

# HIT Policy Committee

## **Draft Transcript**

### February 4, 2014

#### Attendance

Members present:

- Christine Bechtel
- Neil Calman
- Terry Cullen for Madhulika Agarwal
- Arthur Davidson
- Karen DeSalvo
- Paul Egerman
- Judith Faulkner
- Scott Gottlieb
- Gayle Harrell
- Charles Kennedy
- David Kotz
- David Lansky
- Devin Mann
- Aury Nagy
- Marc Probst
- Troy Seagondollar
- Joshua Sharfstein
- Robert Tagalicod
- Paul Tang

Members absent:

- David Bates
- Patrick Conway
- Thomas Greig
- Deven McGraw
- Alicia Staley

#### Presentation

##### Operator

All lines are bridged.

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

Thank you. Good morning everyone, this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Policy Committee. This is the 56<sup>th</sup> Health IT Policy Committee meeting. As a reminder, this is a public meeting and there actually will be two sessions for public comment, the first will be before lunch and then there will be another session after lunch. A reminder to those who will be providing public comment, public comment is limited to three minutes and we will stop you at the three-minute mark. And the Committee is not required to respond to your comment; it simply is a public comment. Also, the hash tag for today's meeting if you are tweeting is #HITPC. Also to those speaking, please state your name before speaking as this meeting is being transcribed and recorded. For roll today, let's just go around the room, I think that works a little bit better for our transcriptionist, so we'll start with Judy Murphy.

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs & Policy – Office of the National Coordinator for Health Information Technology**

Sure. Judy Murphy, Office of the National Coordinator.

**Elise Anthony – Senior Policy Advisor for Meaningful Use – Office of the National Coordinator for Health Information Technology**

Elise Sweeney Anthony, Office of the National Coordinator.

**Kevin Larsen, MD – Medical Director for Meaningful Use – Office of the National Coordinator for Health Information Technology**

Kevin Larsen, Office of the National Coordinator.

**Arthur Davidson, MD, MSPH – Director, Public Health Informatics – Denver Public Health**

Art Davidson, Denver Health.

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

Troy Seagondollar, Kaiser Permanente.

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

David Lansky, Pacific Business Group on Health.

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

Paul Tang, Palo Alto Medical Foundation.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

Judy Faulkner, EPIC.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Gayle Harrell, State Representative, Florida.

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

Marc Probst, Intermountain Healthcare.

**Devin M. Mann, MD, MS – Assistant Professor – Boston University School of Medicine; Attending Physician – Boston Medical Center**

Devin Mann, Boston University.

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

David Kotz, Dartmouth College.

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

Terry Cullen, VA.

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

Thank you everyone and hopefully a few more people will be joining us momentarily. While we do that, I just want to make a few announcements that ONC is going to be announcing, there will be a few slots open for application to be members of both the Health IT Policy Committee and Health IT Standards Committees. For the Policy Committee, there will be a public health representative that will be open and on the Standards Committee, there will be an electronic exchange, a quality and a consumer representative that will be open. So, we will start that application process and all applications are due March 3. You can go to the ONC website underneath of FACAs. There is an application database that you can just use to submit your application online, so we are excited about that opportunity.

I also wanted to announce that we are going to start to impose 6-year term limits for all members. We are doing that just to make sure that we have different perspectives on the committee, we're able to kind of enliven and refresh everyone, although we thank all of our members who have provided such dedicated support to us throughout the years. We just need to make sure that we're hearing from diverse perspectives as we move forward. So there also will be a blog posted later on today if you want to find out more information, so if you subscribe to our buzz blog, you'll see that in your inbox. So with that, I'm going to turn it over to Paul Tang.

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

Okay, thank you Michelle. And a couple of people – for the people on the phone, a couple of people have joined since roll was Paul Eggerman and Charles Kennedy. Karen was at another meeting this morning and so she's in the car in transit on her way here, so her remarks will be a little bit later in the agenda. I'll start out so I don't forget is to approve the minutes from January 14. I mentioned to Michelle that there's one clarification in terms of the quality measure recommendations incorporating some of the discussion into the letter. And so that's a little bit – that will be added in a little bit; otherwise, any other comments about the summary or the minutes? Okay, second? And all in favor.

**Multiple Speakers**

Aye.

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

And not in favor or abstain? All right, thank you very much. So let's go over the agenda today. A big part of the agenda this morning is going to be on the Meaningful Use Stage 3 draft recommendations. We're going to be reviewing the work we've been doing since our last discussion in detail and although we're not going to be approving them this month, we expect to approve them next month. That will be after CMS and ONC update us, that'll be a good preamble to our Meaningful Use discussion at the end of the morning. And then Doug Fridsma's going to provide an update on the standards activity from ONC. We'll have public comment, then lunch.

Joy Pritts is going to report on all of the things that have resulted from the privacy and security recommendations from this committee and its workgroups. Then Kimberly Lynch is going to talk about RECs, that's been a huge activity, as you know, over the past couple of years. The funding is winding down but they've accomplished a lot and she's going to review that for us. And then I'll close with some draft thoughts we've had on the work plan for HIT Policy Committee it's mainly for your discussion, your input into this and I think Karen will also provide some comments. Any questions on that or additions? Okay, let's start off with the data review from CMS and ONC and that's Rob Anthony and

Jennifer King.

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

Paul, before we do that, I forgot to ask if there were any members on the phone, and I think there are a few, if they want to announce themselves.

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

Good. Thank you.

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

Hi, it's Christine Bechtel, I'm on the phone.

**Scott Gottlieb, MD – Resident Fellow & Practicing Physician – American Enterprise Institute**

Hi, it's Scott Gottlieb here.

**Aury N. Nagy, MD, FAANS – Las Vegas Neurosurgery & Spine Care**

Hi, Dr. Aury Nagy here.

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

Great, thank you.

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

I just heard that Rob Anthony is running late so we're going to start with Jennifer King.

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

Okay, thank you.

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

Okay, good morning everyone. Maybe I can advance through to the ONC slides here. Okay, so today for the ONC update, we wanted to provide you an overview of some recent data coming out of 2013 edition of the National Physician Survey on EHR adoption and adoption of a wide range of computerized capabilities including many that are related to both Stage 1 and Stage 2 Meaningful Use. So I mentioned that this was going to be coming out at our last meeting and since then some of the topline results have been published by the CDC in a data brief and by ONC in a Quik Stat on our Health IT Dashboard. And this is a survey many of you are familiar with, but it's conducted every year of – it's representative nationally of physicians providing direct patient care in office space settings. And the survey has been tracking EHR adoption and adoption of specific computerized capabilities over the past several years. So the data here were collected in 2013, in the spring and summer of 2013.

And one thing to note before I jump into the data are some definitions of EHR adoption that we used when analyzing this survey. There are a couple of different measures of EHR adoption that we've been tracking for the past several years. The first is whether or not the physician has any type of EHR in their office, so regardless of what type of functionality it has; just do you have any type of electronic medical record system. And the second is called a basic EHR and this is something that can be sometimes confusing, because it was defined prior to Meaningful Use or HITECH by an expert panel who came to consensus on a definition of the types of capabilities that would be included in a basic EHR system.

And I've shown those functionalities here and one important thing to note is that having a – what we call basic EHR is neither necessary or sufficient for Stage 1 Meaningful Use. So there are some functionalities included in this basic definition that aren't in Stage 1 Meaningful Use, and vice versa. But the reason we keep examining this measure is that we have data on it from prior to HITECH, so it's one of the few measures that we can look at to see trends in adoption both pre and post-HITECH. So just wanted to make sure everyone was on the same page with those definitions before jumping in.

But across the past several years, we've seen steady and substantial growth in both of these measures in EHR adoption. So in 2013, the latest data we see that over three quarters of physicians had any EHR and in terms of basic EHR, the share of physicians with a basic system has more than doubled since 2009 when 22 percent of physicians had a basic system up to 48 percent in 2013. And when we look at specific types of functionalities, advanced functionalities that are a part of Meaningful Use, we see similar strong trends in growth. So this is a set of functionalities that we've had data on going back to 2009, so things like CPOE for medication orders, lab orders, ePrescribing, and recording key patient clinical data. And you can see back in 2009, when HITECH was enacted, fewer than half of the physician had adopted each of these types of functionalities. But up in 2013, a strong majority of physicians had adopted many of those types of functionalities.

The survey also asks about physician's intent to participate in the Meaningful Use Program. So in the CDC data brief, they took a look at that question and reported that 69 percent of physicians reported that they intended to apply for Meaningful Use incentives. And then among that group who intended to participate, the CDC also looked at their adoption of functionalities related to Stage 2 Meaningful Use. So the survey asked about 14 of the 17 Stage 2 core Meaningful Use objectives and the CDC reported that of those physicians intending to participate in Meaningful Use, 19 percent had adopted all 14 of these Stage 2 capabilities in 2013.

And when we look at the adoption rates of all functionalities that the survey asked about related to Meaningful Use, we can see some variation across different types of functionalities. So for many of these functionalities, particularly those that were included in Stage 1, we see strong adoption rates with a strong majority of physicians having adopted things related to medication safety, medication orders and capturing key patient clinical data. We see some lower adoption rates for some of the newer functionalities related to patient engagement, incorporating lab results as structured data and reporting to immunization registries.

So that was sort of the short and sweet data slides that I wanted to present today, but just sort of overall, we continue to see strong year over year growth in EHR adoption and adoption of specific advanced functionalities. But the survey does highlight some of the areas where, not surprisingly, I think, we see lower adoption rates, some of the newer functionalities where we're going to need to see increased adoption to ensure readiness for Stage 2, as physicians reach that point.

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

I think since Rob is not here yet, we'll go ahead and have questions for Jennifer. Gayle?

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Thank you so very much. Do you have any break – I know you don't have it here, but do you – can you give us any breakout on specialists versus family practice and give us an idea of what that is as far as the percentage of adoption across the board?

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

Yes, definitely. So these are sort of late breaking and topline results and we're in the process of conducting many more analyses that will get at sort of breakouts by specialty, other key characteristics like urban/rural location, practice size, practice ownership; so things where we've seen gaps in the past. And we've seen in the 2012 data that those gaps had started to narrow and it will be highly important to see whether or not we're seeing those narrowing trends continue. So, stay tuned for more detail on that.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Thank you, I think that's extremely important so that at the high level, this doesn't give you really much information to be able to say where are we having problems, you really need that breakout. Thank you, that would be nice to have next time, Paul, if we could.

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

As you know, in the past there – the pie chart of specialty participation has been encouraging and in fact, more than half of the money goes to specialists, if I remember from past ones and you want to see if we continue that. David Lansky.

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

Thanks Jennifer. It's obviously very good progress. Are we collecting any data, or will we, on the availability of EHRs per person rather than per provider? The original HITECH Act required us to have an EHR for every person in America by 2014, so as part of our own accountability, we should be looking at how we're doing. And I wonder in general, the second stage of that would be to look at view, download, transmit in terms of a consumer functionality, from the consumer experience. But are we looking – is there an infrastructure in place to capture that data so we can start seeing reports on the penetration of EHRs to the public?

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

So that's something that we – we're working with CMS and within ONC on coming up with ways to be able to report out on those types of measures. So stay tuned for an update on plans to do that and what the results might look like.

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

Other quest – Paul Eggerman?

**Paul Eggerman – Businessman/Software Entrepreneur**

I just wanted to sort of reemphasize what David Lansky just talked about terms of analysis of how many people are using the system. It's actually called for in our enabling legislation, in the HITECH Act, it says this Policy Committee is supposed to ensure that every person in the United States has an electronic health record by the year 2014. So we're like one year into that, but it is also a goal that was established by our two prior presidents, President Bush said that in 2004 and President Obama reiterated in 2009. So this is something that is important, I actually have asked that same question in past meetings and I do think that when they said every person, they probably meant pretty much every person. I don't think – I think it's okay if it's not absolutely every person, but it is a metric that we really ought to be tracking on a month-to-month basis so that when we get to December we can be declaring success. It also occurs to me electronic health records does not necessarily mean that each person has all of their physicians and every hospital on electronic health records. There are a lot of people who see a lot of different physicians and perhaps had interaction with a hospital and there's – I think a very high percentage of the population already, at least one part of their data is on an electronic health record. It's hard to evaluate that.

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

Yeah, I mean, your comment about hospitals prompts me that in the usual slides that we show, which we did not bring today for sort of brevity, when we look at Meaningful Use attainment by both the number of hospitals, but then also the share of discharges. So and there you see that about 90 percent or slightly higher of Medicare discharges are occurring at hospitals that have attested to Stage 1 Meaningful Use. So it's not exactly the answer to the question, but it's sort of a proxy of where patients are getting care, the attainment of Meaningful Use is quite high.

**Paul Eggerman – Businessman/Software Entrepreneur**

And it's also not necessarily the case that they have to have an electronic health record that's qualified, in other words, there are electronic health records that are not qualified for Stage 1, that's still an electronic health record –

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

Right. Yup.

**Paul Eggerman – Businessman/Software Entrepreneur**

– is my observation. So the issue is what percentage of the population has an electronic health record at this point in time or at least part of the record in an electronic health record?

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

Oh, just a little history, I paid – Paul, I paid special attention to the words and I – I'll go back and check again, but I think you're right, President Bush asked for all Americans and I think President Obama said the majority. So, I think we might have a little bit of an out there, but we could check.

**Paul Eggerman – Businessman/Software Entrepreneur**

The legislation says all persons.

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

– got it. Okay.

**Paul Eggerman – Businessman/Software Entrepreneur**

It says all persons, but it can be counted, in other words – side conversation with Marc Probst, I mean he could count pretty well, for example, the citizens of Utah what percentage of them have an electronic health record in some way – personally.

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

We'll work on this number for next time.

**Paul Eggerman – Businessman/Software Entrepreneur**

I'm sorry

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

The question is whether we are making in the statutory goal of having every American's medical information in electronic health records is – says all Americans. Okay. Would you be able to do your comments or?

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

Well, let me just apologize for being late, it's not that it's not a priority, I was asked to make remarks this morning and we got trapped in some kind of a traffic thing, so I apologize for not being here. But I don't want to interrupt; I think we just continue on. Thank you.

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

Okay, any questions for Jennifer?

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

Paul, I have one more comment on this discussion.

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

Yes, David. Sorry.

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

I'd actually like to propose that we, the Policy Committee, draft a letter to ONC and CMS on the subject that Paul and I just raised. I think it's time for us to ask the agencies to produce some kind of a feedback report on attainment of the legislative goal, at the level of persons in America whether this technology is providing access to them.

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

Okay. How do others feel about that? Versus just having them come back and talk – do you think you would be able to bring it back in March?

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

We could definitely report back on concrete options for getting to this measure. I don't want to commit a 100 percent that we'd be able to collect and analyze the data.

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

Judy?

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs & Policy – Office of the National Coordinator for Health Information Technology**

I'm thinking Jennifer that it might be helpful for us to get some counsel in terms of what people exactly are thinking, because of course there's going to be some criteria around, when you think about every person. So I might have five different providers in three different organizations that I've been to in the last year, and if one of them has electronic health record, does that count? Or does it have to be 50 percent, so there are going to be some questions. I'm just thinking if there was some folks we could check with to evolve that measure, that might make some sense, you think?

**Jennifer King – Research & Evaluation Branch Chief – Office of the National Coordinator for Health Information Technology**

Yeah, I think so.

**Judy Murphy RN, FACMI, FHIMSS, FAAN – Deputy National Coordinator for Programs & Policy – Office of the National Coordinator for Health Information Technology**

You're saying any –

**Paul Eggerman – Businessman/Software Entrepreneur**

Because you can't figure out what it means to have 50 percent of your data, especially when you don't know how much data is not in the record. So if one provider you see has an electronic health record, then you've got one. Even if that provider is say your ophthalmologist, that's fine, and you see that person once a year, you have an electronic health record, that counts. And that would be the basis and with that basis, we may be very close to this goal. Because most likely the largest organizations in the area – in each area, like Intermountain Healthcare or Sutter or University of Wisconsin, they've all automated and they represent and see a fair percentage of the patients in this country. And so it's, UPMC in the Pittsburgh area, we've done very well but it would be very interesting to create a methodology to track it. It can only be an estimate.

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

Okay, I see three cards. Let me go to – if the three respondents could be quick with it, I mean, it's a fairly straightforward question, we'll get the answer to it. Judy?

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

The thing that puzzles me is causality. I think there's the premise here that Meaningful Use caused the growth and I don't know that that's true. Practically every organization has a billing system and if there was a Meaningful Use for billing as the systems were being put out into the country, would that have made a difference? It's the same thing with lab systems; would that have made a difference? I think that Marc's system in Utah, our system, Cerner's, Meditech's, many different systems were already out there and showing significant growth, before Meaningful Use. And even though we look at those statistics, there's an implication that Meaningful Use is what caused it/ But I don't know if we can ever prove that that's true or not true, I think that's an assumption that can't be – that shouldn't be assumed. We can see the growth curve, but we don't really know causality.

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

Okay, David?

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

I'm in support of the idea of collecting data for the fraction of people, who are covered by electronic health records, as David and Paul suggested, but actually I think the harder case is when you have five hospitals and you have an EHR at all five of them, you don't want to count that as five people. And so to really get accurate and meaningful data, you first have to de-duplicate names, which as I recall, is something we discussed at the last meeting, and is not yet, I think, a well understood and well solved problem. So I'm in support of doing this, but it has to be done really carefully to be meaningful.

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

That's a good point. So, we can either have Jennifer come back next month and then see if it meets your satisfaction, or if you wanted to propose writing a letter now.

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

I'm happy to hold that proposal until next month. I guess my feeling is, we as a committee, this is one of our primary assignments and duties and more than having an occasional report from the agencies, we should specifically and explicitly discuss this topic and resolve some of the questions that are surfacing here.

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

No, I think that's absolutely true, but I think ONC understands.

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

If I may weigh in, I think it's an important issue to look at and it sounds as though there are some very interesting technical questions around it. So not – happy to receive the letter, but perhaps what we could request is ONC is that we would think through a strategic framework for how we might answer the question and float around even in between to get some feedback from some of the committee members. So that when we came next time, we could have actually an action plan of here's what we want to look at and by when and how we might do some of the key definitions, would that be amenable to folks?

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

Okay, let's do that.

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

Thank you.

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

And thank you very much Jennifer, and thank you also for being concise, despite the discussion requiring otherwise. Okay, I think in the absence of Rob, we'll move on to the Meaningful Use update, and I'll switch chairs.

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

Am I shut off again? While Paul's – for those on the phone, I'm sorry, this is Karen DeSalvo with ONC. While Paul's getting settled, I just wanted to thank the workgroup for two years of effort around thinking through Meaningful Use 3 and how that would get us to the goals of better patient outcomes in particular and start to move us towards being a learning system around areas like quality and safety and overall population health. The committee or workgroup has done an intensive amount of review of the literature and conversations, and I know has been here previously when I wasn't present and I think our plan today is to hear from them of their current iteration. We're having a discussion, we're not going to plan to vote today because there are a few more things that we've all discussed that we'd like to look at before we come to some concrete conclusion, but Paul's going to share with us the thinking and the rationale so that everybody gets up to speed. So again, thank you Dr. Tang.

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

Good. Thank you, Karen. And I saw George peek in, but I'm sure he'll show up soon. As Karen mentioned, this is an update from the last time we presented to you, which was back in August, I'll review for you the timeline of how we got to this place. This is the list of current Meaningful Use Workgroup members, and I'll just point out that the representation is quite broad. We have providers, we have hospitals, safety net organizations, vendors, public health, population management, consumer representation and Center for Democracy and Technology in terms of privacy and security representation as well, as well as the employers; so, quite a diverse representation on this Meaningful Use Workgroup and everyone very intent to doing the right thing.

So the context for today's discussion, wanted to bring that up first and then connect the dots as you asked us to last time between the outcomes and the EHR functionality that we're proposing. We'll then put before you the draft recommendations for Stage 3 Meaningful Use functionality and then have the discussion, as Karen pointed out. So this is the famous three stage swoosh kind of sign, and as you know from Stage 1, the concentration was getting the data in, in as structured a way as possible. Success of that program is pretty dramatic in terms of going from virtually, in the EP side, from 4 percent to over his 50 percent and the hospitals now over 80 percent. Stage 2 is what we're working on right now, the industry, the enterprise and of course, that concentrated a lot on information exchange. That's a heavy lift and we're certainly hearing from everybody about that, but we also recognize how important that is to care coordination and population management. And what we're talking about in Stage 3, we'd always put a placeholder here for impro – measuring and improving outcomes, and that's what we're going to concentrate in our presentation.

So just a review of the timeline, we started almost two year – or two years ago, right after finishing Stage 2. And the reason we did that is because both providers and the industry asked us to give as much a lead-time as possible. So we went to work diligently right after we finish the work on Stage 2. We even issued our own Request for Comment in the fall of 2012, got back over 600 responses representing provider organizations, hospitals, vendors, federal agencies, payers, so again, a broad stakeholder input. And then we presented draft recommendations for your first review back in August 2012. We've had a total of 112 Meaningful Use Workgroup and subgroup calls, all done in the public eye since that time. So, there's been a lot of opportunity for comment, we've had official comments through the RFC process and we've listened to all of those things and tried to incorporate those into the recommendations you're going to see before you.

From a timing point of view, we're putting these draft recommendations for your discussion today, hoping to get approval by next meeting in March. This is just part of the journey. You've seen how much public input we've had, we had our own RFC, this is our first input into ONC and CMS, they go through a rulemaking process, which includes more time to the NPRM process to comment upon, before they issue their final rules that they said would be in the first half of 2015. And the rule will be expected to be effective in 2017. So there's still quite a bit of time left for comment, that's the point I wanted to make here.

Remind us of the principles we used that really from the start of the Meaningful Use process, in guiding our recommendation making process. One is we are not just electronifying the past, either the past record or the past way of delivering care. So we focus on the new models of care, outcomes oriented, team-based, population management centered. And focused on addressing some of the National Health Priorities, as defined by the National Quality Strategies from the Secretary. We also understood that the whole country – the country is diverse in many ways. We have primary care and specialty care, we have rural and urban and we have different geographies of the country and different patient health needs. So we tried to consider all those things as we came through in deliberating the recommendations we're drafting.

Also want to address the key gaps, information exchange, patient engagement, reducing disparities; these are things that we felt were not addressed with sufficient attention in the past, and that's what we concentrated our efforts on. And finally, we didn't want to – we were not working on things that the market was already working on or already taking care of. As you know, since we started off at only – at less than 10 percent of both providers and hospitals, it's not something that the market by itself was already changing and tried only to work on things where there were mature standards.

Okay, looking at outcomes, so what do we mean by focusing on outcomes? So outcomes isn't something produced by the record, but you can measure it, in theory, if you have the right measures. So that's our goal is to have measurable outcomes that we can continuously improve. HITECH in perspective is to help us build the tools necessary for human health professionals to achieve those outcomes. So we set the Meaningful Use priorities as those that are required to achieve the outcomes we're seeking.

The functional goals then are derived from those priorities and then finally what we're discussing today are the functional objectives that are addressing the functional goals we have for the tools of – to help the providers achieve better outcomes. We chose four areas for special emphasis in Stage 3. I explained what we tried to accomplish in Stage 1 and Stage 2, in terms of our recommendations. In Stage 3 we concentrated on clinical decision support, one of the reasons is because that's where the literature has the most evidence, in terms of what – how the use of these systems does improve outcomes.

Second, patient engagement is one of the things that we established from the start as something that we need to address. There's not as much evidence, because people had not been addressing this as much prior to Meaningful Use and HITECH. But we feel that this is an important opportunity, one that will definitely contribute to better outcomes. Care coordination is required in the advanced care models. When you talk about team-based care, when you talk about seamless care, you have to have a way to share information and to coordinate the efforts and the thoughts amongst the various team members. And population management is required for the advanced payment models that are being deployed through CMS.

So, starting with improving quality of care and its safety, so the outcome goals we have are that patients received evidence-based care. That they're not harmed by their care and they don't receive inappropriate care. So those are the outcome goals we have. In order to meet those, we felt that the functionality goals for the EHR are the following: that providers have all the relevant data they need to make appropriate decisions, and that's available through the EHR, and that clinical decision support about which there's the most evidence that it helps support timely, effective, safe, efficient care and addresses prevention. And it also helps us to avoid inappropriate care. And one of the things that GAO has pointed out is we want to also use this tool to help reduce billing fraud.

On the left column then, it's hard to see on this, but you have the handouts in front of you as well, the color coding is red are changes from Stage 2 and blue are new. So most of the changes you're going to see today, are tweaks of prior functional objectives. We've – sometimes it's making corrections and sometimes we're reducing burden and sometimes adding new functionality. And the blue are new functional objectives we've added to address the goals on the right-hand side. So I'm going to turn it over to George to go over each of the functional objectives.

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

Thank you Paul and I want to reiterate thanking the Meaningful Use Workgroup and all the people who came to our hearings, and as you saw, 112 calls is not an insignificant number, so, this was a lot of work and we considered what we're recommending very carefully.

Clinical decision support is clearly going to be at the center, recall in Stage 2 we recommended five rules and at least four areas. So for Stage 3 what we're recommending is, first of all, we moved away from the word rules to CDS interventions that apply to clinical quality measures in at least 4 of 6 National Quality Strategy priorities. That is, bring Meaningful Use closer to NQF. Here are some recommended intervention areas, preventive care, chronic disease management, appropriateness of lab or radiology orders, advanced medication related decision support, improving problem, med and allergy lists and drug-drug/drug allergy interaction checks. We also put forward certification criteria that are not directly linked to provider – eligible professionals or EH requirements, but would be on the vendors. One, ability to track CDS interventions and user responses; two, perform age-appropriate maximum daily dose weight-based calculation and three, consume external clinical decision support rules, and we'll be talking about that a little bit more later, this is linked to population health. So you'll get a little more of that in a moment.

