in a way that isn't simply a lowering of the targets. I mean, if we can find a way to accommodate that, I think that's great, but it's a concern I have.

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

Good point. Marc.

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

So I don't believe we can come up with a recommendation to say delay Stage 2 and move out the timeframe for Stage 3 or extend Stage 2. I just – and this goes back to what Christine said earlier. I don't think we have enough as this group and what we heard in this hearing to say that that is what we should recommend. I do think we can say that from what we learned in this hearing, the meaningful use objectives and the timing for those of objectives is having an impact on usability of the systems and that someone needs to go prove that with whatever data we need to do to prove that. And so I'm thinking of a recommendation that is more in line with that, and that it should go back to maybe the Policy Committee to assess the data and come up with a recommendation back to ONC on timing or flexibility or whatever the issue might be. But I don't think we learned today exactly what we would have to learn to make that recommendation, but I do think a recommendation of delay it. I do think we learned enough to say it is having an impact on usability and it's worse and more energy.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

This is Liz. I would absolutely concur with that. So I think the words we want to use are some – if we're comfortable are something like unintended consequences. I think we all want to do and stay on track. I'm like Christine, I'm worried, we don't want to lose momentum and there are some other options we can look at eventually around how meaningful use measures and dollars and everything ties together. But in the meantime, I liked Christine's suggestion that we look into, it's seemingly – it's now apparent that we can't get it done in two years. We can't get the vendors ready, the implementations complete, the adequate testing, the impact to workflow, I mean I can go through the whole list of things we heard. So we need to take a look at that with the Policy Committee and with ONC. And I think that's what Marc is saying and I concur with it completely.

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

Christine then Carl.

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

Just building on that briefly, I think what I was saying was I don't know who to believe, right, because what I hear and I hear it all the time is, we hear four, five, six individual providers who say it can't be done, this is impossible, the time's too tight. And then I hear four, five, six other people say this is a layup, it's so easy, and those people are just complainers. So my question is, ONC at one point had talked about having sort of a, I don't want to call it a sentinel event system, but anyway, Farzad used to talk about working with the vendors and surveying the vendors in particular about what they were seeing out in the field. It would be really helpful to get some data, not just the anecdotal stories but to really understand what the cycle time is for the whole process of getting ready for a Stage from the day the final rule is issued until everybody should be ready with adequate time so that they do have time for training, and etcetera, reasonable time. But to get some data around what that would be would be very helpful. I don't know if it exists, but I know ONC and CMS both had some mechanisms, but again, I just feel like we keep getting sort of both sides of the story and I'm not sure who to believe.

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

Um hmm. Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

I'd be a strong advocate for a simple standard set of measures that applied equally and fairly to all participants. Words like flexibility and deeming to me are words that indicate we're failing to set the bars correctly. If you want to deem someone as successful, how are we going to defend that the best health systems in the country got a free pass and we enforced a set of requirements that were difficult on everybody else?

With regard to flexibility, again, two points there. Maybe the target's wrong and we should reset it or set it differently in the future. And secondly, whenever we add flexibility, we're actually adding cost and sometimes dramatic cost, because you have to wire things to count differently things in all these scenarios and these requirements from ONC and CMS a very, very detailed. And what users want out of the reports are those real-time dashboards that tell my providers you're making it or you're not. Every time you add flexibility or optionality to that, you wire in more cost, more time and then you start to bump into those timelines of getting products out there that work and can be delivered in time for places to adopt them. So I think flexibility and deeming are words of failure. And the failure is inappropriately having set the targets in the first place. And we should take a hard look at targets and I would strongly advocate for one simple set of standards applied to everybody equally.

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

I guess I would say, I understand your point, Carl, but I also think if we look at the data, the performance is there. I'm not sure we failed in our target setting. I think people are pretty much killing it out there, the ones who have attested, so, at least in Stage 1. I think the challenge is, it's hard to lay out a program – in Stage 1 when we laid out the proposed thresholds, we got a lot of people said good and a lot of people said no way, we're all going to fail. Remember like CPOE was like the big fight, right, and people are killing it, and they're not even complaining about it or talking about it now. And so it's really hard, yeah exactly, so it's really hard to know. Now we're saying, okay, now we're in implementation we see some challenges with information exchange and things like that, so that's a little more like real-based instead of conjecture. But I do think this is part of any policymaking process, this is an inherent challenge that we're always going to have when we're trying to design something that is advancing the field without having the crystal ball so to speak.

