

# HIT Policy Committee Transcript June 5, 2013

## Attendance

The following members were in attendance:

- Madhulika Agarwal
- David Bates
- Neil Calman
- Arthur Davidson
- Connie White Delaney
- Paul Egerman
- Judith Faulkner
- Thomas Greig
- Gayle Harrell
- Deven McGraw
- Marc Probst
- Joshua Sharfstein
- Paul Tang

The following members were absent:

- Christine Bechtel
- Patrick Conway
- Scott Gottlieb
- Charles Kennedy
- David Lansky
- Farzad Mostashari
- Frank Nemec
- Alicia Staley
- Latanya Sweeney
- Robert Tagalicod

## Presentation

### Operator

All lines are bridged with the public

### MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Thank you, good morning everybody, this is MacKenzie Robertson in the Office of the National Coordinator for Health IT. Welcome to the 49<sup>th</sup> meeting of the HIT Policy Committee our next meeting we'll be turning 50. This is a public meeting there is time for public comment built into the agenda and the meeting is being recorded and transcribed so please make sure you identify yourself for the transcript. The hashtag for the meeting is #hitpolicy for anyone using Twitter and I'll just remind everybody that since this is a virtual meeting please don't put your speaker lines on hold the hold music will come through and just a reminder to please keep your phones on mute if you're not actively speaking. I will now take the roll call. Farzad Mostashari? Paul Tang?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Paul. David Bates? Christine Bechtel? Neil Calman?

**Neil S. Calman, MD, ABFP, FAAFP – President & Cofounder –The Institute for Family Health**

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Neil. Art Davidson?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Art. Connie Delaney?

**Connie White-Delaney, PhD, RN, FAAN, FACMI – Professor & Dean – University of Minnesota School of Nursing**

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Connie. Paul Egerman?

**Paul Egerman – Businessman/Software Entrepreneur**

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Paul. Judy Faulkner?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Judy. Gayle Harrell?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Gayle. Charles Kennedy? David Lansky? Frank Nemecek? Marc Probst?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Marc. Josh Sharfstein?

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

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Josh. Alicia Staley? Latanya Sweeney? Madhulika Agarwal?

**Madhulika Agarwal, MD, MPH – Deputy Undersecretary for Health Policy & Services – Veterans Administration**

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks. Patrick Conway? Tom Greig?

**Thomas W. Greig, MD, MPH – Chief Medical Information Officer – Department of Defense**

Here.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Tom. Rob Tagalicod? Okay with that I will turn the agenda over to David Muntz.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

MacKenzie its Deven did I miss myself?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Oh, no sorry, did I skip over you? I have you checked, Deven McGraw present.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Okay, great.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Deven. With that I will turn the agenda over to David Muntz for some opening remarks.

**David Muntz, MBA – Principal Deputy National Coordinator – Office of the National Coordinator**

All right, thanks, MacKenzie I really appreciate it. First I want to express my gratitude for all that you've done, all that you are doing and all that you will do and I'd like to take the opportunity to welcome two members who are joining our ranks, but before I get to that I really wanted to talk a little bit about what's happened in the past month, it's been a pretty remarkable month a lot of very positive things are all converging at the same time and this committee and all the Workgroups, and all the people you represent have played a major role.

So, first, I think one of the more exciting things was the provider adoption numbers were released by CMS and announced by Secretary Sebelius and the numbers are just astonishing, which I think is wonderful and it gives you a chance to celebrate all the hard work though it certainly doesn't mean the end it's just the beginning of the hard work.

As you are all aware there are two parties who are really involved, we been focused a great deal on the providers in terms of adoption, obviously the consumer or the patient is the very interested party and there are a lot of very positive steps that I've seen on the patient side. So, I think it's nice to watch those two groups sync up and move us where we need to go.

There was a very positive column that was authored by Tom Friedman in the New York *Times* and got a lot of pickup, a lot of reaction most of which was very positive, if you had a chance to read the trade press I think very exciting there. And just yesterday was the fourth annual Datapalooza and the numbers are growing substantially and you had to be inspired if you were there or watching on the Internet it really was very impressive and it was nice that you see people who are at high levels in government involved, the Secretary was out front and delivered the welcome, the newly confirmed CS Administrator Marilyn Tavenner also participated.

And during the week's past we've seen the release of some information from CMS on both inpatient and the outpatient side that offers some very exciting opportunities for people and they've done some remarkable work or some remarkable work has already occurred. I think one of the things that we heard an awful lot about was data liberation and this is a great first step and as usual Farzad was actively enthusiastically participating throughout the event and for me the quote that I remember best was when he was talking about data and he said "we're making the invisible visible" and he's absolutely right and it got picked up in several Tweets that was very positive.

Last week the FDASIA Committee met which again is collaboration among government agencies and I think is going to benefit the community as a whole. I'm sure many of you could mention other highlights that I'm skipping over. Just to provide a little balance there were also some criticisms that are just natural challenges to what it is that we're doing and I think that gives us a good opportunity to have a meaningful conversation to make sure that we're heading in the right direction and always see those kind of criticisms as an opportunity to re-examine and make sure that we're heading in the right direction.

So, there used to be an old construct and since I'm an old CIO we used to talk about all HIT products involve people, processes and technology, and the truth is that technology is relatively easy compared to all the other things and as we talk about care transformation is underway I think maybe it's more appropriate to talk about the fact that it's people, processes and policies that are making a difference. So, for members of the Policy Committee I want to again thank you for your role in having such a significant impact.

Now to the administrative matters at hand it's my pleasure to introduce two new members who were recently appointed to the HITPC by the Government Accounting Office and Congress, the GAO appointed Alicia Staley as a new patient consumer advocate. She is a three time cancer survivor and has represented the patient perspective and volunteers at both Tufts Medical Center including being Co-Chair of the Tufts Medical Center Patient Family Advisory Committee and member of the Tufts Medical Center Board of Governor and its Quality of Care Committee. Now, Alicia, I think, are you on the phone and if so would you like to make some comments?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

David, I don't show her as having called in yet, so we can postpone that.

**David Muntz, MBA – Principal Deputy National Coordinator – Office of the National Coordinator**

Okay, well, we'll welcome her in absentia and then Senator McConnell appointed Scott Gottlieb. Scott is a Fellow Resident or Resident Fellow at the American Enterprise Institute and a practicing physician who served in various capacities at the FDA including Senior Advisor for Medical Technology, Director of Medical Policy Development and most recently was the Deputy Commissioner for Medical and Scientific Affairs so he brings a lot of very useful skills and knowledge to the committee. He has also served as a Senior Policy Advisor at CMS and Scott if you're there would you like to say something?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Scott also is not on the call yet.

**David Muntz, MBA – Principal Deputy National Coordinator – Office of the National Coordinator**

Okay, well, we'll welcome him when he does show up. Lastly, I want to thank and recognize the two members who previously filled the positions above and that's Chris Boone and Richard Chapman for their contributions to the committee and now I'll turn this back over to Paul Tang. Paul?

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

Thank you very much David.

**David Muntz, MBA – Principal Deputy National Coordinator – Office of the National Coordinator**  
Sure.

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

A very good celebration of how far we've gotten in just a very, very few short years. I mean, I agree with you having over half the doctors and 80 percent of the hospitals meaningfully using this technology for their mission is really, really a fantastic accomplishment.

I also picked up on the comment you mentioned which is making the invisible visible and in the positive light I think so much of the opportunity we have to transform the health system and deliver better care, better outcomes is made possible by the technology that this group has been so dedicated to making happen. So, I would also like to thank both the work of the ONC for its tremendous, tremendous efforts and your Policy Committee that's providing some advice as we can and hoping to contribute to the cause. So, thanks to everyone and thanks, David.

We'll now move onto look at the agenda but before I forget I want to see if people had a chance to review the minutes and ask for a motion to approve the minutes from last meeting?

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

This is Deven, so moved.

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

Thank you.

**Neil S. Calman, MD, ABFP, FAAFP – President & Cofounder –The Institute for Family Health**

This is Neil, I'll second it.

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

Thanks, Neil. And any further corrections or additions? If not all in favor?

**M/F**

Aye, aye, aye.

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

And is there any opposed or abstained? Thank you for that. Okay we have a new topic to discuss it is an informational meeting largely I don't think we have any action items for this virtual call. So, the first update will be from the PCORI, the Patient Centered Outcomes Research Institute and Joe Selby will talk to us about their work how it interdigitates with the Meaningful Use work in helping to provide this data infrastructure that is so important to outcomes research and what lessons and what kinds of input does he want to make for our deliberations about Stage 3.

Then Robert Anthony will provide us some of the great news, the stats on the program itself. Then Jennifer King from ONC is going to talk to us about the data analytics work that is going on in ONC. And Deven and Paul, the perennial will be talking to us more about the RFC comments reconciling those and their hearing on non-targeted queries the group 3 that we left to get – sorry about that.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Are you there Paul? I think we just lost Paul.

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

Sorry.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

You're back, okay.

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

Okay and then we'll continue in your afternoon on an update from the – about the Health IT Workforce, as you know there was a considerable amount of money invested in workforce development which is really an important component of this overall EHR and HIT adoption program and we'll hear more about what's been going on with that program.

And then Jodi and Farrah will talk to us about some of the – update us on the activities of ONC. We'll conclude, as we always do, with public comment and I forgot to mention I think there is maybe a public comment in the middle but let me know.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

No, it's just the one at the end, Paul.

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

Okay, thank you, any updates to the agenda?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

You got them all.

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

Okay, well let's begin with Joe Selby to talk to us about PCORI.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Okay, Paul, thank you very much, good morning, Paul, good relatively early morning to you I guess and good morning to everyone. Thank you so much for the invitation to be here. Let me just check and make sure you can hear me okay?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

We sure can, Joe.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Okay, good. So, I – and I guess the slides will advance is that right MacKenzie? Yes, good. So, I'm here to talk to you about a recently announced initiative really a sizable initiative dollar-wise in the world of PCORI and an initiative that builds strongly on the work of ONC and on the Meaningful Use Initiative. So, what we're doing couldn't have had a chance of being put into place, wouldn't even have been thought of if Meaningful Use hadn't made the progress that it has.

So, at this point it's a question of whether this initiative or how this initiative moves forward as Meaningful Use continues. So, this is about harnessing the data that are being collected, it's about liberating the data, it is about empowering patients to participate in this case not so much in decision making about their own care it's to allow patients to participate in generating the research based on their data that will create opportunities to enhance their care. So, if you want to move forward to the next slide and I'm assuming I don't have control.

So, I'm not going to spend hardly any time or I'm going to spend hardly any time describing PCORI, I'll assume that most of you have heard a bit about it, simply to say that we are an independent research organization authorized, funded by congress as part of the Patient Protection and Affordable Care Act and we were set up to do comparative clinical effectiveness research.

We were named the Patient Centered Outcomes Research Institute and authorized to conduct comparative clinical effectiveness research and by our lights what that means is it is research that provides patients and those who care for them answers to questions that are generated by the choices they face. So, it is comparative research and it's really research directed at supporting decision making.

It is not research about developing new products. It is not research about understanding the mechanisms of disease. It is quite simply comparing choices for individual patients and providing information on which choice is likely to give you the outcomes you prefer. So, you can think of it as very practical research, you can think of it as research that almost necessarily has to come from real world clinical practice. Next slide.

So, this is what we're proposing in short and I'll go into it. So, we are proposing the development of a national patient centered clinical research network. There are two funding announcements out and actually I can tell you that a third funding announcement just went out today and the total is now up to somewhere upwards of 70 million dollars on the table. We are calling for applications to build clinical data research networks, I'll explain those in a minute, and patient powered research networks and really the insight is about bringing those two together.

And for those of you who work in this area as either informaticians or health services researchers or patient representatives, or clinician representatives, or health systems representatives letters of intent to apply for these are due in just two weeks, June 19<sup>th</sup> and applications then are due September 27<sup>th</sup>. We will announce the awards by the end of December. Next slide.

So, PCORI has a board of governors and the board of governors has been since day one, since PCORI was just first established, that an infrastructure for being able to conduct rapid, efficient, high-volume, comparative effectiveness research studies, outcome studies drawn from real world clinical settings was a crucial contribution that PCORI needed to make part of PCORI's legacy and one of the first meetings we convened, and some people on this call were in attendance, was a meeting in July of last year in Palo Alto and the meeting was called the national workshop to advance use of electronic data and just hit the click button if you will, just advance one slide. Okay and advance it again.

And so we had a lot of people in the audience who represented clinical data networks. We had folks from the ONC in the audience and from CMS and from large data owners let's say. But we also invited patient groups, patient organizations, on-line patient communities and so while we went into the meeting recognizing that electronic health data were really crucial to building this infrastructure and we thought we would be talking a lot about solving problems of data interoperability and bringing systems into the mix, and solving problems about IRB oversight and streamlining those procedures, and getting systems ready to do randomized trials, we came out of the meeting very enlightened about the critical role of involving patients and patient groups in this work.

And so as I said we came out with the idea that we really needed to create a hybrid between what had gone before which were large networks based solely on clinical data and the vision of the future, which was a combination of networks of patients as well as networks of data. Next slide.

This next slide is meant just to say we are not the first kids on this block, we're not the first people who realized that Meaningful Use created opportunities to do research on a grand scale, on a national scale. So, we start with the ONC and the foundational work they've done to make the dream seem feasible, but we also want to mention the FDA who through Mini-Sentinel and through OMOP has really blazed a trail in terms of using certain types of data on very large numbers of people. They count 130 million Americans in their surveillance data for doing safety research which in my mind is a type of effectiveness research.

AHRQ, the Agency for Healthcare Research and Quality has done a lot of – and a real thought leader in terms of how would we actually manage these networks, how would systems be convinced to participate, what about practice-based research networks, what's the role of patient registries? So, they've really I think done a lot of the foundational thinking.

The NIH has long promoted the idea of national data for conducting everything from surveillance studies like the SEER Registries through their CTSA's they've really worked on enhancing informatics across academic medical centers, their collaboratory is a big enterprise that aims at doing research within healthcare systems to answer practical questions.

The VA we all know has been a leader in electronic health records and harnessing them and using them for quality improvement and research. The IOM has been a thought leader in talking about the learning healthcare system and the digital infrastructure for that.

Payers, health plans like the HMO Research Network, OPTUM which represents United Health Care, WellPoint which is Blue Cross Blue Shield plans has done a lot and building data and using it for research. Specialty societies have really promoted and demonstrated the utility of registries.

Industry has invested a lot in building registries and other types of automated data. And innovators and entrepreneurs, on-line personal health records organizations like PatientsLikeMe, C3 and Cancer Commons just to name three have brought patients together on-line for the purposes of research. So, all this is background support partners for doing this kind of a venture. Next slide.

So, what would this network look like? Well, first of all it would in fact be a network of networks. So, we envision multiple networks joining together to solve these problems and create a national, overarching national network.

