



**HIT Standards Committee
Precision Medicine Task Force
Final Transcript
July 17, 2015**

Presentation

Operator

All lines are bridged.

Michelle Consolazio, MPH – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Thank you. Good morning everyone this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Standards Committee's Precision Medicine Task Force. This is a public call and there will be time for public comment at the end of the call. As a reminder, please state your name before speaking as this meeting is being transcribed and recorded. Also, as a reminder, please keep your line muted if you are not the person speaking but wait until after roll call. So, I'll do roll call now. Jon White?

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Present.

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

Hi, Jon. Leslie Kelly Hall?

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Here.

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

Hi, Leslie. Andy Wiesenthal?

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Here.

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

Hi, Andy. Andrey Ostrovsky?

Andrey Ostrovsky, MD – Chief Executive Officer – Care at Hand

Here.

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

Hi, Andrey. Betsy Humphrey's couldn't make it. David McCallie?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Here.

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

Hi, David. Eric Rose?

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Here.

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

Hi, Eric. James Breeling?

James Breeling, MD – Director, Bioinformatics, Office of Research & Development – Veterans Health Administration

I'm here.

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

Hi, James. Josh Denny? Deven McGraw for Linda Sanches?

Deven McGraw, JD, MPH, LLM – Partner – Manatt, Phelps & Phillips, LLP

Yes, I'm on, Linda may also be on. You might have two of us on.

Linda Sanches, MPH – Senior Advisor for Health Information Privacy – Office of Civil Rights

Yes, hi, this is Linda, I'm on.

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

Oh, okay. Lisa Gallagher?

Lisa Gallagher, BSEE, CISM, CPHIMS – Vice President, Technology Solutions – Healthcare Information & Management Systems Society

Here.

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

Hi, Lisa. Mary Barton?

Mary Barton, MD, MPP – Vice President, Performance Measurement – National Committee for Quality Assurance

Here.

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

Hi, Mary. Mitra Rocca? And from ONC do we have Maya and I'm sorry, Maya, I don't know how to pronounce your last name, can you say it for me?

Maya Uppaluru, JD – Policy Analyst for Health Innovation, Division of Science & Innovation - Office of the National Coordinator for Health Information Technology, Department of Health & Human Services

That's fine, Maya Uppaluru.

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

Uppaluru?

Maya Uppaluru, JD – Policy Analyst for Health Innovation, Division of Science & Innovation - Office of the National Coordinator for Health Information Technology, Department of Health & Human Services

Yes.

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

Okay, thank you. Anyone else from ONC on the line?

Debbie Bucci – Office of Standards & Interoperability – Office of the National Coordinator for Health Information Technology

Debbie Bucci.

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

Hi, Debbie.

Mazen Yacoub, MBA – Healthcare Management Consultant

Mazen Yacoub.

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

Hi, Mazen.

Mazen Yacoub, MBA – Healthcare Management Consultant

Hi.

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

Okay with that I'll turn it to you Jon and Leslie.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Thank you so much Michelle, everybody, thank you so much for your interest and engagement for our inaugural Precision Medicine Task Force call. It has been really exciting to see the enthusiasm that everybody has brought to this and I'm counting on that to carry us through.

I just want to give you a few words about kind of, you know, why we're doing this and what I'm hoping that we'll get out of it and then would love to hear Leslie's thoughts, she and I have had some brief discussion about this and I'm already really excited about the things that we're bringing up.

So, you all are likely well aware that in January both in the State of the Union and then as well in the President's Budget, President Obama announced a Precision Medicine Initiative which has been a really exciting concept and has developed into this really wonderful collaboration across the federal government and with the private sector to try to achieve, you know, better health and healthcare using...advancing our scientific knowledge using, you know, the digital infrastructure that we've all been working on for the past several years.

So, the point of the Precision Medicine Initiative, which will be stated by Steph Devaney's presentation to us later, is to enable better treatment, better diagnostics, you know, more precisely tailored healthcare for individuals based on their information and the information of populations and analysis of that information or that data about them. And really you can't do that without good digital information tools and systems, and practices.

So, one key role that ONC plays in this initiative is to advance standards and implementation specifications that can support the Precision Medicine Initiative. There is a request in the 2016 budget for funding to support that but we also know that there are some really great things that we can act on now using some of the resources we've got and that is you all through our federal advisory process through the Policy Committee and the Standards Committee we can undertake, you know, thoughtful dialogue and make recommendations to the Secretary about standards and implementation specifications that can be used and that is, you know, our wheelhouse, that's what we do with the Standards Committee so hence this Task Force.

We've been engaging in a number of activities related to precision medicine over the past several months there have been some fantastic workshops that have been held by NIH in collaboration with all of our other federal partners. There is an advisory committee to the director which is basically NIH's federal advisory committee that is going to make recommendations this fall to Dr. Collins and we're looking forward to seeing what those are.

But then across the government in concert with our partners at the White House, the Office of Science and Technology Policy who we'll also hear from coming up here at Veterans Administration, at the Department of Defense, at the FDA, Office of Civil Rights, of course the NIH, a number of other folks who have been involved there have been internal working groups and a number of events that have been advancing, you know, the cause here and generating a significant interest in dialogue with a lot of partnerships from the private sector as well.

So, it has been tremendously exciting to be involved with. I've been really appreciative of all the comradery and all the...it's exciting to see this happen, but for me it's been particularly exciting to see the hard work that's gone into building the digital infrastructure in healthcare that we've been working on for the past, you know, several years to see the opportunity to have that used in such a, you know, substantive way in this new initiative. So, that's precision medicine broadly.