But I do want to say that with deeming, we actually started out thinking about a deeming a process. We actually really talked a lot about well how do you tie things directly to performance, because at the end of the day, it's not completely about technology, it's about better health care. But then we sort of swung the other direction and said, well it is about technology because that's EHR Incentive Program, right, so statutorily, there's a tech component. So I just wanted to say I think we really need to keep looking at the experience and the reality in the field and remembering the contextual history for things like CPOE where everybody thought, we're going to fail because of this one thing, and then we didn't. So, it's interesting.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

So, I do – I'll add to that Christine. I agree with you, I think Stage 1 was more or less a layup. From a vendor perspective back in the Stage 1 days, our biggest concern wasn't Stage 1, it was the original ICD-10 date that was colliding. Stage 2 is no longer just a layup. I don't know that it's that hard, there are a few things that are squirrely, I suspect people will struggle with and such, but it's not that hard. But now we're right up again an ICD-10 data again. So I think Stage 2 is harder, we're back at another conflicting element and so I think we just have to recognize it was easier before. And I do worry that, again it's not that we shouldn't measure, it's not that we shouldn't proceed, but I would still argue for one simple standard set of measures applied to everybody.

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

Joe?

**Joseph M. Heyman, MD – Whittier IPA**

Well I'll just very quickly, as far as the cost part, if you have 20 core measures, you have to do the work for the 20 core measures, it doesn't matter whether you require 15 of them for one doctor and a different 15 for the other, it's the same cost as far as I can tell for the vendor. So that argument is difficult for me. I just think you're going to make people jump through hoops. For a dermatologist, if you're concerned about usability, requiring them to do things that they would never ordinarily do and is not going to improve their care for that dermatology patient, doesn't make sense. And it makes more sense, if you need measures for everybody and you have 20 of them, it makes more sense to make it easier for those specialists who would not ordinarily need to do something and not ordinary – and even if they do it, it's not going to improve anybody's care, it's just going to make it less usable, take more time for them and make them feel resistant to the whole process. So that's why I think flexibility is still important, especially if you have short timelines. And that's my whole point. Sorry.

**Amy Zimmerman, MPH – State HIT Coordinator – Rhode Island Department of Health & Human Services**

Paul can I just – I'm going to have to leave in 2 minutes after this –

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

Okay.

**Amy Zimmerman, MPH – State HIT Coordinator – Rhode Island Department of Health & Human Services**

I just wanted to share, we – I still have a concern and it came up a little bit yesterday about are providers just going to dropout and are they going to sort of – is the cost going to be more than it's worth? Now maybe more so on Medicaid than Medicare, because there are no penalties. But I can tell you just, and I don't have the exact figure, but we are having a heck of a time getting our Medicaid providers to go from AIU to Stage 1. We have a – we still – I mean this is just – we still have, I don't think that even 50 percent of the providers that attested to AIU, which was the biggest payment, now just getting them to come in and attest the Stage 1 is a challenge. Again, so this may be more on the Medicaid side than the Medicare,

because there are no penalties, although except for providers are billing for both, we're now trying to educate providers that strategy to get them to move, to say if you're not – if you're billing Medicare, too, you've got to realize, you're going to be affected by the penalties as well or whatever. So I just want to put it out there that I don't think it's just – I mean, there's still a hurdle to get people to Stage 1. And I know we're focusing on 2 and 3, but I just want to sort of reality, as I leave here, just sort of not to

dampen the conversation, but that's just our experience, at least. And I think we have to be mindful of that. So we don't have people unintendedly dropout because the cost is not worth the penalties or the lack of incentive money is – it's better just not to do it than to do it. I'm sorry, I'm going to have to run.

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

Anne.

**Anne Castro – Chief Design Architect – BlueCross BlueShield of South Carolina**

I just want to remind everybody that we're not the only game in town. There's – we heard about ICD-10, but we also have patient centered medical home, which comes into a lot of provider's offices and causes a lot of desk procedures and changes in order to look at reimbursement differences. We also have accountable care showing up in a lot of places and its experimental, it's not standard and we just had 5010, so I'm not sure that these other circumstances aren't one of the bigger contributors to some of our problems right now. And when we do do research, we need to think of outside things besides what we're asking for. If we're only thinking about what we're asking for, we're not asking the right questions.

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

Wes?

**Wes Rishel – Vice President & Distinguished Analyst – Gartner, Incorporated**

I wonder if Joe would consider a friendly amendment to his rant. I don't know that he will, but what he said was the measure has to make sense to this physician for this patient solely in his practice. And I think that we have to be consistently aware of the balance between impacting the physician in his practice and getting the systems in place that support the accountable care and the patient centered medical home and all the different things that need to be. I mean, I think it's completely the case that any time we impose on physician's measures that don't make sense for the specialty, we have screwed up. I mean we've screwed up badly in the sense of creating an adverse reaction that frankly we would agree with in those physicians. To the extent that we focus solely on the physician in the practice, even though that may be that physician's focus, I think we are missing part of the thrust of our program.