Next, for advance directives, again continuing on from Stage 2, this will be core for hospitals, but we'll introduce it as menu for eligible professionals. We'll record whether a person 65 years or older has an advance directive, the threshold is medium. We've, as requested in our August meeting, we're not setting specific thresholds but we are giving relative areas of high, medium and low for the new or vastly changed objectives. Certification criteria is that the EHR has the functionality to store the document and the functionality to include more information about the document, such as a link or instructions of where to find it. This is not a requirement for providers, but just an opportunity in the electronic health record to add that extra information.

EMAR is core for hospitals, automatically track medications from order to administration using assistive technology in conjunction with an electronic administration record with a medium threshold. The certification criteria that the EHR provides the ability, we are not asking for the provider to necessarily check their reports, but just to generate and report on discrepancies between what was ordered and what was administered so that you can do quality improvement operations with your electronic health record. For example, if the patient is not responding in an infection, can we see if they got all the antibiotic doses that were prescribed would be an example?

For imaging, both eligible professionals, this is a menu and for hospitals, core, imaging results should be included in the electronic health record. Results means say the radiology report, so this is say a textual report indicating the reading of that study. And then access to the images themselves should be available through the electronic health record, but not necessarily with storing it in the record, but could be via a link with a low threshold on that.

Electronic notes, so core for both eligible professionals and for hospitals. The reason it's separated out there is because one, we're asking for the author to be the eligible professional and for the hospital, just an authorized provider to write the notes. We're asking for the notes to be text searchable at this low threshold, remember. So you can put in images, but some – to reach the threshold, we're counting only the text searchable notes. And the certification criterion is to help the reader understand the origin of the note, that we ask for the system to be able to identify relevant changes made to the original text. We don't want to prescribe how it ought to be done, but we give the example of track changes in a word processor, just to give you an idea of what the group was thinking about, but we don't prescribe that that has to be the method to do it. Just some way to see if it's a note that started and then has been modified over time, when those – how and when those modifications were made. It means that to meet – for the eligible professional or hospital to meet this, it'll be in the low range. In the past, we've had as low as 5 and up to 20. We've occasionally had something where we requested a small number of – so anything from a small number up to day 20 percent.

Order tracking, and this is a new objective for Stage 3, assist with the follow up on orders to improve the management of results. The part that is a requirement for eligible professionals is that the specialist who receives a consult request returns the result of that consult back to the ordering physician, that is the consult report and a low threshold on that. And this is good because it pulls in some objectives for subspecialties. In addition, on the certification criteria, we as that the system be able to display abnormal results, we don't mean it can figure out which ones are abnormal, we simply mean if the lab flags it as abnormal, that can be conveyed in the user interface.

Date complete, this is an optional field where the ordering provider is allowed to state when they feel this order needs to be done by. And the reason for it is the next bullet, notify when available or not completed. So we need to have an ability to say, here's an order that I ordered for the patient, say a blood test, which I thought was very urgent and I want to be reminded in 2 weeks if the patient did not get that test and the results to not come back to me yet. So I have the option, and perhaps only use a small amount of time when it's highly important is to say that this needs to come back in two weeks and then the EHR will then be able to remind me that it didn't come through. We want to be able to record the dates and time that results were reviewed and by whom. And match results with the order to accurately result each order or detect when it was not completed. That is to match results back to the original order, so that you can accomplish this closing of the loop.

Unique device identifier, this was for EPs and EHs should record the FDA unique device identifier when patients have devices implanted for newly implanted device. So this would be a menu item that would be used by usually subspecialists who implant devices and they would simply record the device identifier. We had a presentation or a hearing on this that assured us that this was feasible at this point in time, led by David Bates. And threshold on high on this, but remember this is a menu item, the idea being if you're going to implant say a pacemaker, you should be able to record the identifier into your record.

Medication adherence, this is only for certification. Access medication fill information from pharmacy, benefit managers – sorry for the typo. And two, access prescription drug monitoring program data in a streamlined way, that is, you don't have to put the data into the electronic health record, but be able to reach it.

Demographics and this is relevant for reducing health disparities. This is certification also, as have the remember the demographics we've moved away because we've achieved high adoption of it. So one, patient preferred method of communication; two, occupation and industry codes; three, sexual orientation and gender identity and last, disability status differentiating between patient-reported and medically determined. The communication preferences that is the thing in the first bullet will be applied to clinical summary, reminder and patient education objectives. And we emphasize that providers don't have to be able to do all of them, but select the options that are technically feasible for them, and then we have a list of possible routes that they could use. Okay, let me – okay, let me – oh, you want to go all the way through or –

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

Yeah, no, we'll go – yeah. Thanks George. I just want to comment because the color is not showing up very well on the projector, if you refer to your printouts; the color is easier to read. And red are really our tweaks to the previous stage and blue is new and sometimes the tweaks are really clarification or correction, as I mentioned. A couple of the major areas we focused on were clinical decision support and the new functionality about so-called track changes. It doesn't have to be exactly track changes, but that's an easy thing for people to understand and the purpose of that was to address some of the concerns. We had a special hearing on clinical documentation that readability of the notes is a challenge for us and we're trying to figure out how to address that, both for better accuracy as well as it may help address some of the fraud concerns.

So next, we're going to move to the patient and family engagement. The goals we have for this section are that the patients understand their disease and treatment that they share information in the health record and that they will be able to take an active role in managing their health. An EHR can support those goals by the following: One, enable patients to have access and to transmit their information, two, to be able to contribute information back into the record, such as a patient-reported outcome and three, to have tools so they can participate actively in the management of their health. So the functional objectives we have, a couple of these are tweaks really, view, download, transmit, and I'll go into these in detail and patient specific educational resources, we've just added a little bit to the previous Meaningful Use 2 criteria. And we've added two others, which are patient submitted things like amendments or patient-generated health data, and I'll go over those.

So the first is view, download, transmit, the tweaks here are just two, one is instead of 4 days as a time, we've shortened it to 24 hours. It seems like a reasonable amount of time in terms of being able to update the record and having that available to patients. And the other is adding family history to the data that's available through VDT. Often times this is already available, but this is something that we figure clinical decision support will draw upon and we wanted to include that and make that available to patients as well. So that's basically the change in this cate – in this item.

Amendments is a new functional objective. Its purpose is fairly straightforward, that is, already HIPAA guarantees the ability of patients to submit information to their record, the provider has the – elects whether to incorporate that or not and the patient could come back and provide additional feedback if the provider declines, for example. And this is just to make that process electronic. So it doesn't say whether this is coded, in fact, we're assuming that this text-based, where it can be coded, such as immunization perhaps, it could be, but it's not a requirement of this objective.

For patient-generated health data, way back in 2009 or 2010, we originally had a placeholder for Stage 3 of wanting patients to be able to upload information from their home devices. In 2013/2014, unfortunately the standards – uptake of standards still does not exist. And so although that was our aspiration, we found that the standards were not ready for that in 2012 – uh 2014. And we didn't know how to predict what it would – what the world would look like in 2017. So we have – only are recommending these two ways of getting information from patients into provider records; one is through structured or semi-structured questionnaires, most of the EHRs already have this, and the other is secure messaging, which as you know, already existed in Stage 2. So those are ways that we're suggesting that EHRs are able to accommodate patients submitting information into their record. And just as an aside, if providers have already connected their EHRs to specific devices, that also counts. So while we're saying that all EHRs – we're suggesting that all EHRs do have the capability of accepting questionnaires and secure messaging, the others would be acceptable and encouraged.

For the visit summary or clinical summary, this really almost is a clarification. This is the summary that would be given to – or made available to the patient after having an encounter with a provider. And that's been in Meaningful Use 1 and 2, and what happened is we found, in a hearing, that some providers or EHR vendors were configuring this summary so that it included everything, and so you ended up with 8-page handouts, and that wasn't of use to anybody. So this tweak is to say, the EHR should provide the provider with the ability to include only that information that is necessary to be relevant to the encounter they just had, whether that's a visit or to a hospital admission, and that's what this – that's the purpose of this modification.

For patient education, the change here is to incorporate at least one other non-English language. As you know, California is already greater than 50 percent Hispanic and much of the country is increasing its diversity, we want the EHR to be able to help us accommodate language preferences. So the ask here is that the EHR be able to and the provider do use the capability of providing patient instructions in one other non-English language.

Care coordination; so the outcome goal is that all members of the care team, which includes the patient and caregivers, have access to information they need to make decisions relevant to the patient's care. The functional goals that would translate in our world to making sure that relevant information can be shared amongst the healthcare team, this is health information exchange, of course, and that the care plan components, we start with components, ultimately we of course want the whole plan to be shared, but starting with components for at least Stage 3. What we've added then, we've tweaked medication reconciliation and we've tweaked the transfer of care document and we've added language to cover consult requests and reports and notifications. And I'll go through those in detail.

So for sum – the transitions, one of the things we did was clarify what's a transition. Originally, we had a site-to-site move as a transition. What we've added are basically care transitions either, bullet 2, a consult request from a primary care provider to a specialist or bullet 3, the result of that request coming back. And we've specified four things that the EHR should be able to accommodate, only one of which is required. So we heard – we actually had a hearing on this and the specialists were complaining about the PCP, not telling them why is this patient here and what do you want from me and the PCPs asking the specialist, well then tell me what you found in return. And so we called that closing the loop. So the required – the only required one of those four data elements is number 1, which is a narrative. It's a synopsis of what's going on with this patient, what are my expectations or what did I find in the consult.

Other things that are helpful are overarching patient goals or problem-specific goals, patient instructions or information known about the care team. And in the past, we had specified the minimum, which is the PCP. So this is basically adding the consults and the consult results as part of the closing the loop to facilitate care coordination.

The next new item is on notifications. And again, this addresses care coordination. What we heard was that when someone either gets admitted or goes to the ED, the PCP often does not get timely notice and when somebody's discharged, the PCP doesn't know; all those things cause both patients and their data to fall through the cracks. So one of the proposals we have is that there be some notification to the other providers involved in that care where those people are known. Some of the significant events that we hope would be covered would include arrival at emergency department, admission to a hospital, discharge from either the ED or the hospital or death. A lot of these things surprisingly people aren't aware of, you can't be aware of it if nobody takes either the time or has a convenient way of notifying you. So this is what we are asking with this notification requirement.

Now we'll move on to population and public health and George will take over.

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

So our outcome goal is that providers understand and improve the health status of the patient population and two, that public health officials know and improve the health status of their jurisdiction, so both sides. Our functionality goals to achieve those outcomes, efficient and timely completion of case reports, efficient and timely means of identifying patient populations, shared information with public health agencies and bidirectional health data exchange.

Here are the functional objectives, we will be presenting three here. I think I'd like to step back and say, I believe this area, population and public health is an area that we moved move slowly on perhaps than the other areas, perhaps partly because it's a two-way street with public health departments and we need to have time for those departments to keep up. And that's why many of those 112 calls we had were hearings and presentations about public health and working with CDC to decide what is feasible at this time, and the three that I'm going to be presenting are basically extensions of previous objectives.

The first is immunization history. So you recall in the previous stages, we were asking providers to share information with the health departments, well that's not a lot – that's partially useful so that we know what our population is doing. But we want to actually improve care, which means we've got to get that information back to providers. And we have a number of pilots at this point of this working in practice. So, EP – professionals and hospitals receive a patient's immunization history supplied by the immunization registry or immunization information system, allowing healthcare professionals to use structured historical immunization information in the clinical workflow. We want to – we realize that this is a leap forward so we have a threshold low with a simple use case. And the certification criterion listed there is basically the infrastructure needed to support that. Functionality provides the ability to receive and present a standard set of structured, externally generated immunization history and capture the act and date of review within the provider's practice.

Case reports, this is basically the next step only beyond what we previously had was electronic lab reporting. That is reporting conditions now with the next – complication. This is put forward as a certification criterion and this is the one that I referred to earlier which was linked to the CDS objective that I presented first. The EHR is capable of using external knowledge, for example, CDC Reportable Conditions Knowledge Management System, to prompt an end-user when criteria are met for case reporting. In other words, you can import from CDC a rule that says which patients need to be reported. Then when the case reporting criteria are met, the EHR is capable of recording and maintaining an audit of the date and time of the prompt to the professional. And then the EHR is capable of using external knowledge to collect standardized case reports and prepare a report that's sent back to the local – to the state or local jurisdiction, that is the first step is to identify the patients, the second step is to identify which elements need to be reported back to the local jurisdiction.

And third, registries, remember we recall that Stage 2 had registries, cancer and other, now we are moving this to core for eligible professionals, menu for hospitals. Reuse EHR data to electronically submit standardized, meaning at the level of data elements, structure and transport, reports to at least one registry. We went to one because now this is core, not menu. The reporting should use one of the following two mechanisms. The first one is a certification criterion for the vendors, upload information from EHR to registry using standard Consolidated CDA. The second one is not a certification criterion for vendors. What it states is, if your organization is using a national local network for federated query technologies, and I'll give an example in a moment, then that would – you would meet the criteria for this registry. However, the vendor does not have to supply this explicitly. So an example is the Primary Care Information Project in New York, 2000 doctors who report their counts of their cases to the local health department. Providers who are participating in that could count that as their registry, but we're not asking the vendor to carry this out for them. And that's it.

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

Okay, you will recall that we talked to you about deeming in the past and I want to give you a follow up on that. So the idea was, as we move into outcomes, we always thought of ourselves as we want to put in this electronic – this HIT infrastructure to work with data and to be at the effector arm as well, but that we would transition the baton over to the pull side. Knowing that CMS has its new programs, it would recognize and compensate people for managing departments – populations and communities. So we're thinking that would be the pull. And so we wanted to also move towards looking at outcomes, not just the functional objectives. So that was the thinking behind the deeming concept. And this would be ex – this was explored as an optional pathway. So people could continue to qualify based on meeting behavioral objectives through the EHR Incentive Program or choose to say, hey look, we're doing really well on this and that is sort of a de facto statement about their Meaningful Use of the technology.

So we thought about rewarding providers who either have a high level of performance or significant improvement so that we could – so that anyone would have a pathway to achieve this deeming qualification. And the last bullet says basically, if you don't qualify for deeming, because the question was asked, it would not affect your susceptibility to penalties. So potential elements we looked at high performance or high improver, based on a 12-month reporting. And we had specified before, in our last presentation to you on this subject, two categories, and then you would pick two measures from each of the two categories for a total of four measures. And in addition, one of those measures, you would show improvement in some disparity of your choosing.

What did we run into as we – the devil in the details kind of vetting process? Well first of all you need these measures, you need these outcome measures, that's one of the things that we're a bit short on, and while there are some in the development pathway, there's a time lag between when people start developing them, when they test them, when they get them endorsed and when they get incorporated. And not all outcome measures are HIT sensitive. That is, you can link them to what the EHR does for you.

So, if you need a com – perfor – comparison measures, if you need benchmarks, then you need a track record. So all this is saying is that we're a bit short of that in the sense of having the measures, having the track record and then the whole if you – so that you can compare yourselves and improve yourself as either pro – performing at a high level, in terms of comparative benchmark or improving over your last year's results. And the other sort of Catch-22 was to be truly optional, you didn't want people to measure something, find they didn't qualify and then have to go back and do the other work. So that was another quandary, and then that requested having a less than one-year measurement period and that's an administrative challenge for CMS. So for these reasons, we said it was difficult to implement in Stage 3, still it was a very popular idea. We want to think about it in the future because after all, we are looking for outcomes not actual just use of the EHRs. So, wanted to update you on that.

From the – we didn't want to give up on the disparity idea that we have, in terms of measuring and then addressing disparities that occur in your locale. And so one of our suggestions is that the CQM requirements continue that requirement that one of the CQMs that you report on is stratified by a disparity variable of relevance to you and that you report on it and over time that you improve upon that – reduce that disparity.

So, before we get to discussion, I just want to summarize. What we've talked to you about is one, the reason for the timing and talking about this in 2014 when it's not effective until 2017 is because we're trying to respond to the provider and industry request to have as much lead-time as possible, both to develop and to implement. That this is only one-step in the whole process; we've had a lot of opportunity for public comment and official public comment through the process we've had over the past two years and 112 calls. That we still have more to go, this is just input to CMS and ONC. They take all this input and the continuing input they have to formulate their NPRM. Then we still have another chance to react to that before the final rule, which is over a year away.

So what we've done is we've tried to pivot, use Stage 3 as a pivot from functional objectives in an EHR, use of the EHR to measuring and improving outcomes. And that's where we're headed. Hopefully you've seen that we've based these functional objectives for Stage 3, these recommendations on the need to achieve better outcomes. And we've chosen to address clinical decision support, patient engagement, care coordination and population management as our focus areas. So at this point, we're open to more feedback and I see the cards go up, but we're happy to hear your questions, comments.

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

– you're going to manage the crowd. I'm sorry I didn't see you and I'll first of all just start to the right and move to the left. Is that okay? I'll start with you Marc.

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

Thank you. And you guys have done an amazing job, that workgroup under your leadership this is terrific. So let me start with that. And I just have a few little questions – no, they're not – they're really not all that big. If you look at med adherence, which was one of them, the concept of patient consent. I mean, it concerned me a little that it was kind of carte blanche, that whatever went – that would come back from the pharmacy, so I don't know if you've addressed that or if you talked about it. Do you want me to just go through the list, there's only like four or five and then –

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

Yeah.

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

– answer them. Okay, on demographics, we're getting to some pieces of demographics that are more sensitive, sexual orientation and things like disability and I'm just concerned again if there's a consent issue there, whether that should be there. Because I've seen the misuse of that data, actually personally. On the view, download and transmit, the 24 hours, I think that's a worthy goal. It seems to me though there are clinician workflows associated with that. I mean, it isn't – yeah it goes right into the record when you do that, but there are processes for medical record review and how quickly that happens and should it be part of that record that goes out before that signature gets put on it by the clinician? It's just process, not necessarily technology.

On notifications, it said – or if required for patient consent. But are there times it's not required and shouldn't it always be required if those notifications – if I'm going to the ED – and maybe that's state law, I don't know. And then the last one I had was on registry and this is really – why the term reuse in that versus just use of electronic medical record data? So again, I think you guys have done an amazing job and before I give up the microphone, I like the stages that we've got between 1, 2 and 3. I am still incredibly concerned about timing, and I know you don't address that, you address these big blocks, but I hope somewhere we're addressing timing, particularly as I look at 2, because if we can't get to 2, getting to 3 is going to be a big pull. But anyway, thank you. Good work.

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

Thank you, Marc. Paul?

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

Or do you want me to respond?

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

Oh, I apologize, yes.

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

Let me respond to those and unfortunately, I think we – like most of these things; it's a matter of clarification. And what we did do is if you'll read – I know you haven't had a chance, but the text matrix document has more words that are trying to clarify our intent. So that's one point, and that doesn't make it to the slides. So let me give examples by clarifying some of the things that you asked about.

So med adherence, demographics and the sensitivity, one, they're all optional. The main purpose of this being in there is because the functional objectives drives the certification, which drives the functionality. And what we're trying to do is make available things for providers to use as they adopt the new advanced care model. So for example, in demographics, it's targeted for recognizing and reducing disparities, it does not require any patient to reveal anything they don't feel like it, but without a field, which we didn't have before Meaningful Use Stage 1, without a field in the EHR, there's no way to actually measure the disparity. So that's where we're headed both with that and med adherence. So those are consent driven in the sense they're optional.

Another thing you mentioned, VDT, nothing – this doesn't call for anything to be released before signature, so that's an important clarification we could make. We're trying to – as you know, most of the events that happen, so care happens in clusters, you have an event then you have follow up things. So the relevance of a note is highly relevant very close to the initial symptom, let's say. So that's why we're trying to close the gap between four business days I think it was before, down to 24 hours. And maybe there's some tweaking we can do there, but that's the motivation behind it, but it was not, of course, to release it without signature, because that – it doesn't become official before that time.

Same thing with notification, I think a lot of your questions have to do with privacy and these are all related to, and we even mention, I think, if consent is required, then you need to obtain that before you notify. As you know, HIPAA doesn't actually require consent; most organizations will do that anyway, because that seems like the good thing to do. But for purposes of, as you know, care and payment, you don't have to get consent per se, but most people will.

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

It didn't read that way to me, Paul.

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

Okay, then we'll fix it that way. Thank you. And then you wanted to mention on the social –

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

Just to mention that the Institute of Medicine has a committee on Social Determinants of Health, which correlates with the demographics. Their first phase of their report comes out in March and then the second in the fall. And I think there'll be a lot to learn from that and it'll give the evidence why we should include some of these, which ones could help healthcare, but it's kind of out of phase with our committee, so it will be up to CMS and ONC to incorporate that evidence into their determinations from what we put forward. So that might influence what would end up in demographics. And let me emphasize, as Paul said, it's optional for the patient, so – their giving their consent by answering the question.

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

And then registry, the word reuse was chosen because this is a EHR Incentive Program, so the information has to come through the EHR, yet a registry may not actually occur inside the EHR. So the data would come from the EHR, but be reported from another modularly certified – so, as you can see, there are all kinds of angles people come at this and we're trying to use our carefully...

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

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

– to try to accommodate those.

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

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

You good? All right. Paul?

**Paul Egberman – Businessman/Software Entrepreneur**

Great, thank you. First, I want to echo Marc's comment about the amazing job you've done. These are – I've been to a few of the meetings and you've done a great job of leading them and the members of the committee are very engaged. These are people who have their hearts in the right place and they're trying to do the right thing. I appreciate the fact that you eliminated deeming, I think that is good, I think that we should in America have an egalitarian view of these things and there should only be one way to get the incentives, it's not fair to have two different ways of doing it and give one group of people a shortcut. I also appreciate what you wrote in the deeming section where you said part of the purpose of what you were trying to accomplish was to reduce the burden.

And my observation is, maybe that purpose should still be accomplished, of reducing the burden. Because I look at what you've done here and one observation I have is you've tweaked and changed a lot of existing things that already existed in Stage 2 and you've introduced a few new concepts. And I wonder if you – we'd be much better off if we just focused on introducing a few new concepts and also focused on things like information exchange, care coordination, transitions of care where we could make some real differences that will really affect outcomes. That that would be perhaps a better way to approach and that approach might be better, especially as it relates to specialties. Because you – then if you focus on transitions of care and information exchange, you would not – you would have a broader applicability to more specialties. Because I look at a lot of these things, that you're doing and the applicability seems very narrow. So you look at like device identification on implanted devices, that only affects some specialties it doesn't affect a lot of people. That's a very narrow process and so I kind of think that it would be better to work on broader things.

I also have to say, picking up on Marc's comment about the timing. I look at this in the context of what is going on right now in Stage 2 and in Stage 3, I'm hearing a lot of resistance about the – from the developers about the technical burdens of implementing what's in Stage 2. The ONC data that was presented last month showed the number of vendors declining from Stage 1 to Stage 2, which means that there are some providers who had one vendor for Stage 1, have to change vendors in order to implement Stage 2. And I'm worried that this stage will cause that to occur again, which makes it a very difficult stage, especially in a context whereby the time you get to Stage 3, a fair amount of the incentive money may have already been used up.

So in particular the places where I would make suggestions for significant changes is first on all of the items that are called certification only, in this process, and there are a lot of them that are certification only. And a lot of them are very hard. And the second place I would make a suggestion for changes are places where the standards are immature and there's sort of like a loophole in what you wrote about immature standards where you – about standards. In the introduction you say, well the standards have to be mature or we – or they could be mature by 2017. Well that's kind of a leap to say they could be mature, because they might not be mature by 2017 or there might be some other standard, but in the meantime developers have to do a lot of work on something that may not ever be used. And that's very frustrating.

And I can give you a few examples. One of the things you have here is this concept of CDS being able to consume external rules, and that I have to take first by itself, that's a really hard thing to do. That's extraordinarily hard, that's going to cause a lot of technical people to do a lot of work. And it says, consume external rules, in one place it says, in order to able to use the rules from Health eDecisions. Well Health eDecisions, is simply not widely adopted and so you're talking about something that's a massive amount of work in an area where there's not a lot of adoption and it really isn't necessary to accomplish your goals, you could do your goals just fine without it. And so I would use that as an example.

I'd also use as an example; you have all of the certification only rules about CDS where you've got to track every intervention that occurs as a result. And every time an alert is reviewed, that's a lot of work to get all that stuff done. And the same thing with electronic meds administration, you've got to track every single variant from the standpoint of producing what is called a quality report. And there are other ways you could accomplish the same goals without doing those. So those are certification rules and there's a whole series of them. And in your certification roles you put down, which is probably just an error, you have these new demographic fields, and you put down occupation and industry. And then on the next line you have sexual orientation and a gender identity as options.

So I assume occupation and industry are mandatory, but I would point out that pediatric patients do not have occupations, at least most do not. And so that it doesn't apply and it's an odd thing to put forward that as a requirement, especially since I don't know where it fits in the total picture, even something as simple as gender identity can be a complicated issue because if you put in food field, that is called gender identity can be a very complicated issue. Because if you putting forward a field that's called gender identity, it can influence sort of like downstream on other things, like what is your salutation going to be to a patient when you send a reminder? What is your salutation to a patient in terms of the address block on an envelope is it going to be Mr. or Ms.? And people have that stuff already programmed to come from the sex file, and now you're going to say, well, we've got to look to see if the gender identification field is there, and if it's there, I use it, if it's not there, I use this other thing. And I'm just saying that there's a lot of technical work here that I don't think people acknowledge.

