

Meaningful Use Workgroup
Draft Transcript
April 1, 2011

Presentation

Judy Sparrow – Office of the National Coordinator – Executive Director

Good morning, everybody and welcome to the Meaningful Use Workgroup. This is a Federal Advisory Committee call, so there will be opportunity at the end of the call for the public to make comments. Just a reminder, workgroup members please identify yourselves when speaking. Paul Tang.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

George Hripcsak.

George Hripcsak – Dept. of Biomedical Informatics Columbia University – Chair

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

David Bates couldn't make it. Eva Powell from National Partnership?

Eva Powell – National Partnership for Women & Families – Director IT

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Neil Calman. Art Davidson. David Lansky.

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

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Deven McGraw.

Deven McGraw – Center for Democracy & Technology – Director

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Charlene Underwood.

Charlene Underwood – Siemens Medical – Director, Gov. & Industry Affairs

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Latanya Sweeney. Michael Barr.

Michael Barr – American College of Physicians – Vice President, PA&I

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Jim Figge.

Jim Figge – NY State DoH – Medical Director

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Marty Fattig. Judy Murphy.

Judy Murphy – Aurora Health Care – Vice President of Applications

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Joe Francis. Karen Trudel.

Karen Trudel – CMS – Deputy Director, Office E-Health Standards & Services

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

Josh Seidman.

Josh Seidman – ONC

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

And we have our speakers on, Doug Bell from Rand.

Doug Bell – RAND – Research Scientist

Here.

Judy Sparrow – Office of the National Coordinator – Executive Director

I'll turn it over to Paul Tang.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Great, thanks, Judy. We have a tight agenda, so we'll move along quickly. Our first order of business is to finalize the May 13th specialist hearing, importantly the panelists and then we have some questions we'll just entertain and then do finalization on e-mail. We have a quick organizing ourselves for April 5th face-to-face meeting, which, by the way, will begin at 8:30 and go on until 5:00. Then we have a discussion by Rand about their drug-drug interaction work. This relates to what we call the evidence-based drug interaction objective in the meaningful use proposal for stage two. Then, we'll close the public comments.

Without further ado then, let's move on the May 13th specialist hearing and you should have an update I believe Judy sent out, perhaps, yesterday with the current status of the panels and the panelists that are proposed. Why don't we just go through those panel by panel and see if we have any comments. None of these folks have been invited yet, correct, Judy?

Judy Sparrow – Office of the National Coordinator – Executive Director

That's correct.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Let's see if we have comments on the panelists themselves. I could probably also read the latest we have for the questions just to stimulate or remind ourselves what we want to accomplish during that panel.

So, the first one we labeled Panel A-1 is Care Coordination Among Specialists, Primary Care, Care Management and Patients. The kinds of questions we're going to ask the panel are what is the minimum data set needed to be transferred by whom and when? What quality measures would you recommend to

assess care coordination? This we might defer really onto the Quality Measurement Workgroup, would you agree with that, David Lansky?

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

In terms of which measures are needed for care coordination?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Yeah.

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

That's in play already, too.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Yeah, so we don't need to cover that. Then we really were concentrating on some of the things we mentioned in our stage two criteria. So, we're asking how does your specialty handle the following: data exchange in the flow loop, longitudinal data capture, patient reported outcomes, registries, longitudinal care plans and problem list and medication list reconciliation.

So, those were sort of the kinds of things and we probably have to flesh this out a bit more for this panel. In the e-mail, you can see we listed a number of folks: Ann O'Malley from the Center for Studying Health System Change; Tom Graf from Geisinger; Cheri Lattimer from Case Management Society of America. We had initially put some long-term care, post-acute care names in both this panel and Panel 3, if we get overcrowded with this one we might consider that better placed in Panel 3 under Experience, and a Sacramento Stage W Blue Shield kind of arrangement.

David, did you have any other update on the Sacramento group?

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

Well, I got a little pushback. I was hoping to get someone from an IPA kind of environment and less integrated than the Geisinger examples and the private practice physicians that have been mentioned to me are not too eager to travel for our hearings. I'm still working on that.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay. Comments about the names so far and any other suggestions?

Charlene Underwood – Siemens Medical – Director, Gov. & Industry Affairs

Paul, the only thing, before we jump down to data elements and the questions, it would strike me, we might—and I think Dr. Hickey has kind of identified, what are their key pain points. If they could take it up a level and just speak to what pain points in the process or where is the highest need in terms of exchange, so the elements are in a context, if you will.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I totally agree. As I read that, it did seem like we jumped down to things. The main purpose of the panel was from this sort of multi-disciplinary team kind of approach; what do you need to travel around? At least if we say pain points from an information point of view; I think we all have pain points.