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

Is that a new card?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

And Joe, I would also try to clarify that. Flexibility among measures is a bit easier than flexibility within a measure. So where we do flexibility among measures it does make sense with the caveat that historically when we've talked about this, it seemed to be a carte blanche for then let's have a 100 measures because no provider will have to do more than three. But as a vendor you have to do all 100 so somebody can pick the three that they want. So I think we'd have to make sure that didn't become rationale to expand the number of measures beyond what you can actually successfully program into these tight windows, especially given the fact that we do not have discipline around quality measures being delivered timely enough to get in early stage development.

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

Charlene.

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

Actually I want to represent that deeming concept, too. And I would concur with Christine and a lot of the discussion on the Meaningful Use Workgroup that our endgame has been to move to the ability to support – improving quality by providing the ability to be able to measure. And we've struggled with that for lots of reasons that we've talked about on the committee. But going forward, it seems to me the more that we can align our programs with other programs, cost-cutting programs, to be as efficient as possible so that we can move the industry forward with reliable measures that again cross cut the different practices, and we're getting better at that, and that could be a focus. And then we move away from the prescription of how it gets accomplished, that will give us platforms to kind of advance the health industry, as well as some transparency in terms of who's performing well and who's not performing well. And then you start to actually go back to – and the vendor systems that help you do this is X, Y, Z. So it will just advance the industry. So I am in support, even though I see the complexity of the deeming process, of a go forward process that integrates the measurement process with the other programs as quickly as possible so that we can get to really advanced healthcare.

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

Thanks. Okay –

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

Paul, this is Leslie, I have a comment.

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

Go ahead Leslie. Yeah, go ahead.

**Leslie Kelly Hall – Senior Vice President, Policy – Healthwise**

So I agree with all of the concerns about timing and about the difficulty, but I also echo the desire to keep momentum up, specifically around what we had hoped Meaningful Use 3 and 4 to be centered around patient engagement and care collaboration. And so, this would not support going forward with a reduction or change of timing that made us lose the momentum on this crucial part of health reform, which is to have the patients help transform their care and our industry.

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

Thank you. So let me see if I can summarize where we are. I think – actually, Marc and Christine were saying it would be nice if we had a bit more data on what's the normative timeline for going from one stage to another. That would include what does it take to develop tests, QA, get it out and then get in the queue to implement. So it really becomes cumulative and in some sense, vendors have always told us it's an 18-month thing and providers would say about the same amount, from of the time they release the darned thing. So that's talking in the two to three years kind of thing for getting new rules to getting it implemented feasibly in a large number of providers.

So it sounds like this is something we need to take up in the Meaningful Use Workgroup to look at. We won't get the data right at hand, but we need to figure out how to accommodate the time it takes to go through this in the face of everything else that's going on. There's a lot more going on in 2013 and 2014 than there was in 2009 leading up to 2011. And part of the out, I think, is the flexibility that Joe was talking about. So I think some of the guidance, if that's what people are saying, is that as we consider from the HIT Policy Committee and the Meaningful Use Workgroup in particular, how to make recommendations on Stage 3. We need to accommodate the realistic timing and part of doing that – so you would balance timing and flexibility so that we can add some wise counsel to our recommendations going to ONC and CMS. Does that – is that a fair summation of what we discussed? And I saw Joe up first and everybody will ask Marc what he thinks.

**Joseph M. Heyman, MD – Whittier IPA**

The only thing that just occurred to me while you were saying that, and I agree with it, but because of the last comment about how important a patient engagement is, if that's what's important, maybe some of the things that we had in Meaningful Use 1 are not so important anymore. And maybe one of the things we could consider is one way to make less requirements is when you've achieved something, you drop that and you concentrate on something else. So I just raise that as something for you guys to think about when you are talking in a meaningful use place.

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

So just so you know, that that's already been sort of dis – we have the second part of this program is the consolidation and Christine let that. So for topped out, and that's what we referred to, for topped out measures, just drop it, people are not going to turn off something and consolidate some just reduce the burden. So that's already another part of our Stage 3 thinking. And Christine?

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

I would just say, I think in terms of flexibility, I think it's fine to discuss it, but I don't know that it gets us to addressing the timing issue, and Joe and I talked about this a little bit off-line. Only because you still have to code and develop for all of these things, whether you miss the mark or not, you still have to give it a shot and try to hit the mark. So I actually don't think it addresses the timing issue at all. I think we ought to give flexibility if what we're finding is that the performance is on the margin, and it starts to look like people are close enough to missing the mark, that we may have set the mark incorrectly. But I think that's a completely different lens for flexibility than a timing issue.

In terms of Joe's idea just now did spark something for me, which is, I do think it might be useful for us to look at Stage 1 knowing what's in Stage 2. There was some – and then of course 3, there was some retrofitting that happened in Stage 2 that happened to Stage 1 in the final rule, and there may be some areas where we could make some improvements to Stage 1 that do some things that are a little bit more meaningful. Like even creating the view, download, transmit functionality because if you're buying a certified system and the Stage 2 systems are out there, that's what you're going to end up with, even though you may only be during Stage 1. So we might think about those things as a way to kind of advance and make Stage 1 a little bit more meaningful but still achievable I guess I would say.