So my very specific recommendation is, number 1, I would eliminate all of the certification only requirements, I would eliminate every single one of them. It doesn't change at all the functional goals of what you do. Second is, I would in the next month, encourage you to review all the places where there is immature standards, to really understand that. Family history is another one, are there really standards that allow you to structure family history and use it in CDS? Does that really exist? And I think that you need to look at that. Number 3 is I'd also say in terms of tweaking the existing things, actually I would ask you to look at all of the places that are low threshold to understand, are you really accomplishing anything if you have only 5 – if the result is only 5 percent of the population has to use it? Might we be better off focusing on things that are more usable? The one thing that I thought was like incredible was this idea that there was something put forward where you can put forward an alternate language instruction and to meet the criteria you just had to do it one time. And to me that's just checking the box, that's not accomplishing anything.

So, those are my comments. Again, I'm sure it comes over fairly negative just because there are some things that I think really need to be changed, but I also want to re-emphasize, this is a wonderful group of people who are doing good work and we can make these changes and make this into a much better recommendation.

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

So let me try to address them. And the reasons because it's not as if they weren't discussed and again, we may be short on writing skills but as I say, a lot of these are – we've tried to word in the matrix to clarify some of these things. So for example, to track CDS intervention, I couldn't agree with you more and we discussed that if we were to follow each intervention and try to figure out what result happened to each CDS alert, that would be really hard. So it was narrowed, so many times, you'll have an alert saying, hey, remember this and would you like to do such and such. Would you like to order the A1c or would you like to order and ACE inhibitor and it'll be right in that "alert." That's the only thing that's being asked for there.

The reason is because, and this was elegantly shown by I think it was Allen West at Intermountain Healthcare over 10 years ago. And despite how, you would gather all the experts to formulate this decision rule or this algorithm for managing people with ARDS in a ventilator, they got it right only 40 percent of the time, the first time. And so what they had built into it was, tell us why this didn't work for you. And so they improved very rapidly because of two things, one, they acknowledged that this rule that we put in is probably not going to be right the majority of the time. And two, if we listen to our users, we'll get it very close to right, it never gets to 100 percent, it's something like 90 percent.

So that lesson is what we need to have all organizations – all provider organizations to have the tool to do. So if they don't know what are people doing with this alert, and then they'll never know is this good or bad. And if it's not good enough, they won't know how to improve it if they don't have this intervene – tell us why. These are all optional, but without the tool, we can't write good rules, essentially. And we already explained that clinical decision support is the most potent lever we have in terms of how would use of this technology improve care and health. So that's the background, I thought was important to at least bring to the table as far as why that was put in and why it was written that way. Specifically, to be a good functionality, but low burden, so all you had to do is report on how many times a day you follow this and if they didn't, did they give us any reasons we could help improve the system for.

Another example you mentioned is the occupational health and the demographics. And you recall that all the demographics are voluntary, but without these fields in the EHR, which is our whole reason for certification only, is that you have no ability to track – to stratify your reports by anything, by and in the cases here, by disparity variables.

**Paul Eggerman – Businessman/Software Entrepreneur**

I might have just misunderstood the slide, I saw optional only next to gender identity.

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

Paul, this is Michelle. Sorry, we were supposed to fix that and it was a miss, so I apologize. That was my fault.

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

Okay. So it's just a typo in a sense. A comment about the low threshold, because that is also –

**Paul Eggerman – Businessman/Software Entrepreneur**

– probably about the consumption of the CDS rules.

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

Okay, the consumption of the CDS rules, that's – as you know, that's an ONC pro – I wish Jacob was here, but that's an ONC Program. He assures us that it – we're going on his recommend – his assertion that these would be – these are standards ready and would be consumed, that he's working with vendors on the implementation side as well as the standard side. So we are relying on that and we can reaffirm that, we've done that multiple times, but we can reaffirm that in this coming month, for example, to address that. And I totally understand that one; these standards don't exist and are not implemented right now, so that's a heavy lift. And we can just check on the status specifically with Jacob.

On the low threshold, our purpose is, as you know a lot of things have to start and particularly when it's not just a technology or a technical solution, it takes calendar time to change the culture. So actually secure patient messaging is one of those, it takes a while to just get the organization and that's both sides. The provider side has to have a workflow, the consumer patient side has to understand what to do with this, but once they do ramp up, they ramp up very quickly. So even we had a slow start 10 – over 10 years ago, but now we're over 80 percent of our patients are online with us. Likewise, like we said, we're going from 0 to 60 essentially overnight in a couple of years, we can't force everybody to go full bore and have all have all patients and all providers understand this at once.

That's what we mean by low threshold, not that it's a low value, but that you need to start. You might – in the inpatient setting, you might start with one ward, in the outpatient setting you might start with some providers, but you have to start and there's some progression, there's some ramp to go. So that's how we use the term low, not low value, it's just that the ramp seems – we're starting with zero and we have to get there over time. So I'm just trying to respond to some of your questions, both to show the rationale and to show that we've discussed this in the group to – and we came up with these proposals.

**Paul Egerman – Businessman/Software Entrepreneur**

So I take it, from your discussion, I think that all the certification only should be eliminated and I think that the low – the things that have immature standards should be reviewed. I take it from your response you disagree and that's not going to happen –

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

Well, I'm not saying I –

**Paul Egerman – Businessman/Software Entrepreneur**

Am I understanding that?

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

– I'm giving a rationale for – the certification only is basically saying, there are some, but not all providers that need this functionality at varying times, but that all of these functions will be needed, in our opinion, to operate in the new care model and in the new payment model. And that these tools are important enough that our proposal is that they be included in EHRs. Sometimes it's also very hard, without using checkbox kinds of requirements to measure behavior. So where that seemed to be a behavior that's hard to measure, and becomes checkmark or becomes burdensome, we wanted to avoid making it a functional objective. But we thought that the EHR support of that behavior and having that information available was important. That's how – that's where – those are the kinds of objectives that put certification only.

So I'm just explaining, we'll obviously have the discussion, we have multiple calls between now and March to have that, but we have heard that and we'll re-examine that. So that's not an answer, it's just a – it's a background.

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

Thank you. I'm being reminded by the staff that people on the phone, they can't always discern who's speaking, so that was Dr. Tang responding to Paul Egerman's questions and part of that was Marc Probst. And, by the way, this is Karen DeSalvo and now I'm calling on Representative Harrell from Florida. Thank you. If I forget to introduce you, please introduce yourself. Thank you.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Yes, this is Gail Harrell. And first of all, I too want to commend you and the workgroup for the hard work you've done. I can tell you over the last four years it's been amazing the amount of work that's come out. And I've probably been one of the more critical persons dealing with where we're going with Meaningful Use, especially when it comes to areas dealing with specialties. And again, and it's somewhat disappointing to see again we are not really looking at the probably 80 percent of the care that individuals receive is done by specialists. And again, the entire Meaningful Use Program has been very geared to primary care. And it depends on the specialist to get the information into that record for that primary care doctor to really appropriately deal with that patient.

So much of care is given by specialists, so when I look again at decision support, which I think is absolutely essential and one of the key tools that we can put into the EHR. And looking at the various things that are there, it becomes difficult in many ways for an ophthalmologist, an orthopedic surgeon to achieve, as it gets more and more difficult, as you put things more into core, without the ability to have many selections. If you're going to do decision support, broaden it and include areas that are specialty specific so that a specialist by doing what they do and recording it, has the ability to achieve Meaningful Use. We're getting into a stage now where, and the timeframes, where we're not into an incentive program, we're into a punishment program where we're going to be withholding payments to people if they don't meet Meaningful Use. It's no longer, we're going to pay you to invest, we're now going to take away from you and going to make it more and more difficult.

So as you go through these, just be ever so mindful, and it's somewhat discouraging and I've been on this soapbox for many, many years, you all have heard this before, and I know there's going to be pushback on it, but I just – I see it happening once again. I don't know many podiatrists or orthopedic surgeons who really look at immunization history and record that as part of their routine exam when I'm coming in for my broken arm or my broken toe. Are they going to record that? So just be ever, ever mindful of that.

Secondly, as we go down, when I look at care coordination I think that's the key to really improving outcomes and looking at how we achieve really good care coordination, whether it's closing the loop on consults back and forth, whether it's dealing with medications and medication reconciliation and the care coordination is so important. Are we going to have the ability to exchange records to the degree – are we going to have that interoperability? Are we going to have our health information exchanges up in time to meet these requirements? That's key. You've got to have information exchange in order to meet Meaningful Use requirements of care coordination, absolutely essential. And I know what I'm seeing, there seems to be a whole lot of problems still and we've still got a few years until this comes in place, but I think that has to be addressed and perhaps this is a Standards Committee endeavor, but we need to make sure within this that we have that interoperability ability. And ONCs responsibility to really push the exchange element and to make sure that that is there in order to meet these Meaningful Use Stage 3.

Another issue I'm concerned about is PDMPs and making sure every state and not – I think there that 37 states have PDMP, some states do not. So you've got a difference there. You also have various ways states do this and I don't know that many states have the infrastructure or the ability to do what you're asking here. It's problematic and that for vendors becomes difficult, I would think, dealing with individual states. And if you have a product on the shelf and you're building a Florida product, it's very different than if you're building a California product. So the PDMPs are very – are problematic. I think it's essential that doctors have that information if you're really going to deal with drug abuse and prescription drug abuse especially, but it's – that needs to be very carefully thought through on how you do that.

Also, the same element with public health departments, every state is different. How you get that information in to public health, some states aren't ready for this, I don't know that by 2017 they have the ability to be ready. Very difficult to do and many states don't have the infrastructure in their public health departments to be ready. So again, becomes problematic for vendors and – to achieve that.

Then I get down to the usability and timing elements. And again, I'm a voice crying in the wilderness at times on usability. Let me tell you, when I go back to Florida, and I always – I'm kind of the bottom of the funnel, all the complaints come to me. And I hear from providers out there, and there's a revolt going on, an absolute revolt among physicians, among providers, especially in small communities. Large groups, Mayo's out there doing it, Cleveland Clinic's doing it, we have both in Florida, but I tell you, the doc on the block is having a tough time and the usability factor for many people is very difficult. The amount of time that's being spent in offices. The threat of the penalties coming down the pike make it extremely difficult and the inability to exchange records, which is the key, is – then frustrates them even more.

So let me tell you, there's a revolt out there among providers, especially in small groups. They need to be listened to, so I think the timing is difficult, especially when vendors are going out of business. If you purchased a large – if you made a large purchase and now your vendor isn't going to Stage 2 and then how many are going to drop out of Stage 3, and then you have to repurchase, this becomes very problematic. So we've got issues – plus the usability of the individual record. So, I want to commend you for all the hard work you're doing and everything you've done and we're pushing the envelope, we're making significant changes that are going to improve outcomes, I believe, but there are a whole lot of hurdles in between. Thank you.

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

I'm going to address a couple of things. PDMP, although we can call it out more prominently, we understand this state – we understand it's a priority for the federal government and for state governments. We understand that all the states don't have it, which is why it basically got reduced to a sign in. It's almost like a bookmark. So for the pro – often times for the provider who wants to check something, it's like where do I go, so this requirement was actually just a bookmark of the PDMP sign in. So that sort of talks about that. The CDS, I always like to hear your comments, Gayle, to make sure that we do check our work and make sure there is something in for the specialists. When we looked at – that's one of the reasons we took special care in the CDS to not make it prescriptive, basically said to have multiple, that's like more than one, that addresses 4 of the 6, even made that not all 6, so 4 of the 6 NQS goals. And all of the things that we put down are optional. You could see how – you pointed out orthopedic surgeon, could want to remember to either start or stop anticoagulation as appropriate for that patient. So there are things there, even an orthopedic surgeon may benefit from a CDS rule, as long as it does cover some of the National Quality Strategy content domains.

So we did try to look at that and I do appreciate every time hearing about specialists and then looking down and making sure, is this covered or not. And I think we tried not to be prescriptive and tried to be accommodating of as much – as broad an area as we can, particularly with specialists. Some of the things you mentioned is a little bit be – the timing and interoperability are more going on in HHS in terms of trying to understand and respond to the pressures that you cite and are legitimate.

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

All right, very good. I think Charles Kennedy is next.

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

Paul, George, I think – first of all I want to applaud the report because I think the notion of trying to transition from Meaningful Use 1 and 2 to 3 with a focus on outcomes is absolutely the right thing. I also think it's a bit like trying to thread a needle and I think you guys have done a great job in threading that needle. And I agree with the vast majority of what I read in here. The part I'm struggling with a little bit around is the population health segment. As you all know, population health, in order to do it well, really requires discrete data so you can run analytics algorithms against it, identify people that had gaps in care or whatever the case may be. And I think you did something I think which was very practical, which is to say I'm going to set, I think you called it a low threshold and I'm going to create a simple use case. And that is probably the smartest thing to do.

But for the organizations that are going to want to use this technology, ACOs, health plans, payers, etcetera, who will have an interest in that, we're seeing now in the industry risk, financial risk, gain share risk care contracts, increasingly being pushed down to the provider. And that will increase their sensitivity and need toward population health analytics that support chronic disease management. And I think immunizations may, to an organization that is taking on financial risk or for performance purposes, immunizations alone may be a little unsatisfying. And so I'm just wondering, I mean I think what you did is smart, but I'm just wondering, were there discussions in the group around, is there anything else we can there like chronic disease, right, is there anything we could do to nibble at chronic disease. Or is there anything we could do that might paint, I hate to say it, but even a further roadmap around how we might get some more structured data in more clinical conditions, especially when you think about the financial risk that physicians and delivery systems are starting to take on.

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

So thanks Charles. We want – so the reason for immunization is we wanted to pick one thing that we could do that improved care of patients, so I think – you're not saying not to do that.

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

No, no, no.

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

I would say if you look at versions, Art's versions of the registry objective, it was exactly to achieve that. And if you look at the details on the C-CDA and how it needed to be structured was exactly for that purpose. What we didn't do, however, was pick one area that we should focus on, we didn't pick Million Hearts or this or that because we don't know, it depends on the specialty network they're in or – but the goal of the registry objective was to accomplish exactly that and maybe it's too short.

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

Well just –

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

We also didn't want to duplicate what the other legislation is doing; we want to provide the infrastructure so the legislation can do its job, so we didn't want to replace that goal. So, we want to provide the infrastructure – the functionality in the EHR to then carry out population management. Do you have specific things that are missing, functions in the EHR that are missing there?

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

Well, I think, and it may be in the registry work and maybe I just need to dive deeper into that, but I think the, to Gayle's point about the revolt, one way to quell a revolt is to help people with some infrastructure do better against their financial objective. And if there are ways to improve perhaps the depth of the recommendation around maybe some additional disease states, maybe it is cardiovascular. I can't give you a specific recommendation, but I can say, I think this is a really critical area to try and be perhaps a bit more specific and maybe a tad more expensive.

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

Okay. And was moving away from cancer a bad – we didn't specify it had to be ca – remember, in Stage 2 it's cancer. Are you seeing that as something...we made it more flexible?

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

No, I think flexibility is good. I mean, I really think just a few more steps beyond immunization is really all I'm trying to convey.

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

Okay.

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

Great, thank you. I think I have Devin Mann then Terry Cullen and then Judy next, so Devin.

**Devin M. Mann, MD, MS – Assistant Professor – Boston University School of Medicine; Attending Physician – Boston Medical Center**

My question is actually a lot smaller scope than what Paul brought up, but it's going to touch something he did bring up, so I want to kind of separate the two. But also about the external consumption of CDS. George had mentioned that it would come up later, and it came up during the case reporting section. Is

that the case that kind of defines it, because when you go into the word document explanation, it brings up Health eDecisions, which was referenced, which is a somewhat in progress standards, but as an example. So I'm trying to understand how detailed, how prescriptive are you trying to be or how low is the bar. Do they literally just have to do the CDC integration and hit the vaccines and they're done or are you trying to push this further? And it's very interesting also from the research perspective, which is so involved in CDS, and trying to understand are you guys trying to encourage really a plug-and-play approach or is this not what you're trying to do?

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

Well first of all, the committee is correct in identifying consuming external rules as someplace where we went further, so that's correct. So we understand that and we're – and you'll be the ones to decide whether we go that far are not. We were looking for concrete examples of successes so far and that's why that case, that use case, was one where Art had specific things that were working in practice. I mean not across the country, but at least working in practice, so I would – my opinion is that yes is the answer, that that is sufficient to meet what we put forward in the earlier objective. What actually happened is, we had put consumption of CDS into the CDS objective and then realized that it was going to be too confusing. So what ended up getting broken out again, but it didn't get taken out of that objective. So we were trying to consolidate, we consolidated in; we realized it became meaningless and so then we pulled it out again so people understood what we were saying. But we didn't then erase it from above, because it really is related to it. I think keeping the scope very small is a good idea for Stage 3 and if the committee decides it's too far, it's too far, but we think that keeping the scope small at least makes it feasible.

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

Thank you George. Terry Cullen?

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

First, I want to thank you, like everybody else, because I know how hard this is and it's really impressive, but I have some comments. Some of them kind of hinge on what Paul said, but I have a few very specific comments. The first thing, George, you had made a response to Marc about that when the patient gives consent by answering the question, I don't know that you really meant to say that, because I don't know that that's true. I think if patients indicate a gender preference or a sexual orientation preference they may not mean that they're now giving consent that everybody in the world knows about it. So I would just. Be cautious about that one.

My overall comments are really related to standards and interoperability. And I looked forward to what Doug's going to present and so what I'm wondering about is the co-depe – I'm sorry about my throat, the co-dependencies that will evolve from what your proposals are here. If I look at what Doug's going to present on standards, I'm not sure how it's aligned here, and I think that this alignment is happening somewhere. But I want to ensure that if I was doing the integrated master schedule going forward of how I was going to get to Stage 3, that those codependency's had been identified and were going to be met before I got there. And I'm concerned that there, as we've said previously, there's so much work in standards and so much work in interoperability that still needs to be done that whatever we propose for Stage 3, we can ensure that that kind of, I'm going to use the term infrastructure, that kind of infrastructure work is there and can support it.

The other thing is, if I look at public health, there is a goal for bidirectionality and I think that that's a goal that we see implicit through most of the proposals for Stage 3. However, if you look at what is required for public health it appears to me at least, and I might be reading this wrong, that it's all unidirectional. It's me sending data to public health and there's not a requirement that public health send back to me. Now that, once again, may be a very reasonable steppingstone as we go forward. But I think we need to acknowledge that and say the goal is bidirectional information exchange in the public health arena, this is the first step. And I may, once again, have misread what you put in the document and it really is bidirectional that you're asking for.

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

Yes, thank you, Terry. So one, that first objective is sending it from the – I've been sending it – well, it wasn't a requirement at first, but sending immunization information to the public health department, this one is to send it back from the health department. So this is that second half, this is building on that.

On the patient giving information, what I think, if the pa – just a – because the patient is not giving consent to share information, say gender identity. The patient is allowing the person that gave it to that provider to stratify at the population level and look to see how they're doing on disparities, but not share that individual's information with others. So that's what I was implying with was allowed, in other words, how am I doing if people who, in this or that group, am I serving them equally with others. So I'm talking about that person looking at it at the population level, I'm saying is implied when you give that information. But thank you for clarifying, it doesn't mean they're saying that you can give it to anybody else.

And then, bidirectional, oh standards, did you want to answer on standards? Okay.

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

Good, thank you George. Next, I have Judy.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

I too want to thank you and appreciate your trying to really improve patient outcome, because I know that's what everyone here is trying to do. I was surprised and worried last time we met when one of the ONC folks mentioned that we're regulated the HIT industry. And I think, in fact, that is what's happening and that's a consequence of what we do here and I think we have to be very careful that the cumulative effect is not more harmful than the beneficial effect. I have not seen physicians say they're happier with Meaningful Use. I have more heard them say they're less happy because of the burden it puts on them and in fact, I think I mentioned a while ago, that I did see a letter from one physician who talked about Meaningful Use being workplace violence, and I think we have to pay attention to that.

I agree with Gayle, there are unintended consequences and that the rush to Meaningful Use has, in my observation, resulted in some and actually I should say, too many healthcare organizations putting in systems too fast so that they make the date. doing poor jobs that will take years and years and years to recover from. And what I think about it is it's sort of like the US government saying every couple who has a baby born in July will get \$10,000. And so lots of people induce the babies at 7 months, and we all know that that's really bad. And I think that that's to some extent what has been happening, unfortunately, as an unintended consequence with Meaningful Use.

I worry that is going to push many of the small – more of the small vendors, because they've already dropped a bunch, out of the electronic health record space and that will lead to fewer choices for providers. That in order to keep the penalties from hitting them, providers may need to switch vendors to achieve Meaningful Use, even though they're doing well. And this is going to be a big cost to the providers. I worry that the across-the-board documentation will hit many specialties and as a result, it will compromise patient care. I worry that patients may find that their providers are not agile enough to respond to patient needs because they are preoccupied with Meaningful Use requirements. I looked at a few that I thought were very interesting, 50 percent are provided with a summary of their visit. Well when I'm thinking through how that would work, because when I have a patient visit, is there a printer in the room? No, every exam room does not have a printer. Then I would have to go stand by the registration desk and get the report. I don't want to spend the time to do that, I just want to leave. So I think there's a big difference between available to have and provided. And I worry about things like that.

The 5 percent secure messages, you have a lot of people using the portal to get 5 percent secure messages for every eligible provider, and that is also specialty based. I have heard providers talk about doing a raffle so that every patient who sends a message gets put in the raffle for each month and win the prize. I have also heard them talk about not telling patients important things so they have to get back.

I think that some other areas that we need to look at are the thing about full track changes like Microsoft Word. I am not sure people realize how huge a job that is for the developers and legal, the compliance departments and payers are the primarily – the primary benefits of these changes that will take the vendors away from working on things that are most beneficial for the doctors and the patients. Requiring a display of abnormal flags on all abnormal radiology or pathology results is dependent upon the ancillary systems supplying that discrete information, and they often don't. The line between a trivial abnormal and a significantly abnormal chest x-ray can be uncertain and that could lead to a lot of alert fatigue.

Prompting end-users for public health case reporting may end up being another interruptive alert. And there may be a lot of additional check boxes for providers to match the external knowledge base. There are currently not standards in place for electronic interaction between a centralized public health entity and individual EHRs. How do you make sure that each individual state Prescription Drug Monitoring Program can work with all the EHRs? That would require national standards for statewide drug monitoring registries.

The requirement for each provider to submit data to one registry is too much for all eligible providers. Some small multispecialty groups will have a significant reporting burden with that and certain specialties have no registries at all. And also, sometimes a registry – registries charge quite a lot to providers to do this. Requiring, as Paul said, requiring information about occupation and industry for each patient is obviously not appropriate for all areas, like pediatrics, perhaps those who take care of those with very special needs. Family history too is another problem. And I've got to say that when I go to the ophth – went to an ophthalmology clinic for the first time to get my eyes checked, I did not want to be asked gender identity or sexual orientation, I would think that's inappropriate.

I do agree with, well; let me go to one other thing first. I think there are four things that have to be added to these lists right here that we have. One is there should be a column for physician burden, does this data requirement add a physician burden to what we're asking for, so that we can judge physician burdens against benefit? Secondly, I think it should have a column that says, appropriate for which specialties, so we can more clearly see, is this just primary care or does the obstetrician, the pediatrician, the gerontologist and everything else, benefits and is able to do that, too. I think there should be a third column for are there measurable standards that are available in order to do the things here. Excuse me, and then there should be a fourth column and that should be, what is the software development effort? Because when you start getting rid of the small vendor software companies, that's harmful and the other thing is, if in fact, something is going to take thousands and thousands of hours of effort, it might not be worth it when you realize that.

I agree with Paul that eliminating certification only would be good. And I actually think that if the focus is more on standards that can be used for interoperability between the different vendors rather than regulating functionality, that would be better for Meaningful Use. That's it.

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

Thank you Judy. Do you guys want to respond?

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

Yeah, I can provide some global comments. So the first one you were saying that there are physicians that are unhappy with some of the – associated with use of EHRs, and as you well know and actually pioneered some of the work, there is a period when there's a lot of hardship when you start using an EHR. And it does take quite a significant amount of time, and as you also know, the vast majority won't go back to paper. So, there is a learning curve that everyone goes through and so –

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

Oh, I didn't explain that right, Paul. It isn't that they were saying EHR; they were saying specifically the Meaningful Use requirements.

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

Well I think the Meaningful Use requirements actually caused a lot of the or stimulated a lot of those EHRs to be implemented and so, I'm just making an additional comment to add to yours. Some of the things, like the AVS 50 percent, I think it's explained in a FAQ from Stage 1 that providing was our term for making available and so once – if you have it available on a patient portal, then that's the same as providing.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

What if you don't have 50 percent of the patients signed up, is that still providing?

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

No, you'd have to make it available, make it – the possibility available to them, yes. And this, yes this is a push towards having the patients be both more informed, which I think is a provider responsibility, and to transition into one of our goals, which is patients both having the understanding and taking a more active role in their health, that's part of advanced care models, etcetera, and patient engagement. So that is a deliberate push to make that information available.

Track changes, we actually pushed out in the RFC as example and got support and very little pushback on that. We understand that it is a heavy lift, but that's also in the face of the feedback we get about what people reading notes in the EHR are experiencing, plus things like the GAO report. So there should be a better way to make sure the information content contained in text is apparent to folks reading it and that was one of our ways. We tested both – we actually tested in a hearing format, so we got feedback. It was out in the RFC and was also in the hearing, so we had feedback on that. So it's one of those cost-benefit kinds of things.