I'll tell you real specifically and we're going to discuss the charge later in this teleconference, but, you know, I'm really hoping that by early fall here we can come back to the full Standards Committee and make recommendations to be discussed and hopefully advanced to the Secretary about what standards are currently in existence and implementation specifications are currently there that we've probably already recommended that ought to be used and leveraged in the Precision Medicine Initiative moving forward, what are promising data standards and implementation specifications that we think ought to be looked at closely but tested out and then potentially where there are gaps that there are needs for the Precision Medicine Initiative that ought to be filled in the months and years ahead.

So, that's what I'm hoping to get out of it. I look forward to your discussion and again I really appreciate everybody's enthusiasm and willingness to, you know, spend your precious time and your little gray cells working with us on this so I'm really looking forward to that. So, thank you, those are my comments. Leslie, I would love for you to take the floor.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Well, thanks, thank you very much, Jon. You know I'm about to be a grandmother for the 5th time and I wonder if little Hudson is going to have the genes and the long life that many in my family possess or he might have other desirable conditions...other less desirable conditions like cancer and schizophrenia, and heart disease and I think it's better to know and so I'm very excited about this work.

I'm a patient and consumer advocate and this is really about medicine that's personal and the primary objective of this work is to make what is highly personal highly computable making both what I'm uniquely made of and who I am uniquely available to my care team to help diagnose, treat and cure me uniquely.

It also might be just as important to know what disease is not likely to occur knowing this could prevent unnecessary escalations in care, unnecessary tests and unnecessary treatment not to mention unnecessary anxiety for the patient.

You know the patient and the researcher who are now the stakeholders of this work have until now been observers of or recipients of care and they're now at the very origin and I liken this to instead of cleaning up after dinner the researcher will bring the entrée to table that the patient has set and the physician will be an invited guest, it's a whole new dynamic and these stakeholders will bring a new set of requirements things like computable consent by patients or patient generated data. These weren't ever envisioned in an electronic health record. This data is not likely even to be centered in EHRs but instead EHRs will act as a repository and exchange mechanism for data that is sourced from research or laboratories, or the patient's App or portal of choice all in an interoperable digital ecosystem.

This really isn't an EHR problem to solve but an innovation to be enabled and there can be no more important data to make accessible and interoperable, and medicine and health might change forever if we do our job well.

Assumptions around standards maturity and certification regulation, and incentive payments need to be put aside somewhat, this is not the Meaningful Use of electronic health records but the Meaningful Use of data that gives each of us meaning, what we're made of and who we are. So, I'm very excited to be part of this and I look forward to serving. Thanks, Jon.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Thank you. Michelle, do we have time for the members of the Task Force to give a little bit about themselves and who they are since they're going to be working together so closely over the coming weeks and months?

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

Yeah, we were hoping to do that. Just, you know, a quick round robin.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay, fantastic. Can I call on folks? Can I start with Lisa Gallagher?

Background voices

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

Before we do that, somebody with a quite a bit of background noise...

Background voices

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes...

Lisa Gallagher, BSEE, CISM, CPHIMS – Vice President, Technology Solutions – Healthcare Information & Management Systems Society

I can try to go ahead. This is Lisa Gallagher and I'm Vice President of Technology Solutions at HIMSS. I'm a member of the Standards Committee and member of a few of the previous groups the Transport and Security Standards Workgroup and the Data Provenance Task Force, and I'm happy to be a member of this team as well. Thank you, Jon.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Thank you. My colleague Mary Barton?

Mary Barton, MD, MPP – Vice President, Performance Measurement – National Committee for Quality Assurance

Thanks, Jon. I'm Mary Barton, I'm Vice President for Performance Measurement at the National Committee for Quality Assurance and before that I was the Scientific Director for the US Preventive Services Task Force Program at AHRQ where Jon and I worked together. I'm very much looking forward to the ways that evidence and data will play into this initiative. So, thank you.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yeah, as a matter of fact our offices were literally right next to each other. So, it's good to have you on the phone. Dr. McCallie?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Hi, David McCallie, Senior Vice President at Cerner, former member of the HIT Standards Committee. My interest is in or my role at Cerner has been expanded to include strategizing as to how we interface and interact with the Precision Medicine Initiative in the full, you know, breadth of things that fall under that rubric so I'm excited to help learn from this group and to share with the group what we're hearing from our clients and where we think this space is going.

I will pre-declare that I'm a bit of a skeptic about the value of genomic data and will probably share some of my skepticism but I'm overall much more excited than I am skeptical although just my nature is to sometimes surface the cautions and skepticism to make sure we don't overhype something or miss, you know, the full breadth of issues that are in front of us. So, I look forward to this with a lot of enthusiasm.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Your skepticism is always thoughtful skepticism and always appreciated. So, Dr. Ostrovsky?

Andrey Ostrovsky, MD – Chief Executive Officer – Care at Hand

Thank you, you can call me Andrey, I appreciate it. Andrey Ostrovsky here, I'm a Physician at Children's National, I'm a Pediatrician by training, I'm also the CEO of a software company called Care at Hand. I sit on one of the federal advisory committees on Health IT standards on implementation in particular. I also am one of the committee leads on the Electronic Long-Term Supports and Services Workgroup and also I participate in the National Quality Forums Committee on Home and Community-Based Services.

And to tie it all together why a pediatrician is working mostly in the aging in healthcare space, my focus is predominantly around vulnerable populations and I hope to bring a perspective of the health systems both limitations and opportunities for precision medicine efforts and in particular the implications for populations that may not have the purchasing power to buy an App or to buy a test. So, I think those considerations I'll try to bring to the group.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Fantastic, glad to have you here. Eric Rose?

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Hi, this is Eric Rose I'm a practicing Family Physician and have been for 20 years so I'm an enthusiastic consumer of scientific evidence and try to practice personalized medicine with every patient and so very excited about the ability to do that...more scientifically. I'm also the Director of Clinical...