There are two types of component networks, one called clinical data research networks which originate within healthcare systems and electronic health records and one called patient powered networks which originate with groups of patients with a single condition organized to do research. It calls for the active involvement of the healthcare system. So, we require that the systems behind the data be involved in the governance and use. We do not want this to be a product of just funders and researchers.

We want the clinicians within those systems and the patients to be involved in governance and use. And we want a strong commitment on day one to establishing interoperability and data sharing across these networks and to be ready to collaborate with the outside larger research community. So, this is not going to be a closed shop. The capabilities will be that we will have rich clinical data on many millions of persons all ages representative populations coming from electronic health records but enriched with patient reporting information and all organized, and standardized in interoperable formats.

We absolutely require an interest in capacity to do both observational studies and randomized trials embedded within the healthcare systems. We want obviously the highest rigor to our data security and confidentiality practices, we really recognize the need to continue working with IRBs to streamline to recognize the kind of research this is, the low risk that most of it entails and the barriers that outdated and overly regulatory IRB practices can have. So, resolving and making realistic human subject oversight is an essential part of these activities.

And we see this as being useful not only for comparative effectiveness research but for safety, for surveillance, ultimately for understanding the causes of diseases and potentially even for the pre-approval type of trials that pharmaceutical industry and device industry needs to undertake. Next slide.

So, the ideal network starting in the lower left would cover large diverse and defined populations so that at all times we know who is in and who is not in the population drawn from usual clinical care settings, has to have the capacity for complete capture of longitudinal data, that's what outcomes research is a longitudinal study of what happens after you get a treatment, has to have the capacity for collecting patient reported outcomes, it has to be really an efficient capacity.

It requires the active involvement of patients, clinicians, and although the slide doesn't say it, systems in governing and using the resource. It has to be efficient in terms of the cost for capturing data, storing it and analyzing it. It has to have direct links back to these systems so that learnings can be disseminated and implemented and it has to be capable of randomization because many comparative effectiveness research studies require randomization. Next slide.

So, this just is our long-term vision that once the network is established two or more partners will work together on particular research questions and those questions will come from the systems and the patients who are contributing the data. Next.

Once we fund, and this slide is a little out of order, we anticipate that there ultimately will be up to 8 clinical data research networks, these are large networks and up to 18 patient powered research networks and they will join a steering committee with a coordinating center and on that steering committee in addition to all the awardees will be PCORI, AHRQ, NIH, FDA, ONC, CMS and VA representation.

So, we're very hopeful and optimistic, practically certain, that those representatives will sit with our awardees so that we stay up-to-date with what's happening, so that we coordinate and so that we see the – understand the ultimate needs, the potential and the ultimate needs of this network.

We'll have a scientific advisory board that will be populated in part by members of PCORI's methodology committee and we will have a special expert group which we hope will be populated by vendors, electronic health record vendors, personal health record vendors, but also pharmaceutical industry and device industry representatives who are other potential users of the network. Next slide.

So, now these next two slides talk about the two opportunities. The patient powered research networks we've said that they will be 12 million dollars available to support up to 18 awardees and this is just for an 18-month phase 1 period. At the beginning we want patients with a single condition who are interested in research participation. We want them to demonstrate in their application that they're able and interested in increasing the size and the diversity and the representativeness of their membership.

We want willingness to build a standardized database of patient reported data and a willingness to explore the collection of electronic data. By 18 months later we want them to have grown to the point that they represent at least a half a percent of the US population with that condition and this really is thinking of more rare diseases but at least – or I mean up to 10 million persons. So, they don't have to go above 10 million persons. Rarest diseases could be applicable if they could promise to recruit 50 patients. So, really anticipate both rare and more common conditions.

We want them to have demonstrated that they can and have collected patient reported information from at least 80 percent of their members. We want their patients clearly involved in governing their network and we want standardized data suitable for sharing with other awardees with other members of the infrastructure. So, that's the patient powered research networks and those applications, I repeat the letters of intent are due June 19<sup>th</sup>. Next slide.

And this is the clinical data research networks, these are larger projects, we envision up to eight and there are 56 million dollars available, so that would be up to 7 million dollars on average per awardee and again that covers an 18 month period. Coming in applicants have to be at least two healthcare systems who are engaged in working together. There has to be the willingness and capacity to work towards data standardization within the network and with the other awardees that will be one of the major activities of the 18 month period.

There has to be a willingness demonstrated to participate in collaborative studies with data sharing not only across the infrastructure but also collaboration with researchers outside the network. This has to become a research resource for the country. By the end of 18 months each awardee has – we have to believe that they're going to be able to build a population of minimally 1 million members and hopefully many more, that they have accomplished data standardization within their network and with the other awardees, that patients, the system and the clinicians are really engaged in governing the network and in using it asking and answering questions. And they have to demonstrate a capacity to implement randomized clinical trials within these real world care settings. Next slide.

Who could participate? This is a – I imagine there might be a few people wondering even on this call the answer to this question. So, obviously patient organizations both advocacy organizations, long-standing advocacy organizations but also on-line communities, newer on-line communities, practice-based research networks. CMS is obviously a big player, they are pointed to in our legislation and CMS will be the only resource for identifying the outcomes for many populations.

Medical groups who own electronic health records and care for large numbers of patients. Integrated delivery systems who bring not only the electronic health record data but the information on who is in the population. CMS, I'm sorry this slide should say, where it says CMS in the middle row, should say state and county healthcare systems, so, and state and county health data. So, Medicaid data, other state and county level data to provide outcomes and information about the populations. Disease registries have a place but fit in and partnered with healthcare systems that have larger and more general populations.

Health plans I think will play a crucial role because they do identify the populations and help to make sure that we're capturing all the care on members of those populations. And academic medical centers and other large medical centers, hospitals that have electronic health records and generate in hospital information on patients. All of those, but we don't anticipate most of these applying as individual entities, we anticipate partnerships between two or more of these types of entities to create the kinds of large cohorts of patients with complete longitudinal data.

So, we hope to trigger some partnerships that haven't been seen before in our applications. I think that's my last slide, let's just see, go ahead one more and this is just an invitation to all of you to join us to go to our website and become reviewers of our research, send us research questions, get involved in our public workshops and other activities, but that is the vision and as I said I think the vision is a natural outflow of the work of Meaningful Use.

Meaningful Use empowers patients to participate in their own care, it empowers patients and others to pool data, to assess the quality of care, to improve the quality of care and we believe it empowers patients and the systems and clinicians that generate the data to participate in conducting the kinds of research that they need to improve the care that they either deliver or receive. So, thank you very much and I hope there is time for some questions.

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

Yes, thank you very much Joe, really a very inspiring vision and as Joe pointed out it comes out of the ACA. It's extraordinarily important for not only the ongoing healthcare but the future of healthcare and helping us make better decisions. And it's really a good example of the data infrastructure that the learning health system committee that the IOM envisioned, this is really an important piece and Joe at the end of course mentioned the connection between that and the work of this group in the Meaningful Use Program.

So, we try to put that – help contribute to your infrastructure in Stages 1 and 2 and hope to really open that up in Stages 3 and beyond. So, also invite you to make any comments you want in terms of advising us on Meaningful Use directions and objectives that we can focus on.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Well, thanks, Paul, I'd just say that's one of the many reasons that we think it's wonderful that ONC is going to serve on the steering committee because I think that will be a real natural place for two-way conversations about what is possible today and where we're headed and what research could use and could benefit from in terms of improvements.

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

Thanks. Let me open it up for comments or questions from the committee members? Is anybody on mute that wanted to say something?

**Paul Egerman – Businessman/Software Entrepreneur**

This is Paul Egerman; I just wanted to say this is very important work and pleased that you gave us this presentation and hopefully we can get updates from time to time as to how you're progressing.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Well, I'll just say maybe as a way nudge some of the knowledgeable on this call, that, you know, I present a very rosy and optimistic view of this and I am optimistic about it, but I do not in any way want to understate the challenges.

The way that we wrote the funding announcements is there is a set of challenges we face and you're going to have to – we want you to tell us how you're going to participate on working on these and they are issues like interoperability of data across systems, helping patient organizations get their electronic health record data along with their patient reported data. We mentioned a lot Blue Button as a strategy for that.

I know Deven is on the call today and I believe she would agree that none of this is going to get very far if we don't continue to make progress on understanding the meaning of human subjects protection in this world of comparative effectiveness and quality improvement research. So, those are the three.

And this notion of how do you in fact talk healthcare systems into admitting to their members, if you will, their patients that sometimes we don't know the absolute best treatment for your condition and that's why we use your data and that's why we invite you to participate in our randomized studies because we're trying to get to better answers to these questions. So, all of those are challenges, how do you get systems to host randomized trials in their midst? Those types of questions are not – others have tackled them and the answer is not at hand yet.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yeah.

**Paul Egerman – Businessman/Software Entrepreneur**

And those are great questions that Deven would raise from a patient perspective. There are also some interesting technical challenges that you will face in terms of having like a common data model and data definitions.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Yes.

**Paul Egerman – Businessman/Software Entrepreneur**

And, you know, what the FDA did with the Mini-Sentinel could be a guideline for you in terms of how to accomplish that.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Yeah, as a matter of –

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Absolutely.

**Paul Egerman – Businessman/Software Entrepreneur**

Because it's important it isn't easy.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yes.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

We are going to convene a meeting, the IOM is going to help us convene a meeting in the early fall on exactly that question Paul of the common data model. We on the one hand recognize the need for something like a common data model and on the other hand we recognize that we could spend 18 months deciding, you know, discussing what the optimal common data model is. So, we're trying to get a jump start on both that and on how you actually move toward a learning health system.

I mean, it's great to talk about a learning health system but it actually implies that the systems are going to come to the table in the name of learning and that we haven't seen so much of yet. So, both of those are meetings we'd like to make some progress on before the awardees come to D.C. for their first steering committee meeting early in 2014.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

And this is Deven; Joe and Paul your comments were right on the, you know, the issues surrounding policy frameworks for research uses of data and I want to remind the Policy Committee that we actually did some work on this issue and submitted some comments with some recommendations as part of the advanced notice of proposed rulemaking for some potential changes to the common rule which are the set of laws that govern federally funded research which are in addition to HIPAA for many entities.

And, you know, I think this is an issue that, you know, hopefully from a policy stand-point we'll be able to return to, because I don't know what the plans are from the Office of Human Research Protections for where they're going to go with that set of rules much less what might need to be done to HIPAA.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Thanks, Deven.

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

So, I think we're talking about not only a technical or data interoperability we've been struggling with this concept a lot but really a policy interoperability.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yeah.

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

You have to put data and policies, and protections together across state lines, it's a challenge.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yes.

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

But, hopefully we can work together on some of the needs that you have, because there are certainly needs that we've voiced before but you can give us a good working example of the kinds of needs for the purposes you are advancing. Other comments or questions?

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

This is Judy, I want to just piggyback on the other comments made about the common data model and interoperability. And the interesting thing I think is how to some extent you have two different things going at once, a learning system versus a common data model, because a learning system means you'll be able to add new data elements, do research by working with your subjects and adding new data elements to collect that are going to help tell you about the answers that you need.

And against that are the common data model which is pretty static to be able to get it common you have to talk to many people to try to get everyone to agree or at least a subset of them to agree that these are the definitions of the data model and here's how it's going to work. So, I think it's the contradiction between the two or maybe the word isn't contradiction but it's the clash between the two that's going to be part of the interesting thing.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

So, this is Joe, and I appreciate that comment. I do not see this as a contradiction at all however. First of all learning health systems are not going to learn if they stay within their own population and just study themselves to death. Learning health systems will really learn when they begin comparing across systems. So, that actually requires some commonality there.

I mean, the – as a – you know, we are – we call this a national infrastructure but the truth is in America we are a system of multiple systems and if we can't learn from each other's successes and experiences we're in trouble. So, I think you need to accommodate – but even – so, I came Kaiser Permanente and we've had Epic for 10 years and what Kaiser Permanente has come to discover and we also have an active research unit which participates in numerous networks that have a pretty well-developed common data model that they share.

And even Kaiser Permanente has turned now to that common data model as a way for them to ask questions because it takes the data from the electronic health record and it subjects it to the rigor of researchers in terms of defining variables and so I think the common data model procedure has utility even within a system and certainly for that part of learning that comes from comparing notes across systems.

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

Well, I guess there would be – it's interesting what you say. Let's say Kaiser has to find a lot of its own data elements and put it in the data model, what happens then when Duke or Partner's or Hopkins wants to also do some of the same studies and they've defined things differently, just let's take out – suppose allergies has not been defined and you define allergies and you define allergies –

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

No, I –

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

Differently than they define allergies. How do you then correspond with everyone to be able to get it all to be one data model and at the same time have enough speed?

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

I think that is my point that we need to evolve a common data model that allows Duke and Kaiser Permanente to replicate studies and have confidence that in fact, you know, their findings are comparable. It's, again, I said at the outset I don't want to understate the complexity or the iterative nature of this kind of activity, but I think, you know, having multiple big systems at the table of this steering committee who intend, they intend to do research together, they are committed and getting paid to get ready, prepare to do research together is a great way to hammer this out.

You know, it will certainly be something that happens in stages and we might not get to allergy and the definition of allergy until Stage 3 or 4, but you're totally right you need a common data model in order to do research that you can have confidence is comparable across systems.

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

So, as I said, this is bringing up a topic and challenges that we're very familiar with.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Yes.

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

We do want to hear updates and the things that certainly come from the work of your grant.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

I will be – we will be delighted to update you frequently. This really – you know, we are extremely excited by this and in many ways it feels like our – increasingly it feels like our central most contribution. So, your advice we'll seek it frequently.

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

And there might be some interaction between PCORI and the Information Exchange Workgroup perhaps over time.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Yes.

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

Because there is research interface that needs to be explored along with the patient care side. Well, thank you very much, Joe, it's very, very important, and it was very interesting.

**Joe V. Selby, MD, MPH – Executive Director – Patient-Centered Outcomes Research Institute (PCORI)**

Thank you Paul; thanks everyone. Bye-bye.

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

Thanks. All right our next topic is Rob Anthony and giving us the good news from the CMS update of the EHR Incentive Program.

**Robert Anthony – Health Insurance Specialist – Centers for Medicare & Medicaid**

Thanks, Paul. Thank you, everybody I'm going to go through some of the overview numbers and then I will just cover briefly a couple of the high points. If we can go to the next slide. We're going to cover registration and payment data and then as always we have information on attestation at the end, not a huge amount of that information has changed on the attestation side so I'll just highlight a couple of points through that and we'll focus primarily on the registration and payment data. Next slide.

So, all of what we have here are active registrations, I'm sorry are numbers that are as of the end of April, we do have some draft numbers for May at the end, but as of the end of April we had nearly 395,000 active registrations for the program, that's out of a complete total of about 532,000 overall. So, we have a large number, a large percentage of providers actually registered for the program at this point. Next slide.

