

**Meaningful Use Workgroup  
Subgroup #1: Improving Quality  
Draft Transcript  
February 7, 2012**

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Good morning, this is Mary Jo Deering in the Office of the National Coordinator for Health IT. This is a meeting of the Health IT Policy Committee's Meaningful Use Workgroup under Subgroup #1. I'll begin by taking the roll. David Bates?

**David Bates - Brigham & Women's Hospital & Partners**

Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Paul Tang?

**Paul Tang – Palo Alto Medical Foundation**

Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Neil Calman? Marty Fattig? Yael Harris?

**Yael Harris – Human Resources and Services Administration**

Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**

Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Charlene Underwood? Eva Powell?

**Eva Powell – National Partnership for Women & Families**

Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Okay and those were the members of the Subgroup. Are there any other Meaningful Use Workgroup Members who joined the call? Okay, back to you then, thank you.

**David Bates – Brigham & Women's Hospital & Partners**

Thank you all. So, as Paul described this morning, what we're supposed to be doing is going through the objectives that focus on improving quality, safety, efficiency, and reducing health disparities, and trying to figure out what should go into these for Stage 3. And we've been asked to try and do a number of things to align with emerging payment policies and the NQF, to consider harmonized qualifications among the various CMS programs, for example, considering things like cross crediting ACOs in Meaningful Use, making sure that we support population health, data analysis, supporting innovative approaches to using

HIT to improve healthcare, trying to make sure that what we suggest enables flexible adaptive platforms, and that we don't penalize success, for example forcing people to take a step back to prove that they're capable of being successful.

And we've been asked to think about focusing on a number of specific functions for example, real-time information at the point of care, re-enforcing and empowering patient partnerships, taking advantage of emerging sources of data, considering the various domains of CDS and then using population health assessment analysis and surveillance to drive policy making. And as Paul suggested earlier today, this can be a big signal to health systems for the future. When we go through this I would like to note that we need to take in all the things that we've learned from various sources. So, for example, the barriers report that we had today but also the early data on how Meaningful Use is going and so on, and I for one feel like there are enough sort of signals coming in to us that it's a little challenging to keep track of all of them, and there may be some that I certainly am not thinking about, so we should just chime in around that.

Our timeline overall is that we're supposed to finish by approximately May to June and then we'll have an opportunity to iterate with the full subcommittee as Paul suggested today in the mid to late summer. And, Paul, let me just ask you whether that is a reasonable summary of what we need.

**Paul Tang – Palo Alto Medical Foundation**

It sure is, thank you.

**David Bates – Brigham & Women's Hospital & Partners**

Okay. So, let me just stop there and ask if there are questions or comments, or thoughts? Okay, and, you know, what I thought we could do is basically just use as a template the existing matrix. The last one is from July 7, 2011 and I don't know if people have that handy, but it may be helpful to you to do that. I think we've all spent a lot of time with it. Does that sound like a reasonable approach to moving forward here?

**David Lansky – Pacific Business Group on Health – President & CEO**

Yes, I think so.

**David Bates – Brigham & Women's Hospital & Partners**

Okay, does anyone lack access to that? Okay, so it sounds like people have it. So, let's just go through and talk about the various measures. The first one focused on medication, I guess we should use as a departure point Stage 2. So, the first one focuses on medications and CPOE and in Stage 1 we said that 30% would have at least one med order entered using CPOE, in Stage 2 we increased the threshold to 60% and then for the laboratory we said that more than 60% of unique patients seen during the reporting period with at least one lab test that resulted in a return would have at least one lab ordered during the reporting period using CPOE. And for radiology we said at least one radiology test should be ordered using CPOE. So thoughts about where we should go with that one, if any place differently?

**David Lansky – Pacific Business Group on Health – President & CEO**

This is David L. I was going to ask David and Paul, and others if you were going to characterize what is the best-in-class performance at facilities you work in or you know about for having full implementation and availability of meds, labs, images what would be, you know, the best case of achievement for the Stage 3 nationally from what we've seen that is feasible?

**David Bates – Brigham & Women's Hospital & Partners**

Best-in-class is over 90% for all three of these, but that's a challenge for a lot of places and I don't think that is probably where we should set the bar.

**David Lansky – Pacific Business Group on Health – President & CEO**

No, I agree. I just want to understand what's possible and then we can work our way back to what is feasible and realistic.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah, you know, for community hospitals I think that the 60% threshold is actually still a pretty reasonable bar.

**David Lansky – Pacific Business Group on Health – President & CEO**

For all three?

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, yeah. There’s something to be said for just leaving it the same for all of them. I mean we could raise it to 70%. It starts to get much more complicated if you raise it above 70%.

**Paul Tang – Palo Alto Medical Foundation**

And this is one of the requirements where we could start moving toward the surrogate outcomes. So, we could talk about clinical decision making, decision support accompanying CPOE for measuring the results of that, but it seems like we could start moving in the shaping orders rather than just the structural measure.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah. Yeah, exactly, that’s where I would favor raising the bar.

**David Lansky – Pacific Business Group on Health – President & CEO**

It sounds good to me.