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Eric, quick caveat, you're quiet so you may be kind of across the room from the phone.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Oh, okay, all right, sorry. Is that better?

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Much, thank you.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Oh, okay, sorry about that. So, I'm also the Director of Clinical Terminology at Intelligent Medical Objects, we're a terminology content company so we try to provide clinician friendly terms to bridge the gap between the way clinicians think and speak and standardized medical vocabularies so very much aligned with the needs of making precision medicine work in the trenches.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Fantastic, super glad to have you. Andy Wiesenthal?

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Hi, I'm another in the compliment of physicians, also a Pediatrician, a Pediatric Infectious Disease Doctor by training. I sit currently on the HIT Standards Committee, have been on the Content Standards Workgroup. My interest having spent...right now I'm a Director at Deloitte Consulting and have been for the past five years so I help a lot of clients do a wide variety of things mostly delivery systems and physician groups trying to do better taking care of patients, so broadly speaking this fits with those kinds of projects.

And my prior background was as the leader of the Health Connect Project at Kaiser Permanente implementing the large electronic enterprise, electronic health record system there and large delivery systems like Kaiser are very interested in targeting therapies, I know I was and am as a clinician and I think they're trying to understand how to manage populations and at the same time individualize treatments and testing strategies so that they are the most efficient and the most effective for individuals.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Fantastic. So, that is the list of the non-federal, except for me, Task Force members, you know, you can see it's a tremendously talented and capable group of folks. There are two things I want to mention, first is that the interest in participating as a Task Force member far outstripped our ability to actually put people on the Task Force. So, you know, there are a lot of really great people that are interested in this so appreciate your time.

I am hoping that even though there are a number of folks that we weren't able to include directly on the Task Force that we'll be able to get their input in the months ahead as we kind of, you know, wrestle with recommendations here but we're super glad to have you all.

The second thing I want to kind of call out is that, you know, Andy's last comment made me smile a little bit because he's like another one of the, you know, list of physicians, so the Task Force is a little bit doctor heavy but I want to point out that Leslie is my extremely capable Co-Chair and I asked her to be Co-Chair for a very specific reason, you know, one thing that I have not mentioned yet about precision medicine but that's making it really different is the extremely high-level of interest in making this initiative different through a different approach to participating and engagement and by "participant" I mean the research participants, you know, these are you and me, right, and the rest of our family and friends around the country and we're really looking, in the Precision Medicine Initiative, to have them involved in a different way than they've been involved in research initiatives previously to be really actively committed and engaged and how their perspectives drive what happens in the Precision Medicine Initiative.

So, it was really important to me that Leslie, as our consumer representative, one of our consumer representatives on the Standards Committee, to have a leading voice in this. So, I'm really grateful for her willingness to commit to that and help us keep that perspective kind of front and center as we move ahead.

So, there are a number of Federal Ex-Officios which you can see the list on the slide here, Michelle, I'm going to defer to you on this, but I think in the interest of time what I'd really like...they're a super talented group and I want them all to introduce themselves. You tell me if you feel like we've got time now or if you'd rather go on ahead and get into the presentations from our honored guests, if maybe our federal colleagues that as we get into the discussion can introduce themselves as they start to make comments, which way would you prefer to go?

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

Totally up to you Jon, we only have three of the members so...

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Oh, okay, well, in that case let's go ahead and have the members introduce themselves. Really again, as talented as you folks from the private sector are this is a really talented group as well. So, in the list that I've got folks listed here, how about James Breeling?

James Breeling, MD – Director, Bioinformatics, Office of Research & Development – Veterans Health Administration

Hi, this is Jim Breeling, I'm an Infectious Disease Physician at the Department of Veterans Affairs and I'm the Director of Bioinformatics for the Office of Research and Development where I manage the IT and informatics aspects of our Million Veteran Program.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Fantastic, thank you. Linda Sanches from the Office of Civil Rights? Linda if you're there you're on mute.

Linda Sanches, MPH – Senior Advisor for Health Information Privacy – Office of Civil Rights

Hi, I'm here, I'm sorry, I was on...I had you on mute. Well in the Office for Civil Rights we have been working very closely on precision medicine task groups with the White House and with the rest of our colleagues in HHS and as you know we've always been very involved in all the privacy and security work around HIT so we're very interested in continuing our involvement here. Also, Deven McGraw, our new director also might want to say hello.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Absolutely, thank you, Linda. Hey, Deven?

Deven McGraw, JD, MPH, LLM – Deputy Director for Health Information Privacy – Office for Civil Rights

Hi, Jon, yeah, no, I'm...this is of keen interest to us, I'm very pleased to be able to sit in on this introductory call and appreciate the opportunity.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Ah, so modest, Deven is well known to the other members of the ONC FACAs for her six years, right, of service on the Policy Committee. So, we're delighted to have you on our side.

Deven McGraw, JD, MPH, LLM – Deputy Director for Health Information Privacy – Office for Civil Rights

Oh, thanks.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Mitra Rocca from the FDA?

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

I don't think Mitra is on either. I think that's it.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Oh, okay, I'm sorry, I thought Mitra was here. Okay, fantastic, then let us...

Joshua Denny, MD, MS, FACMI – Associate Professor, Departments of Biomedical Informatics and Medicine – Vanderbilt; Office of the National Coordinator for Health Information Technology

I'm...this is Josh Denny I am here, I was just not audible before.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Welcome, lurker Josh. Introduce yourself to the rest of us.

Joshua Denny, MD, MS, FACMI – Associate Professor, Departments of Biomedical Informatics and Medicine – Vanderbilt; Office of the National Coordinator for Health Information Technology

Sure, I'm from Vanderbilt University currently on IPA to the NIH and I work in sort of the personalized precision medicine space with...I'm a clinician informatician and manage our de-identified EHR resource connected to DNA samples.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Most excellent and most welcome to have you working with us on this as a truly valued member of the team. Okay, is that it for our federal colleagues?