This is an outline of what the Medicaid Incentive payments look like and I always want to break this down because it does demonstrate that we are steadily accruing people on the Medicaid side, eligible professionals who are becoming Meaningful Users. You can see in the Meaningful Use Program to date column that there are a little over 13,000 eligible professionals who are Meaningful Users at this point in time of the Medicaid side and we are seeing more and more come in from a month to month basis. In April we had 3400 eligible professionals come in and demonstrate Meaningful Use. So, we are starting to see that transition from actual adoption, implement, upgrade payments to Meaningful Use. Next slide.

We also have a breakdown here of Medicare EPs by specialty. We got some additional requests for this, remember this is just Medicare EPs where we have specialty information we don't have that specialty information on the Medicaid side. So, this would represent all Meaningful Users and at this point in time we're seeing an upward trend of Medicare EPs who are Meaningful User who are not primary care physicians, 61 percent of the total of eligible professionals who are Meaningful Users are actually in a specialty non-primary care. Next slide.

So, these are the overall totals. As of the end of April we were at about 14.6 billion dollars paid out for the entire program. Obviously, 2013 is lagging a little bit more behind because for this program year we're going to have many returning providers, which means that we'll have both hospitals and eligible professionals who are on the fiscal or calendar year and will not be able to attest and receive a payment until the end of that fiscal or calendar year.

We are continuing to see some EPs come in but if the trend holds true with previous years we will likely see a number of eligible professionals come in at the very end of the year and a number of hospitals come in after the close of the fiscal year. Next slide.

The good news is that we do have a significant number of people I think that a lot of people saw the press release not too long ago that said that we had over 200,000 Medicare eligible professionals. We are now closing in on a 300,000 mark for participating eligible providers that's both EPs and hospitals, but obviously most of them are EPs. So, that is encouraging news. Again, the total universe of this is about 532,000, so we're looking at a little less than three out of five at this point in time. Next slide.

So, this is the breakdown if we look at registered and paid at this point we have about 87 percent of eligible hospitals that have been paid or I'm sorry that are registered for this program. Next slide. And we have a little over 77 percent of hospitals that have actually been paid under the program. Next slide.

Registration is continuing pretty handily for eligible professionals as well. We have almost 75 percent of eligible professionals actually registered for the program. We do expect that we're going to see more registrations this year as this year maybe a payment determine or a payment adjustment determination year for a number of providers. So, we do expect to see a number of them come in towards the end. Next slide.

And the encouraging thing is that for those of you have been watching over the months that blue section of the pie keeps getting smaller and smaller that represents the total number of unpaid eligible professionals at this point in time, but the rest of the pie is growing and those are EPs that have been paid at this point in time. We have a little over 55 percent of all eligible professionals have been paid for either adopting, implementing or upgrading or Meaningful Using a certified EHR. Next slide.

So overall, we got about three out of every four eligible hospitals that have actually made a financial commitment to an EHR or have an EHR in place. We have about one out of every two, 50 percent, of Medicare eligible professionals are Meaningful Users. About 63 percent of all Medicaid EPs have received an incentive payment and now 10 percent of Medicaid EPs are actually Meaningful Users, that's a figure that has been growing steadily.

Overall, as many of you know we've had some recent press coverage about this, over 55 percent, one out of every two EPs are participating now in the program, have received an incentive payment and we've got over 292,000 Medicare and Medicaid EPs alone that have received an incentive payment closing in on that 300,000 figure. Next slide.

This is just a draft overview of what we are looking at in May, obviously a little bit of a slower month as we are processing through the very last of attestations from program year 2012, but it looks like we had about 2700 Medicare providers, 4700 Medicaid EPs, 200 hospitals and 12,500 Medicaid Advantage Organization EPs not all of those EPs are new many of them are returning from a previous year, so they may not add to the number of unique providers but all together we had about 20,000 estimated payments for May we believe and depending on how the numbers exactly come together we do believe that in May we will have surpassed 300,00 unique providers that have been paid under the program. Next slide.

So, I won't go through all of the attestation data but I just did want to highlight a couple of things. If we go to that next slide. Obviously, what we have here Medicare providers and at the time this analysis was run had 194,000 EPs who had attested the vast majority, as always successfully. And then almost 3000 hospitals have attested all of them successful. So, roughly 3000 hospitals out of the total of 5011 at this time, so 3 out of 5 hospitals at Meaningful Use. Next slide.

I did want to highlight that we can continue to see these particular objectives in the most and least popular category drug formularies, immunization registries, generating a patient list for EPs/hospitals, advance directives, incorporating clinical lab test results and drug formularies.

Again, more important I think is for us to look at this second category of least popular menu objectives and look at transitions of care summaries popping up for both eligible professionals and for eligible hospitals it is one of the least selected menu objectives and it's understandable because it is one of the more dramatic lifts and changes in workflow for a lot of providers and organizations, but we're looking at this closely as we move closer and closer to the implements and implementation of Stage 2 where that transition of care summary will become a core objective and is obviously a central part of information exchange within Stage 2. Next slide.

So, this is some of the 90 day performance data and we've looked at some of this before, I just wanted to reiterate a couple of points here. Next slide. We're continuing to see for the most part an upward trend or at least a hold steady in a lot of these places. There are a couple of areas like CPOE where we've seen a drop from 84 to 81 percent which does turn out to be statically significant, but still well above what the requirement threshold is for CPOE in Stage 1.

This is 90 day performance so these are always new providers that came in, new providers in 11, 12 or 13 and we were looking particularly at these different performances because as the program progressed there were concerns that the people who came in the third year might be less prepared than the early adopters who came in 2011. However, the numbers seem to bear out that they are performing at least at the same level if not higher in some cases and the same is true on the hospital side as well.

So, I won't go through all of these 90 days. There is some information too about returning providers on this as well and it also bears the same fruit that we're seeing thresholds maintain very high for the program overall which is encouraging news. I think our challenge is to look forward as we look at Stage 2 and see where we may be able to help some of the providers over that initial hurdle of implementing things like that transition of care summary. So, that is where we are and I will take any questions.

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

Very good, thanks Rob. Any questions from the committee? Okay, very good, thank you and congratulations. So, speaking of drilling down and data analytics about the participation and a little bit more of the details something that the committee asked for and, especially Gayle, so we have an update from Jennifer King to talk about some of the analysis of the data that ONC has been looking at. Jennifer?

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

Great, thanks very much, happy to be here and hope everyone brought a great appetite for data today. I'm going to provide a complimentary sort of data update like you just mentioned in terms of digging down a little bit more into some of the trends that we're seeing in progress to Meaningful Use.

So, on the next slide I'm going to be presenting data around two main objectives, the first is to really understand progress towards Meaningful Use by key characteristics of hospitals and professionals, to understand who is making progress and where any gaps might be emerging and the second to present some information on a few things that might be indicators of trends for the future. So, looking at the experience of professionals who end up registering for the incentive programs and how successful they are in moving through to attestation or incentive payment after they register. And then lastly, presenting a little bit more information the objective performance relative to the thresholds that Rob just presented among those providers who have attested so far.

So, on the next slide here we'll start off by looking at progress to Meaningful Use by key characteristics among hospitals. So, going forward, here we have a snapshot of current progress towards Meaningful Use among the eligible hospital population in the US. So, we combined data on both attestation and payment from the Medicare and Medicaid Incentive Programs along with data on hospitals that are participating with the Regional Extension Center Programs to paint sort of a full picture of engagement with either of the two programs and working towards Meaningful Use.

So, we grouped hospitals into one of five mutually exclusive categories. So, you can see here that 60 percent of hospitals in the US have attested to Meaningful Use either through the Medicare Program or have gotten paid for Meaningful Use under the Medicaid Program. Another 19 percent of hospitals had not yet attested but had received incentive payment on the Medicaid side for adopting, implementing or upgrading to certified EHR technology and then an additional 8 percent of hospitals were registered with the EHR Incentive Programs but had not yet received payment or attested and an additional 4 percent were enrolled with the Regional Extension Center to get assistance with progress towards Meaningful Use but had not yet registered with the incentive programs. So, in total over 90 percent of hospitals are engaged in some way with either the Medicare or Medicaid Incentive Program or Regional Extension Center.

We also merged these data to the American Hospital Association Annual Survey to get information on characteristics of hospitals including bed size. So you can see there in that bottom bar that 67 percent of beds in the US are at hospitals that have attested to Meaningful Use.

So, going forward to the next slide, this provides the same snapshot of progress towards Meaningful Use by 3 key hospital characteristics, hospital size, critical access hospital type and urban/rural location. So, the first two bars there across the top show that large and medium sized hospitals are doing a little bit better than average in terms of their attestation rates, 69 percent and 66 percent have attested, an additional 20 and 23 percent have received payment for AIU.

The next two bars are somewhat surprising, we found that small urban hospitals have lower than average rates of attestation with just about 49 percent of them or just about half having attested so far, but we actually see that small rural hospitals are keeping pace with large and medium hospitals.

And the last bar here shows critical access hospitals. So, those first four are acute care hospitals that are not critical access and we see in this last bar, with critical access hospitals, that nearly 3 out of 4 have attested or received AIU payments, but the attestation rate of 56 percent is a bit lower than among larger hospitals and other small rural hospitals.

One sort of bright note here though is that hopefully REC assistance might help to close this gap going forward. There is relatively high rates of participation with Regional Extension Centers among these critical access hospitals and because of that only 4 percent of critical access hospitals are completely unengaged with either the CMS Incentive Programs or Regional Extension Center. So, overall we see broad participation in the programs among all hospital types, but a big of a lag in attestation among small urban hospitals and critical access hospitals.

So, on the next slide we examined two other key hospital characteristics, system membership and ownership type and we find that hospitals that are members of a system and hospitals that have not for profit ownership have slightly higher rates of AIU payments but we don't see really any big differences here in terms of attestation rates with about 60 percent of all these types of hospitals having attested.

So, going forward we can shift to looking at professionals, progress with Meaningful Use among professionals. So, the next slide, slide 7 again shows a snapshot of current progress to Meaningful Use among the universe of eligible professionals. So, here again we've combined data from both the Medicare and Medicaid Incentive Programs to summarize that just over 4 out of 10 eligible professionals for either program have attested to Meaningful Use either under Medicare or have received a payment from Medicaid for Meaningful Use attestation. An additional 14 percent of professionals have received AIU payment only.

And moving to the next slide to look at sort of overall progress to Meaningful Use by key characteristics among professionals we merged this data from the incentive programs to data from the Regional Extension Center Program to get a full picture of all of the professionals who are engaged with either of the two programs.

So, this slide shows both the number and types of professionals who are engaged with the two programs at various stages. So, the first bar there shows about 226,000 professionals have attested to Meaningful Use either through Medicare or Medicaid and then the next bar over shows that about 300,000 have either attested or received payment for adopting, implementing or upgrading to certified EHR technology. And the last bar shows that over 450,000 professionals are engaged in some way with either the CMS Incentive Programs or Regional Extension Center Program.

And across all of these different categories you can see that the vast majority of these professionals are physicians which is not surprising given the makeup of the healthcare professional population in the US overall, but there are some important minorities that are made up of other professional types like nurse practitioners, physician assistants and some of the other eligible professional types.

So, it's a little trickier to monitor progress towards Meaningful Use by key characteristics among professionals because there is not a nice clean dataset like there is with the hospital side that we can easily merge the incentive program data onto to get characteristics, but one way that we can do this is to compare the characteristics of all professionals nationally to the characteristics of professionals at various stages of Meaningful Use to sort of understand whether or not the characteristics of providers who are making progress to Meaningful Use are representative of all providers nationally. So, we do that in the next few slides and in those slides we focus on the subset of professionals that are physicians just because we have the best data on the physician population at this point.

So, going forward to slide 9, here we examine physician progress towards Meaningful Use by specialty. So, the first bar on the left shows the specialty distribution among all ambulatory physicians in the US. So, about 9 percent of all physicians have specialties that are sometimes categorized as non-direct patient care radiology, pathology or anesthesiology.

Another 51 percent have medical another medical or surgical specialty and about four in 10 have a primary care specialty. We broke out pediatrics here individually because there have been questions about progress among that specialty specifically at previous meetings, so about 7 percent of all physicians have a pediatric specialty an additional 1/3 have a different primary care specialty.

So, looking across at the other bars you can see that in terms of the physicians who have attested for Meaningful Use the medical and surgical specialty group is proportionally represented there about 51 percent matching up quite well to that percentage in the all ambulatory physicians group and you can see that primary care physicians actually make up larger shares of the physicians that are at these various stages of working towards Meaningful Use, which again is not totally surprising given the fact that the Regional Extension Center Program has a large focus on primary providers so it makes sense that that group would make up a larger number of the professionals that are participating with that program.

And in terms of pediatricians specifically you can see that they are slightly underrepresented in the group that has attested to Meaningful Use thus far which is 3 percent being pediatricians, but in terms of the other groups that are on the way to Meaningful Use so those that have either attested or received AIU payment and those that are engaged with the incentive programs or Regional Extension Center Program pediatricians are proportionally represented.

So, moving to the next slide here we examine progress towards Meaningful Use by physician rural, urban location and it's pretty clear to see that there is no evidence at this point of any emerging disparities here. About 10 percent of all ambulatory physicians are located in rural areas and this is true of physicians at the various stages working towards Meaningful Use across the board.

So, now we can shift to looking at a few other indicators of current performance and future trends going to the next slide. The next few slides here are going to look at the experience of professionals who have registered for either the Medicare or Medicaid Incentive Program and the extent to which they've successfully moved onto attest or receive incentive payment. So, this gives us some sort of sense of whether or not the number of providers who have registered for the program is an accurate indicator of the number of providers that might end up eventually achieving Meaningful Use.

So, slide 12 here shows – these two graphs show progress towards attestation among professionals who registered for the Medicare Incentive Program at various different points in time. So, on the graph on the left for example if you follow that blue line that's the group of professionals who registered for the Medicare Incentive Program in January of 2011.

So, if you follow that line across the graph to the right over time you can see that as of December 2011 about 40 percent of these professionals had successfully attested and then if you go over all the way to the right as of April 2013 over 80 percent of these professionals have successfully attested.

In the other colored lines there show these trends for groups of professionals that registered at later points in time and you can see that groups who came in registering a bit later had a faster trajectory up to attestation which makes sense given that they were registering closer to the deadlines. And that as of April 2013 about 80 percent give or take of all professionals who had registered had successfully attested.

And then the graph on the right shows the same type of data for the subset of professionals who were registered for the Medicare Program and also enrolled with a Regional Extension Center and you see that the shape of the trend is largely similar but the success rates are slightly higher with about 90 percent of professionals who registered in 2011 having attested by April 2013.

So, the take away here is that the vast majority of professionals who have registered for these programs have successfully moved onto attestation. We might see somewhat of a plateau effect around 80-85 percent but it's also possible that we'll see those numbers continue to spike up as we get further along in the calendar year of 2013, so something to monitor going forward.