**Paul Tang – Palo Alto Medical Foundation**

Well as an example we have things about formularies or we have things about drug interactions, we could tie all three together, so we have CPOE for meds that avert drug interactions or drug allergies, something like that, you’re combining the drug interactions or drug allergies with potentially the CDS and the CPOE.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah. So, for drug interactions ONC sponsored the development of a list that are the most serious ones and I think we could ask that those be included in all applications. And we could even say that they should be included as hard stops in all applications, because, you know, that’s going to be the recommendation. None of these come up very often and they really are instances in which you basically should never use the two together. Are people supportive of that?

**Paul Tang – Palo Alto Medical Foundation**

Yes.

**David Bates – Brigham & Women’s Hospital & Partners**

Okay, you know, for drug allergies it’s a little more complicated and we don’t have a kind of a national list of those. And I’m just looking for the formulary part of things, I think didn’t formulary come out? I would think we could add formulary in Stage 3. Paul, do you remember?

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

This is Charlene. I don’t think there is a formulary in there right now.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, that’s what I think, too.

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

I mean, what’s in place now will be a list that will have the standards in place with sharing data in Stage2, so if it links to access to the formulary, I know in hospitals there are formularies, right?

**David Bates – Brigham & Women’s Hospital & Partners**

Right.

**David Lansky – Pacific Business Group on Health – President & CEO**

So, Charlene, the entry on the bottom of the third page, at least when I printed this out, about implementing local drug formulary checks, how does that get operationalized now or will it be in Stage 2?

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

Actually, don't we have as option one in Stage 1, I don't have my papers in front of me, I'm sorry, that they have to check the drug formularies for Stage 1?

**Paul Tang – Palo Alto Medical Foundation**

Yes, I was going to check as well, but I think that was one of the menu items and it's a clinically a selective one, actually.

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

Yes. So for the inpatient piece that's pretty much in place, it's with the ambulatory piece and I actually don't recall if we recommended that for Stage 2. I think we we're still struggling with the ability to do that.

**David Bates – Brigham & Women's Hospital & Partners**

Is that right, are you having a hard time doing that?

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

Well, it's just access via a standard to those drug formularies via the different drug plans. I think that was what we talked through and it's just really hard for practices to get that information. It's very costly, but I think we should at least have it there as a tickler for what we want to do in Stage 3.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah, I mean we do it routinely, but I just don't know how easy it is for practices broadly. It would be nice to have Neil on to see what they're doing.

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

Yeah. It seemed like I recalled a discussion where we kind of backed off of Stage 2 because it was really problematic for practices to do.

**David Bates – Brigham & Women's Hospital & Partners**

Right. It does end up being one of the things that saves the most money.

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

Yes.

**David Bates – Brigham & Women's Hospital & Partners**

And I think we should definitely ask for it, you know, for eligible hospitals, and I think we should probably ask for it for eligible professionals, too.

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

Yeah, I think it's actually in Stage 1 for eligible hospitals, but I think where we want to be is eligible professionals.

**David Bates – Brigham & Women's Hospital & Partners**

Okay.

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

Kind of where you're at.

**David Lansky – Pacific Business Group on Health – President & CEO**

Has anyone opened the document Mary Jo sent out which were the comments to the Stage 2 proposal item-by-item, and if anyone does, I am wondering if you could comment from these as the users or vendors would address what it's feasible for the next phase? I just don't have it available to me.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, I’m looking for it now.

**Paul Tang – Palo Alto Medical Foundation**

Which objective are you looking for?

**David Lansky – Pacific Business Group on Health – President & CEO**

The formulary one?

**Paul Tang – Palo Alto Medical Foundation**

Okay. It’s funny; actually at first glance I couldn’t find it.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

It’s at the bottom of page 3 of the table.

**Paul Tang – Palo Alto Medical Foundation**

Oh, yes, so that actually crosses, it’s a menu item; it crosses for both EPs and EH. And then what we did was we made sure that people could tailor it to local needs, local hierarchies.

**David Bates – Brigham & Women’s Hospital & Partners**

We don’t have a threshold, though. I don’t know do we need that?

**Paul Tang – Palo Alto Medical Foundation**

I’m not sure, well our threshold was one, one drug formulary. Part of our struggle I think was what Charlene alluded to which is not everyone and not every geographic area has access to an up-to-date formulary.

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

Right.

**Paul Tang – Palo Alto Medical Foundation**

So, that’s why we wanted the certification criteria so that EHRs would have them and then based on the local, you know, what’s the best formulary or what’s the most popular, or whatever it is, and the hospitals are fairly easy because they only have one.

**David Bates – Brigham & Women’s Hospital & Partners**

Right, so maybe we should stay with this, but, you know, continue to ask for it in Stage 3.

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

Yeah and clearly, you know, depending on what comes down in the rule too we know that it’s an important one, you know, that we have to make sure to see how they defined it.

**David Bates – Brigham & Women’s Hospital & Partners**

Right.

**Josh Seidman – Office of the National Coordinator**

This is Josh, I guess I just want to, just for a process check, and Paul feel free to correct me, I had thought that the goal of these groups and certainly the one that we had yesterday was to sort of try to outline the topics and sort of the measure, the functionality constructs and so forth that you were interested in rather than sort of hammering out specific things around actual objectives and there are sort of two reasons for that, one is to just sort of, you know, lay out the groundwork at the start, and then also obviously, to wait for what comes out in the NPRM and how you all decide to respond to that. So, Paul, is that what you were thinking or did you want to go into this level of detailed discussion?