And then just the last thing is in terms of the timeline for all of this coming back to the Meaningful Use Workgroup. I think the timing piece is really important and I think we should ask ONC to help us very quickly to first gather that basic facts. What does the statute say? How does it work? What's going to happen to the penalties? What are the politics going on right now? All that kind of thing. But I want to just say that I think we would need to really keep the Stage 3 discussions moving, regardless. And we can come back and we can make – we can add thoughts about timing, but I want to keep those really on track as fast as possible, because there's a door that will close much quicker, that won't close in the same way as the timing opportunity.

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

I think that's – Liz?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Yeah, just real quickly. I agree with you, Christine and I think the group. Just want to make sure that while we were doing Stage 3 that we are thinking about the other – is there a way – one of the things that started this whole – as we've led to this hearing, was a concept that was put out there that maybe we should refocus and look at what's already required and limit the Stage 3 impact. So as you consider where you go from here, are there some measures that are significantly more important? So not ignoring the timing, because I agree with you, we need to understand what the real rules are and what the impacts are. And secondly, I'm not sure it's been clearly delineated anywhere, other than people's presentations, what does that lifecycle really include?

Because what happens is, we are putting – and I can tell you this from day-to-day experience, we are putting the cart in front of the horse because we do not have time for adequate workflow analysis and so we are implementing systems and trying to adjust. I mean, it is what it is, it's not complaint and I can tell you from a very large source of information that it's true. However, we are diligently working, as you say, because we are one of those people that's going to make the deadlines, so we are working diligently to reduce the unintended consequences. But I think one thing that might inform the Meaningful Use Workgroup and the public at large is do you understand all of the things that have to happen? Wes talks about it a lot, but I don't ever see it demonstrated so that people can use this as sort of a frame of reference, this is how the lifecycle works or this is how the lifecycle should work, our choice. Make sense? I think that will help us get there, you're right. Keep on Meaningful Use 3, recognizing in the back of your mind that what's going right now is really tough and lots of things are going on –

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

Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Just a brief technical thing. A strong recommendation not to attempt to consolidate old measures, either drop them or keep them, but do your very best to leave them alone. Because what's done and been programmed we don't need to be tearing apart the old stuff while we work on the new stuff. So either use them or don't but this notion of consolidate, it's – again, it's false benefits. It's just going to consume more time and energy for both the developers and the implementers have to put in practice.

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

I think – well I think we should talk about that with you, maybe offline and make sure that we're on the right track. Because we kept them, but they were essentially built into other objectives where you simply couldn't achieve that objective without doing a thing that is required separately, so why are you requiring it separately? That was the idea. So we should – if you could maybe look at the slide decks that we've presented to understand how things moved and where they moved, some of the recording – basic recording objectives, just the data was required in the care summary. So why do you have to require a separate check the box function to record demographics, when you know you've got to include those in the care summary, therefore you have to record them. So I want to make sure that we didn't inadvertently do anything that we didn't intend, if you could help us with that that would be great.

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

Happy to do that.

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

Great.

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

Okay. Larry?

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

I apologize for having to step out, so what I'm going to say maybe have been already been covered.

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

We'll work you if it is.

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

Thank you, thank you, that's what I need for today. But I'm thinking that as we look timeframes, we have now several years' worth of data that's come through from people's certification for Stage 1. And it might actually be useful if ONC or CMS could summarize the attestation flow so we get a sense of who came in new each month and sort of what the pipeline is. Because we – Paul gave the very quick 18 months for the developers, 18 months for the providers, if they line up perfectly, that's cool, but there's also the pipeline to get implementation going and started and products delivered. So it might be interesting if there's some data that's out there that could speak to what Stage 1 was like, recognizing Stage 2 could be different, but at least give us a better sense of what has been the actual experience for those timelines.

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

There was some aggregate data that was just presented, but I don't know whether you identified per individual institution what's their lifecycle.

**M**

– finding it –

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

They're of Medicare and Medicaid, hospitals we have, and so it would be interesting to just look at, so what was the rate of the MU stuff? And it could tie back to the certification, because we'll know product's ID numbers, when did that product become certified, so what was the lag between when it was certified and where we saw adoption. But, so we have it endpoints, so we're missing a lot of data points, but it might be an interesting exercise in framing.

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

Marc?

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

At the risk of saying the same thing over and over again, I'm trying to tie this back to this hearing. It was on usability and implementation and a recommendation that we're going to give to ONC based on what we learned here. And to me, what we learned was there is plenty of anecdotal evidence to suggest that timing is having an issue on usability of these systems. Now, usability can be everything from achieving Meaningful Use Stage 2 or whatever, but that there's anecdotal evidence and that our recommendation is that ONC do some work to prove those anecd – or not or disprove that anecdotal evidence that we have.