And then on the next slide we have this same data for the Medicaid Program. So, this is looking at progress towards incentive payment either for AIU or MU among professionals who registered for the Medicaid Program at various points in time.

So, again on the left hand graph there if you look at the blue bar you can see that professionals who registered early on in January of 2011, as of December 2011 about 60 percent of them had successfully achieved or received incentive payments and as of the end of our last data collection here in April 2013 over 80 percent of them had received incentive payments.

We see again similar trends on Regional Extension Center professionals but again higher rates of success there with over 90 percent of professionals who are registered for the Medicaid Incentive Program and also enrolled with the Regional Extension Center successfully receiving incentive payment as of April 2013. So, again indication here that registration is a good indicator of intent and success in moving forward through with incentive payments.

So, moving onto the next slide we have the last set of data we're going to present which is sort of an alternative way to visualize some of the data that Rob has presented on provider performance in terms of the core and menu objectives when they attest.

So, this slide here shows the distribution of scores for all of the objectives that have a numerator and denominator score for eligible hospitals. So, the cells represent the percent of attestations that reported a numerator, denominator score in the corresponding range. So, the take away here is that the red cells sort of in the heat map format show where the bulk of the providers are and you can see that the vast majority of hospitals for almost all of the objectives are at the very high range of performance.

Some of the menu objectives have a bit more of a distribution so things like patient specific education resources. Medication reconciliation and transitions of care summary there is a bit more of a spread but still the vast majority of hospitals are at the high range of objective performance.

And then moving onto the next slide we have the same data presentation for eligible professionals and again you can see a similar pattern with the vast majority of professionals being grouped at the high end of performance. And again, similarly we see a few exceptions in terms of the menu objectives. Here you can see that for the patient specific education resources for example there is a small chunk of providers who are just at the threshold but many providers are also at the high end of performance. So, the take away here is that with some exceptions professionals are pretty consistently well exceeding the thresholds for the core and menu objectives.

So, moving onto the next slide, I think this is the end of our data slides, but just to recap we've been monitoring progress for potential gaps in progress towards Meaningful Use and are seeing on the hospital side wide-spread participation among all types of hospitals with slightly lower rates of attestation among small urban hospitals and critical access hospitals, but because of high rates of Regional Extension Center enrollment only 4 percent of critical access hospitals are completely unengaged at this point.

Among professionals we aren't seeing any major gaps emerge by specialty or rural/urban location and both of these trends in terms of hospitals and professionals are things that we're going to be continuing to monitor over time.

And then in terms of indicators of future trends we see that a strong majority of professionals who register for the incentive programs are progressing towards attestation or AIU especially among professionals who are also enrolled with the Regional Extension Center.

And finally, we saw that a strong majority of both professionals and hospitals are exceeding the thresholds for core and menu objectives pretty strongly. So, I'll stop there and happy to take any questions.

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

Thank you, Jennifer. I think that this analysis has been extremely helpful and if I could sort of also summarize. I mean, I think you've shown that you have a nationally represented sample that are participating in Meaningful Use and that's just wonderful, it crosses all specialty boundaries. The vast number are succeeding once they engage with their program. I saw a little bit of your graph – it's interesting I compared that to studying for a test some people plan ahead and they do well and some people are a little bit cramming for the test at the very end they still have a – the majority of them pass with a slightly lower score and that everybody is blowing past the thresholds and scoring A's in a sense to this test.

I might make one suggestion on your color-coding since we all interpret green is good and red is sort of not good yet, you might switch the colors so that all the emphasis is the number of green on the right side, you know, really passed exceeding the threshold. But at any rate it's a wonderful drill down and I think it's very comforting in how broad spectrum that are engaging and succeeding. Let me open it up for comments, questions from the committee?

**Paul Egerman – Businessman/Software Entrepreneur**

This is Paul Egerman, Jennifer this is a great presentation and the way that you are looking at all of this data is based upon eligible providers and hospitals which makes perfect sense. Do you have any data or does ONC have any data that's simply based on the total population of this country? In other words, what percentage of Americans have an electronic health record right now?

And in asking that question I make the observation, you know, I could have an electronic health record even though some of the providers I see may not be Meaningful Use attestors, it may be my primary care provider has an electronic health record, it might not matter whether or not say my ophthalmologist has one or my radiologist has one. So, my question is do you have any idea of what percentage of Americans have electronic health records right now?

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

So, that's, you know, a really good point but most of this analysis is focused on the professionals that are eligible for the incentive programs. We do have some survey data that looks at all physicians nationally so that we conduct in partnership with the National Center for Health Statistics, the National Electronic Health Record Survey of office-based physicians and for example there we found that in 2012 72 percent of all office-based physicians had any type of EHRs. So, not necessarily corresponding to the Meaningful Use functionality, but we do have data like that that can sort of get at the question of nationally overall the percent of providers that are, you know, have an EHR regardless of whether or not they are actually part of the incentive program.

**Paul Egerman – Businessman/Software Entrepreneur**

Yeah, but Jennifer my question was really about not the percentage of providers but the percentage of patients that have an electronic health record. Think about it in terms of sort of a patient or a consumer or a citizen perspective. Do we have any data on that?

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

Let me just turn that phrasing around and it may clarify it a little bit. So, what percent of American residents have their data in EHRs?

**Paul Egerman – Businessman/Software Entrepreneur**

That's correct.

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

So, I'm not aware of a specific number around that statistic specifically. I think that's something that you could estimate sort of by looking at the professionals that have EHRs and then sort estimating what their patient panel might be so you could come up with an estimate like that, but that's something that we can look into to see if that number exists anywhere else or if there is a way that we can calculate it.

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

I know Judy Faulkner –

**Paul Egerman – Businessman/Software Entrepreneur**

And the reason I asked that is if you look at the sort of recent history of the electronic health record, if you go back to 2004, President Bush, put forward a bold statement that every American would have an electronic health record in 10 years, so we're 12 months away from that, but that bold statement was actually I think reiterated in 2009 by President Obama and we talked about every American having an electronic record in 5 years that would be 2014 and I'd just be curious to see are we making progress towards those concepts. I mean, I think we are making very good progress, a better way to say it is, you know, just how close are we?

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

Yeah, that's definitely something we can work on trying to come up with some numbers around that specifically.

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

I know the Judy Faulkner has an estimate for how many US residents have their records in her product system. Do you want to comment Judy or even the methodology how you get that?

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

Well, I think there's two things, one is we have an estimate for how many patients – we do have an estimate for how many patients have a record. Our customers tell us it's like, oh; I'm just going to guess 178 million something like that. But we ratchet that down because one of the things you have to take into account is overlap where a patient is in more than one organization at a time. So, you don't really have a unique patient count then. So, we ratchet it down a bit because of that we've studied some of the states to figure out how much we should ratchet it down and we've done that.

And then we ratchet it back up because lots of times when organizations tell you what the count is they're telling you their number of patients but then if they extend the system to their community doctors who are not part of their organization under the OHCA umbrella – so they're extending it under the OHCA umbrella than that adds more. So, that's how we do it. Does that help, Paul?

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

Yes and you might be asking Paul Egerman?

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

Yeah –

**Paul Egerman – Businessman/Software Entrepreneur**

Yeah, this is – yeah, I know who you're asking but that is helpful, but, you know, I look at this data and it seems like you get numbers like, you know, 60-75 percent of eligible providers have – are involved in our program but I think that means that in terms of the population of the country the number is higher. I think you've got 80 or 90 percent of the people perhaps have an electronic health record. It would be interesting to track that number.

**David W. Bates, MD, MSc – Senior Vice President for Quality and Safety – Brigham & Women's Hospital & Partners**

This is David Bates, I agree, it's just another lens.

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

I wonder if that's something that could be added to the national statistics like NCHS or NCVHS and the kinds of questions – does your physician, does your provider use an EHR and the other one would be and do you have access through, you know, a PHR or patient portal.

**David W. Bates, MD, MSc – Senior Vice President for Quality and Safety – Brigham & Women's Hospital & Partners**

There is data from NAMCs for example about that, the National Ambulatory Medical Care Survey.

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

Right.

**David W. Bates, MD, MSc – Senior Vice President for Quality and Safety – Brigham & Women's Hospital & Partners**

But there is a big time lag and the numbers that we're getting now are much lower than the numbers that we're getting from ONC, but that's in part because things are changing pretty rapidly.

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

Right.

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

And that is a good point about surveys of consumers and patients and there are surveys that have questions about whether or not your physician has an electronic health record, so that's another data source that we could draw on to try to get some estimates of this as well.

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

Right. Is there something the consumer either the consumer group in ONC or the Consumer Empowerment Workgroup of this committee is looking at and assessing both the access and how it's helping them and its impacting?

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

So, that is something that from the data side ONC is monitoring and examining through some original surveys that ONC is doing of consumers as well as partnering again with other federal and other survey efforts. So, those data are forthcoming on patient's perceptions about, you know, sort of actual estimates of whether or not they have electronic access to various tools at their physician's offices and then their perceptions around impacting the fullness of those tools.

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

Paul, this is Art.

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

Go ahead, Art.

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

Jennifer, thank you for the presentation I really enjoyed this and I agree with Paul that the change in color might help. I'd like to go to that last slide that you just showed and just ask a question that reconciles something that I thought I heard in Rob Anthony's talk where he mentioned that the transition of care summary was something that was the least popular of the menu objectives for the EPs, but on this last slide that you have, and let's see have you – yeah, okay, you've gone back, it says that 100 percent of the objective score was reported through attestation and here we have 48 percent there. What does that mean and how does that relate to what Rob was saying about transitions of care document being difficult?

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

Yeah, so that's – thank you for asking that question because that brings up an important point, which is that this data on this slide here is just restricted to the professionals who selected that menu objective and successfully reported a numerator and denominator. So, this does not reflect that fact that fewer professionals actually selected that objective relative to some of the other objectives, but of those who did 48 percent of them reported 100 percent score.

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

Thank you for clarifying.

**Robert Anthony – Health Insurance Specialist – Centers for Medicare & Medicaid**

And Jen this is Rob, if I could jump in. I mean, I think that we have always been encouraged by the fact that even on these least selected menu objectives when providers actually implement they are performing at a very high threshold an indication that when they implement they seem to be able to implement throughout workflow and really incorporate this as part of patient care. It's just because transitions of care summary is such a difficult alteration to workflow for many practices that it tends to be among the least popular.

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

Thanks for the clarification.

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

And this is Gayle; I do have a question now.

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

Go ahead, Gayle.

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

When you look at the dropout rate do you have any analysis or ability to determine why people dropped out? The reason why someone who registered but never completed? If we have 85-90 percent of people who have registered achieving Meaningful Use yet have we re-looked at any of those who have dropped out?

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

Yeah, so that is something that we are looking into and I would say that they haven't necessarily dropped out because they're still registered for the program so it's – you know, once we sort of have hit a bit of a ceiling there in terms of the trend, but there are small numbers of people who do continue to end up successfully attesting or receiving incentive payment even after they've been registered for quite some time and even after their registration cohort has sort of – most of them have already been successful.

So, it's still possible that they will continue onward, but we are looking at characteristics and other sort of quantitative information on how those professionals might be different than other professionals and what might be driving their slower rates of attestation.

And we're also working with the Regional Extension Centers to sort of get a sense of the providers that are enrolled with the RECs and have taken longer to get to attestation after they're registered what might be some of the reasons there. So, I don't have an answer right now but that is something that we're looking at and trying to get more information on.

**Robert Anthony – Health Insurance Specialist – Centers for Medicare & Medicaid**

And Jen, if I could, this is Rob Anthony, we actually have done some investigation into this through some surveys both qualitative and quantitative that we've done on our end and I think we've presented some of this information to the Policy Committee previously, we can certainly revive some of this for next month's presentation and talk about it.

The reasons that prevent people from registration to attestation fall into a number of different categories, there certainly, as Jen identifies, a number of providers that fit into the category of registering with intent to participate but then for various reasons don't get to attestation as soon as they would like to. I think you see a general trend when you look at Jen's tables that over time more and more people are getting to it, but there are still folks that fit into this category that either are not able to implement as soon as they would like to, begin implementation and find that a particular product does not serve their needs so it changes their timeline.

There are a significant number of folks that are able to implement but experience challenges with certain workflow issues, so theirs becomes a long timeline. We also discovered and this I think we addressed in a previous Policy Committee, we also discovered there is a significant number of people who registered because we were very successful with initial messaging. They registered because we told them to register, but when we followed up with them we discovered that knowledge of the program itself was actually very limited.

So, consequently we have spent some time in the last 12 months really focusing on more introductory education material for that market and trying to reach out to that market. We've since gone back and are doing some additional surveys and that still exists, there is still some knowledge gap in this area. So, we're looking at some new ways to try and reach out to those audiences as well to really give them a roadmap, if you will, to how to get to Meaningful Use.

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

Any other questions or comments? Well, Jennifer this was very, very helpful and there are a few suggestions for other kinds of slices you could take and we would love to have updates periodically.

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

Excellent, great, well, thank you all for the comments and questions gave us some great new things to look at and thanks for having us.

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

Thanks, okay, now we'll move onto the Privacy and Security Tiger Team update and they're going to be talking about some of the reconciliation from the RFC comments and talk about the hearing on non-targeted queries.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yeah, great, thank you very much Paul we – so we're – we had an opportunity to take a look at the comments that had been submitted as part of the Meaningful Use Stage 3 Request for Comment that were related to privacy and security, and what we are aiming to do today is to talk about sort of our suggested response to those comments and in many cases the response basically punts, I mean, punt is probably the wrong word, but says, you know, it's not really a policy question that was asked here it's sort of more of a standards or technical question that's probably better served by having the Health IT Standards Committee and it's Privacy and Security Working Group look at the issue.

So, we're going to go through that and as you mentioned Paul we're going to give you guys an update on how we're going to handle the non-targeted query scenario, the scenario where you're looking for a patient's records but you don't know who that patient's previous providers were. We had a fair amount of discussion at the last meeting about that issue and you asked us to gather more information and we're going to do that and we'll give you a little update on that too.

I don't have the slides on my screen but it could be that my computer is frozen, do you all – okay, here we go, great, we can go all the way to slide 4. Okay, great, thanks. So, the first three sets of questions dealt with recommendations around identity management for provider users of an EHR system and you'll recall that we had some recommendations on identity management that we promulgated, we keyed them up to the Policy Committee, the committee adopted them and they are already on the website, but nevertheless there were a few questions that were teed up, by ONC I believe, in the RFC about this issue and these first three questions really deal with that.

The first questions involves how the Policy Committee's recommendation on provider user identity management can be reconciled with the National Strategy for Trusted Identities in Cyberspace and their overall approach to identity, which strongly encourages the re-use of third-party credentials and you may remember the presentation that we got as a Policy Committee about this National Strategy for Trusted Identities in Cyberspace which occurred around the time when we were considering this issue. And the fact of the matter is, is that the recommendations that we did on this issue actually mentioned the National Strategy for Trusted Identities in Cyberspace.