So, the one brief comment that I'll offer to you here is that, you know, a lot of our Task Forces and Workgroups on the FACAs have had, you know, federal ex-officio members. There is a significant involvement here and that's because this really is such a broad administration initiative that it's really important for us to have our colleagues involved early and often.

You know we hit our ex-officios but we have not hit our invited guests, you know, for our colleagues at the White House, we have different terminology for these folks, the terminologist in the crowd will appreciate that, so instead of being ex-officio members we have invited guests. So, could our colleagues from OSTP introduce themselves to the crowd?

If you're introducing you're awfully quiet. Ut-oh, hope we didn't lose them.

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

I thought Maya had said that Claudia was there with her, but maybe I heard wrong.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yeah, no, I heard that Mina, Sean and Claudia, and Maya, and DJ were all there. So, okay, OSTP colleagues if you come back or find the mute button just holler up in the middle and let us know. So, thank you, that's a fair amount of introductions, but, you know, I want to make sure that everybody kind of knew everybody else. So, thank you for making introductions everybody. Michelle, are we ready to move onto the presentations?

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

Let's do it.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay, fantastic.

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

But now actually we might need to kill some time it looks like Maya's line was disconnected.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Oh, dear.

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

And they are our presentation.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

All right, well, I can tap dance a little bit in the meantime if we need to. Oh, that's right because Stephanie Devaney was with them wasn't she?

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

Yeah.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay, all right, well, let's...

Maya Uppaluru, JD – Policy Analyst for Health Innovation, Division of Science & Innovation - Office of the National Coordinator for Health Information Technology, Department of Health & Human Services

Hi, hello?

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

There she is.

Maya Uppaluru, JD – Policy Analyst for Health Innovation, Division of Science & Innovation - Office of the National Coordinator for Health Information Technology, Department of Health & Human Services

Hello, sorry, instead of unmuting ourselves we hung up on you guys I'm so sorry.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

Jon that's actually...this is DJ I hung up on you. It was my most epic passive aggressive thing I've ever done to you.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Not the red button DJ, not the red button.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

Exactly.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay, awesome, well then, thank you for coming back, actually would you guys take the opportunity to introduce yourselves.

Maya Uppaluru, JD – Policy Analyst for Health Innovation, Division of Science & Innovation - Office of the National Coordinator for Health Information Technology, Department of Health & Human Services

Sure, my name is Maya Uppaluru and I'm with the ONC's Innovation Team and I am currently part-time detailed to OSTP.

Stephanie Devaney, PhD – Project Manager for the Precision Medicine Initiative – White House

And Stephanie Devaney I am the Project Manager for the Precision Medicine Initiative at the White House.

Claudia Williams, MS – Senior Health & Health IT Advisor – Office of Science & Technology Policy – White House

Hi, Claudia Williams I work on Health Technology and Innovation for the...team and OSTP.

Mina Hsiang, MBA – Healthcare Advisor – US Digital Service (USDS)/Office of Management & Budget (OMB)

I'm Mina Hsiang I work...I lead our efforts that the US Digital Service across the VA, the DoD and Precision Medicine on healthcare data and interoperability.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

I'm DJ Patil and I clearly don't know the difference between the mute button and the hang up button as well as I'm the US Chief Data Scientist.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

The important thing DJ is that you know data.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

That's right.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

I can fiddle with the hardware you just need to know the data that's good. All right, well thank you and I will say, again, for the participants on the Task Force, you know, this has been a significant interest to the president and that is really reflected by the highly active leadership and involvement and the colleagues that introduced themselves so they've been really valued partners in this whole process so thank you all for being involved. All right so we're only 4 minutes over time, which is good, so thank you everybody. Steph are you ready to go ahead and give us our opening presentation on the overview?

Stephanie Devaney, PhD – Project Manager for the Precision Medicine Initiative – White House

Yes, definitely, thanks, Jon.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

The floor is yours.

Stephanie Devaney, PhD – Project Manager for the Precision Medicine Initiative – White House

So, as a reminder, my name is Stephanie Devaney I'm at the White House, I am currently serving as the Project Manager for the Precision Medicine Initiative. I'll do a quick high-level overview and then I'll pass it to Dr. Kathy Hudson at the NIH who is really spearheading the efforts that they have underway with the two research activities as part of the Precision Medicine Initiative and then to DJ to talk to us a little bit about the data component of this.

So, when the President launched the Precision Medicine Initiative he was really trying to capitalize on where we are today with technology and computing and our understanding of disease, our ability to collect and manage, and analyze large amounts of data, and a particular groundswell support from patients and participants in this sort of research, and as part of that launched this big initiative that was really aimed at some research priorities and some policy priorities. This initiative has been surrounded by a large groundswell support from a lot of stakeholders out there who have been working on precision medicine for a long time so we've been really fortunate to become part of that and to work with a number of stakeholders.

Our mission statement...if you can advance two slides please, so our mission statement for PMI is to enable a new era of medicine through research, technology and policies that empower patients, researchers and providers to work together toward development of individualized treatments and that should also be prevention strategies as well. We're really interested in using this initiative to think about health as well as how we treat disease. Next slide.

The concept, as you all know, of precision medicine is not new it's quite old and I think has been the driver of a lot of medical practitioners. It goes as far back as prescription eye glasses and blood transfusions so there are some very staple examples of precision medicine. Recently we've also had a lot of success in precision medicine in oncology and other areas we would like to expand that success into other diseases.

What we need right now is the development of a rigorous research platform that will allow us to use all of the resources at our hands and data on individuals who are volunteering to agree and to partner with us and to get to some of the answers that we currently don't have that would ultimately lead to more precise care.