**Paul Tang – Palo Alto Medical Foundation**

Yeah, I think for the reasons you mentioned it we don't have to go into the details yet just because we don't have the NPRM. There's nothing wrong with getting started, I mean it's sort of either way is fine, but we can outline some priorities this group had, so what areas did we want to go in, and so when David started out with the CPOE that is an opportunity to say instead of continuing to have the structural measures can we move towards measurement and outcomes, in effect that's how we started going into the formulary because formulary is yet a different topic, is one of the few "efficiency" measures we have, the other one is that we had tried back in Stage 1 was high cost imaging and it never made it, but you know, those are areas where decision support with CPOE can make a difference and that's sort of what David is talking about right now.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah, and I'm comfortable just keeping it higher-level if we want to wait for the NPRM also. I actually thought we were supposed to start going through things, but it was not clear to me. So, Paul would you rather us keep it higher level at this point and we can avoid getting into the granulated tail for now?

**Paul Tang – Palo Alto Medical Foundation**

Yeah, I think that would be a good idea.

**David Bates – Brigham & Women's Hospital & Partners**

Okay.

**David Lansky – Pacific Business Group on Health – President & CEO**

David, can I make a comment about that?

**David Bates – Brigham & Women's Hospital & Partners**

Sure.

**David Lansky – Pacific Business Group on Health – President & CEO**

The higher level thing?

**David Bates – Brigham & Women's Hospital & Partners**

Sure.

**David Lansky – Pacific Business Group on Health – President & CEO**

I like the way this conversation is going and I don't know if we can generalize it or make a format or template from it, but what I'm hearing, I think you raised it when we started on the CPOE and Paul's thought about outcome it that in a sense there was a staging that in broad stroke Stage 1 was to have systems that captured important data, in Stage 2 we begin to manipulate that data and in Stage 3 we demonstrate some attainment of clinical benefit or outcome process and as you operationalize that for different buckets, in this case the CPOE-related order sets for meds, labs and radiology, in each of those threads that there is kind of a thread over time where we've got the capture piece in CPOE and we've got the clinical decision support as the operationalization of, you know, the intelligence center and then we've got potentially an outcome improvement as a result.

And if we could take that three part model for each of these big buckets of stuff, in other words, right now, what we have is sort of a list of things. A formulary pops up here and drug allergy pops up there, and it's not...or somehow organized in a way that suggests a strategic implementation of IT. But, I think we have it, we just haven't really laid it out that way. And maybe we could think about shaping it and in each case advancing our requirements as far down the path toward the outcome measure as possible and backing off to the CDS level if that's the best we can do, and even backing off to capture if that's the best we can do. But, that framework to me would be a good publically understandable representation of what we're trying to accomplish.

**David Bates – Brigham & Women's Hospital & Partners**

I think that's a good suggestion. So, let's talk then about what outcomes we might expect to see, you know, for some of the various categories of intervention. Let's start with CPOE. What outcomes do we think we could reasonably ask for in Stage 3?

**Eva Powell – National Partnership for Women & Families**

Well, this is Eva and I actually just got off of the phone right before this call with folks in the long-term care setting who have been working on Health IT and it was amazing to me to hear how much progress has been made in long-term care, much more so even than in physician practices, and so they highlighted a number of areas where they thought Meaningful Use could reach out of the four walls of the hospital and the physician practice in order to somehow promote the connection with other provider settings, which I think is something I would really like to see in Stage 3 because I'm not sure that we can say we've really advanced care coordination, quality, efficiency or really any of the things if we remain stuck in our silos of doctors and nursing homes, I'm sorry doctors and hospitals, even though, obviously, we need to bear in mind that the incentives only go to them.

But, I think there are a lot of things we could do to promote cost setting including other settings and other providers that are not eligible for incentive money and I think to the degree that we can, we should absolutely be doing those things in Stage 3 and so with regard to this one area one of the things that they said could make the biggest difference is when you talk about CPOE on the hospital or physician end to make sure that is interoperable not just two-way, between doctor and hospital, but three-way to other providers and I think one thing that does is it starts getting at the overall interoperability problem that we still haven't resolved but it also puts fingers into care coordination.

So, I know we need to be a lot more specific than that and I'm not sure I'm the one to stay say that, but I would really like to see in all of Meaningful Use a greater ability to these silo or healthcare system, because I'm not sure we've actually really done much in that regard thus far in Meaningful Use.

**David Bates – Brigham & Women's Hospital & Partners**

All right, so, you know, we've certainly made efforts to do that with some of the data exchange things that we've focused on, but I would agree with you that has been one of the parts of things that has kind of been the most challenging.

**Eva Powell – National Partnership for Women & Families**

Well and I think the other thing that we should bear in mind that I had not thought of before, but that this conversation revealed is that in our attempts to be consistent and aligned with other incentive programs what we haven't talked so much about or at least in the conversations that I've been part of, is the hospital re-admission reduction and payment. I'm not that familiar with that program, but the point that was made in the conversation I had earlier was that in most of these other incentive programs it's only a subgroup of providers that will be participating in that, but the re-admission payment penalty applies to all hospitals, and so that's a leverage point that we should be thinking about in order to build into Meaningful Use things that we know may be difficult for particularly hospitals to do and that they would not necessarily be inclined to do, but that we know will help them when it comes to this re-admission requirement down the road as well and some things, again CPOE, the medications, reconciliation being able to do that three-way not just internal to a hospital or a physician practice.