And then I think the next step of that recommendation is what to do with that? Well, if the facts suggest that that is the case, then I think the usability issue is a very salient point for saying, well, we ought to reconsider what we are talking about relative to the timing of Stage 2. We can't do anything with Stage 1 at this point, and we ought to be talking about how it might impact the Stage 3 timelines. But short of that, I mean I don't think we can solve the quality measure issue in this group based on what we heard, other than that it is one of the usability issues that sits out there, as was the documentation issues, as was the workflow issues. I think we can get to that, but based on this hearing what I heard was, there is evidence to suggest that there's a problem with timing and usability.

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

I don't know that that's – I mean, that was one of the things we were going to ask from the study that we decided not to do. So I'm not sure –

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

I thought we asked that they do study the timing issue around Meaningful Use Stage 2 and usability. I thought that's what we were – I don't think we were saying, redo all of usability and are doing usability right.

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

I didn't get that – yeah.

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

I'm assuming that in part of our data gathering around the timing issue that is one of the consequences, one of potentially others as well, that could be uncovered. So if you're looking for a recommendation, I don't know that we have one yet, but we could certainly say, we heard the timing issue loud and clear, there may be an impact here on usability, because vendors don't have time to really test and do the design and all that. It's like the Christmas tree problem, you just keep kind of hanging stuff off the EHR. So we could say something like that, but I think this is something we should take up more in the timing context.

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

I agree, no, I agree with that.

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

George.

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

So I don't think Marc is really saying that we should see how timing affect usability, I mean, what if it turns out that usability is fine, everyone's failing meaningful use and people are dying but usability is good so we should keep the timing. So I think he's just saying, we should address timing. Usability might be one of the things I look at, but you look at – so the proposal is we look at timing and figure out – I think personally the way I would do it is what you described earlier, Paul. Look at what makes sense. What is the proper cycle, is it two years, three years, some other number, and then given that, you figure out how many things to put in new, given that time, which is, determined through more concrete factors like how long it takes to do X, Y and Z. So I think that's what Marc's asking for.

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

Okay, so that's –

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

– already knows what I'm asking.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

That sounds good George.

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

Okay, let me – let's see, we have 20 minutes left.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

And we have to allow public comment.

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

And we have to allow public comment. Let me summarize where I think we are. Oh sorry, Scott. I'm sorry.

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

I was going to ask for that anyway because we started the recommendation list and then we kind of got –

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

Correct.

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

So –

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

Okay, here's what I have so far. We talked about the certification process and the background is the testing scripts – the certification process as currently done can inadvertently cause hardwiring of functions – it's actually hardwiring of workflow for the providers. And so are there other ways to test – to certify products so that you incorporate the workflow in that certification process, incorporate how quality measures are reported and make it consistent with auditing – or make auditing consistent with that. So that's sort of a big recommendation, but it does address a lot of the underlying issues that we heard about.

The second recommendation was that ONC commission a group, it doesn't necessarily mean – it could be internal or external, to develop a short list of industry-wide standards, such as medical records in the top upper left-hand corner, tall man lettering is done the following way, or subscribe to the following standard. And the third one has to do with timing. The desire, doesn't necessarily mean that it can be done certainly in the short term, is that we have more data on the normative time needed between the issuance of a rule and its completion and release of products and its ability to be implemented in the provider group. And one way was suggested I think by Marc is – or Larry is, can we look at the people who have already progressed and what was the timeline from the "X" to implementation by – and you have the early doctors, then you have the majority, etcetera. What does that lifecycle look like from rulemaking on to implementation and qualification for meaningful use?

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

Paul, can I just make one modification on that?

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

Yeah.

**George Hripcsak, MD, MS, FACMI – Department of Biomedical Informatics – Columbia University**

It's not just – because what we've done is we've moved the definition – so we've pushed our work back far, so we might have 17 years from when we start working until it becomes a rule. But the other question is, how quickly they can – the users can start over again. In other words, we started before – we're almost done before Stage 2 even becomes active yet. So we fixed the time between us defining a rule and getting the vendor to implement it and get it installed on the users to adopt. But there's also the time between stages where they just can't handle another upgrade, even though we started 15 years ago.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Yeah I would also say, Paul, that the other question that that study that was suggested about how long it took people to get attestation doesn't tell us if it interfered with their ability to deliver clinical care. It said they figured out how the – what they had to attest for, they did it and they attested. It doesn't tell us it was – to impact, possibly impact outcomes.

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

So, that is correct, and it would be pretty hard to go get that information. That's what we'd like to have –

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Right.