We need recruitment of the best and brightest from all sorts of sectors. We need scientists from all disciplines. We need technologists and data scientists. We need participants in patients who want to be active partners in this and we need the government agencies that will support this and help drive it forward and we need all of you and the work that you're doing and we very much appreciate.

We also need the standards and resources for generating and ultimately sharing data and we need to make sure that we've got the right policies in place to protect that data and to pave way for what we can ultimately do with it and the technology to make this vision possible. Next slide, please.

So, we have this convergence right now of opportunity. We have a strong desire from the public to be part of research in all forms and we do know that participants are excited about this type of research study and NIH ran a survey recently where they showed that there is a lot of excitement around this type of research.

We also know that patients are eager to be active participants in research like this so we have an opportunity right now I think to take advantage of that. We have seen tremendous advances in data science and bioinformatics. We have new evolving and emerging technologies for biomedical analysis including rapid cheap genome sequencing capabilities.

We have new FDA cleared technologies for genomics and FDA is focusing a lot of their time on genomic technologies and making that pathway more streamlined and clear. And we have new omix popping up and availability of new types of data and we also have a lot of people who have already been thinking about this and have set up existing research cohorts that are trying to merge electronic health data with other types of research data including some of the omix and patient specific data. Next slide.

So, as part of PMI there were, as I mentioned earlier, science priorities and policy priorities. I will not touch on the science priorities and I'll instead turn that over to Dr. Hudson in a moment, but I would like to say a little something about the policy priorities.

First of all, in the FY16 proposed budget there was a 215 million dollar request which was broken down as shown on this slide here with 200 million going towards the two different research components and 10 million to the Food and Drug Administration for their work on genomic technologies and regulations, and then 5 million for ONC. Next slide.

So, under the...I'm going to start backwards and just touch on the policy priorities before I turn this over. We have realized that with an initiative this big there is an opportunity and a responsibility to have the right policies in place to make sure that PMI can do what we would like it to do.

We first and foremost have been engaging with stakeholders, as I mentioned before, this is not a new game this is something that we have been, that the world has been focused on for many decades even and we want to learn from the best.

We have been engaging stakeholders from all walks of life to think about the best way to launch an initiative like this. NIH of course has been doing very public workshops as they've been working with their ABC working group to plan the optimal design of the cohort piece and then in the other spheres we have also been pulling together roundtables and hoping to hear from people and we will continue to do that as we plan.

The Food and Drug Administration is working very hard on the right framework for genomic technologies and that is moving along. They had a workshop in February where they talked with the community about a draft framework for that.

And finally, we have been focused quite a bit on privacy and I'll throw security in there too with such a data centric initiative like this we know that we have a real important responsibility to make sure that we are thinking about privacy and security as one of our primary priorities. As part of this process we have developed a draft core set of privacy principles that has been posted on line and we would really like feedback on those. We know that those need to be then implemented and that can be the tough part operationally, but at least we want to put out there our commitment to privacy and we will also be looking at security and the right security framework for this initiative.

So, now I think, unless there are any questions or if we want to do that at the end, I'm happy either way, otherwise I'll turn it over to Dr. Hudson to talk about the cancer component and the research component, the research cohort.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Brilliant as always Stephanie, if you don't mind let's go straight to Kathy and then to DJ and then let's ask questions at the end.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Great, thanks. So, I'm Kathy Hudson, I'm the Deputy Director for Science, Outreach and Policy at the National Institute of Health and have had the honor and privilege to be really involved in the design of the scientific components of the Precision Medicine Initiative.

We have used the advisory committee to the director in a working group of that to really help us in putting together a blue print for what the cohort part of the Precision Medicine Initiative will look like and Josh Denny, who is a member of your group, plays two roles, he is on part-time working with us from Vanderbilt and is also a member of the working group so that will be a nice connection between the work that you undertake and the work that our working group is working on.

So, as Steph said, there are two priorities scientific priorities, there is a cancer part and the cancer part logically is being led and coordinated by the National Cancer Institute with input from the National Cancer Advisory Board and the elements of the precision medicine for oncology is focused on clinical trials where the specific therapeutic agent used is targeted or thought to be targeted directly to an underlying molecular mistake.

This clinical trial is...these clinical trials are really interesting and unusual in the large partnerships that we have with pharmaceutical companies to provide compounds that have been approved for one kind of cancer and are now being tested in many other forms of cancer.

So, the notion is that we will be able to identify the molecular basis of different subtypes of cancer and be able to test targeted therapeutics for those. This has proven to be quite successful in a number of cancers already but unfortunately far too often the cancer outsmarts the drug and resistance emerges and so one of the goals of this project is to really understand and combat drug resistance potentially with using combination therapies as one approach.

So, the cancer match clinical trials program is already up and running and what will happen with precision medicine is it will be expanded very significantly and there will be the addition of a pediatric component to it so that's an important edition. So, next slide, please.

So, the part that the working group has been focused on is really designing a roadmap for building a national research cohort of a million or more volunteers and the notion is that we would assemble this group of excited and inpatient people who are going to donate their genetic information, their behavioral information, their environmental information and that this very rich detailed dataset will be a treasure trove for research.

So, the working group has been trying to work through who will be in the cohort, how will they be recruited, what will be the data elements that we will collect, how will the data be shared both within the research community broadly defined and also with participants.

So, I think that this research cohort is quite novel in many ways and one of those ways is that we are envisioning that the participants in the cohort will be active partners with us in all phases of the design, implementation and governance. And so we're really building it in a new model not as sort of a researcher and a research subject but rather as research partners. So, next slide, please.

So, we are aiming to have a recruitment method that will be efficient and inclusive. We are looking at leveraging existing cohorts to the degree that that's feasible and beneficial. We also want to make sure that we are including groups that are traditionally underrepresented in biomedical research and underserved in medicine.