Charlene Underwood – Siemens Medical – Director, Gov. & Industry Affairs

Yeah, that would be great.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay. Comments on the panelists we have so far.

M

Who actually on there is a specialist?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

That's a good question.

M

So, the question is how does your specialty handle X? So, is there anyone with a specialty?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Should we focus perhaps on, well, the national quality strategy focused on cardiovascular health; maybe we should pick a cardiologist or at least someone in that field.

Josh Seidman – ONC

I'll just note that on the last call when Ann O'Malley's name was brought up it was mentioned that she did present at the last hearing and that perhaps she would be able to identify from their research other actual specialists.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Well, what do we have as suggestions for someone in the cardiovascular space? Actually, there were a couple of organizations, like the AMA, who volunteered to help us with some names.

Josh Seidman – ONC

I can certainly reach out to the American College of Cardiology.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

That makes sense. If you paint what we're looking for, it's not just from a cardiology point of view, it's cardiologists as part of the whole care team and what kind of information should flow to and from the other folks. Okay, so maybe an ACC contact or reach out would be helpful there.

Tom Graf from Geisinger, I don't remember his specialty.

Deven McGraw – Center for Democracy & Technology – Director

I thought he was an internist. I actually was just at Geisinger yesterday and he gave us a presentation.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I think you're right, too. I think he was picked for the whole, sort of the care coordination aspect of it. So if we have a cardiologist, let's say and his perspective as both an internist, but also he is a primary care provider and Geisinger has done a lot of work with his care coordination.

M

Yes, he's family medicine board certified, so that's good for that role, which we talked about having on the panel.

Deven McGraw – Center for Democracy & Technology – Director

Yeah, actually, I got a care coordination presentation yesterday. It was really fascinating. It just shows you what can happen when things work the way they're supposed to.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

It's nice to be reminded. Okay, that's a really good place and hopefully we can get him. Then we have the Case Management Society and I don't know whether that Cheri herself or someone she recommends. Oh, what about the patient side? Any ideas there, maybe, Eva?

Eva Powell – National Partnership for Women & Families – Director IT

I'm trying to think.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Probably someone who has a chronic condition that, well, I mean it could be like diabetes.

Eva Powell – National Partnership for Women & Families – Director IT

Yeah, and I'm wondering do we want; I guess I'm trying to think what do we want from that patient side? I think it's good to go down the track of chronic conditions. Do we want someone who simply is not having their needs met and then could speak to that or someone who is actually getting those needs met?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I think sometimes hearing a good story, because all of us understand how things aren't working too well right now. As Deven was illustrating, hearing how it could work and seeing how that feels would be really great.

Josh Seidman – ONC

Another possibility is, because this often is an issue, is information getting back to the system. Are cancer patients who then return to primary care and how does the information follow them?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Or, if we kept cardiology scene, again, because that's part of the national strategy focus, that might help. Our goal was to almost have this group try to be the care team for an individual and how would that work, so maybe identifying a patient with a serious cardiovascular condition who does receive care in multiple places.

Eva Powell – National Partnership for Women & Families – Director IT

Would it be helpful— Because I agree. I think the good example is the better way to go, which, of course, narrows the field of possibilities of who we might ask. I'm just thinking there was a discussion before about Geisinger. I don't know if it's good or bad to go to someone like them to ask if there is a patient that we could reach out to or if that's the way to go. Because I'm just thinking about the advocates that we work with and the patients that we know and having a hard time coming up with one who will see what we're talking about.

M

Jessie Gruman has been doing some, that would be back in the cancer world, but Jessie might be good from a credential point of view.

Eva Powell – National Partnership for Women & Families – Director IT

Yeah, that's a great— I can't remember, she talked, I think they're calling it a framework, but it comes at this from the whole person care perspective, but it emphasizes the role of the patient as well. I think that would be something good to bring out of this conversation. Not just what is the positive example of experience by the patient of care coordination as it should be happening, but to do that in a way that highlights how that, in turn, empowers and supports patients in playing the roles that everyone feels they should and wants them to. Or, kind of like the roles that they can play, which is not necessarily always the role that, say, providers want them to play.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Right. Another possibility is to work on heart failure, so heart failure would be the cardiovascular theme. It would also tie in how this care coordination can reduce re-admissions for this important population. So, I wonder if we could go back to Tom Graf, for example, and, again, look at how this can work and see how it's better for care, it's better for affordability, etc.