And they require the abnormal, in the text at least, in the word document, we point out that this is just an EHR providing a flag if it that flag is available to the ancillary. So I'm just trying to re – well clarify for the group what's been thought of, and maybe it's not clearly expressed in the text. And the good thing is that the diversity expressed here is reflected in the diversity of the Meaningful Use Workgroup, so we do get to hear these things. And for the vast majority of these comments, we've been talking about these things as well and then you have to come up with something to recommend and this group is the one that has the final approval authority or to not recommend. Yes Paul.

**Paul Egerman – Businessman/Software Entrepreneur**

I'm just a little confused about what you just said about track changes. Is your recommendation just that you have to be able to track the changes or is it more specific that you have to cross that?

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

So one of the issues, and this applies both to the accuracy and quality of the notes and the readability of notes, is for the reader to understand the legacy, the provenance of that information, that text. Track changes is one of our everyday use kinds of things, so people can understand well what would that would mean? In track changes, you can see who wrote what, when, where and what was changed. That's really important when you're reviewing something and it's just as important when the clinician is reviewing a progress note, for example, to understand what was changed.

**Paul Egerman – Businessman/Software Entrepreneur**

My question is are you saying you just have to track it or are you saying specifically how you have to track it?

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

It's that it's made visible in some way to the reader, so it's not – and you know, examples are good when they help you understand the functionality, but we didn't intend for it to be specified it must be that.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

So can you say here's the current note, here was the previous or do you have to edit them to say here's where the changes were made?

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

So you could do your former. It's obviously from a reader point of view, if you think about reviewing documents, collaboratively written documents; it's not as easy when you do it that way. So it's up to –

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

We can do it that way.

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

– the vendors to decide how to do it and it's up to the users to say is this really helpful or not.

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

Thank you. Moving on to Art Davidson.

**Arthur Davidson, MD, MSPH – Director, Public Health Informatics – Denver Public Health**

Thank you. And thank you, Paul and George were representing us as a member of the workgroup. I want to make a few comments about the suggestion that certification only not be included in the recommendations. I think that our efforts around suggesting the certification only is to move the industry. For me, it seems like we have an opportunity to push the standards, given the fact that we've invested several tens of billions of dollars into an industry. And this opportunity is one that I'd like to just kind of allude to from the point of view from some other industries. When you go into a supermarket, there's a UPC code on practically every item that you buy and in that store, regardless of whether it is Kroger's or Safeway, they figured out how to use that code. We have an opportunity to do similarly inside of medicine, same thing with when you go to a bank and you want to make an exchange of dollars. There's a place to go to find out the exchange rate for euros to dollars and back and forth.

We have – to me, it seems like we are trying to drive the standards into the products. If we don't have this certification criteria and if we don't have this way to consume the external knowledge, it'll be worse for the providers and hospitals, each will be providing their own knowledge and have to pay the vendor to build it. So for instance, in the immunization process that we're trying to promote here, about external knowledge, I have a record for a kid. I need to know whether this kid is up-to-date. Doug has another practice, same thing he has to do; we will each wind up building that knowledge inside of our product that we've installed in our office, versus having a place to go to say, where can I get the rules around figuring out whether this child is up-to-date? To me, consuming external knowledge is key to making it easier for providers, we're putting the burden on the vendors, I agree. We need to put the burden on them. We're spending this much money that's allowing them to sell so much product, we should get more value for that investment.

I just want to make a one other – couple of other points. In terms of your concern, Gayle, about the states aren't ready, I think when we drive the standard into the product, the states can be more prepared. Right now, it was a wild open West, each one building their own system. As we define what are the things that the states can expect, they will build to that. We have now efforts going on among the advocacy groups for state health departments to build a common platform, that's an effort going on now. Once they know that there's this standard, they can build to that, rather than saying it's now up to my state to make up a standard. So, I think we're trying to drive the industry to help us help the states define what to build. So it seems like we have an opportunity with the certification criteria to make that – those steps forward and make even greater value to providers in using external CDS and to drive the states to build a common platform that they can share and have common standards across those.

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

Well, are you okay with the response from –

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

Yeah, time.

**Paul Eggerman – Businessman/Software Entrepreneur**

I just want to say, in some ways Art I agree with you about certification only. I would not have any problem with certification only that involves information exchange, that involves coordination of care, transition of care; all of those things are very good. And what makes them all possible is sort of like within the ecosystems that ONC includes from one EHR system to another. When you talk about consuming external rules, however, that's not coordination of care or transitions of care, that's pushing the industry into a totally new area and it's a totally new area where there are not mature standards. That's a giant leap. And so I think it's reasonable to object to that.

And when you talk about issues like whether or not states can consume the data. I think that is a legitimate issue relative to the feedback that I'm getting from Stage 2, where I had one person, and I don't know if this – maybe it's only one data point, so it may be accurate, who complains that gee they have to do this reporting, it's called a QRDA report. And have the ability to electronically send it to CMS. And the only problem is CMS can't receive it. And so you have to build the technology and there's nothing on the receiving side. And when that happens, what I have to tell you is the impact on that, that may seem like a small thing, but the impact on the vendor is that it destroys the credibility in our program. I mean that issue may not have – that issue may have been like a significant amount of work, but you asked them to build a bridge to nowhere. They get so frustrated and they say, oh, the whole thing is horrible and so those are the things to avoid. And so what I'm trying to say is I don't have any trouble with certification only if it helps us do transitions of care, care coordination and information exchange. But, for these other things where we just want to push the industry, well the industry is not being happy the way you're pushing us, we actually feel like we're being kicked.

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

Thank you, Paul. Do you, Paul or George, Paul Tang or George, are you all good? So I'm going to move on to Neil, Neil Calman. Thank you.

**Neil S. Calman, MD – The Institute for Family Health – President and Co-founder**

Thanks. I'm glad I'm not a programmer, but I wish I did own one of the HIT companies right now. I want to emphasize one of the things that Art said, which wasn't on my original list, so I'll come back to it, but I do think we have a public accountability for the amount of money we're putting into this system. I mean, we have driven an entire industry. When you go to conventions now, there are more HIT companies than there are, pharmaceutical companies and we've driven this huge industry with dollars. And I think you could step back and criticize the whole concept of Meaningful Use, but if you have a Meaningful Use Program, you have it specified in legislation and you have certain parameters that we function within. I think, again as a member of the committee, I think what you've seen in Stage 1 and I think in Stage 2, and I think what we're discussing in Stage 3 is how to create a reasonable middle point for driving the things that might not happen otherwise in a way that would add value to the system. So I think this is the first step in a dialogue that we're going to continue.

So, I want to make a couple of points. I, too, think that maybe, Paul, you're overreacting to the certification only piece, because it came from some of the very issues that your neighbor, Gayle has mentioned. So one of the things that's good about having fields that we don't require people to use is that specialists for who, they're meaningful get to use them and we don't require that people for whom they're not Meaningful Use them. So for me, capturing information on occupation and gender identity in my practice in lower Manhattan is really critically important. For other people, it might not be. If I don't have a place in my system to capture those things, then I don't have a way of doing it. So we need to be able to create more functionality than we require the use of in order to create the kind of flexibility that people need to be able to do different things in different geographical settings and in different kind of populations. And I think that's a good thing, not a bad thing.

The other piece is I think that we sometimes set too high of a bar when we say there need to be standards for things before we create ways of capturing them. So, family history is a great example, I mean we have to capture family history. I mean it's critically important in making lots of decisions but, yes, there is no standardized way, to my knowledge, of capturing family history. Does that just mean we say, okay, we're not going to do family history in the electronic health records until somebody figures out a way of doing it? And I think that that's a mistake, I think we do have to be able to experiment with certain things and be able to create opportunities for people to create certain functionality, even before there are standards to do it. So, that's the second point I wanted to make.

I think that it is – there are – for as many stories as you, all have told in the last 45 minutes of people who were unhappy and miserable. There are just as many stories of people who achieved incredible breakthroughs in quality of care, in improved patient safety and all kinds of things, with the functionalities that we all are around this table have been developed – pushing the system to have for the last five years, that may have shown up in one or two systems, but not in all systems. But what we've been doing is basically creating sort of a floor for certain functionalities that we think are critical. So, I think that we should continue down that road and we need to try to figure out what to do with that.

In terms of the clinical decision supports, we all have heard the issue about decision support fatigue, alert fatigue. And I think the idea of capturing the information about how these alerts are used and which ones are being used and how they're used and what they result in is a critical step in moving this science forward. And otherwise what we're going to be doing is accumulating dozens and hundreds of clinical decision supports that we all know don't get used regularly, but we can't capture the information on how they're being used, what's being used and what's being effective. And so this was a major point of discussion. I think the systems have to develop that functionality so that we can keep the important decision supports, the ones that are really driving care improvements in systems. And remove the ones that aren't doing what they're doing or be able to change them. Otherwise, we're just going to keep growing this stuff without really having that information. So I would go back and say that that is a very important thing.

Judy, all of my exam rooms have printers, they do...and they do for a reason because the tools that we're printing, the after visit summaries and other things that we're doing are tools that create the foundation of a discussion between providers and patients. They're not just things we throw at people on the way out the door. We circle things, we annotate things, we draw pictures on them, I mean, we do all kinds of stuff with those tools; it's really a starting point. So I wouldn't throw that one out either, I think that's been a major – one of the major benefits for what we do.

I guess the last thing I'll say is, I think there is a 75,000-foot view of this Meaningful Use Program that we should be thinking about, which is the one that we started with many years ago. And that is to think about what are the things that we're doing that are essential, because they wouldn't be done without our input. And I think that's the place where we could thin out a little bit, potentially. Like some of the stuff that we're I think are going to be sort of natural evolutions of systems and if we can think about those and say this stuff is going to definitely happen anyway, and so for those things I'm not sure that we need to move as far as we have.

And my last point is about using external sort of decision processes. I couldn't agree with Art more. In the very first year, I remember sitting around this table and we talked about whether vendors have a responsibility for putting content in their systems. And I think Judy and others said the last thing we want to do is build clinical content, because it changes all the time and we do all of this stuff. So we're in a situation now where everybody in every different country – not only every different vendor, but every different user is creating the same kind of decision support things. And the amount of work that's going on in this country with people duplicating in their systems and in their environments work that's being done in 1000 other places is just insane.

And so if you have public health folks or you have people who are specialists in diabetes or people – geneticists or whoever they are. If they can start producing this information in ways where information can get passed to them and returned with current, up-to-date information, whether they're drug-drug interactions, whatever it is, we will have moved this industry and our ability to work light-years ahead of where it currently is. So currently, we have tools and we're required to build all of the clinical content into those tools. If we can start externalizing some of those things, whether it's public health information or immunization information or other things, and be able to use them in a national way, in a way that's really meaningful, I think we will have – we will be moving this process dramatically. And so, if there's an experiment that we can do to kind of budge – start to nudge ourselves down this road, even if it's not completely developed, I would encourage us to sort of think through what that is.

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

Thank you, Neil. Paul and George, do you have any feedback? Okay, I have four more cards and we have about 8 minutes left, but I want to get through all the cards, if the committee is okay with that, it'll push back public comment a few minutes, so if public comment folks are okay with that on the phone; in the room I don't see any riot happening. Hopefully we'll just be about 5 or 10 minutes behind. So, next I have Troy.

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

Thank you very much I think I'm off. Is the speaker at live now? Thank you. So, Troy Seagondollar. I would like to clarify something before I get started, while I am employed with Kaiser Permanente, my purpose on this committee is to represent others besides physicians. So we have PAs, we have NPs; we have all of the other members of the healthcare team that really are impacted. And echoing what Judy said and what Gayle said, there really is a, I don't want to say they're ready to implode, but there really is a lot of dismay as to the impact that EHRs in general and Meaningful Use is having on their practices and how they actually coordinate care and integrate together.

Many of the things that are part of the Meaningful Use criteria, physicians don't directly deal with on a day-to-day basis. It is the ancillary staff that captures all of the demographics and all of the gender identities. So, they have a difficult time asking these questions of the patients. Even medication reconciliation, huge debates go on with who actually does review and who does the reconciliation. And we continue down these paths and pharmacy is now intimately involved in that as well. So I think as we continue to look at all of the Meaningful Use criteria, we need to really look at the dependencies. We put all of the burden on the backs of the physicians and the eligible hospitals, but yet, the dependencies that are associated with achieving those goals are huge and tremendous and causes a lot of downstream problems.

There is one in here about the Stage 3 priorities in looking at improving care coordination. It specifically calls out sharing of information among the healthcare team members, but yet it doesn't really define what the healthcare team members are. So, I suppose my question for that is, who is really defined within that healthcare team member? And then the other thing that it also points out is a care plan. Now as a nurse, nursing has developed patient care plans for many, many years and we're pretty exclusive in using that terminology. I have noticed over the past couple of years that the other professional practices are picking up on the term care plan and moving away from what we used to call a treatment plan. So maybe you can help me understand that transition. Is this an integration of all of the other professional service's care plans into the physician care plan and how that will actually help and evolve over time?

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

So let's see, I think I heard two questions. One is who is the healthcare team? I think that's a definition we're trying to promote in our goals that one, is beyond "the physician and nurse." A lot of that depends on the individual provider organization, but we're building towards the new models, which are really team-based. The other thing that we explicitly called out was patients and caregivers, because they're often forgotten. So that – we let the definition of the professional healthcare team to the provider, but our intent is that it's to follow the advanced care model and want to make sure we include the patients and caregivers on it.

With respect to the care plan, one of the reasons you don't see an enumerated care plan is because there isn't a standard. So to answer your question, we don't have an integrated standard for a care plan, that's something we're actually asking the standards development organizations, but probably more importantly, the professional associations to work on what's a care plan. Docs, as you know, don't get that kind of instruction yet it's more and more important as we go towards coordinated care on a healthcare team. So that needs work at the professional level and at standards level, but we've started things and a lot of that stuff is in text, free text right now, but we've just started things, we just put a stake in the ground.

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

Do I have time for one more?

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

Sure.

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

One more dependency that I noticed in here was the statement about enabling, and there are two actions in this one statement, I think you might want to change this. It says enable patients to access and transmit their information. Now those are actually two things, accessing is one thing, being able to transmit it, a totally different world. I think accessing is something that's feasible, transmitting though, I wonder about that one. And again, it places a huge burden on the eligible hospital and the eligible provider for something that they have absolutely no control over. Now I understand you're going to qualify that and you're going to say well, we want to make it enabled. But yet if you're going to measure it, how do you measure it? You have a raffle, right, so, it's just kind of a delicate thing.

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

So, we understand that dilemma. So the conceptual goal, VDT, we added the "T" in Stage 2, in fact there's a hearing scheduled to cover this. I think it's co-sponsored between IE Work – Information Exchange Workgroup – so in other words, we have to understand better, too what it means to transmit and the standards necessary, so yes, that's an extra I still left for us to do.

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

Thank you.

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

Thank you. Devin?

**Devin M. Mann, MD, MS – Assistant Professor – Boston University School of Medicine; Attending Physician – Boston Medical Center**

Two quick points, I mean, quick, hopefully. One is I just wanted to follow up with the external consumption again. I agree with Neil, we have to push this forward, there's a lot of duplication of effort going on, but I'm also sensitive to the amount of work. So I think that was my question before, just making sure the scope is modest and that's what I think that's what I heard and that sounds good to me.

My other concern is about the copy and paste functionality, the documentation. I'm knee-deep in an install for an EHR at our healthcare system, and the biggest gripe that we're getting is from this documentation and the providers are very upset about how much becoming stenographers. And I understand what GAO was talking about with the copy and paste being a patient safety concern, but we're in the process of trying to figure out better ways of doing documentation right now. Things like problem- oriented charting, some people are experimenting with scribes and I'm just concerned that if we do take up a lot of vendor effort trying to kind of block something that's not really going to hopefully be there for long. And actually, at our institution, the most simple way of doing the thing, you cannot use copy and paste, period. I'm just very – I'm con – I really do want better innovation going on on how to document more efficiently. We're pushing people to think of the chart as a larger entity that you pull pieces from and you're copying it from place to place and that's good. I don't want, necessarily, to have all this work trying to put trailer lights all over where everything is going, so I'm just a little nervous that we'll spend energy in something that's probably not, where it should be spent. Although I understand the impetus of trying to reduce patient safety errors from copy and paste, making notes more readable, which is important, I don't think that will get there. The reality is we have much bigger problems of why notes are unreadable and it's really a transitional period of how to document with all these tools in these care coordinated models, so that's what I'm kind of nervous about.

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

I see Christine, I had her after Terry, was she before Terry?

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

I'm not sure. She hasn't made a comment yet, so I would – if we could

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

That's fine. Are you okay with that Terry?

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

Yup.

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

All right, Christine on the phone, please.

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

Thank you. So I'll be quick because I know we need to move on, but I'll just say amen to Neil Calman's comments. I wanted to say that I think some of the challenges with Meaningful Use aren't actually about the policy. We all know that EHR systems weren't exactly built for a lot of the health improvement goals that Paul Tang laid in the beginning of his slide presentation. So it's taking time and effort to transition these legacy systems. But I think what will happen is that providers will better be able to deliver care in a more coordinated and outcome focused way and be better positioned for new models of care. And I think Meaningful Use is really helping to create the standards and functions that are going to make provider's lives easier and most importantly, help improve patient care. So, I'm very supportive of that certification only approach, within reason and I think we have struck a good balance there.

A couple of specific comments, one on SOGI data. I think Paul did a really great job of responding to some of the concerns that Marc and others laid out, particularly given the extremely large gaps in healthcare between LGBT populations and others. And so I really think we have learned a lot in the last probably two years in particular through work of organizations like CAP and Fenway about how to really do this well. And given that it's certification only, I think it's a good approach.

I think to Judy Faulkner's point, too, I certainly get that patients on this issue don't want to be asked the same questions over and over, whether it is about SOGI data or other things. And sometimes it's not intuitive to us how those questions are relevant to our care, but they often are. And more importantly, I think if we look broadly at the of the goals that Meaningful Use is trying to achieve, like fostering electronic information exchange or encouraging providers to give patients view, download, transmit or use patient-generated health data through questionnaires. I can really see a day when all those pieces will come together and have an ecosystem, like Paul Eggerman talked about, where there will be a lot of efficiencies introduced for providers and patients. You know, not having to fill out the same forms over and over again because it's available electronically or through VDT, etcetera.

So to that point, too, I think the one criticism that I would have in the specific objectives is around the care summary thresholds. And I know we have not been specific about numbers here, so this is a threshold that the group is recommending no change. And that would be no change over what was I believe established in Stage I, which is that only 10 percent of summaries that are exchanged are exchanged electronically. I think that's a missed opportunity to go from Stage I all the Way through to – in 2011 to 2017 with only that very bare minimum requirement, given the priority that information exchange, and more importantly, care coordination really is for all of us. So, I just wanted to suggest that we relook at that and maybe just again, not suggest a number in the threshold, but rather really suggest an advancement of some kind in the electronic requirements for that threshold.

And then finally, patient education materials, I think Paul Eggerman, I agree with you, one is not necessarily a meaningful number, but it's – we just could not really find an alternative way. So I'd love it if folks would put their innovation caps on and really think that through further. So that's all I have and thank you Paul and George for a great presentation.

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

Thank you, Christine. And any response from Paul and George? Okay. I have Terry and then Judy and then we're going to close the floor.

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

So, I'll be quick. Once again, thank you for all the hard work. I want to follow up on what Judy said because when we were working the ACQM Workgroup and we came up with quality measures, we actually – and Paul, you're familiar with this, we actually worked that out and pushed it out and said, what does it really mean to have this measure? So I think the application of something like that to certification criteria, what does it really mean to have this? What is the impact on interoperability, on standards, on infrastructure? And I want to push on this a little because over the past few years we keep talking about capabilities within the IT system. So if I pick up the FDA numbers for implants, that's a really critical capability, if you have that capability it extends far beyond just the ability to track FDA numbered implants, but it gives you a capacity within the health IT system to pick up anything novel that might come along.

So I think we may be missing an opportunity to crosswalk and say if we do this capability, this is what we get from IT, you've done it clinically because you said where's the clinical impact on this, care of patients, care of populations. But I'm wondering if we approach some of this that way, there might be an ah ha moment that yes, this is what looks like a very specific thing, but if we do it right, we're going to set the future capabilities within the health IT system so that we don't make the vendors and the providers a little bit crazy there.

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

Thank you. Judy?

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

Two things, I believe the original purpose here, with this Committee was to one – well with the whole thing of Meaningful Use was, one, to bring more jobs back at a time when jobs were needed. And two, to help healthcare organizations have the money to purchase electronic health records that were really electronic health records, so there has to be some definition of what they were. And two, that they were used meaningfully. I do question whether we are still true to that original purpose. Neil, you mentioned basically causality. He said we have driven the industry with money and I question whether that's true.

One, I mentioned the beginning that it was the same curve that we saw with billing and with labs that we're seeing with EHRs. Everybody was going to get them, in fact, people used to say to us before electronic – before Meaningful Use that you needed to buy electronic health records to be in the game anymore if you are a healthcare organization. So I saw that coming and we can't do a double-blind test on it to see whether it made the difference, but what I can say is in the rest of the world, as we work overseas, we see a huge move towards electronic health records throughout the world and there's no Meaningful Use money. So, it may not be causality, it might just have driven things faster, but that's even questionable about whether that's better, because as I mentioned earlier, that it caused some hiccups. And I think the other question is, as – it's that whole concept of, well we paid for this, therefore you owe us. I don't know, I can just think of girls on dates, I'm not sure that's a real good idea. Right?

I think there's a lot of innovation – I think that as you do this, keep in mind that when you do something, the hugest thing on here is the word like tracking. And I worry that although in here it might say; well you could just have the previous one so people can see. But by the time it gets through the multiple levels of regulation, it is word like tracking, and it's a huge amount of effort and what it takes away that people sometimes don't realize, is the crowd sourcing that vendors do. They listen to their thousands of users say here's what we need. Now if in fact what they would say is, what we need word like tracking, that's one thing. But I'm not sure that the huge number of users would say that's the most important thing.

The other thing Art, you talked about pushing the EHR vendor, and I wanted to push you, if you don't mind too much. Can you please get immunization standardization throughout the country, then we can do that part that says communicate with all. And I know Josh and EPIC starting to try to do that, but I think it's kind of not going where it really needed to go. So maybe you two can work together to get it done. That's it.

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

I just want to close and express the workgroups appreciation for the comments here. We take them very seriously, they're very, very important they're significant. In our responses, we hope to also reflect that there's a diversity on the workgroup and that we can't escape discussing these things, the vast majority of these things on the workgroup. And we tried to arrive at something that advances the primary cause, which is improve the care and health of the population. We tried to digest information; we seek out new information in the form of consul – basically other people, experts, to talk to us. So, we just hope we're reflecting that this is a thoughtful group that tries to bring its best work in front of this group, which is a decision-making body.

And you can also see that there are a number of committee members who are on the workgroup. So I think it's well represented, thank you for your input, we'll take it back. We have three calls between now and March and, Paul, yes, we'll discuss certification only. It's a hard issue, you've heard both the pros and the cons, but we'll look at that again for sure. So, thank you so much.

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

Great, thank you. So as we discussed, we're about 10 minutes behind, but I want to continue the agenda and so Doug Fridsma's going to come up next and give his report. While we're making the adjustment, I'm going to take the Chair's prerogative and actually have the last word. So thank you, Paul and

George and the workgroup for an enormous amount of work with a lot of really important input from not just this committee today, but I think generally through a variety of mechanisms, which want to continue to encourage.

I just have a couple of points I'd like to make, which we'll get into perhaps a bit more this afternoon when we talk about our work plan. First of all, ONC is 10 years old, we've had 10 years of thinking about and working on, as has been said, the promise of how information technology can improve care and health. And that's, I think, why we're all sitting here and come to this on a regular basis, to think through and share perspectives. I would say that this, in my opinion, was a really great and rich conversation and I so much appreciate the candor and the perspectives that were brought to the table. And in particular, I appreciate the members of the committee representing the broader stakeholder groups that they have out there and you carrying that voice. So that's important as we move forward.

This is – this committee's work has been really focused on Meaningful Use for appropriate reasons. We've had a lot of work in that space and we're not finished. I know we're going to hear a little bit probably in public comment about that, too. But, I do want to step back, as was mentioned in some of the comments, to that 75,000 foot level and just remember that whether it was the 2004 or the HITECH Act, or whatever punctuation you want to pick for the work of the National Coordinator. We have many more chapters to go of the work that we want to do to see that we achieve what we want. Whether that's usability on the front lines or better learning systems so that we can enhance safety and quality or whether it's really true interoperability, so that the care continuum is linked together in a way that patients deserve.

So, this is not our last chapter, this is just the next chapter and so we don't have to try to solve it all right now, but I do think there are some important things that we need to solve with Meaningful Use 3. So again, thank you to the committee for doing a lot of work to think it through and then to begin winnowing. And I think we have some great ideas here on how to continue doing that. And now, I turn it over to Dr. Fridsma. Thank you.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

Thanks. So what I hope to accomplish today, and I'm going to try to compress this, as much as we can, is to give the HIT Policy Committee a sense for what we're thinking about on the standards side. To essentially take the "what" that you're trying to accomplish and give you a sense of the how, what we're thinking about in terms of going from where we are now in our standards to where we would like to be, as we go forward.

So, the first thing is, I just want to talk a little bit about where we are when we think about this notion of a learning healthcare system, and this was something that came up early on. What I'm going to try to step through is not a one-year plan or even probably a three-year plan. But this is actually a broader set of kind of ways in which we can look at the problems that we're trying to solve so that we can make sure we don't create silos of excellence or that we don't kind of segment off different parts of our population. So there is some math in this section. So those of you who have math backgrounds, please speak up on this. Okay, good, Judy, you're on.