We are working closely with our colleagues at HRSA to explore being able to recruit from within the federally qualified health centers which have a significant proportion of people receiving care through that system that are at or below the poverty line and racial and ethnic minorities are overrepresented in their patient population. And they also have an electronic health record system that we think could work really nicely within the cohort.

So, we are considering having participation in the cohort open to all people of all ages and it would be longitudinal so during the course of the cohort study people will be born and people will get sick, and people will die, and so we will have sort of the whole range of ages included within the cohort.

We've been working especially with the help of the White House to collaborate with the Department of Defense and the Veterans Administration to make sure that the cohort and participation and research like this is open and available to both active duty military and to veterans, and the Veterans Administration already has a substantial cohort, the Million Veteran's Project, and so we're working on how we can have those efforts coordinated and complimentary with one another.

And then of course because we are going to follow people over time this is not a situation in which we would just take existing data from for example a health system and build the cohort around that rather we want to have the active engagement of all the participants and so of course consent will be required and we really want to experiment with some new models of consent within the cohort. So, next slide.

One of the big challenges in collecting such a big dataset will be how to keep this information both secure and protect the privacy of the participants but also at the same time make information available for important research and so that is a topic that has occupied a lot of the time of the working group and also a lot of the time as you'll hear more from folks across government and we look forward to your input on this as well. Next slide.

So, I mentioned how important the participants are and Steph mentioned that we have done a survey to sort of get an idea about what's important to people and what we learned is there is strong support for building such a research cohort and that a majority of people across all racial and ethnic groups, and across all age education and geographic origins really would be interested in participating in such a study. So, that's really encouraging.

We asked people what they would be...what would be the primary motivations for their participation and overwhelmingly over 90% indicated that getting information back was really important and valuable to them. So, that falls into a number of categories getting information back about what kind of research is going on with the data from the cohort and also getting data back specifically that is relevant to them, information about them.

So, we are spending a lot of time thinking about what information will...what information we will collect and what information will be shared with the participants and then also how to have solid privacy protections that will give people the confidence that they can participate and not have information about them revealed broadly.

So, I think that's all I had to say and I will now turn it over to DJ to talk about the data side of this.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

Great, I'm just going to pull this a little closer, thanks, Kathy. This is DJ Patil let me just talk a little bit about the data and how we've been thinking about the technology and what we've been referring to as the data tech track for PMI and it really starts with our mission and that mission is to enable the 21st Century research plan platform that responsibly empowers participants, researchers and providers with the highest quality of data to power the next generation of precision medicine and healthcare innovation.

There are just a few words I want to really highlight there in that statement, one is the word "responsibly" and how do we responsibly empower one of those three groups at a time, but through technology collectively empowering all of them and that is this participant, this patient, that is one which we really think of as a human at the end of the day that is receiving care, is providing data, is getting data back. Two, is the researcher and then three are the people who are the providers and actually the frontline people and everyone else involved that are providing healthcare.

We really have three buckets in how we're thinking about our work. The first bucket is "enable." We have to enable patients to access their electronic health data easily and contribute it for research. So, many times the conversation has really been about just enabling patient's data for themselves that's obviously the very fundamental birthright kind argument of the foundation of things.

We have to also make sure that we're considering what does it mean to open up data for research and what is that notion of responsibly? Does responsibly opening up data...also what does it mean about providing data back to the patient especially when it's done in a clinical setting and I know there is an incredible range of conversations there everything from buzz words likely to what is appropriate to give back to a patient.

But we are entering a fundamental world and we are seeing this as we shift across the broad range of the entire United States government portfolio with data where there is a much stronger view that the data that belongs to you is yours and needs to be returned back to you.

There is obviously with such an easy carte blanche statement doesn't weigh the downside of providing data back to you and the ethical questions of what it means in responsibly giving that back to you. And so providing extra guidance and giving us additional viewpoints in that area is very much welcome and desired.

In this bucket some of the things that we've been working with and groups we've been talking to, many of which are on this call, are the patient advocacy groups understanding their goals, the policy issues working with everyone from CMS to ONC everything where these levers are, obviously very closely there with the National Institute of Health and most recently we had the champions of change event that happened last week, July 8th, and highlights and if some of you that were not aware of that I encourage you to check out the factsheet that was provided with that which provides some of the commitments and the champions and to give you a sense of the groups that we're interacting with.

In there we also want to talk to healthcare providers, the vendors need to make sure to understand the workflow challenges a lot of that overlaps naturally with this group as well as the broader ONC mandate.

We're bringing researchers, technologists, all the groups required to help us understand this and we're really working to understand, what is the greater ecosystem in here and enabling data because as we've seen there is obviously a group of population where they obviously need their data because they are sick and they need care.

But what does it mean to have healthy people who want to provide their data to researchers? What does it mean when we may have other products that add value where if somebody feels incented to provide their data because they will get other beneficial results through those applications and those toolings.

The second area, the second bucket...so the first one was enable the second one is "accelerate." We really see precision medicine as this unique opportunity to act as both a catalyst and an accelerant for the change that we know is happening and ONC is pushing on the roadmap and so how do we accelerate the widespread use of APIs to allow for seamless exchange of EHR data and support the Precision Medicine Research Initiative.

In this bucket I think we all have to ask ourselves is the fundamental question of, does the current roadmap and technologies, writ large, not just putting this on the ONC roadmap, everyone's roadmaps vendors, researchers, everyone. Do those roadmaps get to a place where we're able to move data around and then get that data to researchers, have science conducted, that science gets put back into clinical care and really impact the patient, because that means not just moving data around and I come from very much of a traditional Internet world from consumer and enterprise companies where we look at these things as not just about moving data and opening it but really about providing seamless experience.