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

And the outcome is, I think that the Meaningful Use Workgroup needs to consider timing with what the available data is – are, as it prepares its recommendations for Stage 3 in the program. And I'm getting some nasty looks from Charlene.

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

This space, again from a vendor community, is so complex because all of us are on different release cycles and our customers are on different release cycles, so it kind of makes my mind spin. But maybe rather than start at the development lifecycle, we have the providers communicate what their best practices, in terms of implementation cycle and then we work backwards, as opposed to starting with our development cycle.

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

Okay, so you're saying take the context of the provider who has to implement this stuff and get qualified for meaningful use –

**Charlene Underwood, MBA – Senior Director, Government & Industry Affairs – Siemens Medical**

Yes, start there and then let us work backwards. Because we're going to have some concurrency, because we know ONC has to roll out stuff concurrent and we've got to maybe get smarter and better and more flexible at that. But we can't stay at the current state where it's all sequential. But start with the provider as kind of our base, and then maybe we work backwards as we think about it. And again, practices might be different than hospitals and that type of thing.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

And I will tell you, this may or may not help you, but the Implementation Workgroup has taken that approach. And we'll be glad to go back and do some more of that to help inform your process, is to recognize that if we don't look at the endgame and where we have to be and what the ramifications of that and back up from there, we have had that conversation several times.

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

How quickly can you get that information to us?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

Cris, what are you doing next week?

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

That's a proxy for what we're trying to get it sounds like.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

I completely agree with Liz. I don't think we've fully documented that, but I think we've done substantial work there.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

So I would say to you, we will take that on and what we'll do is, so I'm looking to my partner here, that we will obligate ourselves to get you early stuff by the time you have to talk to the policy group in August, recognizing that we still have another full month to get more information to you. And obviously, you've got to have lead-time.

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

Right. So to the extent that you can get us information, like our next call is the 30<sup>th</sup> or something like that, to the extent that you can start feeding – give us a hint for how it's bounded, that starts – and then by the following workgroup call, it would be nice to have a bit more detail around that. Because we'll probably want to start socializing that with the Policy Committee.

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

And so obviously, Scott, we're going to have to talk about how to make that happen, we've got to talk.

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

So Scott, you withdrew or –

**Scott Purnell-Saunders – Program Analyst – US Department of Health and Human Services**

(Indiscernible) – shares this. There has been data collected on when providers are able to attest and attestation maybe does exist for dates and times. The one thing we noticed, at least from some of my colleagues with CMS, is that there's an influx of attestation of the last possible date. So just to kind of share that, sometimes that information is going to be skewed just simply because it's a deadline – we just need to be aware of that.

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

Right. Right. Yeah, sort of get what you pay for. Okay. Joe?

**Joseph M. Heyman, MD – Whittier IPA**

I am petrified that we are going to leave this meeting without addressing the standard issue about health information exchange. I cannot believe that after the testimony we heard yesterday, at 12:15 we have not addressed that issue and I think it is critically important that when we leave here, that we require for certification that every EMR has to have the ability to send out a parsable CDA that every EMR can receive. We cannot expect patient engagement, continuity of care, etcetera, unless every EMR can send out a health summary to every other EMR and every other EMR to receive that health summary. So I would hope that we do something to move that along by making some sort of a requirement rather than just letting that sit out there for another year or two. That makes much more – it's much more important than any of the meaningful use things that you have made for requirements, that is the one thing that will actually improve patient care substantially, rather than 20 PQRS measures .

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

It's clear that the panel said that in spades. It's clear that they do not, current time, communicate with each other, vendor products. But in Meaningful Use Stage 2, the certification requirement is that they either prove that they communicate with another vendor or the CMS tests, correct? So, I mean I think what you ask for is in Stage 2 – the 2014. Yes?

**Joseph M. Heyman, MD – Whittier IPA**

Well then why does it cost \$25,000 to do that?

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

Uh, that's a separate question?

**Joseph M. Heyman, MD – Whittier IPA**

Well that's why, I think if you actually required – instead of requiring that they do the thing that you require that they make it possible to do the thing, before they get certified, so that we don't have to pay

\$25,000 after we buy the product that would be a wonderful thing .

**Jacob Reider, MD – Chief Medical Officer – The Office of the National Coordinator for Health Information Technology**

– I think that Wes made a comment about the scope of what the government can do. That's a business practice question, Joe. With they charge or what they don't charge – so the certification criteria are what they are. There is a requirement that a care summary be transmitted, a consolidated CDA, it's very explicit. It's very explicit that it's required that he be captured, reconciled and incorporated in this 2014 cert criteria. So if we want to expand that beyond what it says in the 2014 cert criteria, I think that's fine. You don't see it yet because, you may not – the 2014 certified products aren't in production yet.

**Joseph M. Heyman, MD – Whittier IPA**

All right. I give up.