Udi Ghitza – NIDA – Health Scientist Administrator

Also in the substance use treatment, substance use disorder treatment out there, there's seldom good coordination between primary care and specialty care. One of the reasons it is is because in HIT systems there are seldom data elements relevant to substance use disorder treatment, and those are seldom represented in HIT systems, especially in EHR efforts that are discussed here. So, I'm wondering if it would be possible to have someone on the panel that could speak to the coordination of treatment between primary care and specialty care as it relates to substance use disorders.

H. Westley Clark – SAMHSA – Director, Center for Substance Abuse Treatment

I think that's a great idea.

Eva Powell – National Partnership for Women & Families – Director IT

Yes, I agree because it brings in the... health, behavioral health component and there's actually an advocate that I heard speak at the Patient Center Primary Care Collaborative meeting the other day from Maine, who was a fabulous presenter and he ended with our story, so I'll reach out to her.

Udi Ghitza – NIDA – Health Scientist Administrator

I recommend two experts in our field that are advocates or very well known in this aspect. One of them is Tom McClellan. He used to be Deputy Director of ONDCP.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Folks, we're very, very short on time, so what I'd like to do is—we actually have behavioral health in Panel 1-B. Maybe we defer that over there because we had a good team going here in the sense of picking on something that is a focus of the national strategy, is a focus for care coordination and is a focus for affordability. It's almost like we have a triple aim going on in this panel, so I wonder if we can hang onto that theme.

Jim Figge – NY State DoH – Medical Director

I like that idea, Paul, and I think you should reach out to Geisinger and get a best example and put that out.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I think that's a really great idea.

M

Actually, Paul, just in your world the Sutter Sacramento CHF Care Coordination Program, I don't know if they've got an EHR. I know they have an EHR built into that, but I don't know if they had some patients or cardiologists that might be able to speak to the issues you were raising.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Why don't we try to pursue asking Tom and then seeing if he can help us put together even the cardiologists, that team; it just would be so powerful I think to have essentially the triple aim going on and how that is enabled by this kind of Then we'll fall back on picking them one at a time, but if we can get the scenario going, I think that would be really helpful.

M

Paul, one question that I have is I'm concerned that the epic Geisinger type installations are not as typical of the specialist environment that we're trying to get at.

Deven McGraw – Center for Democracy & Technology – Director

Well, I thought that they were using, well at least in their Beacon project, which is also focused on COPD and heart failure readmissions is GE.

George Hripcsak – Dept. of Biomedical Informatics Columbia University – Chair

So, for this specialist panel, I suggest that we have two specialists on this panel and three other presenters, one specialist coming from Geisinger and one specialist not coming from Geisinger who represents maybe a more typical environment that's less well connected on the way into meaningful use and coming from the cardiology society or wherever. So one from Geisinger, one from cardiology and then three other people, one of them being patients and then some combination of Cheri or Ann or, one of the others and have a five-person panel, or at most six, but probably five.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I wonder, George, if we could move that into Panel 1-B and the reason is we're trying to get a story together of what the world could look like. If that works, it could be very powerful, I think.

Udi Ghitza – NIDA – Health Scientist Administrator

I recommended a specialist in the area you're talking about, Richard Saitz from Boston University Medical Center. He treats a lot of people in an ER setting with a large number of chronic conditions.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Let me try to close this Panel 1-A and move on, which is where I think this conversation is going, to 1-B, recognizing we only have five minutes to do the rest of this panel, so we're going to have to move along. So, we just heard about someone in the ER. We talked about having behavioral health representatives and we have a name here from Neil, I think, Brenda Little. I don't know where we are with this person.

Eva Powell – National Partnership for Women & Families – Director IT

I haven't invited anybody, Paul.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay. So, we're talking about behavioral health and we talked about radiology. We heard from Keith Dreyer in public comments last time and had some very concrete suggestions in terms of how EHRs could support that specialty. We also talked about other non-direct care folks, like pathologists. What other specialists? Oncology was another one that was mentioned, although we did hear from oncology in our last specialty hearing, so we might want to break out.

Karen Trudel – CMS – Deputy Director, Office E-Health Standards & Services

I've been hearing from the anesthesiologists and neonatologists that they have some very specific needs and requirements and that doesn't get covered by the pathologists because, obviously, these people do direct care.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

And we're trying to cover different themes. Can we pick either pathologists or; well, let's see.