So, I don't know I would encourage us to think a little more broadly than what we have been, which I know is hard, but these are just some of the things that I think we really need to achieve in Stage 3 to really feel like we have set things up well for overall reform.

**David Bates – Brigham & Women's Hospital & Partners**

Gotcha you. I agree, I think that most of these things really fall into group three, which is the care coordination one because they have sort of been tasked with doing some of the data exchange part of things. It's tricky making CPOE interoperable. So, you know, typically you have to be licensed within whatever your organization is just to be able to write an order. There are times when that is not true, so I can send a laboratory order to a lab that I don't have a relationship with, but most hospitals wouldn't let

me write an order if I'm not licensed within that hospital. I don't know, Charlene do you have comments about this?

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

I agree that the interoperability piece I agree is a real challenge. Here let me tell you where we're hearing it, when they're doing the exchange with sharing the med list, what's happening is I send my discharge summary from the hospital into the practice and it populates, it shows up on the provider's desktop and here's the meds that were given in the hospital in the current state, and then they have to do the reconciliation process. They want to populate their EHR with the prescription, that's what I'm hearing, so not just the list but the prescription, right? So, we're starting to hear that now in terms of operations. So, as part of that reconciliation process, I mean but they might be able to pull that down from Surescripts or other sources too. So, we're starting to hear that on the interoperability piece, but it's more on that data transfer piece during transitions of care. So, I don't know if others are hearing it in that space, but it's more than just, you know, the high-level definition of the order, it's the whole prescription.

**Eva Powell – National Partnership for Women & Families**

Yeah, okay and I didn't mean to get us off of track. I realize a lot of this stuff is care coordination, but anyway, just to the degree that some of these things can be addressed in these areas, what I don't want to have happen is for this to be hard and then get kind of tabled a little bit by everyone.

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

Yes, so really what we're seeing kind of as you look at, you know, during that care transition, there is almost a transition reconciliation step. The problem list is reconciled, so, you know, right now we just reconcile the meds that would start the flow in terms of, or an encounter reconciliation step, right? So, that's kind of where, you know, we're seeing the flow happen. So you end up with what's truth in your local electronic health record basically.

**Eva Powell – National Partnership for Women & Families**

Yes.

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

So, I don't know if that would meet their needs, but it certainly would seem to, you know, help.

**Eva Powell – National Partnership for Women & Families**

Yeah. Yeah, definitely, and I guess my idea is not necessarily to take the steps toward that. I'm not sure of how much...

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

Okay, that's fine. I was just telling you kind of where the...

**Eva Powell – National Partnership for Women & Families**

Yeah, yeah.

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

Once you start to do it what the asks start to become.

**Eva Powell – National Partnership for Women & Families**

Yeah.

**David Lansky – Pacific Business Group on Health – President & CEO**

So, this is David, I like where Eva was going and also I like the suggestion that we think about the longer-term payment models because Meaningful Use itself will be now, especially in Stage 3, a relatively short-term structure, and the other payment changes that are rolling into place will be longer-term incentives for information use, and if we understand that at least have it on our radar it'll help us decide on how to do some of these things with more durability and the incentive model.

And back to your question, David, about what outcomes do you use for CPOE, it occurred to me that our header on this whole section improve quality, safety, efficiency and disparity, give us four kind of compass points to consider as outcomes, and if we take CPOE as an example of one of the entry points to the whole flow, we've already identified some safety outcomes associated with CPOE, which we're translating into drug interaction tests, drug allergy tests and so on, we have clearly identified an efficiency outcome, which says essentially the formulary is an option in saving dollars as you mentioned. We could consider whether they are quality outcomes and disparity reduction outcomes that we would attribute to CPOE use and I think there are, and so using those four tests for any of these categories of implementation might be a way to find our outcomes of interest and then if necessary back off to a CDS.

**David Bates – Brigham & Women's Hospital & Partners**

Okay. I may be a bit of a purist, but when I think about outcomes I think about actual injuries and I think it's too much to ask hospitals, you know, did they have fewer adverse drug events, for example. I'm confident that they will if they do the right things, but I would also be okay with sticking with something proximal to that, that is to say did they have the right medication related decision support in place on the safety front.

**David Lansky – Pacific Business Group on Health – President & CEO**

Well, personally, I think that's reasonable in the hospital setting, you know, the ADE review that the consultants did with new measures also came out with a kind of, you know, hospitals and I think the original intent of the subcommittee was to look at is it possible to measure a reduction in adverse events and maybe that's something we have to build a history before we can do that. But some of the other data, you know, I think the CBO or somebody did this report on 84% of adverse events where going unmeasured, unreported. So, it seems like that's a big area that I hate to just turn our back on, but I also understand that in the short-term we're not going to get there from where we are today overnight.

**David Bates – Brigham & Women's Hospital & Partners**

Sure, I mean, you know, the situation is better in the hospital than it is in the outpatient setting in terms of our ability to identify them, but I think the CBOs assessment was correct. I do like the idea of using the quality, safety, efficiency, disparity's framework for each of these. And we have a couple of things that we've talked about for safety. Are there things that we would think about for quality in CPOE?