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

No, but it's just – the time – we haven't been 2014. But what you asked for was what was recommended and what was put into the –

**Joseph M. Heyman, MD – Whittier IPA**

Okay.

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

Cris, then Carl.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

Joe, I wonder if you would feel less petrified if you knew that the Information Exchange Workgroup and the NWHIN Power Team are working on that issue. The second is, and I don't know, we can talk more about it, but I think based on the little sidebar conversation we had the \$25,000 cost that we were talking about is potentially is more related to the query health IHE related interactions that are not part of Meaningful Use Stage 2.

**Joseph M. Heyman, MD – Whittier IPA**

Oh, so what I'm hearing now is that the 2014 requirement does not require the CDA to be parsable.

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

It does.

**Joseph M. Heyman, MD – Whittier IPA**

Well then that's part of the –

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

But it requires that it be transmitted via Direct and not via exchange connect IHE, however you want to refer to it. And I think when you and I were talking about your vendor and HIE activity that it related to that second channel of exchange, the non-direct exchange.

**Joseph M. Heyman, MD – Whittier IPA**

But if it's parsable, once you receive it with Direct, then it shouldn't be incredibly expensive to –

**Christopher Ross, MBA – Chief Information Officer – Mayo Clinic**

That's a problem with you and your vendor.

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

Carl?

**Carl Dvorak – Chief Operating Officer – EPIC Systems**

First, I thought the NwHIN type exchanges would count towards your 10 percent. They do, okay, good – so that’s good, a moment of panic there. One thing I was going to comment on is we do see among our sites a flurry of activity and getting ready for the 10 percent. So I do suspect that much like what we saw with CPOE measure that said you’ve got to do CPOE at 10 percent, what we’re likely to see is that as it implements, we’ll see people just go all in and I suspect you will have pockets of exchanges that far exceed 10 percent. And I know today, among our user base, we’re moving about a million transition of care documents per month across organizations, 38 percent of which are not Epic-to-Epic, they’re across vendors. So, the vendors have been behind-the-scenes very collaborative. We’ve done work personally with athenahealth, and I talked with Ed on getting that exchange set-up, that’s been programmed with – Clinical. The vendors are actually working pretty closely behind-the-scenes to enable end users to activate a connection between different sites. Still a lot of work to be done on enterprise level provider directories and provider directories at large, but I do think we’re going to see that effect of that small requirement will create

probably a disproportionate effect on exchange.

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

Good. Larry.

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

So, there are a lot of complexities to get the information exchange right, as we’ve talked about maybe endlessly. I don’t think we should ignore that. I don’t think we should simplistic – it is not binary, this is not it’s free or it’s super-expensive. A lot of the implementation costs though are very real and until we really get at plug and play and get standard transport and standard everything, it’s going to be expensive in pockets. This also though, I think, rolls into some of the implementation issues. Some of the cost in getting interoperable documents is, how did the information to documented? And can we start to ratchet that down and can we start to really embed the vocabularies in the products in a way that they don’t have to get remapped and recoded as they transition from provider to provider. So it’s going to be a pretty long journey and I think it’s important that we keep coming back to, how do we get good, clear standards in place,? Where we have them, to take to the next level, where we don’t have them, to get them on the table and to get them moving forward?

Some of this is the business model, and this is not the vendor business. It’s partly the vendor business model, but it’s also the provider business model. Kindred’s been contacted by many of Carl’s customers and other vendor’s customers of, oh we have this requirement to send documents, are you ready to receive it? And so we’re busy scurrying, putting in place technology so we can say yes, we’re ready to receive it. And that is also not inexpensive. But we need to be there because we see that is part of the business of healthcare, we have to be connected. That’s new, and it’s not just new – it’s not new because of meaningful use, it’s new because of payment reform. It’s new because of changing pressures in the marketplace to be more tightly partnered.

And so, I think there’s a shift happening in the drivers for interoperability, but it’s not fully there yet and we have a lot of barriers to get there. And it’s as much the clinical practice. Joe, you’re talking about you want to be able to receive this information and incorporate it. I’ve had experience of care with specialists in one umbrella, all share the same EMR, that haven’t figured out how to coordinate the problem list. They haven’t figured out how to get the meds current, and I’m not sick. Right, I should be a pretty easy patient. I think it amuses my PCP when I show up and say that we’re spending 5 minutes, we’re cleaning up the record. And she does it, which is great – mostly she does it, but then she says, but I can’t touch that, that’s their problem statement. Okay, enough for me.

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

Okay. We're at the end of our time. Let me try to summarize. It really does follow a little bit of Joe's rule, which is I think we have three recommendations that do touch on a number of the topics that we heard about yesterday. It touches on usability, in particular workflow. It touches on quality measures, it touches on auditing, it touches on certification process overall, it touches on timing in a big way, flexibility and industry-wide standards. Now the industry-wide standard was a little baby step, but on something that we could do and it prevented a heart attack of Joe with the fact that we, in Stage 2 2014 certification already do address, at least it is addressed in the certification criteria, not many have gone through it yet, so that has to play out. But what you asked is being asked of everyone. So I think we've actually come up with some things that are not trivial, that we need to work on and there are some assignments made from ONC through the other workgroups, to start working more explicitly, more deliberately on these things with a fervor.