Karen Trudel – CMS – Deputy Director, Office E-Health Standards & Services

Well, here's my thought. The reason I suggested either the anesthesiologist or a neonatologist is that these folks actually do practice in the hospital setting, but they have their own EHRs and there are specific things that they need and then the other connectivity issues with the rest of the enterprise. So, I'm not suggesting both, but one or the other. I can get you some names.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Well, my only concern is with the available spots, we have one, two, three, four that are primarily hospital-based and we just wanted to sort of spread the kinds of issues that you're facing, Karen.

Jim Figge – NY State DoH – Medical Director

I would remind you that the hospital-based folks can't participate in the Medicaid incentive, so it probably is not good to over populate with hospital-based practitioners.

Udi Ghitza – NIDA – Health Scientist Administrator

Sorry, I'm having a hard time following. Are we talking about Panel 1-A or 1-B now?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

We're on 1-B.

Udi Ghitza – NIDA – Health Scientist Administrator

So, is it possible to at this point recommend a behavioral health specialist who has experience in treating multiple chronic care patients in an ER setting, both alcohol dependent patients and substance use disorder patients, Richard Saitz from BU Medical Center. He has many years of experience treating a large number of addicted patients in primary care settings and has an EHR system and it's in his setting that is coordinated between primary care.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay, just because of time, we're going to take the name, but I'm not sure we need to talk a lot about that.

Udi Ghitza – NIDA – Health Scientist Administrator

Yes, his e-mail is rsaizt@bu.edu.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

So, let's think of the other major categories; we have cardiovascular care, we have diabetes, endocrinology, we have pulmonary asthma and COPD, just thinking of the top chronic conditions.

M

Kevin Johnson is already on there, you hadn't mentioned before, pediatrics.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Right, so for pediatrics, which has always been a specialty that has some different needs.

M

So, are we shying away from it being focused on CDS or do we remain focused on CDS?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Well, I think it's EHR support of specialists and CDS is one of the examples of how it can support specialists. We don't have surgical specialists in here; the whole procedural specialties is another area.

Josh Seidman – ONC

We do have two orthopedic people in the next panel, right? But one is orthopedic oncology, which might be different, but I'm just saying maybe one of them could be in this panel. Although we were inviting them because of their knowledge or registries, not their knowledge of CDS, so it may not make sense.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Well, again, I suppose, Josh, we could reach out to AMA to pull in some surgical specialists.

Alex Ross – HRSA

Hi, this is Alex Ross at HRSA and I apologize because I was asked to join this call to let you know of a couple of options, so if these are not appropriate; at HRSA we work with networks of safety net providers, many of whom stretch across primary care and specialty and have worked hard to do the integration. So, two choices would be OCHIN, Abigail Sears, which is out of Portland, which is a large network and then Kevin Kearns, who is the CEO of Health Choice Network based in Florida, but across the country; very, very innovative, both of those. If you give me an e-mail, I'll just forward the information to you and you can decide.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

That would be great, really appreciate that. In fact, the way you talked of them it might make sense with Panel 3, which talks about experience from the field and I'm familiar with OCHIN. That kind of experience is saying you can connect one small practice and two safety nets.

Alex Ross – HRSA

Right, and link with those specialty folks, so I'm with you there.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Yeah, let's plot that in for Panel 3.

Alex Ross – HRSA

Is there somebody I should forward this info to?

Judy Sparrow – Office of the National Coordinator – Executive Director

Yes, judy.sparrow@hhs.gov.

Alex Ross – HRSA

Okay, I got it, thank you, Judy.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Thank you. We're going to have to make sure that we get some of these major specialties, so we'll have to work on that with some of the specialty societies, perhaps, whether it's ACC or groups like that.

The Panel 2, Population Data and Registries we have four names here, how do these sound? Part of this, of course, is that we did have a hearing that almost concentrated on registries last time, so we heard from I think it was STS and I think we heard from Frank Opelka, too, representing the general surgeons.

George Hripcsak – Dept. of Biomedical Informatics Columbia University – Chair

I put Kristy Weber, which is with a K, by the way. I don't know that she'll be great on the registries. She's organizing the Orthopedics Quality Institute, which is covering a lot of the; there is both an American Joint Replacement Registry and some other regional ones, so we could think about who is best there.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Would she fit on the previous panel?

George Hripcsak – Dept. of Biomedical Informatics Columbia University – Chair

I just don't know. I can touch base with her and get back to you on that.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay, so let's put her in parenthesis. Another possibility is to look at it from sort of a regional HIO kind of an organization, creating registries on their behalf and IHI comes to mind there.