**Paul Tang – Palo Alto Medical Foundation**

David, this would be an opportunity to...

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

Hello?

**David Bates – Brigham & Women's Hospital & Partners**

Did Paul just cut out?

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

Well, I was going to put a quality one in, that's where we do a lot of the work in terms of when you're writing orders, that's where you can identify the need for preventative care kind of things too, you know, so you're looking at the patient record and you can certainly flag that certain procedure, or you know certain follow-up needs to happen.

**David Bates – Brigham & Women's Hospital & Partners**

Right.

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

So, there's an order set or however you're doing it, you know, you set it up as a preventative care, order set or the patients get smarter or this patient has these symptoms and you suggest these things. So, again there's a lot of variation in terms of the level of sophistication around that space. So, there's definitely some quality initiatives that can be addressed and that's actually where a lot of the quality measures, you probably do that, you know, our outcomes are achieved through CPOE.

**David Bates – Brigham & Women’s Hospital & Partners**

No, exactly. David is developing the actual measures and this will start to bleed over into the measures themselves.

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

Yeah, yeah.

**David Bates – Brigham & Women’s Hospital & Partners**

So that makes it tricky.

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

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

I don't know where I got caught off, but...

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

Well, we were just saying we're linking to quality, I mean, it's like we use CPOE to capture the data to report on measures today, so it's really, you know, part and parcel with the measurement process.

**Paul Tang – Palo Alto Medical Foundation**

Right. Would it make sense to piggyback on the Million Hearts Campaign and pick a cardiology domain, you know, it could be aspirin or beta-blockers.

**David Bates – Brigham & Women’s Hospital & Partners**

Sure.

**Paul Tang – Palo Alto Medical Foundation**

Or something and in fact either of those could work in the hospital as well so you don't have to have different measures.

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

Absolutely.

**Paul Tang – Palo Alto Medical Foundation**

And then so you measure it then of course it can tie to JACHO measures, so you tie it from the measure back to the CDS, back to the CPOE and we could even tie it to drug allergy, but at any rate, I mean at least go those three.

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

Yes.

**Paul Tang – Palo Alto Medical Foundation**

And that plugs right into.

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

Well, you know, Paul, you remember how we talked about like order sets and all that stuff originally, but that's where we, if you tie it to the measure that's where we link it all in is in order set.

**Paul Tang – Palo Alto Medical Foundation**

Right. Right.

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

Right?

**Paul Tang – Palo Alto Medical Foundation**

Right. And one of the areas we want to push on is what are the more outcomes oriented quality measures that we might have to actually development de novo, I mean, if there's something that exists we certainly will use it, but if there is more or less a next generation quality measure this is one way to push development of those newer kinds of measures.

**David Bates – Brigham & Women's Hospital & Partners**

Okay.

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

Well one thing, you know, if there is, this is my advocacy point, a road map of what those measures might look like then that really starts to drive, you know, development planning, you know, a lot of pieces too, so that's really, the sooner those can start to be formulated then you can start to get the evidence-based capabilities in place.

**Paul Tang – Palo Alto Medical Foundation**

In fact, we could play the whole thing out and go ABCS, again, part of the Million Hearts. You can certainly see how ABCS fits in with safety, it fits in with quality and the CDS in it and also dovetails with a lot of the other measurements we already have, the structural measures for Meaningful Use Stage 1, so it's the vitals and the blood pressure, the smoking documentation, etcetera.

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

Yes.

**Paul Tang – Palo Alto Medical Foundation**

We can sort of tie all these things together so you can see, oh gosh if you do these things that are enabled by Meaningful Use capabilities well you actually produce a measurement that can help your quality as well as also...in the future.

**David Bates – Brigham & Women's Hospital & Partners**

Yes, okay, so this is starting to make sense. I'm making an outline as we're talking here. So we have a variety of things on the quality front. On the efficiency front, we could link back things around drug formularies, we could link in things around laboratory and radiology costs, too.

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

The guys that are writing the whole radiology evidence-based process for rather than going out to third party administrators actually doing that checking within the system, and I know that is supposed to come out within a year or two in terms of what those protocol looks like, but again, that's linked to efficiency and quality. So we should take a look at, and there's a whole project going around the space. Appropriateness, appropriate guidelines, that's something we should consider for Stage 3.

**David Bates – Brigham & Women's Hospital & Partners**

Okay. And how about on the disparities front? This one is little trickier for me, I mean it seems clear that you should have the same decision support for it.

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

Right.

**Paul Tang – Palo Alto Medical Foundation**

Well maybe one of the ways we can do it is, I don't know how you necessarily cure disparity in a report but, could we take into account the disparity variable? So, look at let's say blood control in African-Americans and so the CDS can help guide a treatment drug class.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah, actually, our decision support is different for African-Americans around hypertension.

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

**David Bates – Brigham & Women’s Hospital & Partners**

You know that’s what, yeah.

**Paul Tang – Palo Alto Medical Foundation**

Right, so that’s one way we could, at least, so then you’re leverage, one you have to obviously capture the race and ethnicity. Second, you have to incorporate and so we’re exercising the system to produce a more tailored decision support.