So we may be as good as we can get from this very informative day we had yesterday and working through this multistate – group here to advance the ball at least. Is that still good to people?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

That's great.

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

Well certainly appreciate your participation yesterday and today in the discussion and we're going to open it up for – Liz, anything else?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Vice President, Applied Clinical Informatics – Tenet Healthcare Corporation**

No. Let's open it up to public – please

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

– public comment please.

**Public Comment**

**Michelle Consolazio – Office of the National Coordinator**

Operator, can you please open the lines?

**Caitlin Collins – Project Coordinator, Altarum Institute**

If you are on the phone and would like to make a public comment please press \*1 at this time. If you are listening via your computer speakers you may dial 1-877-705-2976 and press \*1 to be placed in the comment queue. We do have a comment from Matt Reid.

**W**

Just a reminder to Matt, before you being speaking, you have 3 minutes and you will be cut off after 3 minutes. Go ahead Matt.

**Mari Savickis – Assistant Director, Medical Affairs - American Medical Association**

This is actually Mari Savickis of the American Medical Association. Thanks again very much for inviting Dr. Stack to testify yesterday; we feel this is a very important hearing and listened intently this morning remotely on the discussion on the committees. I wanted to make a few points for your consideration. First one to draw your attention to the letter that the AMA sent with the AHA to the Secretary today. You can reference that on our website @AMA-ASSN.org/go/meaningful-use. And in that letter you'll find the issue of timing addressed. And there are four specific recommendations that we have made collectively and I will read them to you.

Allow providers at Stage 1 to meet requirements using either the 2011 certified edition EHR or the 2014 certified edition EHR. Number two, establish a 90-day reporting period for the first year of each new stage of meaningful use for all providers, similar to what was done for Stage 1. Number three, offer greater flexibility to providers in meeting Stage 2 to ameliorate the all or nothing problem and recognize that the level of change in Stage 2 will take time to accomplish. And number four, extend each stage of meaningful use to no fewer than three years for all providers.

So again, would highly recommend that you take a look at the letter; I also wanted to make a few additional comments. I think it is may be an overstatement to say that providers are killing it. Certainly we are very pleased the adoption, with respect to physician, is increasing. Many of those physicians still remain primary care physicians if you dig down deeply into the CDC data. Also would caution the committee to recognize that because you have met meaningful use does not necessarily mean that you're using an EHR in a meaningful manner. Likewise, just because you have not met meaningful use does not mean that you're not using it in a meaningful manner.

We also think that rather than asking for a wholesale rewrite of the entire Stage 2 requirements, we think that a better approach may be, given the timeframe, to ease up on the gas and require providers to at least have met 75 percent of the requirements. We think that while one set of measures sounds good but if the same at the same measures don't work for every particular specialist, this will still lead to problems among the variety and practices. Another point would be on the audit. I know specifically, having spoken to many physicians, that they're missing measure – one measure or a measure by a certain percentage point. And when you get to Stage 2 there are actually requirements within requirements and if you miss even one, you are deemed to have been a failure.

Lastly, I would say that with respect to the – products for ambulatory providers that right now there are only about 11 on the market and they were six months out and they have essentially until actually next October. But that also is the same time that they have to meet ICD-10, which was mentioned several times yesterday. And so the bandwidth to incorporate the changes that ICD-10 comes and also the – reporting period for 2014 will be very, very difficult. Thank you very much.

**Ashley Griffin – Management Assistant – Altarum Institute**

I believe that's all for public comments.

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

Okay. Well thank you. On behalf of Liz and myself, thanks very much for everyone participating and vigorously discussing this. Safe travels.

**Public Comment Received During the Meeting**

1. Timeframe is important for implementation, as well as design and development. Vendors need enough time to work with users during the design and development of usable products. However, the timeline for Stage 1 and Stage 2 from the time requirements were provided to the time they needed to be available for clients to install has not allowed thoughtful UCD.. Vendors have consistently asked for at least 18 months from the posting of the final rule and the beginning of the next reporting period. Thank you.

2. One thought on the 'deeming' concept: Just because a threshold of a Clinical Quality Measure is met, does not ensure that the clinician is using the EHR in a meaningful way. Many hospitals and practices have Quality and Utilization nurses that will review patient records to ensure that the information to meet the measure is present. This may result in a retrospective entry of problems, meds, allergies, etc. This does not meet the goal of maintenance of up-to-date problem lists, medications and allergies and for decision support at the point of care.