So the first thing is to talk about the patient. So, the patient, what's 10 to the zero? Judy, 10 to the zero? One. So, that's the patient. And I think one of the things that we think about when we think about kind of the scales desk at which we might – Judy, very good. As we think about the scales of engagement, we have to recognize that the patient is always going to be at the center. So, what's 10 to the third? It's about 1000, and that's about the size of a practice, it's about 1000 or 2000, which would be a patient panel. And much of Meaningful Use has been focused on supporting the practice, electronic health records and the information technology to support that as well. What's 10 to the sixth? It's a million, right? And, that's really a population, we talk about Million Hearts, we've been talking about that as an administrative priority, but we can think about regional information exchanges and HIEs and other things like that that are really part of that population level of about 10 to 1,000,000. So, what's 10 to the ninth? Judy?

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

A billion.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

A billion, yes. And so when we think about the learning healthcare system and the various scales at which we might engage, we've got 10 to the zero, 10 to the third, 10 to the sixth and 10 to the ninth. And across patients, practice, populations and the public at large, we really need to think about how every one of those interactions all works together. So this again, not a one-year plan, but kind of how to look at the problems that we're trying to solve. So one of the relationships, and we could draw lots of arrows across this, but I wanted to highlight a couple of them.

When we think about patients relationships to practice, one of the things we're doing is around quality measure, right; you take an individual patient's experience and aggregate that at a practice level. And so there's this relationship between patients and practice that we try to capture in some of the quality assessments that we do. When it comes to practice and population, we've got public health. The idea of taking groups of patients in our electronic health records that might be enabled to do this or within a particular practice and trying to learn from that at a public level, at a regional level or at higher levels of scale. And finally, when we think about populations, HIEs or the like, there is a relationship as you get to the broader public that we've got things like clinical research that might be done in populations of 400,000 or more, if we're talking about some of the women studies with hormone replacement and the like. And we try to abstract that into the higher levels and apply that more generally.

Now there's another loop that comes from this as well, so when we talk about the public to the population, we talk about clinical guidelines. And there was a discussion about how do we make sure that knowledge gets transferred back through the system and is there a way that we can think about how we represent knowledge so it doesn't take us 17 years for a paper to come out, but we've got computable ways of sort of flowing that back through the system. Public health policy is something that impacts the practice and finally, clinical decision support is something that exists at the practice level but is applied to an individual patient. And so we started to see these loops where quality measurement and clinical decision support are related to one another around quality improvement. And one would hope that all of the building blocks that we have will help support all of the different scales, which we might have.

Now, the things that help support this, standards and interoperability, certification, policies, privacy and security standards and policies as well as measurement monitoring and evaluation. And in fact that center piece of that is really a lot of the work that this committee does, the HIT Standards Committee does and that the ONC does to try to support across scale. Even though our focus has been in large part at practice, there is work in the Blue Button around patients, there's work in the HIEs around population and certainly there's work around the patient-centered outcomes research around how we can include clinical research. So we've got work in personal health records, electronic health records, health information exchanges and sort of national and international health analytics through population and public health. And I think when we think about the problems that we're trying to solve, obviously, we are not going to solve all of these problems in a very short period of time. But I think we have to think about how standards can support the continuum and this committee can help us identify the focus that we need to do that incremental and iterative approach to improving the learning healthcare system and information technology to support it.

So when we think about what we need to do to try to achieve interoperability in the health information technology space, one of the things that I think is critical is that we have to support the success of Meaningful Use Stage 1 and Stage 2 and the work that's already out there. And so we've been doing a lot of work to try to make sure that we've got good implementation guides, that we support, the communities that are doing the implementations and things. And then we have to think about how we need to expand the value of the portfolio of standards that we have to support things that are coming down the pike. And remember that interoperability has two parts, it's about exchange and it's about use. And so when we think about the uses that we want to extend, some of the discussion around here about what it is that we want to do in terms of a policy perspective to add new uses, we need to think about how we can expand the value of our portfolio to include those new uses and the like.

And then finally, we have to recognize that technology is not going to be static and that technology will – today is the 10-year anniversary of Facebook, and Twitter started what, five or six years ago. Who knew that we'd have to summarize our entire life in 140 characters? And in fact, there's likely going to be, in another 5 to 10 years, new kinds of technologies as well. And we have to be resilient in our strategy to adopt newer, simpler and more powerful standards as we go forward. So, make sure we support what we've got, add to it based on high-value use cases and the discussions that are happening in this room. And then make sure that we have a resilient portfolio that allows us to incrementally move towards newer, simpler and more powerful standards, as those – as technology moves forward.

So we've always had sort of governing principles around this. And certainly the notion of government as a platform for innovation to create the conditions of interoperability, trying to provide ways that we can engage the communities to come up with the standards and implementation guides that we can support the communities that are implementing with testing and other kinds of infrastructure. And then realizing that health information exchange is not one-size-fits-all, so we've always talked about a portfolio of solutions. It's not as if we've gone all in. How many around the room here have invested in Wal-Mart 25 years ago? Did you go all in on your retirement? No one? Oh, see, if we had been able to predict the future, we would have simply put all of our money in one big bucket, right? But in fact, we don't know what technology holds, we don't know what the future holds, and we have to make sure that we think about this as a portfolio of functionality that we can support.

And that leads to the third, which is we have to build incrementally. We can't let perfect be the enemy of good in we've got to get to good before we can get to perfect. And I think it's one of those things that it builds into the system the notion of making the pieces work with other pieces because the systems that we install today are going to be the legacy systems of tomorrow. And we need to make sure that we've got resilient ways of making sure our standards can support both what we have now as well as what we think might happen in the future. And incrementally that helps us expand our portfolio without building things top-down and in fact letting it be driven by many of the users. So, government is a platform, it's not one-size-fits-all and it's a portfolio of things we have to build out incrementally.

So you've seen this slide before and if you haven't, please write it down because I put this up just about every time we talk, there are five things that we are trying to standardize. And this mimics much of the stack that we have in the Internet, in terms of various standards, all the way from the standards that you put into the plug for your Ethernet cable, to the fact that your computer doesn't have to shut down and reboot when you change from the wireless to the wired connection. And by having these different portfolio of standards that have different kinds of purposes and functions, it allows us a lot of resilience and capabilities in the standards that we have.

So we standardized five things, we standardized a meaning through standardized vocabularies and value sets; we standardized structure, so a computer can go from the beginning to the end and not break. We standardized transport to make sure that we can get things in a secure way from point A to point B. We standardized security so that when I encrypt it, you can decrypt it and we make sure it's secure in transit. And then we have services, which is really, if you take standardized vocabularies, structured transport and security and you package that together to serve a particular function, that's really what a service does. It kind of provides functionality by packaging that altogether in a way that makes sense.

And those are the building blocks that we are going to be working on. So, one is about vocabularies and content is something that we call semantic interoperability, the ability to understand meaning, and the other is syntactic. And that has to do with this notion of the ability to exchange, which is about syntax, and the ability to use the information, which is really about knowing the meaning and being able to use clinical decision support to file it away in ways that make sense and to be able to use the information that's been exchanged. So what I'd like to do is go through each one of those five building blocks and tell you a little bit about the kinds of things we are thinking.

Now I want to make it clear that when we talk about the standards strategy, it's in some sense still waiting for the priorities that are going to come from this committee. And once we get those kinds of priorities and we understand where we need to go, we'll then go back through our portfolio and figure out is it a refinement of what we have? Is it an expansion based on a new use case? Or, is it an opportunity for us to move to some of these other ways of standardizing meaning, structured transporting and content?

So, we've got standards right now that help us with vocabularies and terminology and we have been working very closely with the VA and the National Library of Medicine, who are expanding SNOMED to include additional codes to describe functional status. And that's a really important piece of making sure that we have better standards so that returning servicemen and women, we have the ability to capture their current functional status and use that as a way of following them and making sure that we're making good improvements. But we have to look at expanding our portfolio based on new use cases and new functionality. So, do we need vocabularies that support consumers? Are there user interface vocabularies that would be helpful? Are there functional status classifications that need to be considered or is long-term care one of those things we need to think about additional terminologies to include?

But ultimately, when we think about the way in which we represent meaning, most of the time what we do is we take a whole list of codes and we say, this represents all 100 codes for diabetes. But when they update the codes and there's a new code for 101, we have to go back and we have to go back through that list and make sure that we get another code added to that. So we need to think about how we can create ways of moving from what I call declarative, static lists, to ways that we can create computable ways of representing those terms and concepts. And so we're working again to try to figure out ways to create, almost like query-like ways of describing a concept. The VA right now is doing some pilots in looking at this as well. And we're tracking that information to see at what point does it make sense for us to move from things that are going to be difficult to maintain overtime to things that will be much easier for us to build tools and infrastructure to help support the meaning that we would like to see.

Second, standardizing structure. Again, we're continuing to refine the consolidated CDA, we're supporting through the implementation and testing environment ways of tracking challenges that people have, putting in bug fixes around the HL7 2.5.1 specifications or the ways in which the consolidated CDA works, to make sure that it's responsive to the experience that we've got. We can't get to interoperability in committee and the only way we're going to do that is through experience. But if you're going to do that, you have to have the way of capturing that information and improving what you do. And that's been a critical part of our ability to track what's going on and to feed that information back to the standards development organizations, CMS, our federal partners, to make sure that we're all on the same page with managing that.

But then we have to consider where do we want to expand that portfolio? Are there new templates needed for behavioral health or for long-term care use cases? Do we need to think about the Blue Button portfolio, which currently does mainly clinical information, to expand that to include some administrative data, working with WEDI and X12 and others to be able to take a look at more functionality that would help support consumers? And I think fundamentally we also have to recognize that as more and more data gets out there, we need to think about how we can move from document-centric views of the data-to-data-centric views of the data. And so one of the activities we're doing is something we call structured data capture, but it's a way of saying, can we represent individual data elements with more structure that allows us to extract that information and reorganize it not around a document, but around the data that we're collecting. And so there's work going on in HL7 and others to really start to pivot that, and I think that's a direction that we have to look for opportunities as we go forward.

Standardizing transport. Clearly, we need to make sure that Direct and its implementation is successful. We also have web services approaches that are included as an optional certification criteria, but it's important to recognize that culture will always trump strategy. And if the world is moving to RESTful based approaches that work on iPhones and Android devices and mobile devices, we have to be sensitive and we have to make sure that we look at that going forward. So you couple RESTful approaches with things like OpenID and OAuth, it's a technology that when – if you've ever gone to Facebook and signed in and then it said, do you want to go to Twitter? And you don't have to re-authenticate because it knows something about you, those are underlying frameworks that allow you to sort of share information about IDs and authentication across websites so that you can sign onto Amazon and you can go to an accompanying website and it kind of knows that information as you go through.

So you can imagine if a patient has a multiple set of portals that they have as part of their Meaningful Use EHR and they've got multiple doctors they're seeing, there may be ways that we can tie that together and make it better for the patient to have a better experience across those. So we need to think about how we can move from complex orchestration using existing things like Web services and Direct to things that provide simple, RESTful approaches that really is where the rest of the world is going, and we need to be able to track that and to follow that.

Standardizing security, obviously with Direct, we use certificates, which is sort of a little electronic piece of information that serves as your electronic ID. It's like your driver's license but it's a whole bunch of ones and zeros basically. And it's used when systems try to make sure that you've got the proper credentials. You present that certificate, it checks to make sure that it's valid and then it allows you to access the information that you've requested.

One of the things that I think that's important is that as we look at REST and other things like that, we have to think about how the rest of the world is looking at OpenID and OAuth and we need to think about moving from this infrastructure based on certificates to a more federated approach. I think about identity management the same way I think about GPS, right, you can't figure out your location without three satellites. So, if you really want to authenticate someone, it's not about a single thing you have. But it might be a thing you have and a thing you know or that you've done a knowledge-based way of doing that in which you got financial information and social information and professional information that only you would be able to understand all of that information. So, we need to think about how, as we go forward, we can expand the way in which we do authentication to this more federated approach and establish modular trust policies that enable consistent and modular policy development that matches the kind of modular technology that we got.

And finally, when it comes to things like standardizing services, we currently don't have a lot in our portfolio that defines an API. So, we need to think about where we should take new use cases to expand that portfolio. And I think ultimately what you'd like to do is move from interoperability based on what we build, which is specifications, here's the recipe, this is how you bake the cake. To how you use, which is really saying, if you have this query in this format to this server, you're going to get information back in this format. And that hides a lot of the complexity and I think it will enable people to more quickly kind of connect the dots around how they could then make sure that they've got interoperability and information exchange.

A couple of other things that I think I want to mention just to kind of give you a sense for things is that we have to tie this to some of the levers that we have. And so one of the things that I think is really important, we have to make sure that we continue to refine the test methods and testing tools. Because some of it we got right and some of it we didn't get right, and we have to make sure that we correct some of the things that we didn't get right. Scenario-based testing and other kinds of criteria are going to be important but I'm a big fan of Postel.

Judy, do you know who Postel is? Postel's principle – he did all the datagrams; this is back in computer science, right. And so Postel's principle to interoperability, he's the one who basically developed a way in which all of the data packets move around on the Internet. And think about it, it's been around 25 years and you've had how many versions of routers and how many different kind of upgrades? And it still all works as it flows around there. And what Postel said is that when you send, send conservatively, conform to the standard. But when you receive, don't reject it just because you were expecting four values and now you've got five. So, there's a certain degree of flexibility on the receive.

What that means is that when we're going to do – we do conformance testing to the standard both on send and receive. But we really have to think about, if we really, truly are serious about interoperability, we need to make sure that people conform to the standard when they send. But when you receive the information, if you get something that doesn't quite fit or that has a different set of options than you're used to, you've to be able to accept that. Because if you don't, it's only going to be if everybody uses exactly the same standard, and that doesn't fit into our notion of kind of a portfolio, it's not one-size-fits-all, we have to have some degree of making sure that match works. And so we've been working to try to figure out how we can provide extra testing and demonstrations and other tools that will help people get to interoperability and think really about how do we actually test for interoperability, not just conformance to the standard.

A couple of other things, structured versus unstructured data. There was this big talk about big data; I'll give you my definition of big data. Big data is more data than you are used to. And it pretty much fits at any level of scale, right? And I think we have to recognize that we are not going to structure everything, that we have to have conversations in the public about what's appropriate to structure and what's appropriate to leave unstructured and use other techniques like the data mining and big data and all these other things to get some information in there. And clearly if we've got things that have patient safety involved, clinical decision support, allergies and medications, vital signs, those things probably we can't have – you can't do big data on an individual, you may need to have some of that information structured. But we have to be sensitive that just because we can structure it, doesn't mean we should. And I think conversations like this in the committee and in the Standards Committee are going to be an important for us.

Device interoperability, again, looking across that scale, mobile, HIEs, cloud-based services are all going to be important when we think about how to integrate across scale, and we need to be looking ahead because I think we've focused – I think I've given this explanation this story before. In fact, Nora nearly killed me at the annual meeting when I brought this up, but the whole notion –

**W**

She's on the phone.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

– she's on the phone? Well, hopefully she won't turn off my mic. But there was between 1906 and 1912 a whole bunch of articles published in the American Journal – the American Medical Association Journal, about the physicians automobile. And, there was this huge focus about how we were going to use this brand new technology around the turn-of-the-century to improve our ability to provide better care, better health and increase our efficiency so that we would be able to take better care of patients. And in fact, lots of energy went into the standards for that, like should you have pneumatic tires or whether should you have rubber tires that are solid core, because those don't pop even though they give you a terrible ride. Should you be a mechanic who can understand your electronic health record – I'm sorry, your car, in a way that allows you to debug and to fix it.

But what happened is in 1912, Henry Ford developed the Model T and it became not about the patient – and it became not about the physician any longer, it became – see, I keep making the mistake there. It became about the person, the patient who could now get their own car and they could travel to clinics and it changed the way that things worked. So, I think it's important for us to make sure that we look at devices and mobile and focus on the patient because ultimately I think that's what's going to drive this.

And finally, we've got to do this in an iterative and incremental approach that leverages real-world experience; we'll continue to do that in the Standards and Interoperability Framework and in the implementation and testing. And I think it's – I wanted this committee to understand how we've been thinking about supporting the “what” through the standards that we've got and recognizing it's not going to be static, it's going to be evolving over time. And that we've got a strategy that I hope will support what we're doing now, expand it based on the things that we want to add to our portfolio, and make sure that we are looking ahead to the new kinds of technologies coming down the pike. So with that, I'm going to end, and I think we are ready for public comment.

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

Thank you very much, Doug. That was great. I'm sure that there are going to be some questions for you but I'll ask people to grab you at the lunchtime. I really appreciate that. So with that, we're going to move over into public comment. I'm going to turn it over to Michelle. And I'm sorry, I'm hogging the mic here, I should let Paul take back over.

## Public Comment

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

Just a reminder to everyone in the room, public comment is limited to 3 minutes. If there are numerous public comments, we might ask people to wait until the second – at the end of the day when there's a second opportunity for public comment. Because we want to make sure that our committee members are able to eat lunch because we do have a full agenda and we have to end on time today for people to get out on their flights. So with that, a reminder 3 minutes and we already have one person up here but I will also open the lines.

### **Alan Merritt – Web Specialist, Digital Communications Services – Altarum Institute**

Yes and if you'd like to make a public, and you're listening via your computer speakers, please dial 1-877-705-6006 and press \*1, or if you're listening via your telephone, you may press \*1 at this time to be entered into the queue.

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

And if you could just state your full first and last name and your organization that you're representing.

### **Mark Savage, JD – Director of Health Information & Technology Policy & Programs – National Partnership for Women & Families**

Good morning, Mark Savage with the National Partnership for Women & Families. I'd like to suggest an addition to one of the slides from the Meaningful Use Workgroup presentation, that was slide 28 on the priorities for Stage 3 on improving population and public health. And under the Meaningful Use outcome goals, rightly mentions a goal for providers and a goal for public health officials and I'd like to suggest that there's also an outcome goals for patients and the public. Just as we have the functional objectives there, when those are summarized and reported out in the aggregate, patients and the public too will benefit from understanding health and health trends. And I think that comes back to the learning community as well, so I wanted to suggest that addition that there's a goal for patients and public as well. Thank you.

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

Thank you, Mark. Are there others in the room with a public comment?

### **Thomson Kuhn – Senior Systems Architect - American College of Physicians**

Hello, my name is Thomson Kuhn with the American College of Physicians; I'm a member of the staff there. The ACP has 137,000 members dealing with internal medicine and internal medicine patients – students. We're here to join other groups who have supported – submitted letters and comments raising concerns about the direction of the Meaningful Use Program. From the beginning of the program, we have supported its goals and objectives and our comments have been focused on making sure the program succeeds. Since last year, we've become increasingly concerned that the direction being taken with Stage 2 of Meaningful Use will put the success of the program at risk. We see several impediments, but we will focus here on just two.

The first concern is timing. Delivery of products is behind schedule; therefore, the EPs are behind schedule. We support providing more time for providers to begin their reporting on Stage 2 measures. The other impediment is the lack of flexibility in the program. We support switching to a scoring system that recognizes the differences in practice and the differences between incentives and penalties. We further encourage a less prescriptive approach to workflow requirements that allows practices to address the unique characteristics of their practice, specialty and patient population. We urge all of you who are responsible for the direction of the Meaningful Use to give serious consideration to these concerns and work with us to ensure the ultimate success of the program. Thank you.

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

Thank you. Are there others in the room?

**Jeffrey Smith - Director of Public Policy – College of Healthcare Information Management Executives**

Good morning. My name is Jeff Smith; I'm from the College of Healthcare Information Management Executives, also known as CHIME. I sit here before you representing just over 1400 chief information officers from hospitals and health systems. I wanted to take a few moments today to look at some of the fundamental structures of the program that we're seeing. Adoption numbers are up, successful attestation among eligible hospitals and eligible professionals by and well – by and over the majority of people who have tried to attest have been successful to attest. And the other thing is two-thirds of the incentive payments or thereabouts have already been delivered. These trends are tribute to the success of the program and also to the hard work that all of you have put onto the table. But, I'd also like to point out some other fundamental structures that we're seeing at CHIME and with our provider colleagues.

First of all, EHR capital costs have skyrocketed, what used to be 5-10 percent of your capital costs are now up over 30-35 percent. Workflow changes are real, intense and expensive to productivity, even and perhaps especially for those who are already high achievers in this space. Competing for priorities, especially in government mandated space is growing by the day and when considering all of these fundamental structures, we remain concerned about the viability of the program and about progressing the success that we've already achieved to the next level.

The pressure point to CHIME and to many others in the provider space is that of timing and flexibility. And I think that others that have just come up have documented what pieces of those and why we think those are the pressure points. But one thing that I would ask this committee in specific to do, is to think about the data points that you all need to prove that the outcomes that the efforts are being achieved in the next stage of meaningful use. But also realize what extra time and what extra focus on making sure Stage 2 goes off right, how that impacts the success of Stage 3. Thank you.

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

Thank you. We're going to go to Mark on the phone.

**Mark Segal – Vice President, Government & Industry Affairs, GE Healthcare IT – GE Healthcare**

Hi, thank you. I'm Mark Segal; I work for GE Healthcare and speak today for the EHR Association on the Stage 3 proposals. We really appreciate the hard and thoughtful work by the Meaningful Use Workgroup in its proposals and particularly its focus on outcomes. And we also thank the workgroup for asking the Association in detail about the resource burdens associated with particular proposed measures.

Generally, we certainly support the Meaningful Use Program and resulting progress and adoption and use of EHRs. Unfortunately, we have very broad concerns with the proposal, which repeats and amplifies many of the well-identified problems now playing out for Stage 2 and that you've heard about today. We will, of course, do a detailed review of the final recommendations and share these with CMS and ONC to support their Stage 3 rulemaking. But want to give a high-level response today.

Based on what we've learned from Stages 1 and 2, and as Paul, Judy, Gayle and others urged, we urge a much more focused and prioritized approach to Stage 3. The emphasis should be on greater and more effective use of the truly far-reaching and robust Stage 2 requirements and associated EHR capabilities. Certainly in the areas like interoperability and that in addition to the more effective use for Stage 3, focus on any needed interoperability enhancements to enable more care coordination. Such a focused approach will free vendors to meet the priority customer needs that they tell us about. And reduce the extent to which once again, as discussed today, extensive and prescriptive Meaningful Use requirements squeeze out development asked for by our customers, impose costs and implementation uncertainty on providers, slows certification and implementation, and we heard about that today, and in fact interfere with usability.

Finally, new and emerging technologies that enable value-based payment and accountable and integrated care, like those that support population management, care coordination and quality improvement should advance in an innovative manner using the kind of technologies that Doug Fridsma just talked about, outside of Meaningful Use and certification. They shouldn't be forced into a regulatory EHR construct; in fact, the market will produce the right functionality that our customers and the nation needs. Thank you very much.

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

Thank you. We are going to go to Daniel Barchi on the phone.

**Daniel Barchi – Chief Information Officer – Yale Health System and Yale School of Medicine**

Hi, thanks. This is Daniel Barchi; I'm CIO of the Yale Health System and the Yale School of Medicine. First of all, thank you all for the work that you're doing on this committee, especially on our behalf as providers and patients. I agree with Neil Calman. at the 75,000-foot level, Meaningful Use has certainly jumpstarted healthcare IT and advanced technology by about 10 to 15 years, probably in only the past five. I run IT for a \$4 billion enterprise and like Mark and David there on the committee; my health system can afford to keep up with Stage 2 and 3 requirements. But, not all institutions can do, especially when we get into the details below 75,000 feet. Even with our resources, we're challenged to meet some of the detailed requirements such as having 5 percent of patients view or download data.

Certainly Stage 1 and 2 have advanced healthcare coordination in the US but the requirements of Stage 3 and the expectation that other stages will follow has created unfunded mandates for providers and for the technology we're purchasing to advance national healthcare objectives. I agree that penalties can and should follow if we're not achieving Stage 2 and 3, but I strongly urge the HIT Policy Committee to limit the scope of Stage 3 to a small number of well-defined metrics. Afterwards we should focus on tweaking those standards based on longitudinal studies of the outcomes we're achieving, before we add additional standards and metrics. Thanks for your focus.

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

Thank you. And we have one more commenter on the phone. Leigh?

**Leigh C. Burchell – Vice President, Government Affairs – Allscripts**

Yes. Hi, this is Leigh Burchell from Allscripts; I am also Vice Chair of the Electronic Health Record Association. The thoughtful and serious work done by the workgroup is entirely evident and we really thank you for that. We applaud the focus on the four priority areas that were mentioned, those are each areas that we agree are worthy of emphasis and that could drive delivery of strong value for participating providers and patients. However, we must note we're concerned about the approach presented today would add many new or materially revised Meaningful Use and certification requirements that will impose a sizable burdens on both providers and developers.

We were pleased in particular to hear Paul Eggerman's comments on the certification only elements that generated such conversation. Not only is this an area of concern for the vendor community, but it is clear that providers are increasingly recognizing that certification only is not actually cost free to them. It can lead to the addition of non-priority features with negative implications on usability and fewer other new desired features being added. In some cases, proposals would rely on standards or functionality that are not sufficiently mature or appropriate for Meaningful Use certification, as also mentioned by Paul. He's correct that it is a real stretch to assume that the maturation of standards and time for the work that vendors must do to develop the 2017 edition of our products, given the time period in which that is going to have to start very shortly.