**Eva Powell – National Partnership for Women & Families**

So, and this is Eva, the other side of that as well is to use this in a quality metric way and just to compare and I don’t know if the fact that the CDS is different would hamper this, but to the degree possible make sure that the race, ethnicity and the data that is collected is used not just to tailor care, but also to determine whether or not disparities exist and where they are and then target interventions.

**David Bates – Brigham & Women’s Hospital & Partners**

Okay. Good. Okay, you know, in just looking through these, the sort of the other big categories I have, you know, really mostly relate to sort of data types and their demographics, problems, vital signs, smoking status, and then clinical decision support and registries. Clinical decisions support and registries are a little more like CPOE. These others are just really kind of core elements in the record.

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

What did we decide on registries?

**David Bates – Brigham & Women’s Hospital & Partners**

I don’t think we, have we decided anything?

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

I don’t recall. I know we looked at it.

**Paul Tang – Palo Alto Medical Foundation**

I don’t think we have added them yet because we ran into a number of challenges from that area.

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

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

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

Okay.

**David Bates – Brigham & Women’s Hospital & Partners**

I thought we did have them sort of, let’s see, let me just go back to where they are.

**Paul Tang – Palo Alto Medical Foundation**

I think we had stratified patient list.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, exactly, that’s what I was thinking, so we have lists of patients by condition which is effectively a registry. We didn’t call them registries.

**Paul Tang – Palo Alto Medical Foundation**

Yeah, I think the some of the specialists were pointing us to external registries and we ran into a number of challenges there.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

But, clearly, we want to make lists of people by the EHR.

**David Bates – Brigham & Women’s Hospital & Partners**

Okay, so we want to call them lists instead of, I mean, you know, for improving care it’s really important that they be actionable lists?

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

Yeah, that was my point, it’s like it’s more than a list. My problem is that you need some more functionality around it.

**Paul Tang – Palo Alto Medical Foundation**

Well that’s a good direction.

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

All right.

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

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

Okay, I mean, you’re right.

**Paul Tang – Palo Alto Medical Foundation**

And I think one of your implicit points is that not all the EHRs have actionable lists or things that dynamical change as new lab tests come in, etcetera.

**David Lansky – Pacific Business Group on Health – President & CEO**

So, I think one of the places the registry discussion goes, especially for the specialist, the ophthalmologist and the cardiac surgeons, and the cath labs, is that the, you know, prevailing model of an EHR in an ambulatory office or even a hospital EHR doesn't speak very accurately to these specialists EP utilization of Health IT. So, you know, we’ve been talking in some of the oncologists, the ophthalmologist and so on, who all have specialized ICU infrastructure around them and I think the question for us ultimately is whether we want to create a vehicle for qualifying for Meaningful Use, which is sort of an assembled registry data model so it would allow you to qualify for Meaningful Use even though the data that populates it comes from a bunch of different places, but ultimately what you then have is a data platform that does some of the functions...that we could try to list. But if you’ve got those functionalities, even though you don't directly control the whole software platform, your basic cardiologist, interventional cardiologist he can get credit for it if your cath lab has got this kind of system in place and can do the things it needs to, and that’s I think the issue we’ve never quite wrestled with in spite of people hearing a lot of frustration I’m still hearing from the specialty society. I guess, Paul, I don’t even know quite how we feel about it. In some ways we were trapped by the original HITECH law to think about pretty much the space in the EHR and it just never has mapped very well to where these particular specialists are. So we’ve never quite figured out how to crack the code.

**Paul Tang – Palo Alto Medical Foundation**

I think one of the directions we were headed is, I think, what I understand you to say is essentially getting credit for participating in that registry instead of requiring participation, even NQF has wrestled with this and decided against any measure that would require you to do something, but at the same time if you are participating both in understanding your own practice and contributing to the broader knowledge base

that's a good thing and that's a good use of the EHR in HIT, so that may offset some other requirement, but I think we actually are not requiring it.

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

Yeah.

**David Lansky – Pacific Business Group on Health – President & CEO**

Well I think the idea was discussed at some point was if we could figure out what these functions of a registry are that qualify as Meaningful Use of a registry and we could list them then CMS or someone could say okay these 12 registries passed the test and if you are a satisfactory user of the registry, both the data contributor and a data user you can qualify for Meaningful Use.

**Eva Powell – National Partnership for Women & Families**

Well, this is Eva, and to go along with that in my mind there's a closer tie between the use of the registry and the ability to address health disparities and so, I don't know what that would look like or if there is value in somehow tying those rather than having completely distinct criteria but that is just something that rolls around in my head.

**Paul Tang – Palo Alto Medical Foundation**

So, I think we've mentioned a number attributes building on David and Charlene's points, we talked about actionable, we talked about being dynamic, we talked about it being able to stratify by, in Eva's case, a disparities variable, and you can see how a number of EHRs don't have that. They think of patient lists as essentially a report that you have to create on the fly instead of its dynamically updated and you just click on somebody where you have an exception and immediately go there to try to immediately do something as part of an action or potentially even just immediately order an A1c or the mammogram, or whatever it is. So, maybe that is the direction to go.

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

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

And then if other ways of satisfying that become available that could be a substitute but mainly what we're trying to do is insist that EHRs have this capability.