This is a bit of a long answer on the slide here but it basically – what it does is sort of remind folks that we addressed the issue of provider identity management and generally what we said, which is that in remote access environments ideally provider users ought to be authenticated at a Level of Assurance 3, which is beyond user name and password.

But we also acknowledged that there is work being done as part of this national strategy to establish trusted third-party credentials and that that work is ongoing but the solutions are not yet widely available and in fact may not be by the time of Stage 3.

So, as a result we actually expressly recommended to ONC that its efforts on the issue continue to be informed by developments with respect to this National Strategy for Trusted Identities in Cyberspace otherwise known as NSTIC and include the work that is being done in the NSTIC pilots which includes specifically a pilot dealing with identity management in the healthcare space.

So, it sort of felt a little bit like asked and answered on this one and it could be more of a timing issue in terms of sort of questions on the RFC versus when we were able to complete our recommendations and get them posted on the web. Next slide.

The other question that was in the RFC was how would ONC test the recommendation that we made for two-factor authentication at least in remote environments in certification criteria and here we really felt that this wasn't asking a policy question, this was asking a technical question around implementation and certification and so therefore we thought that it would be best answered by the Health IT Standards Committee in particular their Privacy and Security Workgroup. They have a process in place for dealing with responses to the RFC and we really felt like they were the ones whose expertise should address this particular question. Next slide.

And then the third question that comes up on this issue of identity management is whether ONC should permit certification of an EHR as a standalone for authentication purposes or is it possible to do EHR along with a third-party authentication service provider and our response was well there isn't any reason to say that it has to be one way or the other and that in fact both should be permitted, again, though this is another area where on matters of certification the Health IT Standards Committee is likely to weigh in on this issue as well. Next slide.

So, here is a question that really gets to the heart of how we have treated the issue of privacy in the Meaningful Use criteria in the first two stages, which is to shine a spotlight on certain existing provisions of the HIPAA Security Rule and require Meaningful Users to attest that they have addressed those particular provisions. So, you'll remember that in Stage 1 the requirement was to attest to doing a security risk assessment and addressing any deficiencies that get uncovered as a result of that assessment.

In Stage 2 you will need to continue to do or update your risk assessment but you'll also have to, in that risk assessment, specifically address how you deal with encryption of data at rest and attest to having addressed that issue, which is not to say that you're required to encrypt all data at rest but instead to address that issue and that's what is currently required under the security rule.

And so there was a question that arose that actually was a question generated by the Tiger Team for the RFC which is what other security risk issues should be subject to Meaningful Use attestation in Stage 3? And then we sort of added a question for our own consideration which is, would we want this to be in lieu of or in addition to existing attestation requirements, which I just summarized for you all, and we added this question in part because of our own efforts collectively as a Policy Committee and in particular the work of the Meaningful Use Workgroup to look at streamlining Meaningful Use objectives and consolidating in some way and so we thought we ought to be part of that effort. Next slide.

So, we actually ended up having a fair amount of discussion of this issue and I think in general we – and the bottom line is that we are still discussing it, we are leaning towards not requiring any additional security rule provisions to be attested to for Stage 3 but we remain concerned that the security risk assessment, based on survey data and information that is coming through as part of the HIPAA audits that the Office for Civil Rights is doing, that that requirement in the security rule is still really not being done, which raises the question of whether, you know, sort of merely having people attest to having done this, done a security risk assessment and a check the box way, whether that's really the most effective way of ensuring that these security risk assessments are being done first of all much less being done well.

And this is a bigger question that we're forming a subgroup to dive into in a little bit more detail and our aim is to provide you with an update consistent with our schedule overall for handling Meaningful Use Stage 3. We really sort of feel like this has been our sweet spot for how we handle privacy and security issues in the Meaningful Use Program overall and we're really sort of eager to try to figure out what's the best way to approach this in Stage 3. Next slide.

So, the next set of questions are a set of questions regarding audit logs and there is in fact an audit log standard that is required for certification for Meaningful Use and it is part of the sort of collection of security functionalities that are required for the base EHR. These questions were not generated by the Tiger Team but were proposed as part of the RFC and we have some responses to them that we're summarizing here for you today.

The first question is whether it's feasible to certify the compliance of electronic health records based on the prescribed existing standards for audit logs. This is another one where we really sort felt out of our element here, it's a technical question, it's a certification question as well and we really thought that the Health IT Standards Committee is the one to address this, but there were a number of Tiger Team members who wanted to know that they also questioned the adequacy of the standard, so you'll see that here on the slide, but in general we really felt like we were not – that this was an issue that was sort of outside of our purview. Next slide.

So, in this next question, again on the issue of audit logs, should there be a requirement for attestation by Meaningful Users that the logs are being created and maintained for a specific period of time? And here our response to this is that the HIPAA Security Rule currently does not require audit logs to be maintained for a specific period of time and so as a result we really didn't see a reason to put forward additional policy that would specify a timeframe.

We really thought that covered entities, you know, Meaningful Users both on the professional as well as the hospital side should make up their own decisions on audit trail maintenance periods based on their own security risk assessments and really the internal policies that they develop in order to address those risks. Next slide.

Should there be a standard format for audit logs? Is there a requirement for a standard format for the log files of EHRs that will support analysis of access to health information across multiple EHRs or other clinical systems in a healthcare enterprise and our response to this was that we certainly could see some arguments in favor of standardizing formats for log files. We generally thought, you know, in terms of sort of whether the priorities for Meaningful Use attestation and acknowledging the fact that we're trying to streamline this program and make it less burdensome for providers, we really didn't think that this would be a priority for the Meaningful Use Program and we felt again the HIPAA Security Rule guidance itself does not provide any particular audit trail format and sort of leaves this up to institutions to make their own determinations based on their security needs and we felt that was a good place to be landing at this particular point. And next slide.

And then the last question that came in on audit logs was again a format question. Are there any specifications for audit log file formats that are currently in wide-spread use to support such applications? Again, I think this is along the lines of seeking for some common standards and common approaches to this. And here again we looked to the HIPAA Security Rule which does not require any particular format and really leaves it up to the institution and we didn't feel that there was anything more from a policy stand-point that needed to be said on this issue. Of course, the Standards Committee, you know, certainly is within their purview to determine if there are certification needs for greater audit file format specification here. Next slide.

So, the last set of questions that were proposed as part of the RFC dealt with the issue of consent, specifically the RFC acknowledged that there are existing laws at the federal levels regarding substance abuse treatment data as well as at the state level that establish detailed requirements for consent for information in certain sensitive health categories and we've certainly had discussions around this topic before so this is not an unfamiliar topic to the Policy Committee. Here are – next slide.

Here are the three specific questions that were part of the RFC. How can EHRs and HIEs manage information that requires consent to disclose so that populations receiving care covered by these laws are not excluded from the health information exchange?

The second question involved how can Meaningful Use improve the capacity of EHR infrastructure to record consent, limit the disclosure of this information to those providers and organizations specified on a consent form, manage consent expiration and consent revocation, and communicate limitations on use and restrictions on any re-disclosure, which is part of the federal substance abuse laws, to receiving providers?

And then the final question is whether there are existing standards such as those identified by the data segmentation for privacy initiative implementation guide that are mature enough to facilitate the exchange of this type of consent information in today's EHRs and HIEs?

And so in many respects these questions are a similar set of questions that we have struggled with ourselves on the Policy Committee both in terms of sort of the underlying policy rationale for these consent laws that the countervailing considerations around treatment, the technical questions that we have tried to grapple with are also reflected in the Request for Comment. Next slide.

And there were a range of comments that were submitted here and they're quite reflective of the very types of issues and concerns that Policy Committee members themselves have raised on this issue. And as a sort of first response to this set of questions on the issue of sort of technical requirements to enable entities to at least pass along the existence of a consent requirement and to be able to share consents when they need to acquire them.

We actually did address some portion of this in our recent recommendations with respect to query response for the scenarios where we have resolved recommendations, which is in the circumstance where you are querying or asking for a patient's record from a specific provider or a set of provider organizations. And what we said and what's in our transmittal letter as an improved recommendation is that certainly data holders and requesters should comply with the applicable law and policy, they need to do that and should ideally have a technical way to communicate an applicable consent or authorization need and requirement. And that ideally they should have a means to maintain a record of that kind of a transaction.

But work from the Standards Committee is really needed here to consider how this gets done from a technical stand-point so that you at least have the capacity to exchange the need for a consent where it exists and then to be able to exchange that consent when you have it and this doesn't get into the issues necessarily of segmentation but it's sort of a first order technical problem of just exchanging the fact that you need a consent what that consent needs to look like and then have that consent be communicated and then ideally be recorded and can that at all be done by the EHR?

So, we said from a technical stand-point, from a policy stand-point it would be nice to have a technical capacity ideally to do this, but it really, you know, it's the Standards Committee that can help us think through whether this is possible and if so what would that look like in certification.

On the questions related to data segmentation or data sequestration, or any other term that you want to use to talk about withholding certain portions of the record because you don't have patient consent to share them we really felt like the pilots, the data segmentation for privacy initiative pilot projects, which we've heard about from Joy Pritts and Doug Fridsma and that were really fairly recently launched it's kind of too early to know what the results of those were and we really didn't feel like we could further discuss this issue given the enormous complicated issues that arise many of which are technical in nature until we hear a bit more about what is going on with these pilots and so we have said we really need to defer discussion of this issue.

And it may be that we will need more time to discuss it then we have for other RFC questions related to Meaningful Use Stage 3, but we have asked ONC for regular updates on these pilots and we will be getting them and so I think we'll sort of have a better sense of when we would be more prepared to answer this set of questions, you know, as the months go along. Next slide.

So, here just giving you all an update, so that sort of concludes our discussion of the RFC questions. We have resolved most of them. The one on security rule provision attestation and the security risk assessment is one that we will get back to you on and we have deferred – and we'll get back to you on relatively soon and we have deferred further discussion of issues involving data segmentation until we have more experience in the pilots.

As Paul mentioned at the start of our presentation here we have scheduled a virtual hearing on the issue of non-targeted query, again, this is query where you don't know where the patient's records are because you don't know who the patient's previous providers are and you're trying to look for the patient's record using information about the patient.

And we were specifically asked by the committee to take a look at this landscape and find out who is deploying non-targeted query models and what are the circumstances under which you can execute a non-targeted query and who can do it and are there any particular limitations that are put on queries in order to ensure that any access to a patient's record using this model is appropriate, legal and authorized.

We don't actually have the date on this slide and my apologies to you for that because we have the date for the hearing and it's the afternoon of June 24<sup>th</sup>. So, if there are any member of the Policy Committee who is not on the Tiger Team and who would like to participate in this hearing, you know, please let us know and we'll add you to the list as we finalize the questions that we're going to deal with in the hearing and the list of testifiers, and, you know, we've already scoped out a number of potential targets who will be hearing from us and hopefully we'll have quite a robust bit of information to chew on and get back to you on with respect to recommendations in this space. So, before we open it up to Paul Tang for some questions from the Policy Committee I want to make sure from my Co-Chair, Paul Egerman, that I covered this okay?

**Paul Egerman – Businessman/Software Entrepreneur**

Yes, Deven you did a terrific job and the only thing I would add is the RFC process itself was extremely helpful, the comments from the public were really terrific and so this was a very good exercise.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yeah, thank you Paul.

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

Deven did you say that was June 24<sup>th</sup> or July 24<sup>th</sup>.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

I think its June, hold on, it's June 24<sup>th</sup>.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

It's June 24<sup>th</sup>.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yes.

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

Well, thank you for that update and these are always challenging but always very interesting questions.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Never a dull moment.

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

Never a dull moment in this, because we're blazing new trails. Let me open it up for committee questions and comments? Wow. So, we're anxiously – I guess we're anxiously awaiting the combination of the hearing results and some of the more challenging questions that have to do with the data segmentation and consent and management, and I think you're awaiting some of the pilot work on that as well.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Yeah, that's right. I think this set of questions – there were so many of them that were really technical in nature that will need input from the Standards Committee on that I sort of hoped that we would get exactly the response that we just got, which is keep going, address the issues that are likely to be more contentious and come back to us and we will.

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

Okay, thanks very much Deven and Paul. Okay, well we'll move on and we're making up some time to the Health IT Workforce update and as you recall this is 118 million dollar investment in workforce development, we all recognize how important that is not only for the IT staff, the clinical IT staff that are implementing these things but all of us users who have to use them effectively and there is a culture change, there is a mindset and there is just proficiency at using these systems well. So, we're going to hear some of that, what's going on and some of the results of that work and Larry Wolf is going to help lead us.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

So, Paul, this is MacKenzie, let me just do a time check since we are running about a half hour early, I just want to see if all the Health IT Workforce speakers are on the line, if not I'm going to turn it to Jodi Daniel to do the ONC updates part.

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

Okay.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

To give people time to join. So, Larry are you on? Chitra? Okay, so there are the first two that aren't on, so Jodi are you on the speaker line? I know Jodi is on.

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

Can you hear me?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Yes now we can.

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

Okay, sorry, I was trying through my headset so it would be clearer but it's not working.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

So, Paul if it's okay with you I'm going to see if we can tee up the slides for the ONC updates for Jodi to present and then hopefully we can have the rest of the Health IT Workforce people on the line?

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

Absolutely, thank you MacKenzie.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thanks, Jodi I'll turn it to you and if Caitlin or someone at Altarum can tee up the ONC updates part we'll have to go back to the Health IT Workforce update.

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

Great, thank you everybody, thanks Paul, thanks MacKenzie, happy to jump in and help keep things on schedule. So, before this gets teed up there were – I also wanted to welcome the new and returning members to our Policy Committee. So, just to reiterate David Muntz had already mentioned our two new members Alicia Staley who was appointed by GAO as a new patient consumer advocate representative and Scott Gottlieb who was appointed by Senator McConnell.

We also have two members that have been re-appointed so I wanted to mention those and thank them for their service, Gayle Harrell has been re-appointed by Senator Boehner and I'm sorry by Speaker Boehner, and David Lansky has been re-appointed by GAO as the purchaser employer representative. So, we thank both of you for your continued service and thank our new members for joining when we do get them to participate I think on the next meeting.

So, with that you can go to the next slide. So, I've got a whole list of things to cover just basically some quick updates on a couple of different activities that are going on, some reports that have recently come out and some new activities that are just kicking off underway, some of them are in the slide deck and some are going to be new. So, next slide, please.

I know David talked a little bit about Health Datapalooza which just was Monday and Tuesday of this week, it was really a great event. Some of the themes that I heard were there was a lot of discussion of use of Blue Button data and Blue Button Plus.