Tom Tsang – ONC – Medical Director

Paul, I know several community health centers who are doing these disease registries as part of the disease collaboratives, so they're doing a lot of asthmatic registries and ADHD and diabetic registries as well. So, if you want some suggestions from the CHC Safety Net Provider side.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

That sounds good because, as I said, we did have here from some of the specialties about registries last time.

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

Remember that the topic is how registries engage specialists who wouldn't otherwise be engaged because they're not primary care providers. So, we mainly need to focus on how registries pull in specialists.

M

Depending on whether you get ACC and the earlier one, you know, their IC-3 ambulatory registry as distinct from the cath lab one would be an interesting; they've been trying to get the registry adopted by the cardiologists in the community practice.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

That does sound good. And also HA's Get With the Guidelines. All right.

M

Also California Maternal Quality Registry that Sanford is managing.

M

Under their Maternity Care on a statewide registry basis.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

All right. So, we have a few leads to pursue. It looks like we're going to have to do this by e-mail as far as finalizing, but if we can track down some recommendations from either these associations or programs in all of these Panels, that would help.

Okay, I'm going to try to quickly go down to Panel 3, so we can move on. So, here we just added sort of the OCHIN and Health Choice Network as one area. We talked about the Taconic Group in New York and the long-term care plus acute. We had a number of recommendations come over e-mail so we can look at that. Then we talked about the RACs, which I guess, Josh, you can help us with?

Josh Seidman – ONC

Absolutely.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

And on the other side would be the Beacon Communities, looking at things that might be more advanced.

Josh Seidman – ONC

Yes, I can help with those.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Any other suggestions for Panel 3? Okay, well, as I said I think we have some work still to do, but we'll flesh out some more of these possibilities and get back with you on e-mail and if you could turn that around to us so we can move forward, we'd like to finalize this, what, in the next couple of weeks probably, Judy, right?

Judy Sparrow – Office of the National Coordinator – Executive Director

Yes, absolutely.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay, moving on to our April 5th meeting and the planning for that. One, I just have to say how much I was impressed with the work that Josh and the team at ONC did in summarizing the close to 500 comments. I thought the format was terrific. It was so succinct, so to the point and just hits the points of the comments right on and just gives you good food for thought, so thank you, Josh. It was really great work.

So, in terms of planning the process I wanted to throw out here for your feedback is to look at sort of a grant review process, meaning I don't know that we can all sort of go through each and every objective without more detailed preparation. So, on the grant review process somebody or groups both get assigned as primary reviewers and so their task it to look at this in more detail and come up with proposals, some summary findings, the high points from the perspective of the workgroup and some options for the workgroup to consider and decide upon. I think that would be one way of helping us get through this material and also make sure we give each of these comments a fair shake.

How does that approach down to you all, if we divide ourselves into I think it would be basically five groups. Because category one is so big, we could have category, divide that into two categories. It could be one, updates to the current objectives and another group focusing on the new objectives we introduce and then categories two, three and four each have a review team, so to speak, as part of that. Does that make sense? Or was that not clear?

M

Sure.

M

Makes sense to me.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay. Here's another kind of guidance that can help our discussion. I think we want to be careful to separate the policy questions from the standards and certification, which are more like the clarification issues. Clearly, we didn't put this out, our draft, fully specified, of course; we were looking for comments and things. Even when we come up with our final recommendations, they won't be fully specified. We pass our comments on when they're approved and our recommendations off to the HIT Standards Committee that does write, adopt certain standards for a certain kind of functionality and they turn into certification criteria.

So, it's sort of a two-step process. We want to focus on the policy issues. We may put things in the parking lot saying, okay, here's the stuff we want to discuss with HIT Standards. Here's what the intent was in our objective, the recommendation for objectives and here are the areas where commenters. We think that there need to be further clarification on the standards or the details, the specifications of the way to meet these objectives.

A second piece is we want to avoid discussion the corner cases, at least in that big group face-to-face. Corner cases, things like, let's say, chemotherapy where it has a very narrow scope. There are very few of the total physician population who deal with chemotherapy. So we don't want to spend a whole lot of time in our big group talking about that, but we can assign that to a smaller group or sometimes it goes off to ONC, where they have to reconcile how you specify a rule and cover the vast majority of folks.

Third, we have to remind ourselves when we're talking about functionality—and some of the comments came back to us, "Can you focus on the outcomes or getting the performance that the country needs as you go out and in future stages? And pay less attention to saying well, how structurally, what kind of functionality do you have to have and use?" As we get on in time, we certainly want to go towards the outcome approach.

Then, finally, we always want to remember parsimony, both because it's easier to understand, but also because there will be less burden overall for people to accomplish. How does that plan sound then in terms of how we conduct our business on April 5th?