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

You know, the other element on that one too is like as you're stratifying and then it's by panels, you know, it's by the matrix, by panels, by populations, so there are other stratifications too, by individual physicians, that dimension, too. So, there's some functionality around there.

**David Bates – Brigham & Women's Hospital & Partners**

Great.

**David Lansky – Pacific Business Group on Health – President & CEO**

I wonder if it would be worth meeting kind of a small off-line group and invite a couple of the registries, stewards to.

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

That'd be great actually.

**David Lansky – Pacific Business Group on Health – President & CEO**

To work with us and try to see if we could make a list of generalizable of these functions and roles, and we could do it as an off-line discussion, it may or may not pass our test, but we would come back in May or at some point and see where we stand.

**David Bates – Brigham & Women's Hospital & Partners**

David, would you be willing to coordinate that?

**David Lansky – Pacific Business Group on Health – President & CEO**

Yeah, sure.

**David Bates – Brigham & Women’s Hospital & Partners**

That would be great. So, you know, I mean it seems to me like the three big, as I look at our list and then reflect on things, it seems to me like the three big, you know, types of functionality for which makes sense to reflect on it are CPOE, clinical decision support and then actionable lists or whatever it is we’re going to call them.

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

Reporting, yes.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah. And let’s talk a little bit about clinical decision support because we, you know, we have not discussed that too much. In Stage 1 we’ve just said pick one rule, in Stage 2, you know, we asked for some more specifics like some more, like what your source is and it should be configurable based and context, but how can we in Stage 3 take this all the way to outcomes or begin to do that? I mean I guess one way, which relates to things that we talked about before is you can pick people with a specific condition like diabetes or coronary disease and see whether their outcomes are getting better. They’ve been able to show in the UK that outcomes did improve for patients with coronary disease after implementation of their national program, that took awhile.

**David Lansky – Pacific Business Group on Health – President & CEO**

I think you’d certainly hear from the Kaiser folks that they think running these precision tools through Epic has made that kind of a different in their cardiovascular program.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah.

**David Lansky – Pacific Business Group on Health – President & CEO**

Back to the ABCS s strategy. I’m wondering if there’s an infrastructure piece of this as well as an application piece meaning, you know, Paul, we’ve talked a lot about the plug-and-play idea for measurement and quality measures and I don’t know, David, what the state-of-the-art is for the plug and play of decision rules, whether there, and Charlene from a vendor functionality, one could begin to talk about as having the capability of adopting an applet or a rule from the table from a national source so that there could be the capability of general adoptions widely accepted in clinical decision making.

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

There’s actually more work in that particular field. I just actually, it’s kind of fallen off the radar in the last couple of years, you know, and I’m actually not sure where that’s at, you know, at this point in time. And I know the discussions have been around can we link the data element content to what gets standardized in the measure content so you’re on the same playing field. But, it’s certainly been a topic and evolving over the years to where there’s a standard set of rules that can be used and shared among systems.

**David Bates – Brigham & Women’s Hospital & Partners**

There are sort of several efforts to begin to build standardized tests of rules that you could consume, for example the web service. None of them are really widely used and the standards I would say are still kind of immature, but that’s a very attractive place to be going.

**David Lansky – Pacific Business Group on Health – President & CEO**

Has our Standards Committee done any work around that at all just to at least monitor?

**David Bates – Brigham & Women’s Hospital & Partners**

Good question.

**David Lansky – Pacific Business Group on Health – President & CEO**

...

**David Bates – Brigham & Women’s Hospital & Partners**

Josh, do you know?

**Josh Seidman – Office of the National Coordinator**

I'm sorry, what was that?

**David Bates – Brigham & Women’s Hospital & Partners**

The question is whether the Standards Committee has done any work on monitoring the development of basically rules that might be consumable through a web service or an as applet, that sort of thing?

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

Yeah.

**Josh Seidman – Office of the National Coordinator**

I'm not sure.

**David Lansky – Pacific Business Group on Health – President & CEO**

I didn't want to get us off track but just thinking that rather than us trying to specify a bunch of decision rules that we think everyone should reflect in Stage 3, if we could solve or at least put people on the road toward solving the longer term implementation opportunities, that would be one way we could proceed.

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

You know, and this is like where there can be some science, this is a huge value so everyone just doesn't have to do it over and over again, you know, so this is, I know work is happening in this field, so that'd be great to have an update on it.

**Paul Tang – Palo Alto Medical Foundation**

As David alluded to, we did try to push on the notion of having, I think my mistake was use of the word platform, people got pretty ruffled about that word, but really some way where you could have a plug-and-play both the CDS rule and the quality measure, that's the kind of flexibility that providers are looking for. It would be a shame if when we specified, let's say in our cardiovascular CDS objectives vendors hardwired it into their systems and we got stuck again in having to do an upgrade for every rule. So, we do want to get more into that flexible capability to incorporate and consume with these rules and measures of definition.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, I think this is one that it would be worth going back and just asking the Standards Committee about where they are certainly.

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

**David Bates – Brigham & Women’s Hospital & Partners**

Because there would be a lot of value added in it.

**Paul Tang – Palo Alto Medical Foundation**

The things that we do together, you know, we proposed doing essentially a joint hearing imaging or a joint hearing on CDS would certainly be one of those high value things it would seem.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah, I think so, too. Okay.