There was also some – there was definitely a theme more on the consumer engagement side than I've heard in past years including discussions about self-tracking information and how people are doing that both electronically and in paper and how that information can be incorporated or combined with clinical information either through – you know, by having some patient generated health data that can be incorporated or shared, or exchanged with the clinician and I know there is a lot of discussion in the Meaningful Use Patient and Family Engagement Subgroup on that topic, and there was a lot of support for that continued discussion in the Health Datapalooza community that was forming.

I wanted to note that ONC announced a Blue Button Plus co-design challenge, innovation challenge that is just kicking off and will take place through the summer. The goal here, it's really interesting that we're trying to do something different which is to have amplified voices of patients and caregivers and have them describe new tools and applications that will help them understand the Blue Button data and to use that information to take care of themselves and their loved ones.

So, what we have done is we are asking for folks to share ideas and to vote on the ideas that have been shared through June 11<sup>th</sup>. I'm going to give a website so if you're interested in looking at what people have identified giving you own ideas or voting on them I'm about to give you a website to go to it is [ideas.healthtechhatch.com](http://ideas.healthtechhatch.com) and we'll send that out to the committee members but it's [ideas.healthtechhatch.com](http://ideas.healthtechhatch.com) you can find it through our website as well.

But the goal here is really to get real people to tell developers what they want so that the tools that are getting developed aren't what we think people want but what real patients and caregivers are telling us they want. So, over the summer the developers around the country will build some of the most popular ideas and also receive co-design support from patients on this [healthtechhatch](http://healthtechhatch.com) platform.

So it's really kind of an innovative approach we're taking to our innovation challenges to build that co-design in with the people who would use the technology kind of going back to what we've been encouraging vendors to do with providers to really incorporate the users in designing the product in this case the users being the patients. In August we'll have people vote for the winner and we'll be awarding the prizes at that time. So, please share your ideas and vote.

Next, next slide please. So, just briefly the third annual Health Privacy Summit starts today in DC with key notes by Todd Park, Chief Technology Officer and the European Data Protection Supervisor I don't know if I'm going to say this name right, Peter Hustinx, the discussion will be centered around the challenges of ensuring personal control over health information in the face of rapid global deployment of Healthcare IT and on-line technologies. So, I thought with our falling on the heels of our Privacy and Security Tiger Team that people might want to know about that and pay attention to any of the discussions that come from that summit. Next slide, please.

Again an announcement about activities going on, there is – CMS has launched a bi-weekly national provider webinar series for the healthcare community and the first call will on Thursday, June 6<sup>th</sup> from 12:00 to 1:30 p.m. The focus is on advancing interoperability through Meaningful Use a refresher course and given the number of people who have already signed up I think it's well over 1000 in the 1800 range, I'm thinking that a refresher course is really in need, so, please, folks can go to the website that's listed here to register and listen in, it should be a good session. Next slide, please.

So, onto the more problematic stuff, the Beacon Community Program was a three-year program which was really designed to increase the quality, efficiency and sustainability of healthcare through Health IT. On May 22<sup>nd</sup> the Beacon Community Program put out a paper reflecting on the three-year program and talking about some of the lessons learned from the field.

There is also a video cast of lessons learned that's on our website, [healthit.gov](http://healthit.gov) to find it, I'm not going to read this whole URL out because it will get lost, but you click on the red policy tab and then look for the Beacon Community Program and you can find that video cast. Next slide, please.

Okay, again moving into some activities that are underway, we've talked a little bit about our governance activities in recent meetings. I just wanted to keep people up-to-date on this. We have kicked off the National HIE Governance Forum in collaboration with NeHC who is our cooperative agreement partner. The forum is for HIE governing entities and there are over 30 organizations represented on the forum at this time. We just established a steering committee to help kind of hurdle the 30 organizations and so I think that will really help us to move things along.

The goal here is really in the next few months through the rest of the year is to try to develop some – identify some of the promising practices which support the principles we set forth in the governance framework that ONC recently released and we're starting by focusing on some of the trust principles that we put out including notice and meaningful choice.

So, again, here I have – the website listed here where you can find more information about the governance forum. The meetings are open for folks who want to listen in even if they are not one of the participating organizations. So, if that's something you're interested in you should feel free to listen to the discussion and the notice of meeting should be at that website. Next slide, please.

We have a series of reports that have recently been put out and I'm not going to go into detail on these I just kind of put them all up on the deck here, two regarding unintended consequences one focused on consumer eHealth and one on health information exchange.

So, when we first kicked off this effort with Westat the goal here was really to start thinking about what are some of the unintended consequences of what we're doing so that we can be better prepared to mitigate any risks, to manage the unintended consequences and to set policies that are at least, you know, informed by and perhaps can help address some of those.

So, there is one report on consumer eHealth and unintended consequences which list strategies for achieving the benefits and preventing or mitigating some of the adverse events that could come about in the area of consumer eHealth and similarly on the HIE side we had a Workgroup that identified unintended consequences regarding health information exchange and came up with 7 categories of unintended consequences. Again, these are available on our [healthit.gov](http://healthit.gov) website under that policy tab.

In these reports there are some recommendations at the end and we will consider those recommendations as we always do in light of our competing and our ongoing activities and budgets, but they've been really helpful in honing our thinking and in giving us some input from some experts in the field on what we should be aware of and paying attention to.

There is also a report on advice to HIOs and HISPs for Meaningful Use Stage 2 transitions of care. This is done under contract with an entity Audacious Inquiry and really the purpose is to provide health information exchange organizations and HISPs with some additional advice on how to support the transitions of care measure so that we can really help support folks who are trying to meet Meaningful Use and particularly in this exchange area which is one that we really think highly of and value as we're trying to promote health information exchange nationwide.

And finally, there is a report on understanding the impact of Health IT in underserved communities and those with health disparities. This was released on May 10<sup>th</sup> and it's really focused on how providers in medically underserved communities and communities with disparities can effectively implement Health IT. Again, all of these are on our website [healthit.gov](http://healthit.gov) and I think all of them should be available on the policy tab but I can verify that. We can also provide you will links to all of these; the URLs are quite long so I'll have to put it in a separate e-mail. Okay, next slide, please.

Okay, so this is just a resource for folks but I wanted to make people aware of. ONC posted videos to walk folks through the basic concepts of HL7 consolidated CDA standard and how to meet – how it can be used to meet the 2014 edition EHR certification criteria. The videos review core features of the standard, requirements placed upon the use of the standard by the certification criteria and the nuts bolts of how certification testing is performed for these criteria. Again, this can be found – this one actually shows the website that red tab, the policy tab, on our healthit.gov website. So, please take a look at those.

And then the last one I actually don't have a slide for, this is late breaking news just announced but it falls perfectly on the heels of our conversation this morning with Joe Selby on PCOR, we have recently just released a contract on patient centered outcomes research so let me tell you a little bit about this and how it relates to what you heard today with PCORI.

So, under the Affordable Care Act there is money that was directed toward PCORI the Patient Centered Outcomes Research Institute to support patient centered outcomes research efforts but there was also a significant pot of money that was given to HHS to build the capacity for patient centered outcomes research and the infrastructure and it was almost 200 million dollars through fiscal year 2019 for this purpose versus the, I'm sorry, via the Office of the Secretary. This is through the patient centered outcomes research trust fund.

So, what ONC had done in trying to figure out how best to lay the groundwork for this infrastructure for patient centered outcomes research we wanted to take a step back and look at where there were strategic opportunities and kind of a blueprint for how we might go about helping set forth that infrastructure that can support all of the efforts that PCORI is doing and that others are doing with the PCORI grants.

So, this is – the PCOR Strategic Opportunities Project is contract that ONC has, but it was just awarded in collaboration with ASPE, the Assistant Secretary for Planning and Evaluation, and we are leading our HHS cross departmental effort to identify the strategic opportunities for building a comprehensive, interoperable and sustainable data infrastructure for patient centered outcomes research. The contract was awarded to NORC, the National Opinion Research Center, to assist with this effort.

During the effort NORC will be assembling multiple advisory groups to explore different standard policies and services required to establish this infrastructure and ONC will be posting documents from this effort for public input. So, I encourage folks to stay tuned for information on how to get involved and to follow along as we start putting some things out from this.

We literally just announced this I think this morning and we'll just be kicking off the project so there is no additional news at this point as far as opportunities but they will be coming out shortly so please stay tuned, pay attention and I will try to make sure in my updates in the future to let folks know if there is an opportunity.

This is a 10-month project where early in 2014 we'll have a final report on the strategic opportunities for patient centered outcomes research infrastructure that we will release and that we'll use to help direct the other activities and use of funds to make sure that we have an infrastructure that can support this important effort. And that is all I have. Questions?

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

Thanks, Jodi. Now, this last one that you mentioned and how does that – because we just heard from Joe Selby about the PCORI's grant program and their infrastructure, how do these two relate?

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

So, we've been talking regularly with PCORI and some of – you know, some of our thinking is requested in the grant proposals that they've put out and the RFPs that they've put out, and they've been giving us some feedback as well on our work, so we've been having regular conversations.

What we are working on is making sure that we have the technical and policy infrastructure that will support these efforts, you know, are there areas where we need standards, are there areas where we need policies regarding how information is used or shared, are there practices that need to be put in place, are there things that HHS can be doing to help support that?

So, we're really looking at the underlying infrastructure. We are working closely with PCORI to make sure our work is complimentary and not, you know, and that we're not kind of tripping over each other. So, I'm sure that that will happen. Like I said, at this point we are trying to develop the strategic framework for what HHS's piece of the pie is and how we'll build that, you know, how we'll support that infrastructure.

So, it's kind of early at this point to know what's coming out of it because we're going to have this very public and very collaborative process to try to work through that but it is in collaboration and with discussions with PCORI.

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

Okay, thank you. Comments, questions from the committee?

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

Hi, this is Gayle; I do have a question if we could –

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

Go ahead, Gayle.

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

Can we make sure some of those links, if you could e-mail us the links to the various things, you named off so many things Jodi it's amazing how much is going on and I appreciate that update, but I think there are some specific things we might be interested in taking a more detailed look at. So, if you could make sure that you send out an e-mail with the links and that would be –

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

I will make sure that happens, thank you Gayle.

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

Yes, I also wanted to ask on the relationship between PCORI and our committee and what we see as developing policy related to patient centered research, outcome research and what do you see that linkage and how do you see that developing and is the intent to use electronic health records to facilitate that research or what's the linkage?

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

So, that's a great question. I think that the – you know, again this is early data so I'll just give you my personal view, but there are various different sources of data that I think will eventually go in patient centered outcomes research. I think the EHRs provide a very valuable source of information that can be used for PCORI activities but also there is claims data and I think one of the greatest untapped areas that can be used for research and for particularly patient centered outcomes research is information that the patient has.

So, we're talking about all three as sources of information to support patient centered outcomes research, but the EHR is going to be a very – of that data and then the question also is not just how that information is used for patient centered outcomes research but how the results of that research get fed back to clinicians and patients so that they can benefit from that research in less than the 17 year lag period that occurs now from the time research is put into practice.

So, we're looking at it from both stand-points both the flow of information to support research and then the flow back of the results into, you know, into the decision making process of patients and providers. You know, I think that we very much want to make sure that we're not creating two different infrastructures that the ground work that has been laid by the Policy and Standards Committee and recommendations to ONC and our work supports this effort, and that we can, you know, use, you know, standards that can support both the clinical care as well as research as opposed to kind of creating a new and separate infrastructure.

So, we're trying to – the reason I think that it's really important for you all to know what's going on with the PCOR and PCORI efforts is to make sure that as things are moving forward there is a coordination of the work so that it isn't – so that we don't have two different paths and then we create either confusion, lost information, you know, systems that can't talk to each other all of that. So, we wanted to make sure that we're both coordinating on policy, standards as well as how we're thinking about the clinical use of information and the research use of information. Does that help?

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

Okay, any other questions or comments? Well, thank you very much Jodi always a lot of work going on at ONC and it's great to be kept informed.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

So, Paul, we now have everyone for the right on time 1 p.m. Health IT Workforce update on the line so we can turn it back to them and then we can have the OST portion of the ONC updates once they are done presenting if that's all right with you?

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

That would be wonderful, thank you.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Okay, so I will turn it over to Larry Wolf.

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

Oh, good morning, good afternoon depending where you are it's great to be back. Last month when I presented the work of the Workgroup, Sub-Workgroup it was clear that we had done a lot of learning during our months of working and it might be helpful to pass some of that on to the Policy Committee as a whole and so part of the thinking – actually, can we advance the slides or I guess back them up technically, yeah, great, next slide. So, the plan, let's go one more slide, great.

So, the plan for today is to acknowledge a couple of things that we heard and then to provide some education on some of the activities that ONC has taken on and then to have time for discussion. So, at a macro-level I left last month with the clear message that we need to be bolder, questions like how to bring all this activity to scale, things like crowd sourcing of training materials or use of massively open on-line courses things like that. But that's not what I'm going to talk about today just to acknowledge that is something we are chewing on. I've had some further discussions with ONC to get their thoughts on that so there will be subsequent updates on that.

But we also heard that there was interest in what ONC has done. So, this is going to be a report back on some of the ONC activity. We're saying the stuff is sort of a mini-hearing if you will. We have several presenters who have been the recipients of ONC grants who are going to talk about some of work that they've done for about five or six minutes each and that will hopefully give us time for discussion with the committee as a whole. So, with that I'm going to hand it over to Chitra who has been our very able and talented ONC guide through all of this.

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

Next slide, please. Next slide. Thank you, Larry. So, several studies have continued to highlight the scarcity of trained Health IT workforce as a barrier to success. The framers of the HITECH Act recognized this and made provisions for funding training programs. So, in order to meet the shortage of HIT professionals, ONC funded the Workforce Development Program and the goal of the program was to train a workforce of skilled Health IT professionals.

The program consisted of four initiatives: the curriculum development centers and five universities were funded to develop curriculum that could be utilized by the community colleges to stand up training. Bill Hersh will provide more detail about this program. The community college program, the goal of this program was to build a training capacity of 10,500 trainees per year. And then the third piece of this group was the competency exam which was designed to test the assessment. And the fourth one was the university-based training program where we funded nine universities and the goal was to train 1500 students. Next slide, please.

The Community College Consortium Program puts the largest of the four programs at 17 million dollars and we funded five consortia that comprised of 82 member colleges. The colleges were required to implement six-month training programs with students that either had a healthcare background or an IT background and the training then supplemented the piece that they did not have and they utilized the curriculum that was developed by curriculum development centers. Next slide, please.

The community college programs were really designed to train the boots-on-the-ground staff because it was felt that we would need people right away to help the Regional Extension Centers facilitate the implementation of EHRs and to support an electronic healthcare environment. Examples of this were the roles where implementation support specialist, implementation manager, practice workflow redesign. The university training programs were designed for graduates and postgraduate level education such as research and development scientists and programmers and software engineers. Next slide, please.