M

How should we mechanically divide it up?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

I was going to take some volunteers now. There are some obvious folks, like I'm sure Christine would like to participate on category two. There are other obvious things like Art in category four. How about if folks turn in, certainly by close of, well, as soon as possible after this call what category you'd like to participate in and being the sort of primary viewer. In other words, you spend more time going into details and coming up with some options to discuss on April 5th. What we can do is we can turn that around by close of business today. We'll honor your preference or if we don't hear, we'll produce a draft list and if you really object you can change that.

M

Okay, so we're going to e-mail the list of assignments by the end of today?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Yes. Does that work?

Marty Fattig – Nemaha County Hospital – CEO

Can Judy put out a list and then we can sign up for the various categories on the list?

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Perfect, perfect. Okay. Now, moving on to the Rand drug interaction, just to remind ourselves, we put out a placeholder on our drug interaction criteria and I will have to find that. Here it is. So, "Employ drug-drug interaction checking and drug allergy checking on appropriate evidence-based interactions." Clearly, we got a lot of comments back saying, well, what does that mean? That was a placeholder for

dealing with the sense of the industry that we have a lot of false positives and that takes away from the impact of the drug-drug interaction itself, the alert itself, as well as sort of takes away from the impact of clinical decision support in general.

So we're looking for ways of making sure that the positive predictive value of each alert, including drug-drug interaction alert is as high as possible. That means if the alert is popping in your face, then there's a good chance that this, one, applies to your patient and, two, you should reconsider your choice of that drug you're ordering. So, Rand has been working, and David Bates has also participated on this project in trying to come up with a way to identify drug-drug interactions that are particularly noteworthy and try to improve that positive predictive value.

Doug, if you can just take the next eight minutes going through your presentation and then I'm sure we'll have questions and we'll try to see how this fits in with this objective.

Doug Bell – RAND – Research Scientist

Okay, fantastic. Thank you so much, Paul. Hopefully people can see the slides. I just advanced to our first slide. I want to mention this work was funded under a contract with ONC, Office of the Chief Scientist and I want to acknowledge our project sponsor, Alicia Morton, Jonathan Teich, who is a Senior Advisor to this project and who has provided really useful guidance.

So, we were developing a set of high priority drug-drug interactions for this. I also want to mention, this is part of a larger project called Advancing Clinical Decision Support. One other task that we specifically want to come back and talk to you guys about is on developing specialty-specific CDS meaningful use criteria. I just wanted to quickly update people that we have completed the panel processes with specialists that we set up and we will have a report forthcoming in a couple of months on the results of that, but we would love to come back and tell you all about that. Also the specialists that we had on those panels might help inform some of the decision-making that you guys were doing just a minute ago. So, I just wanted to put in a plug for that and feel free to contact me offline about that.

But proceeding on, this particular task was led by Shobha Phansalkar at Brigham and Women's Center for Informatics Research and Development under Blackford Middleton and David Bates was the co-leader of this project essentially mentoring Shobha. Shobha is on today. She's on maternity leave, but has gracefully agreed to join us to answer any questions.

So, I will have to speed through my slides here and I'm just going to hit the highlights. So, as Paul just said the problem we're addressing is the large numbers of drug interaction warnings that fire today that lead to alert fatigue and the goal for this task originally was to establish a smaller set of really high utility drug-drug interactions and establish that omitting these would not compromise professional standards of care. I'm going to tip my hand to some of the results by saying that we found that the panel was not comfortable with just relying on this high utility drug interaction list. So we added the goal of establishing a low utility set of DDIs that could be safely omitted from alerting and put together the high utility and low utility lists would sort of help clinically optimize drug-drug interactions. That's what we're calling it now. So, those are the goals and I'm going to show you some of the results, but I'm going to have to skip quite a few of the slides.

Although, overall I'm going on the deliverables and we can provide you, these will all be coming out anyway. I'm not sure if I can provide you with everything right now, but we have a review of the literature, we have a suggested set of criteria for judging the utility of DDIs, we have a brief on legal and liability considerations related to using this clinically optimized list. Then we have the list itself, and that's what I want to focus on today, the high utility DDIs and then I'll tell you about how we're developing the low utility list and then we have some considerations for implementation and maintenance, which I doubt we'll have time to talk about.