So, how do we create a more seamless experience for the entire enterprise structure of everyone from the patient to moving the data to the researcher to the science, to all the way back into results so that somebody actually benefits at the end of the day. And so what does that start to look like.

And in there we've also been doing a tremendous amount there with the ONC members but also really working with EHR vendors and the providers to see how we can accelerate this as well and we know there is a number of questions in there as well with items such as data blocking and what I would typically refer to as a passive aggressive implementation of technology where sure we can say its implemented and done but does it really work? Is there a good experience once it so called says "it works?" Is it reliable?

The final third bucket, so enable is the first one, accelerate is the second one, the third one is "execute." And where we're focused on execution is providing the best approaches for data management storage security, privacy and usage for precision medicine.

And the way we think about this is how do we prototype for 1x, build for 10x and engineer for 100x and as we think about the larger Precision Medicine Initiative one of the things that we've found is that there are some incredibly powerful early work, research projects that are well underway, one of those is the Million Veteran's Program, Jim Breeling is on the call and has been one of the cornerstones of that and that is this idea of how do we have the samples that are collected from the Million Veteran's Program, which is available only to United States Veterans, through a consent mechanism, how do we help them scale, it has roughly 400,000 members that are in there. It started in 2011. It is well on its way. It is doing great stuff, where just four research projects were announced last week as well, how do we use that to learn from all of the things as they work through the research to figure out the results and then provide care back to veterans?

It is a great model to then figure out how do we take those best lessons and apply it to a much larger, broader not just VA, Veterans Administration, but to the Department of Defense and then subsequently larger populations.

Finally, let me just address the question, which is I think we're also very interested in of this as we think about these enable, accelerate and execute buckets, which is how does this tie into the larger questions that many of you who have graciously agreed to be on this group and with a broader ONC FACA really start to address what curve are we on and when we think about the sophistication of healthcare are we in an exponential growth curve of innovation? Are we in a logarithmic one? Are we in a linear one? What is the combination of those such that we believe where we are and where we want to go?

And then the ask as we start to think about that is really the one that I already mentioned which is how can precision medicine act as a catalyst for that change for what is required, for those three groups the participants, the patient, that researcher and then the provider. How do we think about what is...what does data driven healthcare mean in terms of creating that whole ecosystem and those levers to open it up.

And how do we use the ONC process to support the data donation, the aggregation, the API, the open datasets because we've seen phenomenal work happen when data gets opened. Most recently we've seen the Raj Chetty work that was built on top of data from the IRS with very highly sensitive data but utilized by contained researchers on site through an enclave model where they're able to show that kids that are living in a high poverty area when moved to a low poverty area can see as much as 14-15% improvement in median income.

Then also now most recently with HUD data and so we're seeing this change happen as we open it up and even a few months ago we had a kid, literally a kid, living in Upstate New York who was a 10th grader working on DB gap which is one of the major national treasures of NIH in terms of open data, building models to look at cancer research with machine learning and competing with some of the best researchers in the world. So, how do we figure out whatever is on the spectrum is appropriate and what levels of data do we think of as openness as we get to maximize the benefit of this data when we bring it together.

And then the standards I think is something that we have to address as well which is we see tremendous innovation happening in Silicon Valley and we have really had to figure out how in the role of standards and we're seeing very different standard models evolve some of which are extremely rigorous other ones that are extraordinarily laissez-faire.

In the case of the data science movement those standards are very much of an open source committer model the extreme of that. What is appropriate here and how do we make sure that the acceleration that we're seeing in precision medicine and the data standards that support it is something that is used to accelerate the field rather than having any barriers, artificially put in as we continue to evolve in this space?

And then finally, I think it's important to just at least remind ourselves who are we doing this for? It's a human at the end of the day, it's a family member, it's a person and one of the things that we think of when we think about technologists and technology that we're working on here we like to say that a technology is neither radical or game changing unless it benefits all Americans and so we have to ask, as Kathy did bring up, about how do we make sure that talks to everybody and benefits everyone simultaneously and so it's about that human at the end of the day. And I think let's go into the next set of whoever is next.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

All right, so it's Jon, I'll pick back up. Thank you so much Stephanie, Kathy and DJ. Task Force members you have just heard, you know, the brains of precision medicine, you know, kind of talking to you about where the initiative is going and, you know, what's happening in it. So, I would love for you to take this time for Task Force members to ask any questions of our presenters that you'd like for clarification or further discussion. So, the floor is open to the Task Force.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Jon, this is Leslie, can I ask a question?

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

You got it.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Okay, so I'm very fascinated by the trajectory that you mentioned and what the actual curve of pickup that we're on and you mentioned I think a 400,000 people earlier or what your goals are long-term but in general what has the pickup been in using genomics and getting DNA sequenced from beginning until now? It seems to me it has happened much faster than anticipated. Can you speak to that?

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

So, this is Kathy, I can try to respond. So, the advances in genome analysis technology has been really remarkable. So, the cost of genome sequencing and genome analysis short of whole genome sequencing, the cost has just been plummeting and so it is anticipated that it will be possible to sequence an entire genome for less than \$1000.00 in the very near term. So, that's quite a remarkable feat.

The kind of genomic analysis that's being undertaken in the Million Veteran's Program and what we anticipate will likely be deployed in the early stages of the PMI cohort is looking at specific informative genetic variance across the entire genome and we haven't yet decided exactly what that will look like. So, we are at the perfect point in time to be able to use this technology and many other technologies related to health in this large research cohort.

In terms of the adoption of genomic analysis in medicine I think it is, you know, on the upswing. Most of the genetic testing that is available is in sort of specialty care so oncology, in prenatal testing, in carrier testing and the like.

So, I don't think we're...it's not the case today that there is a large use of genetic analysis in day-to-day primary care but certainly that will become the case as we make the connection between genetic risk factors that can then be lessened with other kinds of interventions.