More generally, consistent with comments that EHR Association has submitted previously, we point out that we have an opportunity to avoid a repeat of the Stage 1 and Stage 2 timing challenges by doing the following. Allowing at least 18 months from not only the release of final rules for each stage, but also the final versions of all associated provider and developer specifications; this needed timeline was not followed for Stage 3. And as of today, 5 months into Stage 2, we still do not have a final, complete, high-quality set of requirements. Ensuring through quality assurance prior to release of quality measure specification, the Cyprus quality measure certification tool and associated test data and methods and establishing a 90 day or quarter reporting period for the first year of each new stage of Meaningful Use for all providers, as was done for Stage 2. Finally, we urge active and real consultation with EHR software developers on development of Stage 3 Meaningful Use, the certification criteria and the test methods and tools. Specifically, this process should include a formal process to assess the usability implications of every single new proposed measure and certification criteria as well as aggregate implications for usability. Thank you for allowing us to share our comments.

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

Thank you. I think I'm going to suggest that we cut off public comment and ask any public commenters to go to the afternoon, because we need to have time for our committee members to actually eat lunch. So maybe we can come back at 1:05 PM, it'll be a short lunch, so my apologies to everybody, does that work Paul? There's no one else on the phone and two more in the room.

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

Do you want to make a decision? I think part of the – yeah, there – we could talk about it as a committee. Paul's got to unfortunately had an adjustment to his schedule, so he's going to have to leave early.

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

I mean, do you want me to go now? Okay, the marvel of communication is you get to know things, but I was told my flight's been canceled so they booked me on an earlier flight. But I'll have to leave earlier. So do you want to finish this one up and then we'll go to as short a lunch as I guess we can – as the hotel can accommodate. Yeah.

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

Okay, go ahead.

**Chantal Worzala, MPA, PhD – Director of Policy - American Hospital Association**

Terrible to stand between a committee and their lunch, my apologies. Chantal Worzala from the American Hospital Association. As always, you guys have the most thoughtful conversations. I'm here just to re-emphasize concerns about scope and pace, not just for Stage 3, but for Stage 2 of Meaningful Use. We are more than a third of the way in to the fiscal year for hospitals. If there are any hospitals that have met Stage 2 Meaningful Use, it could only be a small handful. The vendor community is behind in delivering their 2014 edition certified products to hospitals, which means that hospitals are behind in meeting the 2014 requirements. And it's urgent that we get a signal very soon about whether we'll have additional time to meet the 2014 requirements, and whether there will be additional flexibility in what those requirements are.

On December 19, we did send a letter to ONC and CMS jointly that included a survey of hospital systems that represent the experience of 500 hospitals across the country. These are large systems with lots of resources and as Mr. Barchi was suggesting, even those large systems with significant resources are stressed with the 2014 requirements for Stage 2 Meaningful Use. To cut to the chase, those systems reported that 40 percent of their hospitals are at risk of failing to meet Meaningful Use in 2014 if the timelines and requirements stay the same. I don't think that the point of Meaningful Use was to be, as Gayle said, a punishment program. A hospital that fails to meet Meaningful Use in 2014 is punished with a subsequent payment penalty in 2016, in addition to not receiving the positive incentives.

So, I would urge folks to take these challenges seriously. Everyone is committed to the goal, the investments are being made, folks are working really, really, really hard, it's just a question of scope and pace. Thank you.

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

Good afternoon. Mari Savickis, American Medical Association. I know I've sat before you a number of different times and just like to reiterate the AMA's commitment to making sure this program succeeds and I think that we're all watching physicians crossover the digital divide and we're seeing adoption up. However, we are seeing a number of problems, like to reiterate the problems we're seeing around the flexibility of Stage 1 and Stage 2. Some of our physicians are still in Stage 1 and with an increased lack of flexibility, we're going to see them dropping out. I know for certain we won't have that data from CMS until May or June, but the evidence from our colleagues tells us that they are in fact dropping out of the program.

Just a reminder that CMSs data, when they say that 50 percent of EPs are in the program, that maybe 2011, maybe 2012, may have skipped 2013, may have just been in 2013. So we know that there are some problems, but we won't have that hard evidence. But again, evidence from the field does show that they are dropping out. Will that mean that they're going to stop using EHRs? No it doesn't, but we do know that the problems are with the certified EHRs. Want to reiterate the problems that we are hearing from the field, usability of EHR systems, as – the way they are certified, is a big problem. We're giving a considerable amount of attention to the certification process. We've talked to many in the room and we are paying attention to this deeply and we'll be thinking about how we can help make recommendations to make them usable moving forward for version 2017.

But we have to deal with the here and now, and so to reiterate what Chantal just said, we need a flexibility for the current stages in order to make sure that we keep moving forward and this doesn't become a program of just penalties. We believe that changing Meaningful Use now will ensure successful participation. It will increase EHR and HIT use, it will improve patient safety and will allow the delivery of high quality and usable products that will help drive quality improvement. Thank you.

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

Thank you, everyone. Paul, I'm not sure what you want to do about lunch. I know that our 1 o'clock, I believe that her schedule was tough, so I'm not sure how we're going to be able to adjust that. I'll have to check with her.

**W**

There's a little sandwich shop upstairs, right?

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

We'll all be in line together.

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

All right, let's try 1. Thank you.

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

All right everyone, I think we're going to get started. Operator, if you could please open the lines.

**Operator**

All lines are bridged.

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

Thank you.

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

All right. Well welcome back from not having lunch and for those of you who are eating at your tables, thanks for coming back. We're going to hear from Joy Pritts, from privacy and ONC about some of the – what happens after recommendations leave this committee. Thank you, Joy.

**Joy Pritts, JD – Chief Privacy Officer – Office of the National Coordinator for Health Information Technology – Health & Human Services**

Thank you, Paul. It's a pleasure to be here today for a number of reasons, which will become clear in a moment. But our original purpose for being here today was to give you a summary of the Privacy and Security Tiger Team activities as they have been approved by the HIT Policy Committee, to let you know a little bit about what has happened to them. One of the reasons for doing this project is that ONC gets asked a lot by some of our oversight bodies what we do? How we set priorities? And how have we determined what issues we need to address in the privacy and security arena? And that was one of the motivating factors of doing this report. Where with under the able guidance of Kathryn Marchesini, from my office, and with the assistance of the MITRE team, which as you all know, offers support to the Tiger Team, we did a look back as to all the recommendations that the Tiger Team has made and what has happened to them.

So, just a very brief reminder, since the Tiger Team is part of your organization, this will be posted on the website, so I will not be going into detail on all of these slides, because I know you're a little bit behind time. But we wanted to have this information available for the general public when the slides are posted online. But as you know, the Tiger Team is the workgroup that's really responsible for looking at the privacy and security policy and make recommendations to us on these policies and practices. This is really important for building public trust. The Tiger Team was formed shortly after I arrived, in early 2010 and we had a number of very pressing issues at that time. And we thought the Tiger Team, which was the consultant term at the time for a workgroup that focused on something very short term, was going to be kind of a short-term effort. It's turned out to be really more of a marathon than a sprint, yet this team continues to work on a very tight timeframe where they meet twice a month and have planning meetings every other week. And it has been very productive over the years.

We have here a list of current Tiger Team members, as of September 2013, which is when this report was – the reporting on this report was closed out. And we also have many people who have been former Tiger Team members that were also very helpful in formulating the policies that came out of that workgroup. The foundation for the Tiger Team recommendations is really based on the Fair Information Practice Principles. These are the principles that underlie – they are looked at as the gold standard, if you were, for how privacy and security are addressed in IT.

So some of the key things that the group looks that are the provision of access to the individual to obtain their own information, the ability to amend or correct that information, individual choice, which is an issue which as you all know, we have spent a lot of time on about how health information is used. Openness and transparency of course is very important in ensuring that people understand how their information can be shared and used. We also looked at safeguards to ensure that the confidentiality

and privacy of this information could be protected. We've looked at data quality and integrity, accountability, collection, use and disclosure limitations.

In looking at the Fair Information Practices, the Tiger Team also came up with a set of core values that they believe are really important when you're developing privacy and security policies in the electronic world. And one of their key points is that the relationship between the patient and the healthcare provider is really the foundation of trust in health information exchange. And that it is something that the team looks at when they're making recommendations to try to make sure that trust and that relationship remains in place as we move forward.

They also really focus, like all ONC does, on making sure that the patient's needs and expectations are taken into considerations. One of the shorthand ways of expressing this is that there should be no surprises in this area, that people should not be surprised how their health information is used and shared. And that ultimately, to be successful in the use of health information to improve care, we need to make sure we have the trust of both the consumers and the physicians. So these are the values that underlie all of the decisions and all the discussions that the Tiger Team has made on these issues over the years.

In evaluating one of the major components that the Tiger Team has used in evaluating some of the policies that have been recommended have been public hearings. What we really do and what the Tiger Team really tries to do is to engage as many stakeholders as possible and get as many perspectives as possible before it makes recommendations. Our first hearing on this topic was a Consumer Choice Technology Hearing, back in June 2010. And our most recent one was on Accounting of Disclosures.

Many of these hearings we have held in close coordination with the Office for Civil Rights, because our policies that we're developing, as you know, ONC has somewhat limited rulemaking ability. OCR, Office for Civil Rights, has much broader rulemaking ability and the ability to issue guidance. So even though the Tiger Team makes re – and the Policy Committee makes recommendations to ONC, we often rely on other offices in order to accomplish these goals. So we've held these hearings in coordination with them.

As a result, we had 160 total Tiger Team recommendations on privacy and security over the last four years. Now I want to stress that the number of policy recommendations should not necessarily be our focus, but policy is difficult to measure. And so it is one – just one aspect that we have looked at, because I think the impact of the recommendations has really been broader than the numbers. But it is one thing that we can look at and see how productive this team has been. Six of those recommendations were withdrawn by the Tiger Team because they were overcome by events and the rest of those recommendations, after some – oftentimes some negotiation between the Policy Committee back to the Tiger Team and then back again, the rest of those recommendations have been transmitted to ONC.

As you can see you by this pie chart, the recommendations focus on a number of different areas. Access and correction, audit, patient choice is one of the larger areas involving recommendations. And another way of looking at these recommendations is to look at how they've allied with the Fair Information Practice Principles. And you can see the recommendations have touched on every single element of those principles. To date, ONC has adopted over 50 percent of these recommendations and we have – there's room, as we explained when we presented this material to the Tiger Team last week. There's some wiggle room between what's been adopted, partially adopted, if we have taken total action on something we believe that we've done what we can do at this point, we've counted that as adopted. Some of the items that are partially adopted are things that we've taken initial steps where we believe that additional action may be necessary. There are a number of actions that are still pending, that there's additional work that needs to be done and somewhere we are working on at this moment. As you all know, there have been some recommendations that were made very recently and so – particularly with relation to Meaningful Use Stage 3 and those types of things, where those are things that are still in process.

So, moving to the recomment – the next phase, when those recommendations come into ONC and HHS we assess those and we look at what those recommendations mean and we have discussions internally. With respect to some recommendations, particularly in the early days where we saw that there might not be a rule that would be issued anytime soon, but there may be some policy direction taken, we also had an internal process within HHS where we informally vetted those recommendations with other stakeholders within HHS. And then when we had all agreed on, yes, that was a good policy to pursue, we also vetted that direction informally with our other federal stakeholders, to make sure we were all on the same page. Again, that was a very informal process, but it was designed so that we weren't doing anything that would raise huge red flags with anybody we worked with.

Some of those policies have, of course, then directly influenced rulemaking process, and you can see a direct one-on-one connection. So, for example, many of the policy recommendations have ended up in Meaningful Use Stage 1 and Stage 2, in the Request for Comment on Stage 3. There were – this committee made recommendations in response to the Common Rule Advanced Notice of Proposed Rulemaking. And in addition to what I would call a direct one-on-one influence in the rulemaking process, my office in particular looks at the Tiger Team and has used many of these recommendations when we comment on the proposed federal rulemaking during the official federal clearance process. So when we – when any federal agency is making a major policy change, it needs to have that policy cleared by other stakeholders within the government. My office last year cleared about 300 different documents that affected privacy and security in the health arena. And we often looked to some of the recommendations that come from this committee to help guide us in how we comment on those regulations.

So now is the really fun part of the meeting, which I said is – originally we were going to do this report out, but I'm sure by this point, most of you know that yesterday there was a somewhat major rule released that expanded patient's ability to get health information directly from a clinical laboratories. And I wanted to read to you, in case you had not had the opportunity to get on Federal Register immediately and read the rule yourself, some of the language that's in the preamble, so you can understand how important the work you do really is.

The HITECH Act created a Federal Advisory Committee, known as the Health Information Technology Policy Committee. The HIT Policy Committee has broad representation from major healthcare constituency and provides recommendations to ONC on issues relating to the implementation of an interoperable nationwide health information infrastructure. The HIT Policy Committee has sought to identify barriers to the adoption and use of health information technology. According to the HIT Policy Committee, some stakeholders perceive the clear regulations as imposing barriers to the exchange of health information. These stakeholders include large and medium sized laboratories, public health laboratories, electronic health record system vendors, health policy experts, health information exchange organizations and healthcare providers who believe that the individual's access to his or her own records has impeded preventing patients from having a more active role in their personal healthcare decisions.

We will leave these concerns as well as the advent of certain health reform concepts, for example personalized medicine, an individual's active involvement in his or her own healthcare and the department's work toward widespread adoption of EHRs, call for revisiting barriers or challenges to individuals gaining access to health information. So you can really see an impact that this Policy Committee has had on policymaking in a very real way.

And another example of the implementation in policy and technical assistance that we had used because we didn't know this rule was coming out yesterday was the recommendation to include Meaningful Use Stage 1, the requirements that eligible professionals and hospitals conduct a security risk assessment under HIPAA in order to receive incentive payments. This has proven to be a very useful tool and at first we heard some pushback from people saying, well, you know, we already have to do this, so why are you putting it in the Meaningful Use Rule? What it has managed to do though is shine a light on a requirement that's been in place for a number of years, that many people were not even aware of. And there is some evidence that it's really moved the needle, at least on people's awareness that they need to do it and their implementation of a security risk assessments.

So that recommendation was included not only in the Meaningful Use Stage 1 Rule, but because we knew that people were struggling doing this, ONC also released a the Security Risk Assessment Tool to Regional Extension Centers to provide technical assistance. So you can see the recommendations move in not only a policy area, but also are carried out in technical assistance. We are also expecting to release, in conjunction with OCR, hopefully before midterm this year, a revised Security Risk Assessment Tool, which is in plainer language and easier for small providers to implement without having to hire technical assistance.

In addition, these recommendations have influenced ONC's program guidance. This is another lever that we have as a funder of health IT efforts. We try to make sure that when we fund efforts, that where possible we can implement some of these regulations – some of these recommendations, excuse me, not through regulation, but through funding requirements. We've had a number of projects in ONC that have been impacted by the policy recommendations on these. And this is just a partial list of some of those projects.

As a next step here, as to a lot of the work that we've done, we are going to be producing a visual overview of how this information is generated and how it is used, an executive summary, which will be a two-page narrative. And one of the comments that we heard when we presented this information to the Tiger Team itself was a request that we produce this narrative in a way that it would be helpful for members to take it to their boards and their CEOs to explain to them this is why it's valuable that we do this work. And we are hoping that this serves that purpose.

And in conclusion we'd like to offer a large thank you. Personally I would first like to thank Kathryn Marchesini, who has been doing a lot of work with the Tiger Team recently and has been very helpful. And particularly helpful in putting together this summary of the work that's been done. We'd like to thank MITRE, which has produced an enormous amount of assistance to the Tiger Team. They have been very instrumental in framing the slides and doing some of the background research that we need in order to – for this group, the assistance that it really needs. We'd like to extend a great thank you to the Privacy and Security Tiger Team, the people on this team put in an enormous amount of effort. I mean, they meet twice a month, there's clearly a lot of work that goes on in between those meetings and the meetings are very productive. And it's been a very rewarding experience to be associated with it. And we'd also like to thank the Policy Committee for its interaction with the Tiger Team and honing those recommendations so that when they get to ONC, they're very useful.

And last but certainly not least, and perhaps most, we'd like to thank Deven McGraw and Paul Egerman who led the efforts of the Tiger Team and who were really very important in structuring the meetings and in helping to keep us all on track over the years. And I know that Paul is no longer with us – on the Tiger Team, on the Tiger Team. He's right here. I'm just joking. On the Tiger Team, he's moved on to bigger – he's moved on to other things, but we – Paul, now you've embarrassed me. But he's moved on to better things, but we really appreciate – and Deven's not here either today, but we really appreciate all the efforts and time and effort that they put into this. So, I leave you with a very big thank you and we intend to be updating this every year on an annual basis to show the progress that we've been able to

make. Thanks. Any questions?

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

We have one from the ghost of Paul Egerman.

**Paul Egerman – Businessman/Software Entrepreneur**

So, I just wanted to say, thank you, Joy, for the presentation, it was great to get the feedback. And it just occurs to me as we look at the list of people to thank, it's like you somewhat typically did not mention your own role. But I'd just say, you've been terrific to work with all these years in terms of being so incredibly knowledgeable on the whole HIPAA and the law. I mean, this is really a very complicated thing and you're dealing with some very complicated issues. And you talk to the people involved with the consumer advocates, the privacy advocates, they talk about individual autonomy and you listen to them and it makes perfect sense when you listen to them. Then you listen to the physicians who say, this is the data I need to get things done right and you listen to them and it makes perfect sense also. And so then to try to figure out well what you're supposed to do and take a practical approach is a very difficult thing to do. And so Joy, you somehow navigated us through all that stuff and also very patiently explained to us, well, you can't really do that, because there is the law and that's helpful. So I just want to say, thank you Joy, you've been – you were terrific to work with.

**Joy Pritts, JD – Chief Privacy Officer – Office of the National Coordinator for Health Information Technology – Health & Human Services**

Thank you, Paul.

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

Gayle.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Yes, thank you very much, Paul. And as a member of that Tiger Team since its inception, I too want to thank Joy and also Deven and Paul. Because their leadership has been incredible and this is not then an easy workgroup to be part of. Talk about ruling the roost and cracking the whip, when you meet twice a month, it's a lot of hard work. But ONC, the staff and Joy, and especially the leadership of Paul and Deven has been incredible. We've not always agreed and there have been lots of contentious discussions that have gone on this Team, but for me, I think it's the most – everybody thinks their workgroup is the most important, of course. But I think it's one of the most important workgroups because it builds public trust and we will not be successful in this whole endeavor unless you have the public trust and people are willing to have their information, very private information, in an electronic health record. So, this is the key group, I think, to really making us successful and thank you, Joy, for putting that together, it puts it all in perspective and thank you for what you're doing.

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

Any other comments or questions? I think it's an opportune time to highlight what Paul and Gayle mentioned. I mean, I think it's – one, thank the committee and the – really the thousands of hours that go into each of the workgroups and the subgroups. And with – 4:18:20 because people are so dedicated to the mission. So thank you to the volunteers, but also thank you to the ONC staff who always are fabulous. It's a joy to work with the ONC staff and then to also see what comes out of it, I mean, we get a chance in Meaningful Use to see the Meaningful Use, but we don't have – this was a very nice report on all the things that have come out with the Privacy and Security Tiger Team and what's the life after. And it's been – it's very influential, so it's been a very symbiotic relationship that we have with the Office of the National Coordinator and CMS, so thank you, thanks for the report.

**Joy Pritts, JD – Chief Privacy Officer – Office of the National Coordinator for Health Information Technology – Health & Human Services**

Okay.

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

We're going to make a slight agenda change, because they canceled my flight, so I'll have to leave early. So I was able to switch with Kimberly Lynch and talk about the work plan for HIT Policy Committee before Kimberly talks about the REC update. Is – can we switch over to the work plan then, please? And this is – do you want to make any introductory comments or do you want to –

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

You're going to start and –

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

Okay. So this is a draft, these are some of the things Michelle and I sort of put together, some of the things we had anticipated doing. And Karen's going to talk about some of her plans as she digests everything that's going on and things that she wants to do and there may be some modifications. But here is some of the stuff we have on the table right now. We have a number of workgroups, as you know, and here are some of the things that they're thinking of doing.

The Accountable Care Workgroup was there because, as you heard earlier, even in the discussion of Meaningful Use, we need to move towards the model of care, as it will be delivered. And it's not just chasing one particular federal program, but it's the notion of being accountable healthcare organizations, and we need to be able to put in place the tools that allow providers and health systems to do that. So the Accountable Care Workgroup is to focus on that perspective and say, what is the infrastructure, the HIT infrastructure, that would support that? Everything from the information technology to the quality measures, and they participated in the subgroup in looking at the quality measures that would support their work.

Certification and adoption has been working on both adoption issues and certification. They, for example, had hearings in the past about what it's been like to implement this stuff? And we plan to have another one to understand – to get more firsthand feedback on what it's like to implement Meaningful Use and what are the barriers? What are the gaps that need to be fulfilled? And what's the role of policy? So some of the things that we talked about this morning. They're also now working on a voluntary certification program for the so-called ineligibles, the folks that are missed out, they're an important part of the care continuum, but they did not get to participate in the Meaningful Use Incentive Program, like long-term post-acute care and behavioral health. So they've been – that group has been working on addressing the issues there. They're also working on standardized occupational codes, there's a subgroup working on that.

Consumer Empowerment Workgroup has a partner on the Standards Committee and looking at all the ways that patients can more directly participate in their care by directly participating in the data and the sharing and the contribution of data into their electronic health record system. And you see a number of the topics that that workgroup is engaged in; these are new things that are just born because we now have electronic systems that were so burdensome and clumsy to do on paper. And so we've opened up a new technology, a new possibility and so the Consumer Empowerment Workgroups, on the Standard and Policy Committees, are fleshing through some of those issues.

Information exchange, as you know, is extraordinarily important, it's something – it's an unsolved; it's a not yet solved problem. So we have a group that also has a counterpart in the Standards Committee looking at the barriers and enablers that we need to move information around safely, securely and efficiently. So one of the thing – a couple of the listening sessions they have include VDT, the T part of VDT and the transition of care, because that involves getting information from one place and one system, oftentimes to another place in another system. That's hard, we heard from the accountable care hearing that despite the interest and now the incentive to – and the motivation to have that happen, not every vendor's collaborating and not every provider's collaborating. What we can do to facilitate that? It's probably more than just standards, for example. Once things – once data do move around, what are the data practices of the business associates who now have access to a lot more data than they had before? Along with the Privacy and Security Tiger Team, the busy one that you just heard about, we need to look at how does it get moved, but also how does it get protected as it moves around?

Meaningful Use, we're still obviously working on Stage 3. We want to increase even further, we talked about how all our meetings are in public, we had a public Request for Comment. We're proposing to have a listening session where we are basically actively listening to dedicating time; we do have public comment in all of our meetings, but having a dedicated time where we can listen to more of the public input, as we did earlier this morning. We also want to hear about the experience of not only the early adopters in Meaningful Use. We heard that way back in Stage 1, but now let's hear about the Meaningful Use experiences from the 2012 Stage 1 attestors, and also as quickly as we can, from the Stage 2, 2014 attestors. We're trying to get that in a more formal way, and that we'll do as a joint hearing with Certification and Adoption.

Another area we want to cover is, and we didn't talk a whole lot, but it's come up in the past, we didn't talk about it a whole lot today, and that's the certification process. So a lot of people find merit in the functionality we're trying to achieve through the EHR and sometimes the work of proving that you did something and are using it is actually more than actually doing it. And we want to reduce the burden of that whole proving thing as much as possible, so maybe taking a deliberate look at the certification process and see what ways that can be improved, to reduce the burden while maintaining the benefit that we all really appreciated. And then the ONC and CMS will come out with their own NPRM expected in the fall of this year. As we did in the past, we'll respond to that, we'll collectively look at that and see what things have been proposed and have a formal response as well. We'll take into account everything we've learned before, we'll take into account our listening session and the data we have from Stage 2.

Privacy and security is always busy, this – it's just a new world out there. Now that you move data around, particularly sensitive data, we need to make sure that both the policies and the practices follow the data. So we're looking at things like the personal representatives, the business associate, as I said, there are lots of business associates, now they have access to more data, let's make sure that that's protected. Minors sometimes have been left out. We get into – one of the areas actually is patient portals, where a lot of us have been essentially having to cut this 12-18 year old population out, because of the challenges. There are a lot of laws that give them special rights. With their special rights, they have special rights about the data and that's a hard thing to deal with, so, yeah, we don't want to leave them orphaned. We're trying to look at how can we overcome some of those issues as well.

And just the whole notion of actually PHRs. We've been extreme – a lot of – well, HIPAA deals with covered entities of which providers are one. It really doesn't say anything about patients, which means they don't have a whole lot of education about, well what could happen to their data once they Blue Button download it? So we give them the opportunity to download it, but I think, in all fairness, we need to give them some of the education training or potentially tools to help them protect it as well, because there will be other business associates that come after that in that fashion.

Quality measures is an important area, it always has been, I think it's importance will be more visible in the years to come as more of the delivery system moves towards accountable models. Because the payment will be shifting from fee-for-service to a pay for some kind of performance and we were talking about earlier today that the performance measures we currently have are probably not what we need to have, but they were built on what we – what data we had in the past. This whole HIT infrastructure and the HIT policy really can play a major role, I think, in helping to shape the quality measures of the future. And also provide data that's important to go in the calculation of the quality measures in the future. So that, I think, is a main area of focus. You've heard some about that, I think it was last month, the presentation from quality measures, but I think it's going to be an important area in this coming year.

And a couple of other things, there was a Vendor Tiger Team to help provide additional feedback. In Meaningful Use we also, as a respondent as was referred to in one of the public comments, EHRA provided some estimates of level of effort it takes to perform – to develop some of these functions. Similarly, in the Quality Measures group, we had vendor input to try to help understand the level of effort to calculate some of these – acquire some of the data and calculate some of these measures. So that's a good use of additional information that's really important in deciding – in weighing the costs and the benefits.