Overall, the methodology was we started with the scientific review of the literature. We did interviews with knowledge-based vendors and then the real focus was an expert panel that conducted a couple of rounds of online discussions and conference calls and then finally did some ratings of the DDI pairs that we were

suggesting as the high value DDIs. The criteria that emerged from the process that we should use for selecting high priority DDIs was to weigh several factors: the severity of interaction, which is what is really the risk of morbidity or mortality if the drugs are used together with the risk benefit ratio. The probability that the interaction would actually take place even if people were on both drugs, so based on administration timing, route, sometimes DDI pairs are not that important because they wouldn't necessarily be given together, they wouldn't actually occur together at the same time in the body. Sometimes the doses have to be unusually high to trigger the interaction and that would make it less important.

Patient characteristics are often important and I'll highlight that more if I have a chance. The potential to mitigate the patient risk is another issue. Sometimes interactions can happen, but they're easily monitored for or managed and then just with the quality of evidence supporting that the interaction really happens. So, those were the five criteria that we were weighing for each of the suggested interactions. I'm going to skip this slide. This is sort of our background on what are the barriers to dealing with high priority interactions. We can get back to that if you have questions.

Then we set up a panel process to really review a list of specific potential high priority DDIs. We started with actually the list that's in use at Brigham and Women's Hospital where they've done a lot of work over ten to 15 years I would say, clinically optimizing a list of drug-drug interactions and it's actually also part of their cert on drug interactions. We also distilled evidence from First DataBank, Micromedex, Moulton, the Royal Dutch Association for Pharmacy, which has done a lot of work on drug interactions as well. We used drug classes, which is something that hasn't been done that much, but we tried to create drug classes that would really abstract out the drug interaction pairs at the right level so that things wouldn't be duplicated and it could be managed more easily.

What we came up with was 31 DDI class pairs that would be high priority, or suggested high priority drug interactions and we had an initial call with our panel to go over these and the result of that was that five were removed and you can see that in the box off to the right. Two were demoted, two were deleted and one was, I believe, well, some were combined together as well, the classes were jiggled a little bit. So, that got us to 21 DDI pairs. We had another conference call, went over them again, a few more were eliminated and that got us down to 16 pairs, which were then actually rated by the knowledge base vendors on a nine-point scale and only one of those scored below six on a nine point scale and was eliminated. So, that left us with a final list of 15 DDI class pairs.

Then the next slide just shows you a few examples here that were sort of interesting that we pulled out of not just the 15, but actually the original 31 to show you what the process resulted in. So, one here is Atazanavir with gastric alkalinizing agents and the issue here is that this HIV drug needs to have acid in order to I believe be converted from a pro drug to the active ingredient. It certainly needs the acidity to be absorbed. The panel discussion actually resulted in our removal of H2 blockers and changing it to just PPIs and, if possible, I actually put a transcript of this discussion at the end to kind of show the nuance that the panel was considering. That you have to consider in deciding what drug interactions are truly high priority and sort of always drug interactions. But then the final DDI pair that was accepted was Atazanavir with proton pump inhibitors. Another example was statins and protease inhibitors and the underlying issue here was that it's really all the 3A4 inhibitors and we didn't need to have Cerivastatin in there because it's off the market. So, we made that change.

One issue, though, that I'll just mention is that there aren't standard classes right now in the classification systems for 3A4 inhibitors and so one suggestion of ours is that needs to be included, these sort of inhibition categories need to be included in future releases of things like NDFRT. So, another, just to complete this slide.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Doug, I just want to make sure that in the next couple of minutes you get to your recommendations for what you think we need to do.

Doug Bell – RAND – Research Scientist

Okay. We deleted a couple; it just shows a couple that are deleted. So, I'll jump to, the next slide is the conclusion. So, we had 15 drug class pairs that were endorsed as highly significant and really these are things that should never be co-prescribed, that would be candidates for hard stop alerts where the system would really not allow you to prescribe them together. But checking the completeness of this list, do we have every hard stop drug interaction pair is something that would require further research and some panelists expressed concern that there might be other things that we hadn't considered, but it does represent the best available consensus. Each panel did have a chance to suggest additional things.

So, we have that. But the issue is that the less significant DDIs are still significant and, overall when we looked at the prevalence of these alerts going off, it's probably about 1% of the drug interaction alerts that are going off at the Brigham are in these 15 pairs. So, they're severe, but there are a lot of more prevalent drug interactions that probably cause more harm net overall, but they tend to depend on patient characteristics. So they're not level ones because there are a lot of circumstances where it is safe to use them together, but it depends on things like what is the dose, what is the timing of administration of these drugs, are there concomitant conditions like hypokalemia. There's a lot of panel discussion about these factors as we were throwing some of these out even, demoting them to level two essentially, which means that they shouldn't be hard stops, but they should still be alerted according to the panel.