**Paul Tang – Palo Alto Medical Foundation**

So, let's see, Mary Jo or Josh, I mean could you explore the possibility, you know, do we have the funding to be able to do a hearing on that kind of topic?

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

We'll certainly explore it.

**Paul Tang – Palo Alto Medical Foundation**

Thanks.

**David Bates – Brigham & Women's Hospital & Partners**

Okay, and, you know, sort of other broad domains that come out that people think of as relating to our area. You know, when I look at the measures a whole bunch of them just relate to capturing key data types, as I mentioned before.

**Paul Tang – Palo Alto Medical Foundation**

So, maybe one of our "gives" is that we don't keep escalating, we don't keep piling on to these data capture things that you've characterized, David, but that we start looking for these bundles from mode of entry through decision support and measuring it and getting an outcome and that's the new direction which we always promised for Stage 3.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah.

**David Lansky – Pacific Business Group on Health – President & CEO**

So, maybe if we could get elegant in how we think about that finding three or four exemplary ways of that capability being demonstrated would be, maybe it's a Million Hearts, Paul.

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

**David Lansky – Pacific Business Group on Health – President & CEO**

You know, if we take Million Hearts as one thread and we take sort of the CPOE, safety as another thread, and then something on efficiency like radiology use or formulary use, we could start in each of at least those four big headers quality, safety, efficiency, disparities if we had a thread that went all the way through from capture to CDS to outcomes and a user could demonstrate they were using their new technology to do all that in a number of areas that would be pretty powerful.

**Paul Tang – Palo Alto Medical Foundation**

The only caveat is I think we have to explicitly write the objective that turns in to certification criteria so they aren't hardwired so we don't get in that box again.

**David Lansky – Pacific Business Group on Health – President & CEO**

Yeah, exactly.

**David Bates – Brigham & Women's Hospital & Partners**

Right and what thread would you pick for that story for disparities?

**Paul Tang – Palo Alto Medical Foundation**

Well, your African-American hypertension is an example.

**David Bates – Brigham & Women's Hospital & Partners**

Yeah, okay, and that's the best one I can think of. I'd like to have an even better one, but I can't come up with anything.

**Paul Tang – Palo Alto Medical Foundation**

So there you could not only affect the decisions made on the treatment, there is value in reporting.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

For the African-American race and that’s linked to evidence about what its implications are for mortality for example.

**David Bates – Brigham & Women’s Hospital & Partners**

I think that’s a nice story. Okay and remind me when the NPRM is going to be available again?

**Paul Tang – Palo Alto Medical Foundation**

Well, they keep promising February and hopefully it’s in the earlier half of February. So, anyway sometime this month.

**David Bates – Brigham & Women’s Hospital & Partners**

So, before we get together again?

**Paul Tang – Palo Alto Medical Foundation**

Correct.

**David Bates – Brigham & Women’s Hospital & Partners**

Okay.

**Paul Tang – Palo Alto Medical Foundation**

And the overall Meaningful Use Workgroup will be meeting, I think it’s on March the 6<sup>th</sup>, where we’ll have a summary presented by CMS/ONC and then we’ll start really delving into the response there and some of that of course will bleed into Stage 3 discussions.

**David Bates – Brigham & Women’s Hospital & Partners**

Yeah. Okay. Well, other thoughts about this? I feel like we’ve been able to come up with a framework, which works reasonably well, most of the various things fit into one of several big domains and then we can use the safety, quality, efficiency, disparities kind of lens to go through each of those. And also tell the story of, you know, we’ve asked people for certain data types and we’re not going to ask for a whole bunch of additional data. What we’re going to do is ask you to bring it together and use it to improve outcomes and we have examples for each of the four areas. Does that sound plausible?

**Paul Tang – Palo Alto Medical Foundation**

Sounds good.

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

And I think if you re-enforce the need for standards to do that, you know, piece of it, that would be great, just add that piece on, you know?

**David Bates – Brigham & Women’s Hospital & Partners**

No, absolutely. Okay, other thoughts or comments. I mean I’m thinking it’s possible we’ve gotten as far as we’re going to be able to get today without the NPRM.

**Paul Tang – Palo Alto Medical Foundation**

Actually, I think it’s a great framework.

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

Yeah, I think so. I think it’s a great framework, too and I just kind of have to think back on care coordination which is a comparable path, but I think we just have to wait to see what comes out, too.

**David Bates – Brigham & Women’s Hospital & Partners**

Yes, okay. Any other thoughts then? If not, Mary Jo, do you want to open this up for public comment?

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Yes, thank you. Operator, would you open the lines for public comment?

**Caitlin Collins – Altarum Institute**

Yes. 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 not have any comments at this time.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Thank you very much and I will remind you that you're actually going to be talking together three days in a row next month on the 6<sup>th</sup> will be the full Meaningful Use Workgroup meeting, on the 7<sup>th</sup> is the full Policy Committee meeting and on the 8<sup>th</sup> is your second meeting. So, there's a lot going on next month.

**David Bates – Brigham & Women’s Hospital & Partners**

Great. All right, well, thank you all and we'll be in touch.

**David Lansky – Pacific Business Group on Health – President & CEO**

All right. Thanks, David, safe travels.