And then we had a Tiger Team that's fallen off the page probably, which was a subgroup of the Quality Measures and the ACO workgroups. That said, okay, look at some of these – what are the gaps that we have for new measures of quality that pertain when you're looking at managing populations and communities and not doing fee-for-service and measuring processes? So you can see, there's a lot on this plate, it a bit mimics the discussion we had earlier this morning about where really it's a pivot point. We're trying to go towards where the advance – well, let's say it's actually not so advanced, it's just different from today, it was always the right thing to do in terms of how do we deal – what do we want to optimize, it's the health and not just care. And then how do we want to do it, we want to do it with a full team including the patients and their caregivers. And we're trying to mimic our policy agenda – have our policy agenda mimic that direction, that philosophical direction.

So a couple of things, one, Karen wants to add her view on the work plan of this committee. And also I think we're going to open it up for some contribution and comments from the committee as we sort of plan out 2014.

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

Thanks. Thank you, Paul and thank you Michelle, and thank you to everybody who contributed to this. I think it's a good list; it's a big list and a lot of work for the year. As Paul and I have been talking to John and Jon, who run standards thinking better harmonization of the work between the two groups, and there are a couple of reasons for that. One is, clearly the Policy Committee is thinking about the "what" and there is a "how" element that standards is considering. Sometimes standards brings forward information to us that there is new technology or opportunity that we may not be seeing, that might need policy to help inform and drive it, perhaps that's around, for example, devices that are doing remote monitoring or opportunities for patients to be more engaged in their care in that way, just as one example. So the communication loop we're going to work on strengthening between the two committees. But also at the workgroup level, where I know it happens sometimes already, but to be sure that is – there's opportunity for cross talk.

From an ONC standpoint I want to make sure that staff's time is used most effectively in all of our pivots. One of them is there's a financial pivot for ONC, and so we have to be very thoughtful about prioritizing because sometimes you actually have to do less with less, you can't do more with less or the even the same with less, you have to be realistic because you want to do it really well. So those are some general principles. I think as Paul and I have talked about a couple of times, what's – what would be really valuable in addition to this or in lieu of or however we decide to shape this, is first of all some of the basics that I mentioned.

And the reason I mentioned the harmonization, by the way, is we may do some minor adjustments to names of workgroups and that kind of thing and think about timing so that it coordinates really well with standards. But thinking about areas like you mentioned at the outset around accountable care and some of our initial work in that space has been thinking about accountable care organizations and how that's working or not working and what they might be needing. But we're all, already I think in the real world and in HHS, thinking about what's beyond that, what are the other organizational structures or payment structures or ways that we move towards better care and better health and lower cost. So I'm – some places I'm really hoping these groups will continue to stretch their thinking and bring some ideas back and we don't just sort of stay where we're at. I want to keep ahead of the game and we're counting on you all to do that, which is what you do every day, just keep us from getting in a box and make sure that we're spreading our imagination and trying to be prepared for the horizon.

There are a couple of things that don't pop out to me on the list that are part of the work product for ONC. One of them in particular is around safety, and I think that whether it's embedded in the work that's happening or it's explicit, I think it's increasingly important that we're thinking that through as part of a good learning system. It's part of the work that we do and it's part of, I think, one of the opportunities to save lives and/or to make sure we're saving lives and doing the appropriate thing with health information technology. And the other is something that I've been talking about, and it came up today, which is around usability. And again I think it could be embedded in some of these work streams. But I'd like to see it pop out more, so it was clear that when we're thinking about adoption and use and then all the benefits therein, that that becomes something that we seriously have a conversation with, so I'd like to throw that on there as an option.

And I guess from a priority standpoint, something that I just – I would like to share again, it's on our work plan list, there's a workgroup, but it's around information exchange. It came up a lot today, I'm probably listening for it, so some of these things I'm probably just listening for, but at the end of the day, I think that's kind of – that's a part of the infrastructure that's necessary and where we all want to get. And we've got some tools in the toolbox we tried to use to get us to that place of information exchange that's meaningful, right there when that patients in front of you or as your system or involved in the broader population or public health. but this may be something that all the – I know all the committees are thinking about it. I know within ONC we are, we realize all these are a mean – not just a means to an end, but they're critical to get to that place. So that one's going to be increasingly important because it requires us to do all these other things right, from standards across the board,

So those are my comments. And I really just asked if I could raise those things only to say that as we're looking internally, this matches pretty well with our strategic initiatives that we have both now and that we're thinking about in the future, when I say we, ONC. I would say that it doesn't have to match perfectly because what the Policy Committee's doing is thinking about the broader field. We have a role in that as ONC, but we're not the whole field and we have partners and so this is a way for us to keep aware of what's happening that we should be knowledgeable about and/or what's coming into the future. And then just to say that for our own purposes, since we're staffing this as the backbone organization, there may be some adjustments we do, don't be surprised in a way it sort of looks as a front-facing document. Does that make sense?

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

Comments, additions to put on the table. Charles.

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

When Doug was giving his presentation earlier today, it reminded me that one of the founding principles when we started years ago was a learning health system and it's probably been one of the topic areas that we have spent less amount of time on. And I don't see it referenced specifically here and I think it's going to be increasingly important. I struggle a little bit to think about, well what would be the policy implications that we would need to address and a few things come to mind. For instance, pharmaceutical firms and drug development, should they get access to this information? How, under what circumstances do we interact with FDA? I mean, it seems like there are a fair number of policy questions that might be worthy of our attention and I think the notion of how to create products and devices that are consistent with new payment models, meaning value-oriented, is something we're going to see more of and not less. So just that as a thought for consideration.

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

Gayle – or, I think Paul was next. Paul Egerman.

**Paul Egerman – Businessman/Software Entrepreneur**

So I'd just say first, thank you, this is extremely helpful to see the plan. So I really appreciate this and I also want to thank you, Karen, for your comments about – that sort of spotlighting information exchange that is an area where this group and ONC still have significant opportunities to make an impact, and so I really appreciate that. I just had a couple of quick comments. I look at the Vendor Task Force in the first quarter is responding to the 2015 edition NPRM, I assume that's about the 2015 certification process. And my comment there is, shouldn't that really be handled by the Certification Workgroup? One of the things people tend to forget is, certification does not just affect vendors, there are people who have self-developed systems, there are open source software systems and so to simply put that in the Vendor Task Force. I realize how over 90 percent it's vendors, but it's just – that's an observation. And I wasn't sure if that second quarter item should also be in the Certification group. But that's the reason why I asked that question.

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

So, this is Michelle. So most of the response to the NPRM will be taken up on the standards side for all of the Standards Workgroups. So the sister committee or workgroup for Certification/Adoption is Implementation on the standards side, so they likely will respond to the NPRM. We don't have a vendor workgroup on that side, so that was where we assigned it to the Vendor Task Force on the Policy Committee. So we could rethink how that works on between the Standards Committee and the Policy Committee.

**Paul Egerman – Businessman/Software Entrepreneur**

Well I'm just suggesting that you rethink about – because I think it does – it's part of the certification process and so it seems to me that's where it ought to be. But again, as I say, there might be people who are doing self-developed systems and they might feel like, gee, they're not represented in that process and so that's the reason for my comments.

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

– prior rep, I think – yeah, it's a good point and it's also a good point because it gives additional opportunity for other views and input on certification generally, or it keeps it more of a general conversation and not just vendor – to everything you're saying. But also for part of the feedback loop with providers, for example, who are purchasing the systems to see if it's really working –

**Paul Eggerman – Businessman/Software Entrepreneur**

So it's like issues about like market –

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

– post-marketing.

**Paul Eggerman – Businessman/Software Entrepreneur**

– perception and labeling and expectations –

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

Yeah.

**Paul Eggerman – Businessman/Software Entrepreneur**

– that, it's a broader view.

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

So maybe the con – so we do have a hearing on certification process, primarily from the provider point of view that would be done as jointly with the Certification/Adoption and the Meaningful Use Workgroups. I think what you're also suggesting is when we look specifically on certification NPRM, like the 2015 edition, that to include providers and self-developers in that, is that –

**Paul Eggerman – Businessman/Software Entrepreneur**

Right, which was the reason to promote it or to move it up to the Certification Workgroup.

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

Great. Thank you. Thank you. And then Marc – speaking of self-developed, Marc Probst.

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

We're changing that. So just as we, when – this conversation, and I agree with Information Exchange a lot as focus, but the term comes up in every single hearing, workgroup hearing, whatever, around interoperability. And my sense is information exchange is a pretty narrow, at least our focus has been pretty narrow and there are some pretty good strategies coming out around interoperability and if all we did was solve that over the next five years, we'd save healthcare. I just don't know that we're giving it enough focus and emphasis. So, that was – that's just as I look at that, that's one area that I think we could spend more energy and get a lot of value out of.

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

Gayle and Neil, David and Doug.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Okay. Thank you, Paul. I guess I'm next. I think this is an amazing amount of work that we're tackling within this committee, but if anything, this committee's up to it. I want to add a little bit more on the plate. I think, I couldn't agree more about information exchange and the more we can highlight that, that to me is critical. But when we look at information exchange and when we look at how we, on the whole continuum of care, whether it is care coordination or it is the handoff to the next level, you've got to look at additional, non-participating partners out there. We have in this continuum of care, a lot of people who are not included, the nonpaid, non-eligible providers.

I think our mission is greater than implementing HITECH to those people who are paid to participate, paid providers and I think that's a core, but there are many people out there, there are – there's long-term care, there's behavioral health, there's hospice. There are folks out there who are – who want to be part of this revolution in how I deliver healthcare and really making sure people have the very best healthcare, but they're not part of the program, per se. That doesn't – I don't believe our legislative mandate precludes us from including them. So I would like to see us expand our horizons a bit to make sure that we include those groups, whether it's on workgroups, whether it is inviting them to sit at the table. I know you – there are designated people here, but I think it might be worthwhile to at least have them be part of the discussion. They may not be formal voting members, but ex-officio, advisory kinds of folks, that really allow us to look at that whole spectrum of care and the continuum of care that is very much needed if you're going to change how – the whole model of care in this country.

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

Thank you. I think I had Neil next.

**Neil S. Calman, MD – The Institute for Family Health – President and Co-founder**

Thanks Paul. So, I just wanted to add a few thoughts about things that – because I see that in our statewide policy sort of venue as well. Things that are sort of interesting that I think we need to figure out someplace to either monitor or discuss. So on the information exchange, I know that a couple, maybe it was more than a year ago now or a couple of years ago, we had the states come in and talk about what was happening at the state level, since that's where a lot of this stuff is happening. And I think maybe that's happening in a venue that I don't know about, but if – it would be good to hear again what's happening in innovations around states and regions around health information exchange. I know that there's some consortium of like 13 states or something that are working together and developing standards. But I don't know what's happening to the other, what is left 37? Judy, math major, yes, 37 states. So that's one thing. Oh, it's not math? Tell that to my son.

The other thing that we're spending a lot of time on, as an organization is this whole issue of sort of combining claims data now with electronic health record data and data warehouses. And I get two e-mails a day now from companies that are in that space trying to figure out what to do and what they're offering us and everything. And I think it would be worth sort of just understanding what that means in relationship to the future development of electronic health records, what capabilities need to be in EHR systems to be able to deliver and best coordinate that information with claims data, which is something we're just beginning to sort of venture into.

We mentioned before, and I was going to ask this as a question, we talked about collecting like gender identify information and everybody was quick to say; well we're not exchanging that. And I kept thinking, like, we're not? Like aren't we consenting – don't we have sort of an all or nothing consent process now? I mean, we haven't really dealt with data segmentation and relationships to consent. So if it's in the system, it presumably – and somebody signs a consent to share information, I don't know if we have a process to say, but don't share the gender identity information or whatever. So, maybe I missed something there, but there's lot of – there's still a lot of concern in relationship to state policy things, with mental health data and sustenance abuse data and incarceration data and 12 other kinds of data and how that gets sort of segmented.

And then two areas that we're concerned about a lot is sort of the use of data for research, which somebody mentioned before and also, I think, increasingly increasing interest in the integration of or connection to genomics data. And I think that's going to be an area that people are going to be – are already working in that space a lot and we're going to need to figure out something about it. The reason I bring these up is because I think they're really – they're part of the discussion here that I have the most difficulty with, is when we get deep down into the technology stuff. But I think there are still some really big policy issues and since we're the Policy Committee, that we sort of still have to struggle with. So some of these are really big policy issues and sort of trying to set some broad direction on some of these topics so that other people who are smarter than me can figure out how it actually gets implemented and developed into systems. But the policy should be in advance of that process and I think these are things we know are sort of coming down the road and having policy discussions about them would be useful.

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

Thanks. David Lansky.

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

Yeah, I think I'm echoing others. My sense is, that this is a rollup of a lot of the subgroup work, but we don't have – we haven't really owned an agenda for ourselves as a committee. And the things that Neil talked about and some of the other comments represent that I think we need another page that goes with this one, which represents what we want to work on collectively, as well as continuing to support and participate in these other bands of work.

So on the list, like the ones that Neil has emphasized, I'd add a couple more. I think there's a conversation about the national HIT direction, for lack of a better word, what's our strategy as a whole? And after Meaningful Use, what's the plan and what's the role of the federal initiatives in driving a strategy after the Meaningful Use Incentives are not primary. I'd like to see some discussion about how we measure the impact of all this on health, which was originally our goal, and we share that with the public, hopefully a positive message.

I do agree strongly with Gayle and others that whether it's interoperability or information exchange, that is really our next big challenge, after the sort of EHR challenge has been sort of essentially met, what are we doing about data portability, availability, etcetera, etcetera. And maybe that should be, if we wanted to pick one shining star for the year, that's where we should really focus a lot of our attention at this level and think about what do we need to build underneath our discussion, to make a new level of commitment to that outcome.

And I had two smaller questions about this chart. Actually one primarily, which may be for Kevin, the Quality Measures Workgroup report that we had recently, and what I see here, it isn't yet clear to me where the measures menu for MU3 is going to come from. A lot of the discussion about criteria and process, can you – is that something we need to take up or that we need to ask the workgroup to do some different work on? Oh, and I had one more point before I give it back. I was just a little concerned Paul on the Meaningful Use hearing proposal of the Stage 1 and Stage 2 attestors. At least I would like to have an additional panel or program or something about other stakeholders, because I think – I know certainly in my community, the purchasers have questions and concerns about how far we've come or haven't come or where the emphasis should be. And I think we should hear from other audiences, as well as the providers about the progress of the program – I'm sorry.

**Kevin Larsen, MD – Medical Director for Meaningful Use – Office of the National Coordinator for Health Information Technology**

So this Kevin Larsen from ONC and staff of the Quality Measures Workgroup, so the discussions there have been to focus more on the criteria for which measures they would recommend to be in the programs rather than pointing specifically to CMS and ONC, these are the measures that the Quality Measures Workgroup very specifically recommends. With this group's input or others input, we – that group could refocus. Certainly there are a number of draft members already available to look at and comment on that are being developed in the timeline for MU3. So there is already something that could be looked at and with specific feedback, but the workgroup has really said, here are the criteria that we recommend that CMS and ONC use when they are evaluating which measures to go in.

**David Lansky, MD, PhD – President & Chief Executive Officer – Pacific Business Group on Health**  
– so otherwise, we wouldn't see the proposed measures until the NPRM is published?

**Kevin Larsen, MD – Medical Director for Meaningful Use – Office of the National Coordinator for Health Information Technology**

I think that's open for discussion. As I said, there's a commitment from CMS to, as they're developing measures, have them available to the public at whatever point they're kind of ready for public view. And so that list could come forward, I think, with CMS' approval much earlier than it maybe has in the past, so that could be the kind of thing that this committee chooses to do or the Quality Measures Workgroup chooses to.

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

I think it's an important point in the sense of focusing attention – being available is different from focusing attention on and especially having deliberate strategy for either the criteria for what measures are useful and how do we use them and how do we get the data to support them. I had then Doug and Art, Devin and Gayle.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

Great. Well I just wanted to respond to a comment that was made before by Marc. And I see clarity in this committee around the words that we use. So we use the word health information exchange, we sometimes use it as a noun that replies to 10 to the sixth exchange, kind of regional exchange that occurs. It's bigger than an EHR and less than a population. And I think we have to be very, very careful when we use health information exchange, the noun, because there are policy issues and standards issues and things, as opposed to health information exchange, the verb. Because health information exchange the verb occurs at the consumer level, the EHR, at the regional information exchange level as well as at the population level. So first, it would just be really good if we got clarity around the words that we use, because I think sometimes we mix up those issues and that creates a problem for us.

The second is to echo the notion of exchange. I think exchange is necessary, but not sufficient. And I think if we stop at exchange, we have done a great disservice. I think interoperability is two parts, definition is, it's the ability to exchange information and to use the information that's exchanged. We can meet all of our exchange requirements with scanned images, because you exchange the information but you simply can't use it. The thing is that exchange at large, is difficult to quantify, it's difficult to scope. If we think about it as just information exchange, because it's all those verticals and it's the – we talk about regional information exchange. I think we should focus the attention on interoperability and since that's tied to use, we have to define how we want to be interoperable, or what are we trying to achieve. And this is the committee that can really help us with that. I think what happens is, people think about exchange and interoperability in the abstract, as if it's some abstract notion and concept that you either are or you're not and it's a binary concept and someday we'll get it and other days we won't. But in fact interoperability is tied to the thing you want to accomplish and so we need to be able to, as we think about our HIT policy objectives, tie the goals that we have to exchange and use.

And so I just think if we think about interoperability, and we think about it as exchange being necessary but not sufficient, and tying what our goals are to the needs that we have to getting to interoperability, I think it will really help us clarify, both in terms of our conversations, our ability to measure. Because if it's something that we're trying to achieve, then we can measure whether we got it or not. But if we talk about exchange in the abstract or interoperability in the abstract, we're never going to know whether we got there or not. So just imploring clarity on the language we use, nouns versus verbs. And the second is, if we're going to talk about exchange, let's talk about exchange and use, in terms of interoperability so that we can measure whether we achieve the thing we tried to accomplish.

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

Your discussion's really raising the bar; we have to be both a mathematician and a linguist now in order to sit on this committee.

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

It's so important though and that's one of the things that we had talked about in a conversation is that the other – standards calls it interoperability, I think or – and that immediately strikes you as an issue and I'll just say for my purposes, it's the noun and the verb because I think you can't do either independently, so –

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

You've just got to tell me which one you're using.

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

The noun and the verb that we should be concerned about, so in other words, there are some infrastructure governance and business infrastructure issues, some local regulatory issues that are drivers, but there's also the policy and the standards around what or – will actually move across, so the verb part of it.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

So Paul, the linguist, so there's this thing called a semiotic triangle in linguistics, and that's where you have the same word applied to two concepts.

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

Why is it a triangle?

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

Because the concepts up here and people are – I'll draw it for you Karen.

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

You're making it harder Karen.

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

I'm just – eyed.

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

Now we're going to get to geometry.

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

So the thing is, I just want us to get clarity around that because when we talk about the barriers to the verb, sometimes those same barriers are there for the noun, and if we get those mixed up, then we actually start applying the wrong solution across the board, when we are really focused on that vertical. So, I agree, it's both the noun and the verb, I just think it's two different things, we should have some clarity about to words we're using.

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

Right.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

Do you have a suggestion, Doug?

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

Well, I've been calling it regional information exchange to distinguish it from – because health information exchange occurs at every level, but there's sort of – the regional is the noun and the health information exchange is the verb.

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

I don't think we need to decide today, but –

**Doug Fridsma, MD, PhD, FACP, FACMI – Chief Science Officer & Director, Office of Science & Technology – Office of the National Coordinator for Health Information Technology**

So, I'd like to raise a motion and vote – oh, no –

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

While I love the conversation, I'm a little bit concerned about time, so sorry Doug.

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

So I've got four cards left, we're going to only do those four. Art.

**Arthur Davidson, MD, MSPH – Director, Public Health Informatics – Denver Public Health**

Very quickly, I want to add to Gayle's comments that the long-term care and the behavioral this is not enough. I'd like to add public health, not paid, the Quit Lines around the country not paid and schools around the country that are not paid. And in a terms of schools, it falls back into something that is more in our domain around policy is how HIPAA and FERPA can play together in exchanging data for kids, still recognizing your point there about minors. And then on the other side, in terms of the attestation that David was talking about, we should include as well, public health as their experience in Stage 2.

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

Gayle.

**Gayle Harrell, MA – Florida State Representative – Florida State Legislature**

Thank you. I did not get a chance to get to my second point, is usability. This is key and I really think I don't really see that on the work plan. I think that needs to be incorporated separately, so whether it's a separate hearing, whether it is a workgroup or however, we need to really talk about usability. As we're meeting Stage 1, Stage 2, Stage 3, we need to move about to, how do you really make it all work, correctly, easily and really promote the usability of it.

**Devin M. Mann, MD, MS – Assistant Professor – Boston University School of Medicine; Attending Physician – Boston Medical Center**

I wanted to reinforce what Charles had actually brought up about the learning health system and that's a word I hear about almost nonstop now. And so I actually looked up the definition again the other day at IOM and it's really about research and operations closer together and it made me think that maybe we should be thinking about how to encourage that. Are there policy ways of setting that up so that's sort of a tailwind to that happening rather than a headwind?

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

David.

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

I'm not sure whether we could fit this into 2014, but most of the talk that I've encountered so far in my brief time on this committee is around EHRs. And when we talk about exchange, it's often about exchange of information between EHRs. But there's a tidal wave of mobile devices out there that are either prescribed or consumer grade devices and they, as we have discussed I think last time, going to be feeding information into the EHRs and other places. And I wonder it seems to me that at least the Consumer Empowerment and Privacy and Security and probably Information Exchange groups need to be thinking about that.

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

Thanks. Judy, you put your card up afterwards, but go ahead.

**Judy Faulkner, MS – Founder and Chief Executive Officer – EPIC Systems Corporation**

Oh, okay, thanks. Just two things, one is that I think we have to be a little bit careful where we go in terms of suppressing innovation and I think genomics policy is fine. But one of the things that I know a lot of the technical people have said is, don't get into genomic structure or how it should be sent back and forth technically because there's so much new in genomics that whatever is done by one body will probably inhibit innovation. That, I thought, was good advice. The second thing I want to comment on is usability. I think that usability is a very difficult topic; different vendors have approached it differently. I think if Apple's iPhone was great, but if there had been a committee on usability before that, I don't think we'd ever have the iPhone. And so I think we have to be extremely careful, that a small group of people saying here's what usability should be is a very dangerous thing.

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

Yes, and I wouldn't necessarily say a committee's the answer, but if you just go back to information – now I don't know which word to use, I'm all messed up – to interoperability. Let's say you're in the emergency department as a doc and you have the option to use the information exchange or interoperab – whatever, and to – verb and noun. You – if the system is usable in such a way that it pushes that drug allergy right out to you as soon as you open it, that exact level of usability sort of speaks to getting us to that place where we're actually exchanging information and making good use of it. Right, so just back to the comment earlier that David made that if you really think about it, all of these pieces roll up to a learning system. But somewhere in there is a better care system and better health, but to get there you have to have better information exchange and all those other little elements of privacy and security, adoption and certification, quality measures, all that rolls into it.

So Paul and I are going to spend the next week thinking about this – I'm teasing – or not. We have a lot of good work to do. All right, can I ask a clarifying question? So yes, this is the bubble up from what Michelle and her team and Paul are doing with all these workgroup. I think there is a really important broader issue that I'm hearing from everybody which is, we need to define the set of policy questions that are important to us not just in 2014 but beyond. And then from that, make certain that the workgroups are thinking about those and that we have them timed appropriately. I might give one example back to Gayle's point about behavioral health and about long-term care, which is in the third quarter of information exchange. Perhaps it needs to be moved up a little bit, for thinking, for important reasons really, if you're going to start thinking about exchange, you want have an opportunity to think about how those non-eligible providers fit into it. It's an example, I'm not saying we'll do it, but just to think about the timing of how all this falls out.

So, did I hear that correctly that you all would like for us to think about a set of big policy questions that would roll these together into a trajectory of not just 2014, but perhaps for a couple of years beyond? Okay. All right.

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

Good. Thank you very much for your feedback and we will work those in and probably organize them, as Karen just mentioned, what are the policy issues for the next five years or something like that and see how do we accomplish that. And they may or may not look like this, but this is a list of some of the stuff that's still going on and still has to be done somehow, but organized by the policy objective would be – the policy agenda would be a great way to organize that. All right, so I think we'll transition to Kim.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

Great. Good afternoon everyone, my name is Kimberly Lynch. I'm Director of a Regional Extension Center Program at ONC and it's been many years since my last update to the Policy Committee. So I'm very glad to be back again to talk about where the program is today. I'll go through the current state of milestones of the program and a bit of a refresher on what the goals were, specifically get into some of the penetration that the program has achieved across different provider settings and geographies. And then talk about how the program is already pivoting to leverage the initial investment looking ahead to Stage 2, supports that the REC infrastructure can offer right now and how the RECs are also enabling reform and practice transformation in a few specific ways.

Okay. So everyone's very familiar with the vision of HITECH and adoption and now payment system reform to achieve the three-part aim. And we work with the RECs a lot to talk about Meaningful Use's vision within that, the growth path. Critical for those of us working now, including the RECs as we facilitate Stage 1, to get data into the electronic format, and I'll pause there and say that it actually takes a lot of work to remind folks that that was the initial goal, was just get the data electronic. And I think we all deal with that a lot, that the urgency to move ahead is acute. And then to help providers transition and facilitate the care coordination goals of Stage 2 and set the course for broader care improvement delivery system and payment reforms envisioned by the Affordable Care Act.