The competency exam was a six million dollar program and this was a cooperative agreement with Northern Virginia Community College, the funding provided support for the development, testing and implementation of a mechanism to assess whether examinees have obtained a certain set of Health IT competencies. The grant also provided vouchers for free exams available to eligible individuals. Although the grant ended March of 2013 the exam will continue to be administered through the American Health Information Management Association or AHIMA. Next slide, please.

So, what were the outcomes of these programs? The community college program, as of April of this year, has trained 18,845 students and we currently have enrolled in the program 1587 students. Seventy-three of these 82 community colleges will continue to sustain these training programs post funding. Some of the rural community colleges didn't feel like they would have enough students so they will not sustain the program.

The five university-based training programs have trained 1258 students as of April of this year. They currently have 494 students in the program. All nine of the universities will sustain their programs once the funding is over. The five funded curriculum development centers created robust training material that is now publically available to educational institutions to start, enhance or expand current training programs. The material has been extensively used and was actually downloaded by people in 111 countries. They also had a lab component that was part of this program and Bill will go into more detail about that. The competency exam that ended in March provided 9524 exams to students. Next slide, please.

So, the funding provided through the HITECH Act established a foundation for training resources that will endure beyond the funding period. We have several student success stories that have found jobs and actually saw an increase in their salaries. Bellevue College developed some customized training material for rural providers that is now freely available on the Department of Energy's Training and Education Resource site and Patricia Dombrowski will go into more detail about her program.

Cuyahoga Community College is developing learning resources for patient centered medical home, HIE and MU in addition to a framework for mapping training resources to workforce roles. Rita Horwitz and Norma Morganti will provide further details. The funding colleges having implemented these Health IT training programs were also able to leverage other funding streams to continue to expand the training. Examples are Johnson's Community College in Kansas, St. Louis Community College in St. Louis and Bellevue College are some of the examples who got recipients of Department of Labor Grants and with that I'll turn it over to Patricia Dombrowski.

**Patricia Dombrowski, MA – Director, Life Science Informatics Center – Bellevue College**

Thanks, Chitra.

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

Oh, I guess Bill goes next? Bill is –

**Patricia Dombrowski, MA – Director, Life Science Informatics Center – Bellevue College**

Okay, thanks.

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

I'm sorry.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

No problem. Can everyone hear me okay?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Yes we can Bill.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

Okay, great, well, thank you for the opportunity to talk about this project which actually the grant funding it is over but hopefully we will find ways to sustain all the work. My name is Bill Hersh I'm the Head of the Department of Medical Informatics and Clinical Epidemiology in the School of Medicine at Oregon Health and Science University. Next slide.

So, as Chitra said the Curriculum Development Program or the full name Curriculum Development Centers Program were cooperative agreements awarded to five universities with a long history of educational activities in informatics to develop the Health IT curriculum. The grants were awarded in April of 2010 it's hard to believe that it's more than three years and it's all over now, it was certainly a big part of our lives during that time.

In addition to my university there were awards to Duke, Columbia, Johns Hopkins and University of Alabama Birmingham. There was an additional award made to my university to serve as the national training and dissemination center which has created the website where the materials can be downloaded and in fact the materials are there right now even though the grant has ended we're keeping the website up until we can come up with a plan for sort of a final disposition of the materials. This is the third version. Like all things each subsequent version got better and improved. Next slide.

So, the curriculum that we developed consists of 20 components a lot of this was the brainwork of Chuck Friedman who developed ideas behind this program. These 20 components are basically courses equivalent to a college course and the topics should probably not surprise you there are the major issues that people who work in Health IT need to know everything from sort of basic understanding of healthcare and information and computer science to things more specific to Health IT like networking, standards, quality improvement, etcetera. Three of the components you see are listed in red and asterisk that's because these have hands on lab materials that Chitra referred to making use of the VistA system. Next slide.

So, each of these components has about 8-12 units so again comparable to a course in a community college or for that matter a university. Each of those units then has lectures; each lecture has voiceover PowerPoint flash presentations so basically a narration done using professional narrators. We also make available all the source materials, the slides, the MP3 audio file and also a transcript of the materials are accessible for those with both hearing and visual difficulties.

It's not just about lectures there are also learning activities, discussion questions and self-assessment questions. I think an important point to remember is that the audience for these materials while anyone can download them and a lot of people have and done good things with them but really the audience is educators who take these materials and turn them into courses or other types of learning experiences. Next slide.

Just a few comments about VistA early on in the program, actually after the grant was funded this wasn't in the original call for funding, but it became clear to us that we needed some hands on materials and fortunately were able to work with the VA to get a version of VistA.

The original version that we got, because it's the one from the VA uses a commercial MUMPS interpreter environment and we ultimately wanted to try to find a way to not have to use that so we worked with the world VistA community and actually got from them a system some of you may be familiar called GTM that runs in a virtual machine because it's a Linux Application and again, this version of VistA can be downloaded and runs on pretty much every Windows installation. Next slide.

Just some statistics, the whole thing, just to give you an idea of the magnitude is 11 gigabytes so it takes a while to download. The 20 components contain almost 10,000 PowerPoint slides and if you listen from beginning to end of the audio it would take five days, 16 hours and four minutes.

We also developed a search engine on the NTDC site that enables people to search over all the textual material and some of you know I write a blog and I describe in more detail the curriculum in this posting that is linked on this slide. Next slide.

So, again, to get the materials anyone can go the website you have to set up a profile and then you can start downloading to your heart's content. There is also a matrix that was developed early on that is kind of a set table or a crosswalk between the workforce roles and the components, and again, going back to Chuck Friedman, this should be viewed as an educational buffet that you can take bits and pieces it's not a sort of final refined beginning to end kind of curriculum. Next slide.

Just a few comments about the intellectual property issue, as with all federal grants the universities own the intellectual properties but we all agreed that we wanted wide dissemination so adopted a creative commons attribution non-commercial share-alike license meaning that basically anyone can do whatever they want with this as long as they attribute the originator of the work, don't turn around and resell it although they can use it in courses that, you know, they can charge tuition for courses they develop but they can't just sell the materials and that any changes made then are redistributed under this same license, so giving people wide leeway. Next slide.

And that's pretty much all I want to say about the curriculum. I just wanted to make one more point just to let you know that there are real people that a lot of us in these workforce programs have touched, this is a picture from a couple of days ago at the OHSU graduation and this is actually only a fraction of those who did the UBT Program but I just wanted to share their faces and enthusiasm and many of them have gotten really nice jobs and are doing great things in the field. So, that's the end of my talk and I'll turn it back over to the moderator.

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

So, Patricia are you ready?

**Patricia Dombrowski, MA – Director, Life Science Informatics Center – Bellevue College**

Yes, thank you, ready and here.

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

Thanks.

**Patricia Dombrowski, MA – Director, Life Science Informatics Center – Bellevue College**

Well, good afternoon. I am Patricia Dombrowski and I really appreciate the opportunity to add a few words to this discussion regarding how some of our community colleges have and can customize the ONC funded curriculum for specific providers. Next slide, please.

The National Treasurer of Curricula Elements that Bill Hersh just described is a rich resource for particular needs in healthcare. In our 10 state region and that's the beautiful Northwest States colleges went to healthcare and worked with categories of providers to train new staff and those already on the job, incumbent workers, who are in an EMR intensive environment, in other words we went from the general to the very specific in training. Next slide, please.

A good example is rural community and migrant clinics. Our curricula development specialist work with for instance office managers and physicians and their staff, PAs to infuse the ONC curriculum with topics and examples specific to their needs. You can see some of those topics here on this slide and it might surprise you, it might not depending on your outlook, which were probably the most meaningful and really successful topics those that are asked for over and over again. Those would be change management and workflow redesign.

So, while there is a full universe of well-defined information regarding the technical side of things it really pointed out to us that on the rural side and community migrant clinics in particular staff there, staff people there are really looking for a way to accept these kinds of learnings into their work environment. How are we going to change our own work practices? Next slide, please.

Another good example is of taking the ONC curriculum and titrating it towards a particular constituency is the adaptation of the ONC curriculum to the US Department of Veterans Affairs. We really had the honor of working with their exemplary national informatics group and we designed and on-line instructor led class for Health IT basics. You can see what happened, we designed this class, we worked with the informatics group, but neither the VA principles nor anybody on our side were sure what kind of reception it would get, after all it was Health IT basics and they are working in healthcare and many of them touch Health IT every day.

When we opened up enrollment in the first 5 hours, and this was national enrollment, 1000 immediately enrolled and maxed out the system, and 1,000 were immediately waitlisted within 5 hours, and that maxed out the system as well. So, it's only an indication of the tip of that iceberg I think, but to even bring the point even closer to home all of these VA staff and this included everyone from say admissions people to chief physicians within a service line. They were uncompensated for taking this class and they did it on their own time, it was really, it was inspiring.

And while clearly VA medical staff are a model of dedication they are also representative of many incumbent workers and healthcare organizations who want a firm grasp on the meaning of technology in their environment, they want the basics. Next slide, please.

With around 300,000 veterans and their eligible spouses returning from Iraq and Afghanistan we have great interest in assisting those with technology skills to find a career path in Health IT, it's a really good match in many ways. The Department of Labor has funded a project to do just that work is underway right now to incorporate ONC curricula elements into courses designed to leverage military skills into civilian Health IT.

Initially, and this will be within a year, more than 2000 veterans and some others will pilot them and then community colleges nationwide will be invited to implement certificates in areas such as mobile application development in healthcare and oh, data analytics in healthcare for instance, but others as well. Next slide, please.

Another way the ONC curriculum is being leveraged is the newly developed CAHIMS or Certified Associate in Health Information and Management Systems, CAHIMS entry level certification its development is funded through the National Science Foundation and administered through HIMSS an on-line self-paced preparation course is now in final draft and it does incorporate the ONC curricula. So, again, the ONC investment lives on. Next slide, please.

VA and rural applications are really just the tip of that harvest that I was talking about earlier for adapting and building on the ONC curriculum. It's a great example of working – of that kind of work is getting underway right now with what is being done under TAACCCT grants or Trade Adjustment funding to the Department of Labor.

Right now there are 92 Health IT projects underway within community colleges that have received this funding. They're not all the same in fact it's a very disparate group and some are small and some are large, some are infusing Health IT and some are creating it, and many are using the ONC curriculum as a base. It's an exciting time for workforce development in this area and I just wanted to personally thank you for encouraging us to be bold, we can't wait to be bolder. Thanks, very much for your attention. Chitra?

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

I guess it's Rita next?

**Rita Horwitz, RN – Director Business Development – Better Health Greater Cleveland**

Yes, I'm here, thank you Chitra and thank you for the opportunity to speak to this portion of today's conference this subject being rural-based, the rural-based workforce competency for patient centered care using Health Information Technology in the framework that we've been involved in for creating this transformation.

Better Health Greater Cleveland is a partner organization with Cuyahoga Community assisting Norma Morganti and her team. Our work is embedded in patient centric technology enabled care. We are a local organization here as part of the aligning forces for quality under the Robert Wood Johnson Foundation one of the 16 communities across the United States that does this kind of work.

So, the excellent work and training in Health Information Technology and Meaningful Use to date has been instrumental in achieving successful electronic data capture and early information exchange all with an eye to the future for using and applying that information in ways that improve patient outcomes through higher quality, safe and efficient care delivery.

So, EHRs and health information exchange in a practice setting are critical tools that enable patient centric accountable care and therefore in order to use those tools optimally the healthcare workforce needs to master the competencies required to do so effectively and the work that Cuyahoga Community College, Better Health Greater Cleveland, many subject matter experts have embarked upon will certainly help to support that goal. Next slide, please.

In order to help providers and other healthcare professionals understand how to advance to Meaningful Use Stage 2 and beyond they need direction and a roadmap to help make the journey more manageable. The framework we've developed helps to do just that by focusing on four priority areas of patient centered medical homes, health information exchange, Meaningful Use and population health management and then filtering the volumes of information into what is believed by the content matter experts and the subject matter experts as the most valuable information.

This tool can be easily leveraged and used in efficient ways in everyday practice by the healthcare workforce. It is also designed to be a foundation that can be further built upon by educators and other organizations as additional needs are identified in the future. Next slide, please.

So, the process started with Better Health Greater Cleveland and Cuyahoga Community College and the subject matter experts coming together in December of 2012 to determine at that time, you know, what are the key competencies needed to help providers really move forward and what is the best and most optimal approach or process we can use to get that information to scale amongst educators, employers and the healthcare workforce. Next slide, please.

So, the approach we took was to wrap the knowledge, skills and abilities related to PCMH, HIE, Meaningful Use and population management to competencies relative to roles in a typical medical practice setting. These role-based competencies can be used for establishing job descriptions, onboarding new employees, interview guides for recruitment, writing individual development plans, performance reviews and most importantly to help promote standardized best practices among these professional roles in healthcare.

And as you can see the roles are many in a practice setting from the front desk, medical secretary, PSR, Patient Service Representatives, nurses, medical assistants, providers which include physicians and mid-level providers, care coordinators, care guides, care navigators, pharmacists and certainly many other kinds of IT professionals that might also be assisting the practice. So, again, very, very important that the competencies relate specifically to those roles and what is meaningful to them in doing their everyday jobs. Next slide, please.

So, this is a visual of the framework that has been built, it's just a sample and this one happens to be for the patient centered medical home component of the framework and it started on the left-hand side with the patient centered medical home competency, high-level competencies followed by more detailed competencies and then getting those down into learning objectives.

And most importantly with the right-hand side of this matrix being a very, very key filter for those individuals looking to use this framework in meaningful ways and that is that they look at the competencies and then they look to see which ones apply most closely to the role that they are in everyday practice. So, again, keeping it very relevant so that if I am a nurse or a provider I might quickly use this framework to see an area that I want to learn more about and how it relates specifically to my role. Next slide, please.

And then the next particular view was to then take the learning objectives and apply a second filter to that and that was to take the mounds and mounds of information that are out there and filter it down once all this information was extensively researched, reviewed and validated by content matter experts of Better Health Greater Cleveland and subject matter experts from a variety of local and national disciplines, and to put those into the framework that they felt were the most relevant and current information that could be leveraged. Next slide, please.

And then finally for this particular endeavor we took a slice of the framework related to patient centered medical home and funneled it to the relevant role of a nurse in a practice setting and asked ourselves the question how might a nurses role change in this kind of a transformation effort, what is the role and what are the competencies I might have used before functioning in a patient centered medical home setting using Health Information Technology meaningful in my everyday job versus what are the competencies I'm going to master after I have this information and go through this course?

So, again, taking a very small slice of the framework and taking one role and building that out in ways that an individual can access and start to develop and learn and master those competencies necessary. Next slide, please.

So, we'd like to definitely give a thanks to the subject matter experts that were involved in this process and continue to be involved in this process. Next slide. Thank you. And so those are listed here, those individuals are listed here for patient centered medical home experts, Meaningful Use, health information exchange, next slide, please, population health management and data analytic experts and of course facilitating the process with Better Health Greater Cleveland.