But if we really want to address those in a comprehensive manner to improve the sensitivity and specificity of those, we would need a lot more investment in evidence review, which is difficult and even generation of evidence. Some of them, there's just not that much evidence there when we really dig, but there is still strong concern that they do exist and they are important interactions. We need methods to make the alerts conditional on other patient data. So, the drug interaction alert needs to consider more than just are both drugs present? It would need to also include specific patient criteria. And so meanwhile, in the absence of this kind of evidence the panelists did recommend not suppressing these alerts and so that means essentially that this high priority list, while it's going to be helpful to the field, we hope, is not necessarily going to reduce the incidence of false alerts that is the original goal of this project.

So, we've designed a follow-on study that we're just embarking on to look at low value drug interactions. Starting with the 100 most overridden drug interactions from a leading academic health center, we had to go to a different health center because Brigham and Women's had already deleted many low value DDIs from their list and we're aggregating those to classes as we did for the high priority ones. We're actually going to compare that with the Dutch National Pharmacy Knowledge Base, where they've done some similar work and create an evidence table analogous to what we used for the high priority alerts. Then embark on a two round expert panel process, probably with the same panelists, which involved knowledge base vendors and pharmacology experts and other EHR stakeholders. And basically come up with a list of low value DDIs that hopefully could be always suppressed.

So, that's pretty much where we stand. We have some recommendations for maintenance; we have a report on this and I won't go over that in the interest of time. We have some recommendations or suggestions really for how the high priority interactions ought to be implemented. I can come back to this if you want. We've done a review of legal and liability considerations, which I could spend some time on if you'd like, about the concern about omitting any possible drug interactions and concerns that the vendors have about possibly being exposed to product liability actually and I'll stop there, though, and see if we have questions.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Thanks, Doug. I'm sorry there was such limited time to present this. Can you summarize what you think, how we could use the results of this study in our meaningful use objective, because it almost sounds like you set out with a goal and found out that you couldn't say, well, let's have this limited set of alerts that everybody uses. You went to a strategy of let's try to eliminate things that are not useful and it looks like you left off with well, let's go try to find a hundred that we can, something, some number that we can remove to try to decrease the false positive problem, is that where you are now?

Doug Bell – RAND – Research Scientist

It is and so in terms of what could go into meaningful use criteria, I do think that you could make the high value pairs a sort of minimum set. Actually, at the certification stage you could look at EHRs' capacity to alert on those and then at the meaningful use stage you could look at whether they've turned those off. Like, I think what a lot of EHRs are doing now is they turn off all drug interaction alerts and so you could have a meaningful use criteria that they at least alert on these high priority alerts as a sort of minimum set, as an alternative at least to turning them off completely. I guess our panel was not comfortable endorsing this as the only set of drug interaction alerts, but if it's compared with nothing then it would certainly be better.

George Hripcsak – Dept. of Biomedical Informatics Columbia University – Chair

I agree. So, meaningful use, because we never specify everything, meaningful use says you have to do at least the high ones. We don't have a sufficient evidence base for the middle ones for us to say yes, but providers should do as they see fit and the question is whether we ask them not to do the low ones eventually and I'm not sure we have to do that in meaningful use necessarily.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

So, since David couldn't be here with us today, but I wonder if what we could ask him to do for April 5th is to come back with the options as it relates to Meaningful Use Workgroup and the meaningful use program and we can discuss it further here having heard this presentation. So, what we wanted to do is communicate this information to the workgroup and then we could ask David Bates to have the options that he thinks would be appropriate for us to consider as far as the meaningful use objectives.

Jim Figge – NY State DoH – Medical Director

Just one other idea, maybe David has more. You could ask the vendors to display the category of the alert, so high priority, low priority.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Okay, thank you. Thanks, Doug, and thanks to the team.

Doug Bell – RAND – Research Scientist

Yes, thank you, Paul.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

So we have just a little time for public comment that I want to get through those.

Judy Sparrow – Office of the National Coordinator – Executive Director

Operator, can you check with the public and see if anybody wishes to make comments? Paul, while we're waiting I'll send out that list of the categories asking for volunteers along with your instructions basically to focus on policy.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Thank you.

Moderator

You do not have any comments at this time.

Judy Sparrow – Office of the National Coordinator – Executive Director

Okay. Thank you. Dr. Tang.

Paul Tang – Palo Alto Medical Foundation – Internist, VP & CMIO

Remember that we're going to be meeting—we'll send out an agenda later this weekend, but we're planning to meet from 8:30 until 5:00 on April 5th. Thank you all.