The RECs are a part of a broader network, of course, that ONC facilitates, all working to support providers in using health IT for functions such as population health management. And the wraparound services that RECs offer of Meaningful Use coaching, education and outreach, vendor relations, implementation, workflow redesign, functional interoperability and privacy and security really operate in this cycle of giving providers as much support as possible. And we like to pause and talk about that while the RECs certainly perform all of these functions and all the things that I just listed, the duration and the scope and the scale of those services really depend on the provider and what we need. And I think the committee understands that, but that flexibility and ability to respond to the needs of the providers, we feel is really a different way of doing technical assistance that the RECs have been able to do the flexibility offered by ONC.

So just a reminder of the initial program goal of getting 100,000 primary care providers to achieve Stage 1 Meaningful Use by 2014 and that the RECs are all over the country. There are very different organizations that are involved and now the landscape of the RECs participating in different programs from the CMS Innovation Center, that landscape has continued to evolve and pick up with RECs as part of healthcare innovation awards, SIM grants, ACOs, etcetera. So the RECs have really become part of this broader transformation tapestry.

The focus, of course, of the RECs is on priority settings and small-group primary care practices. But to the conversation that was happening just before this one, many RECs are working with non-eligible providers. They are working with NPs and PAs and they've taken it upon themselves to do the right thing for the practice and help the providers with whatever motivation works for them. And often times it is taking better care of their patients and having the pride of, while they may not get an incentive payment, they have demonstrated Meaningful Use and that is a valuable contribution to their practice, to their community. But RECs are also working with many specialist providers; there was a mention of local health departments. Many RECs actually specifically called out local health departments as a priority group that they would work with, regardless of their incentive payments that may flow to those providers, they should out local health departments as a critical pieces of the primary care infrastructure to support.

So, our milestones and you know how we work with always loving to give you the most up-to-date information. So the black line that you see at 100,000. You can see the blue line as far as providers enrolled within REC. We have far exceeded that, we have – the graph shows 136,000 but that's remained the same. The go-live, which is the red line, we're over 124,000 now, so just broke through that. And as far as the number of primary care providers that have demonstrated Meaningful Use, we're now at 87,000 providers. That is just our priority primary care providers. All providers, the specialist and non-eligibles that I mentioned, we're working with over 150,000 providers now, as part of the REC program. And those providers have also bum – they also bump up the go-live number, they also bump up that Meaningful Use number, and we track them all.

This is hard to see, but is a proportion of REC enrolled primary care providers that are live on an EHR. This is accurate as of this fall, but over the December and January timeframe, all RECs now have 80 percent of their providers that are live on an EHR, which of course far outpaces the national primary care adoption stats, so we're very pleased and proud that the RECs have really pushed adoption as a major goal and have succeeded. In October, GAO came out with their second report on Medicare provider's progress towards receiving incentive payments and they found specifically that Medicare providers working with RECs were over 1 point times more likely to receive an incentive payment than those not partnered with an REC.

To switch gears to REC penetration, in total primary care providers, and there's a lot of data here, but total primary care providers in the country, and that includes hospital-based primary care, RECs are working with 45 percent of all primary care providers in the country. Rural primary care providers, that penetration is higher at 53 percent. For specific organization type we are working with 83 percent of all FQHCs and FQHC look-alikes. For critical access hospitals, we're working with 79 percent of all. And then the last grouping here show our penetration in two of the CMS Innovation Center Programs, the Comprehensive Primary Care Initiative and Advanced Primary Care which the REC overlap with those two programs is 53 percent and 82 percent respectively. So we've been able to take the situational awareness of the REC program using the business intelligence tools, I'll talk about those a bit more in a minute. But to turn around to the Innovation Center and give them information about their providers, what systems those providers are on, what challenges they're facing. So that's a real value of our penetration.

Looking at progress by provider type, in terms of those providers live on an EHR and demonstrating Meaningful Use, the first grouping that you see are rural, urban and HPSA spread. And so rural and urban providers were seeing 86 percent and 87 percent live on an EHR, 48 percent and 47 percent demonstrating Meaningful Use, so not a big gap between rural and urban providers that we are tracking. But certainly when we look at our HPSA providers, those HPSA areas, that is where we fall off and HPSA providers are at 82 percent live

on EHR and 39 percent demonstrating Meaningful Use.

Looking at the next grouping, our spread on practice setting of demonstrating Meaningful Use, the spread is 62 percent at a high to 41 percent at a low, and that 62 percent is with our practice consortiums, which are practices that have historically been independent but have become consolidated in at least an administrative way. And so your IDPs, your physician organizations and so forth. And then a low is with 41 percent are small, rural hospitals, rural health clinics and critical access hospitals. So, not surprising there, but that's where we start to see more of a rural digital divide.

Looking at provider type, we have a 56 percent to 39 percent provider spread in demonstrating Meaningful Use, so our physicians are at the high-end of 56 percent, certified nurse midwives are at the low at 39 percent and I didn't include the community health aide practitioners, which are at 1 percent demonstrating Meaningful Use. The CHAPS are a unique designation for the Indian Health Service. And that's another example of providers that are not eligible for incentives but as the RECs, we worked with Alaskan tribal leaders and IHS and the National Indian Health Board to say these are absolutely the kind of primary care providers that we intend to service, how can we support them. So again, we're working with them to recognize the accomplishment of demonstrating Meaningful Use while they may not be able to, or they are unable to get incentive payments.

So in meeting the program's initial outreach and adoption goals, significant challenges were recognized with the REC program. And Michelle I think passed around, we have a paper published that was published in this month's issue of HSR, their Health IT issue, that talks specifically about the REC program, our accomplishments, our penetration and how we achieved the success thus far of the program. So dealing with changing local markets, the diffusion of innovation and coordination with partners were challenges identified early on in the program that we needed to overcome. In addressing those challenges, the REC program has relied on three foundational strategies of adaptive business intelligence, rapid cycle improvement through and using diffusion of innovative practices and then, of course, leveraging partnerships and collaboration.

The business intelligence tools that support the RECs are four. We have the Health Information Technology Research Center, the HITRC, which is an online knowledge management portal only available to ONC grantees. And it's really the workspace for the different grantees and ONC to interact to develop policies, to develop tools in a private space. The Learning Management System provides online training to REC staff on key issues such as vendor selection, workflow redesign and project management. The National Learning Consortium facilitates communities of practice where we gather on specific topics and challenges to disseminate and glean best practices and support discussions about optimizing the use of health IT. And then finally the Customer Relationship Management tool is how we track every single one of those 150,000 providers working with the RECs and, of course, their progress on the programmatic milestones.

So our business intelligence tools converge to provide near real-time performance monitoring and again, not just to ONC, but other areas of HHS. And then that creates a systemic way for us to track and respond to challenges faced by these diverse providers. So an example of that is, now two years ago really, we were focusing in on specific Meaningful Use Stage 1 measures that providers were having issues with. And we had data of thousands of barriers being reported by RECs around the clinical summary measure, and specifically about integrating it into practice workflow. And that was really holding providers up of moving to Stage 1. The communities of practice – our Meaningful Use COP diligently works on what kind of resources would help overcome those barriers. They tested the tools, they shared them amongst the RECs themselves and leading to those tools being vetted and then made publicly available on HealthIT.gov.

Those common practices can really develop robust materials and they are then grounded in our data to confirm not only there's a problem with clinical summaries, but where is it manifesting? What type of providers? What types of settings? And that's where that tool needs to be tested. And so it leads to us developing different types of resources for different practice settings, different provider types and really identifying technical assistance gaps before issues become large scale, hopefully. That's really our goal is to pre-empt large-scale problems. So, what you see here is a capture of final products, and I say final a little tongue in cheek, because anything we put out on HealthIT.gov we expect to have to update as time goes on. But the resources then that are – that bubble up through the REC Program that are vetted by the RECs and the providers they work with then find their way to HealthIT.gov to help all providers on their journey of utilizing Meaningful Use.

So now we are focused, and it's really started through 2013, to pivot the program into leveraging the investment for the broader world for reform and what was really needed long-term. So back to that initial vision, and it came through – it came to a final statement that we're comfortable with of, adoption incentives it simply wasn't enough, that additional coaching was needed to achieve the goals of better care, better health and lower cost. And the practice transformation, especially for the target population of the RECs is out of reach for a lot of those providers, that having the dedicated resources, having the expertise on staff in order to leap ahead with new delivery programs, to take advantage of new incentive payments just wasn't feasible for them. And with the increasing number of providers using and adopting health IT, they are seeking that technical assistance and practice coaching to effectively use the EHR and other tools for delivery transformation.

So for Stage 2 our focus for this year is really on 2014 functionality. And we've talked with the RECs and really winnowed down to a list of the functionality providers can use once they have a 2014 certified system, ahead of their timeline for attesting to Stage 2. But what tools, what resources, what support those providers need to take it advantage of key Stage 2 functions and linking those to broader priorities to improve patient health. So while we're well on our way to practices utilizing EHRs, we're now aspiring to better and improved ways of delivering care, new payment models and participation there, and of course, population health awareness. Through our data capture, those three precise areas have been identified and they of course support the National Quality Strategy and health IT, EHRs and Meaningful Use are foundational to those new care processes, which is where the RECs see their role as being the glue bringing it all together to help providers utilize and move forward.

So the RECs of course began by supporting providers with Meaningful Use and EHRs. As trusted advisors, now their brand has grown across communities and states to work in different clusters and what you see here, the clusters I mentioned before. In care delivery transformation, there's a lot of work that RECs are doing to support medical home initiatives whether they're private payers or state-based; through NCQA directly working in partnership with TransforMED, that's happening across several different Midwestern states. And then Medicaid Health Home Programs aligned with CPC and FQHCs. Payment reform working closely with Medicare and Medicaid ACOs through state innovation models, commercial ACOs. We're currently tracking work across 488 ACOs that the RECs are involved in some way or another in supporting. In population health management, again supporting SIM, being very engaged in the Million Hearts Program and focusing in on those specific measures as an area to leap ahead and leverage the tools that I talked about before. And then, of course, leveraging the EHR Incentive Programs, optimizing their use.

The skill demands to support care delivery transformation, and we've been working closely with the RECs to understand their competencies in these areas and grow them, so using the RECs as a learning network amongst themselves. The skills that we are hearing from providers and then working on focus on HIE, specifically Stage 2 and transitions of care, patient engagement, patient care management and value-based purchasing, again with Stage 2 functionality and new payment models. Data aggregation, analysis

and reporting for ACO programs and shared saving programs, risk stratification, payment reform, getting to total cost of care improvement and then, of course, practice and workflow redesign.

This is an example of an analysis that we did using NCQA data to look at the overlap between REC providers in 28, 2008 NCQA certification and 2011 NCQA certification. The "n" for 2011 is still relatively low, but we expect this overlap to continue with NCQA and the RECs. And the real story is, when we did some analysis of relative risk among REC enrolled Medicaid providers, those that are PCMH certified are 55 percent more likely to be paid for AIU at this point than those not certified. And among REC enrolled Medicaid providers those that are PCMH certified are 29 percent more likely to be paid for Meaningful Use than those not certified. So really it's that overlap of the reform programs and the REC intervention as a coaching model that we're seeing as the real opportunity for small practice providers to leap ahead.

The RECs have shared with us the broad swath of different programs that they are engaged in, everything from practice transformation coaching to medical home. This is just a representation to what they reported to us about a year ago, so this will be no doubt a higher penetration of RECs in various programs once we get the 2014 data back in. And then what I'll leave you with are some examples of the ways RECs are engaging, putting the pieces together, leveraging Stage 1, looking ahead to Stage 2 and reform.

In Iowa, the REC is helping critical access hospitals and rural health clinics leverage Meaningful Use to support patient engagement specifically through PCMH. And they are also supporting their statewide HIE in rural areas. In New Jersey, one ACO in the area partnered with the REC to receive additional technical support on data analytics. And that specifically affected over 1000 providers doing patient matching with beneficiaries and extracting quality data from EHRs. For the SIM model, there are many RECs that are engaged, but in Minnesota in particular, they have been engaged to support practice transformation and healthcare delivery not only in their state, but nationally for a National Rural ACO. And finally, the Comprehensive Primary Care Initiative in Arkansas, the REC has partnered with TransforMED and they are working very closely on CPC milestone five, which is using data to guide care improvement at the provider and care team level in CPC practices.

So, I know that I am the last thing between you and public comment, but I would love to take any questions about the REC program. It's – of course it's a very exciting program for all of us to work on, we're very proud of the success. But I'd love to hear from the committee of what you'd like to see us do next.

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

Thank you, Kim, that's really terrific. I have three cards up, four cards up so we'll start with David, then Troy, then Art and then Gayle.

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

Thanks Kim, that was great. It's really interesting to see how much progress and achievement has happened to that program, that was just a spark in someone's eye a few years ago. I had two questions.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

Sure.

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

I thought the – can you just update me on when the REC funding from the original mandate goes away and what the sustainability and business models seem to be emerging around the country to continue that effort, if it's uniform or in pockets, that there's more viability? And the second question, which is maybe harder, we're often challenged, we hear stories from rural providers about the difficulty of adopting some of the programs and sometimes that leads to a discussion about whether we should slow down or reduce the standards we're expecting. And I'm partly hearing, especially in your last few examples, that there are opportunities with the right support to help any of the providers served by the RECs achieve the same standard or the same level that we're hoping everyone will achieve. And so that is encouraging that we don't need to slow down or lower our standards to still achieve our goal. But it also makes me wonder, in the observations you've had up until now, is it the case that to really be viable with the higher expectations that CMS and the payers and everybody has, those providers are going to have to be virtually networked into ACO-like things? That is part of larger systems with more resources, capabilities and so on, even if it's a virtual affiliation. Or are you saying that pretty much traditional, very small practices can be successful with the new support technologies without that kind of business relationship being necessary?

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

Great questions. So if I miss any piece, remind me and I'll go back, because I want to answer all of that. The original funding for the RECs was scheduled to end in 2014. So right now we are celebrating the fourth birthday of the REC Program. We were able to receive permission from the Department to offer no-cost extensions to the RECs into 2015 and almost all of them are taking us up on that. So the RECs were awarded in three cycles, we know cycle one, which is half of the field, all but three RECs are requesting no-cost extensions. So they will be continuing for that 12-month period. Cycle two has all come in; every one of them wants to continue. So we think it will be, of the field of 62 awards, that likely 58 of them will continue through 2015 on the no-cost extension.

The sustainability plans absolutely vary across the RECs. We have worked with them individually and diligently over the last year to consider how they can use the funding that they've earned from us for their milestones for their sustainability purposes. To think of money that they've amassed, and these are all considered allowable costs, but to think about money as almost venture money, as philanthropic money, what would you do with this funding as seed funding in your state and community? And that's where the examples that I've gleaned, I have examples from every single one of them, of the different models that they're testing. And it involves certainly leveraging our funding, but then a lot of Medicaid funding through the 90/10 Programs, a lot of private payer funding and a lot of hospital funding. And then there's the Provider Direct Pay. In Kentucky, they've already got over a million dollars in committed funds from providers. In New Jersey, it's over \$400,000. So providers are certainly showing a willingness to pay also.

So all of that is good news, but I will say that by all accounts from the RECs that without external funding of some sort, they do not see how they will be able to sustain the scope and the scale of their services, that it's just not cost effective. And certainly when you're talking about rural, and then I'll transition there, it is not cost effective and they're trying to do remote services, they're trying to link providers together and they're finding some ways to move ahead. But, they do not see a business model that will be entirely sustaining and so they are looking at scaling back dramatically what they are able to influence.

As far as, can rural providers move ahead in either an ACO model or independently? Even with those that are networked in an ACO, in a more formal arrangement, and I'll say explicitly, even being owned by health system, they still need support. They tend to be the absolute last people on the priority list of the mother ship, whether that mother ship is an ACO or a hospital system. Then they end up looking a lot like those still independent providers. So in order for them to succeed in either case, they need additional support, they need additional coaching, external technical assistance to help them with the technology side, the workflow side, the change management side and to understand the landscape to really help them put the pieces together of how to dedicate their scarce resources. So I think in either case, they need more than the market will offer on its own.

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

Troy.

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

I – hopefully this will be something you can answer based on my looking at the data that you showed up there. From what I saw, I mean there's roughly around 90 percent adoption of EHRs for the entities that the REC service and assist, but there's only about roughly a 40 percent achievement. In every program you like to see some value added and I mean at 40 percent it seems a little hard for me to see that they're getting assistance that will help them get up there. I would expect the numbers to be quite a bit higher if they are utilizing an REC and the expertise – from an REC. And I do know that the funding for the education programs through the Community College Consortiums that ended in February and what do we got, 17,000-18,000 roughly individuals that went through the program and successfully passed? Is there any speculation as to the qualifications of those individuals, are they still actively working in an REC program or have they been pulled into some private entrepreneurial aspect? I mean, do you have enough resources to do this? I'm just looking at the data, the resources, the education program; did we achieve the goal that we were hoping to achieve?

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

So we don't have perfect tracking on all of the graduates, that is for sure. But what we do know, in certain states that have their own tracking mechanisms or have anecdotally reported to us, there is a great deal of success in graduates of the programs, particularly that were incumbent workers. So that's really where we have the most knowledge because those were folks who grounded in positions already, they received additional training through the Workforce Programs. And those are the folks that we know better how they are performing in REC or REC-like positions or they've taken on additional roles in the practices and settings that they were originally operating in. So I don't have – since the program closed, we don't have the kind of situational awareness at large, but the anecdotal report is that the value really was primarily focused on incumbent workers. And that for those folks that we've been able to keep a bead on, that they have remained or have progressed in health IT technical assistance companies or in their original setting, but with additional roles.

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

Do you know – do you have any idea how many of those may have attrition to off of the RECs into say private entity? Any idea?

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

I can go back to our data, because it is reported to us a few different ways. Let me go back and see if I can get some additional data, because we do track the jobs created through the REC program, but I don't know if we track it to the person level. I think we have a net number, I'm not sure if we have tracked the attrition specifically. But I can check and get back with you.

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

Okay. And this is asking you to speculate, and if you feel comfortable doing that, I would appreciate it. Do you feel you have enough resources to get us through Stage 3?

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

Oh, certainly not.

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

Okay.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

The REC investment is for Stage 1 –

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

And for me that's concerning because the funding is gone for the education and one of the things, I mean, it was brought up earlier is, one of the whole pieces of this was to create additional workforce and create additional positions and jobs in an evolving area of industry.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

Right.

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

And I'm just wondering if that funding dissolved prematurely, looking at the extensions and proposals that are on the table to push things farther and farther out. Do you notice a pulling of the providers or do you have to petition them and say, we want to send someone to you?

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

That is an excellent question. In the initial stages of the program, so before I came to ONC, I actually was running the Michigan REC and it was absolutely a push in the beginning. There was a very small cohort of folks who got it straight away and came to us, but one of the surprises of the program was how long it took to become that trusted advisor. And in a lot of cases, it was a solid two years to build the relationships with the providers that we have.

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

That's what I figured.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

So absolutely, it takes a long time to build that trust and the RECs have it now, so they certainly can continue that, and now they are receiving much more of a pull from providers, they are their go-to source for anything that the provider is concerned about, whether it's ICD-10, PQRS, state-level incentive programs. They are that trusted resource, but we have funding through 2015 now, and that's all.

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

It's interesting you brought up ICD-10 because there are a lot of competing priorities and I would imagine that that would be something they would have look at, instead of just focusing on Meaningful Use and health IT and selecting a product, implementing it, designing workflows. And then we have all these other items that are coming up, that from the provider's point of view, they're looking at it as, it's the whole thing. You're my computer guy or my computer person I should say, what do we do about this? Okay, thank you.

**Kimberly Lynch, MPH – Director, Regional Extension Center Programs – Office of the National Coordinator for Health Information Technology**

We describe it as coaching. The REC staff act as the practice coach and that means that they have to put the pieces together for the provider and have to present different options of, here's the benefit of this incentive versus that. Here's how you can put these pieces together and it's not an "if" or "or," but absolutely.

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

I could go on, but I won't.

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

I know, and I appreciate it. We're 15 minutes past time. There were two cards up, but they're both down, does that mean you guys are good? All right, the table is clear. Thank you Kim, that was a really great update and I'm going to turn it back over to Michelle.

**Public Comment**

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

And thank you Kim for your flexibility, we appreciate it, and so does Dr. Tang, who was able to leave because you were able to switch. So with that, we're going to see if there's any public comment in the room. Just a reminder to public commenters that we are limited to 3 minutes and while we wait for anyone who is in the room to come up to the table, we will ask the operator to open the lines.

**Alan Merritt – Web Specialist, Digital Communications Services – Altarum Institute**

And if you'd like to make a public comment and you're listening via your computer speakers, please dial 1-877-705-6006 and press \*1. Or if you're listening via your telephone, you may press \*1 at this time to be entered into the queue.

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

And we do have a public comment. Jeff Coughlin.

**Jeff Coughlin – Senior Director, Federal Affairs – Health Information and Management Systems Society**

Hello, thanks Michelle. This is Jeff Coughlin from the HIMSS Government Relations Team here in Washington, DC. Thank you very much for the opportunity to comment today. I was at the morning session and really appreciated the thoughtful discussion around Stage 3 and the recommendations from the workgroup. But I'm here to talk to you a little bit about Stage 2. As a global cause-based not-for-profit organization focused on better health through IT, HIMSS strongly supports the development of an interoperable health IT infrastructure that ensures coordinated, safe, high-quality healthcare. HIMSS remains committed to keeping the healthcare committee moving forward on the path to interoperability that leads to information exchange and supports healthcare transformation.

Achieving optimal results from Meaningful Use Stage 2 that can positively impact the effectiveness of national healthcare transformation. However, eligible professionals, eligible hospitals and vendors are increasingly citing timeline certification challenges in preparation for Meaningful Use Stage 2. As such, HIMSS would like to reiterate its support for the on-schedule launch of Stage 2 of Meaningful Use but that an extension of year one of the Meaningful Use Stage 2 attestation period through April 2015 for eligible hospitals and June 2015 for eligible professionals is warranted. This would encompass 18 months in which eligible hospitals and eligible professionals could attest to quarterly Meaningful Use requirements. Our position was described on the HIMSS Call for Action that was issued on August 15, 2013.

At this critical moment for the Meaningful Use Program, it is imperative that we work together to ensure health IT supports healthcare transformation. For our part, HIMSS we will continue to engage our stakeholders, chapters, events and resources to articulate the steps providers, hospitals and vendors can take to ensure 2014 certified products are installed, tested and implemented successfully. We remain committed to achieving the national vision for healthcare transformation and continue to encourage all organizations to work together to achieve Meaningful Use of health IT. Thank you.

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

Thank you. And we have another public comment. Michael?

**Michael Peters – American College of Radiology**

Hi, yes. This is Michael Peters of the American College of Radiology and I just want to revisit what Gayle mentioned earlier in regard to specialists and Meaningful Use. We all know that many specialties are struggling to varying degrees with compliance, particularly those specialties with workflows and data needs that least resemble primary care. In support of Gayle's comment in October 2013, GAO report found that general practice physicians were one and a half times more likely to receive an incentive payment than a specialist of any kind. And this disparity increases when you remove primary care-like specialties from that equation. As just one of many examples, GAO estimated that only 12 percent of radiologists who are eligible for the program received an incentive payment for 2012. Gayle mentioned that MUs transitioning into a de facto mandatory program, I think she used the word punishment program, but I think what she was getting at was the de facto mandate to participate or face reduced payments. This is especially true for physicians who provide a significant amount of care to the Medicare population. This committee should explore developing options for potential framework changes, not just objective changes, but framework changes such as creating alternative pathways, reduced overall prescriptiveness, adding more inclusive, scope-based objective exclusions and most importantly, creating true user choice as to which subset of Meaningful Use objectives are most appropriate for the participant's role in patient care. Thank you.

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

Thank you. Are there any other public comments? Okay. Thank you everyone. It's been a great meeting.

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

– March.

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

Yes, it's in person in March –

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

Big meeting, pack a lunch.

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

And it's at the Washington Plaza Hotel; I know there was some confusion with today's hotel.

## Public Comment Received

1. Are there standards for disability, occupation and sexual orientation documentation?
2. The HITPC needs to define for the vendor community the patient consent management requirements for all sensitive data elements and how these data elements should be transmitted or not in CCDAs.
3. ONC has not worked with only a handful of vendors on the HeD CDS rules consumption. This would be a 'heavy lift' for vendors, i.e. a very large development project.
4. Comments from Sentara Healthcare ... Comments & Concerns: 1) The providers need to Catch up on MU1 & MU2 so we as an industry are at the same point in adoption, 2) Consider increasing the adoption thresholds of MU2 rather than introducing new requirements, 3) give the software companies more time to be ready for MU3 if not more companies will go out of business and providers will be forced to migrate to yet another solution set at increased costs, 4) The providers need time to adjust their operations to the new reimbursement environment 5) given the turmoil in the industry 2017 is not practical and unworkable. 6) Shelve MU3 until the industry stabilizes.(consolidations, reimbursements, adoption & risk models mature)
5. IS MU 3 as described only incented through penalties?
6. What has been presented today is not a small scope for vendors! There is a tremendous amount of certification only requirements and new functionality for EPs & EH/CAHs.
7. Judy is correct on the difficulty of doing a 'track changes' functionality on electronic notes would be very, very difficult. Our development department is quite concerned about this proposal and how this might be implemented.
8. The comment 'need to put the pressure on vendors' is changing the vendor landscape. is this the intent.....to drive some vendors out of business?