And the next slide shows you the key competencies that are included in the patient centered medical home that you would find throughout the framework. Next slide, please. Also, the key competencies related to health information exchange that you would find in the framework and this includes the learning resources that go along with those. Next slide, please.

The key competencies involved with Meaningful Use. Next slide, please. And the key competencies involved with population management as well. And with that thank you to everybody and I'll turn that back over to the moderator.

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

So, I wanted to thank everybody for coming forward today having the time to join the Policy Committee to make these presentations. I think this is really some terrific work and I'll hand it over to the Policy Committee for comments.

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

Thank you, Larry. I totally agree with you this is very impressive and it's good to see this kind of view of what has been done with the money allocated for workforce training and it started out with the curriculum development and then it got disseminated through the community colleges and framed in the context of these health delivery models like PCMH and the workforce stakeholders like nursing, it's just a very lovely presentation so thanks to all the presenters and thanks Larry for organizing this to update us on this program it's just wonderful. Let me open it up to the other committee members for comments and questions.

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

Yeah, this is Gayle, I do have a question.

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

Go ahead Gayle?

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

Do you have any idea how many people have actually been trained and have received certification passed the examination and how many have been employed or received additional upgraded employment or changed positions as the result of entering upgraded situation?

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

So, this is Chitra, it's been difficult to track the students because community colleges don't as a general rule track their students, but Ohio has actually been able to go to their Department of Labor and they've been able to show that their students have been finding jobs and actually finding an increase in their salaries but we don't have concrete numbers at this point. Patricia, can you comment on that?

**Patricia Dombrowski, MA – Director, Life Science Informatics Center – Bellevue College**

Chitra, I would only add to it what you said, anecdotally throughout the country and I can speak for our 23 colleges in our 10-state region, the need is clear and hiring is occurring. The Joyce Foundation and the Lumina Foundation recently, as you all probably know, put together a survey that looked at job postings which have increased 36 percent just between 2007 and 2011 and we believe that has picked up since then. So, we are definitely finding our students able to find work. The caveat to that is they need experience with electronic medical systems, they need hands on experience. Thank you.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

Actually, this is Bill Hersh, if I could just add a point, there was actually an ONC data brief, Patricia kind of eluded to it, you know, there was a data point that actually some of my own research had discovered in 2008 about if we go to HIMSS Stage 4 a need for 40,000 more people, ONC kicked that up to 50,000 it turns out there has been 60,000 increase in on-line job postings documented by Michael Furukawa from ONC.

So, we know that the jobs are out there, you know, as Chitra and others have said it's hard to track these people because they don't always keep in touch with us, but we certainly have a number of anecdotes from our graduates who have taken on positions, analysts, leadership roles, working for vendors, policy committees and so forth.

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

And this is Gayle, I'd like to really ask, perhaps this is something we would want to track if we're, you know, spending a lot of federal dollars to provide this kind of training and develop these courses and things of that sort we need to see what the outcomes are and do some follow-up and find out how successful they are, you know, is this training that needs to happen, is it really providing the workforce with the skills that they need, how effective is it and are they getting the jobs.

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

So, in addition to all these programs ONC also funded an evaluation contract through NORC so those results will be coming out soon too they are going back and surveying students to find out, you know, how they're doing in the field. So, we should have some of that information coming out towards the end of the year.

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

Thank you.

**Connie White-Delaney, PhD, RN, FAAN, FACMI – Professor & Dean – University of Minnesota School of Nursing**

Paul, this is Connie Delaney.

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

Go ahead Connie.

**Connie White-Delaney, PhD, RN, FAAN, FACMI – Professor & Dean – University of Minnesota School of Nursing**

I want to compliment the series of presentations on the workforce and also the approach of integrating several of these programs into this presentation and I think that as we continue to go forward the continuing articulation with other – whether it's the interprofessional work that is being funded by many resources or the professional associations such as AHIMA continuing to get a fuller picture of the synergy of the variety of these different programs along with ONC funded will be essential and I'm making that comment based on I think we're all sharing that the workforce need continues to be most likely insatiable right now.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Paul, it's Deven I also have a question so I want to put myself in the queue.

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

Go ahead, Deven. Sure, go ahead Deven.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Okay, great, thank you. I noticed that on the slides there is mention of privacy and security training in a couple of places there is – in some of the core competencies in the last presentation there was a mention of sort of either regulations or privacy and security specifically called out in addition in terms of sort of the training roles I noticed that in the university-based program there is a training role for a health information privacy and security specialist but then I didn't see for example in Dr. Hersh's slides on the slide in particular that describes the curriculum components that there is anything specific on this issue and given that those – that sort of understanding the need to protect information, health data is pretty important competency, at least I would think so, I'd like to hear some more about that because I'm not sure that I sort of fully understand how it's been incorporated into some of this training.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

This is Bill Hersh I guess I can start, even though there is not a component that carries that name there is material on privacy and security infused throughout and, you know, I know because I was involved in the production of two of the components that were heavily vetted and maybe Chitra can remind me of the name of the person or people – we had the ONC privacy and security folks look over our materials that we had produced in version two and gave us excellent feedback for version three that was incorporated into that. I can't remember the names of the people, but they were from the – some of the leaders within ONC about privacy and security. So, do you remember those names Chitra?

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

Its Joy Pritts's Office and Laura Rosas worked with several of the developers.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Oh, that's great, that's great. Yeah, I mean, I think, you know, it's one of those issues that I think everyone understands is important but it's always helpful to sort of hear specifically how it's being incorporated into some of the training, because, you know, I think the other thing that we've sort of come to understand is that the – understanding the regulations is a daunting task and difficult enough, but really sort of instituting a culture of privacy within an organization is maybe one of the most important jobs of training and people sort of understanding that in addition to having obligations with respect to getting the data accurate and right, and utilizing it in meaningful ways and getting the standards accurate, etcetera is sort of understanding and having a healthy respect for its sensitivity.

So, I'm glad to hear that. I guess it would be interesting, at least from my stand-point, to sort of get some more details on that curriculum, but, you know, we can also follow-up with Joy's office as well.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

If I could just make a couple of more points, well, first of all you can go download and look at it yourself.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

I'm going to.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

But this actually gets to a problem that we face now, you know, which is that the funding, you know, the grant that supported the development of the materials has ended and so for example we were not able to incorporate the most recent, you know, HIPAA update. There is certainly a lot of general material on sort of privacy issues, but, you know, the absolute latest of HIPAA details in the privacy and security rule are not in there and, you know, as of right now there is no specific plan for doing that.

I just want to make one other comment about your culture comment which I completely agree with and I think it gets to a point of, you know, these materials being, you know, more for educators, you know, teaching things like that about culture is not necessarily something you can just put on a slide and, you know, that gets to the value of the larger educational experience that people have. I just want to add that in.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

And I have to say in closing, thank you very much for your feedback on my question, but in addition to really being pleased to hear this content I just was really impressed with the enthusiasm that all of you have for the work that you're doing it's just to me sort of enhances the sort of value of what took place here, because it's really clear that not only was this an important exercise to undertake, which clearly it was, but the people who are involved in it were equally as enthusiastic and energized by the work and I'm just really impressed with that. Thank you.

**William Hersh, MD – Chairman, Department of Medical Informatics & Clinical Epidemiology – Oregon Health & Science University**

Thanks.

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

I just want to echo what Deven just said, it's just really, it's wonderful to hear the enthusiasm the quality of the content is very impressive, the numbers that Bill talked about is sort of mindboggling in terms of I think the users logged in and the amount of files downloaded, it's just amazing. I don't know what the stats are in terms of the overall workforce I know nurses clearly number in the millions but we've got a long way to go, but this is really good content to get out there. Other comments or questions from the committee? Well, thanks very much for the panelist and thank you Larry for organizing this, this is very informative and inspiring.

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

You're welcome Paul and welcome to the committee and thanks again to all of the Workgroup members who participated and those who have been part of our process along the way. We'll have more for you in the future.

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

Thank you.

**Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator**

Thank you.

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

Okay, MacKenzie I think we're going to go back to ONC updates is that correct?

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

That's correct we have Mera Choi as well as Farrah Darbouze on the line to give the OST update of the ONC updates. So, I will turn it over to Mera.

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

Hi, good afternoon. Next slide, please. This is just the S&I Framework Operating Metrics, I'm sure you're well aware of, we have over 2000 wiki registrants and about 700 committed members. We also have, you know, 33 pilots already committed and, you know, as the process continues we have about 11 ballots total right now. Next slide, please. We'll run down the S&I initiative portfolio snapshot, as I said, we're just continuing our work.

Transitions of care, we have, as you know completed the companion guide and we are monitoring the C-CDA updates as needed and hope to, if there are any changes, to the C-CDA we will be addressing that in the September ballot. Lab results interface; there has been no change since the last update.

The IG and the second errata have been published. Query Health, we are – the pilots are complete, are almost complete and the QRDA 3 has been published and hopefully we will progress forward and have that completed soon.

Data segmentation for privacy, the pilots are in evaluation and two implementation guides have been adopted by HL7 and we're continuing efforts there. I turn it over to Farrah Darbouze who will give the updates for public health reporting and the rest of the other S&I initiatives.

**Farrah Darbouze, MPH – Program Analyst – Office of the National Coordinator**

Hi, this is Farrah Darbouze. For public health reporting they are currently in harmonization. They completed the public health reporting reference implementation, they also completed the CDA guide and the testing and pilot's demonstration attestation is in progress. For esMD they are in the use case. Let me see, the use case in progress is for author of record level 2, it has achieve consensus and the IG consensus is closed for use case 1, use case 2 author of record level 1 and provider directories guidance IGs.

For LCC they are currently in the harmonization. They are developing the interoperable care plan exchange use case. They are coordinating the care plan – activities with other SDOs and several care planning committees.

And the next initiative is the lab orders interface, that's currently in harmonization, current status is the LOI IG is currently undergoing DSTU ballot, comment, reconciliation. The LOI Vocabulary Workgroup is finalizing the ask order document and the pilot's progress, the LOI tool for testing, is almost complete and will be referenced by upcoming pilots.

For Health eDecisions they're currently in RI test and pilot, they have three work streams. The first work stream has HL7 ballot for use case one and they are updating IG based on the work of the pilots. The second work stream is pilots; they are 90 percent complete with CDC and Allscripts, 99 percent complete with Wolters Kluwer and the VA and 60 percent complete with Zynx Health and Design Clinicals. And work stream three having to do with use case 2 has submitted a project scope statement to HL7 for their September meeting and they have finalized the harmonization activities.

For Blue Button they are currently in harmonization. The current status is that the bluebuttonplus.org website launched in March that includes push implementation guidance and privacy and security guidance, and clinical content guidance. The draft pull guidance is available on the pull API documentation website and if you'd like that website I can provide you that – the Blue Button Plus successfully demonstrated sending patient health information via Direct to multiple providers and provider partners during HIMSS.

In terms of structure data capture, which is close to my heart – it's currently in harmonization; we just completed a consensus in terms of the use case on May 30<sup>th</sup>. The standards evaluation against HIT, standards community criteria is currently in progress and we have technical work stream kickoffs that are upcoming in the form of Sub-Workgroup kickoff is planned for later today actually led by AHRQ and NLM, goal number one for that is common data elements, structure and guidance. Number two is form template structure and guidance.

The Standards Sub-Workgroup is planned to kickoff at the beginning of July and that will be led by the S&I support team with the goal of EHR interaction with form template guidance and auto population of form template guidance. And PDMP I think Mera is going to cover.

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

Yes, PDMP, as you can tell from the update is – we are still – we've completed the consent on March 14<sup>th</sup> so the work is currently on hold. If you have any other questions for us or if you need more information about any of these initiatives you can visit our [wiki.siframework.org](http://wiki.siframework.org) site. I'll turn it back over to the Policy Committee for any questions.

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

Thank you. Questions, comments from the committee?

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

This is Gayle; I have a question, what happens – support for the PDMP terminated?

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

We – I'm sorry could you repeat your question again?

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

Yes, I was questioning about the PDMP and it says time contract support ended for this project March 27<sup>th</sup> and it was not completed. Can you give us some information on that?

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

Sure, we're kind of in a, I guess in a pause phase with PDMP so we hope to get the work restarted soon. There is no definite date yet, but it ended because the contract ended, but we hope to revisit the work there.

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

Can you give us a reason for the contract ending? It was just...and the work not being completed?

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

No, just the contract dead-lined, it was just administrative; the ending of the date with the contract was March.

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

And is it anticipated that will be continued?

**Mera Choi – Acting Standards & Interoperability Coordinator, Office of Science & Technology – Office of the National Coordinator**

We hope so we're revisiting it and seeing if we can restart the work.

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

And Gayle, this is Jodi Daniel, we are – my shop is working with Doug's shop to try to see if we can get this work to continue it's something that is really an important priority and we'll keep you posted.

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

Thank you, I think this is extremely important. I was distressed to see that.

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

So, thanks, any other questions or comments? Okay, well, thank you very much to the office and I think that concludes our official agenda and we can open it up for public comment unless there are any other comments or questions overall? Okay, MacKenzie, could we open it up to public comment please?

## **Public Comment**

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Sure, operator, can you please open the lines up for public comments and while we're waiting I'll just remind everyone public comments I will be limiting you to 3 minutes and the committee is not required to provide a formal response it is a public comment portion. So, operator can you please open the lines?

**Rebecca Armendariz – Altarum Institute**

If you would like to make a public comment and you are 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. We do not have any comment at this time.

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

Okay, thank you very much. Any comments from the group about this format of virtual sort of the – as you heard MacKenzie say last time it's going to be approximately every other meeting will be virtual? Feel free to send us some comments afterwards but if you want to say anything now we're open for that.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Aren't we – Paul it's Deven, aren't we also virtual in July or am I –

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

That is correct, so I said approximately every other.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Approximately, okay, you really meant approximately, okay.

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

Yeah, I really meant approximately. The reason is because we have, as you know, recommendations to be brought forward both by FDASIA, from Meaningful Use that have are going to have be vetted in front of the whole committee and that's much better done in face-to-face, so August and September will be consumed with that kind of action, approval oriented business so that's why we have two virtual.

So, it's approximate and so we're trying to stage it so that most of the informational updates like today's agenda would be virtual and real heavy action oriented agendas will be face-to-face. So, let us know if there is anything – how it worked out and if there are any suggestions for improvements we'd love to accommodate those. All right, well, thank you everyone for your participation and for the hearty discussion and thanks to all the presenters for this very informative update and see you next time, see you next month.

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

Thank you.

**Deven McGraw, JD, MPH – Director – Center for Democracy & Technology**

Bye everybody.

**MacKenzie Robertson – Federal Advisory Committee Act Program Lead – Office of the National Coordinator**

Thank you everybody.

**M**

Bye-bye.

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

Goodbye.