So, does that kind of answer your question?

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Yeah.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

You know the other thing that I didn't mention that I should have mentioned is there is a rise in sort of direct to consumer genetic test availability so 23andMe for example provides genomic analysis to people directly and they have, how many people do they have? They have several hundred thousand people who have gotten their genomes.

DJ Patil, PhD – US Chief Data Scientist, White House Office of Science & Technology Policy – White House

It's over that, it just crossed a million actually.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Did it? Yeah.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

That's what I was trying to get at. I think this is a wave that's coming from multiple sources that we have to accommodate each source. So, thank you.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

This is David; I have a couple of questions if I can get in the queue?

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

You're next.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Okay and I'll continue with Kathy. Kathy I was lucky to be able to attend the Vanderbilt meeting that you all hosted a few weeks ago.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Yes.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

And was fascinated by the interesting discussion around what is a cohort and your use of the phrase...of the term "cohort" you know obviously is qualified by the other points on your slide, but the one specific question I have is you use the phrase "donate" which I was actually quite interested to hear because I think donation of one's genetic data makes a lot of sense for a lot of reasons, particularly when we get into some of the privacy issues downstream.

But my question is...my first question really is about how are you going to reconcile the notion of using existing cohorts where that notion of donation wasn't part of it with the notion of donation? Are you going to go back and retro collect that notion of donation or is that something still up in the air? Does that make sense as a question?

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Yeah it does. So, there are a number of kinds of existing cohorts and we've gotten really great input from people who have been involved in building and maintaining these and there are sort of research cohorts like Framingham and Jackson Heart and others and we've heard from the folks who built those cohorts. And then there are cohorts that exist within healthcare delivery systems like Geisinger, Intermountain, Marshfield, etcetera and we've also heard from all those folks.

But if we use those existing cohorts as a mechanism to recruit we would still be recruiting people sort of...we would just be using those organizations and those contacts as a means to get to people and a means of collecting information but we would still ask individual participants about their willingness to participate so they wouldn't be de facto participants because they are already in a cohort. Does that make sense?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah, that's a great answer. I'm glad you put it that way that makes a lot of sense to me. That makes me much more comfortable with the notion. So, in a sense you'd re-recruit them under the terms of whatever emerges from this cohort.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Exactly.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

That's terrific I like that. Let me just cheat and ask a second question since I've got the microphone and it's related to this notion of cohorts, you know, the usefulness of a particular study to answer a particular question a lot of times depends on how focused is the gathering of the actual cohort and if you are essentially gathering random, one million random volunteers, the power for answering specific questions is not going to be terribly high although the hypothesis generation capabilities may be significant, but given the small effect size of most of the variants that we're going to run into, what do you see as the primary problem that you're trying to solve with the one million member cohort? Is it really more along the notion of hypothesis generation or do you think the odds ratios are going to be high enough to actually effect primary practice care?

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

So, I think that this is really going to be a discovery resource and we have spent a lot of time talking about, you know, how big...should it be one million, should it be more than one million and what kind of power would we have within a cohort to ask specific questions and there have been some power calculations that have been done to look at what could you reasonably be able to detect, especially in gene by environment interactions and a lot of that was done back in...some of that was done back in 2003/2004 when early ideas about developing a large gene and environment cohort were originally put forward and they didn't get implemented because the costs were prohibitive.

Now with the technological changes the costs are reasonable and so we can...we are relying both on the power calculations that were done back then also looking at other cohorts in terms of the power to detect different interactions and Josh maybe I'll ask you to pile on here as well, but I think another part of your question, I think, is not only whose in the cohort but what data from those people do you want to collect and that's really an important and challenging question because you want to have a really rich data collection but you don't want to...you want to have what you absolutely must have and not everything that would be nice to have because otherwise we'll just get sort of bogged down.

So, to help guide that we have put together a number of use cases asking specific questions about not just about genomics but also about behavior, environment and the like and so we're trying to use those use cases to drive the focus on what data elements we need to collect in the near term with the recognition that over time we may have, either through new knowledge or through new technology, we will want to roll new data collection modules and data analysis technology into the cohort.

Josh do you want to talk about people power?

Joshua Denny, MD, MS, FACMI – Associate Professor, Departments of Biomedical Informatics and Medicine – Vanderbilt; Office of the National Coordinator for Health Information Technology

Sure, I'd be happy to. So, I think a number of important points you hit on there Kathy and clearly your use case drives a lot of what you want to get. You know one of the things that's certainly true is if we're looking at a variety of ways of capturing populations and people raising their hands so to speak and becoming part as well as enrolling from existing cohorts you will get a, you know, large population that will not necessarily be representative in the same way as, you know, a random sample would in something like a gallop poll but you will hopefully get representation across the country, across disease and across, you know, sort of ethnic and age representations.

So, in looking at power one of the things we did is we took power calculations actually that were used and designed in the UK Biobank and for gene by environment and also just disease gene associations and what you see when you estimate prevalence across around 1000 diseases derived from what you would expect to see in a population cohort, you know, you're able...you're powered to be able to look at gene by environment associations with, you know, effect sizes that they've choose in the UK Biobank as benchmarks for them over several hundred diseases, around 300 diseases, at some level of significance that were markers they choose in odds ratios around that, you know, less than 2 number and then gene discovery for many more diseases. So, then you can think about rare variance and things like that with very low minor low frequencies when you start talking about a million people.

One of the key goals to make that happen though is we really have to be able to collect, you know, across the disease spectrum and the medication exposures and, you know, outcomes longitudinally which really, you know, is a lot of the key tasks of what we think about I think for this Task Force really in terms of getting and being able to port EHR data across different venues as well as getting data from, you know, outside places and what will help and things like that.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

So, Josh, thank you for that. So, this is Jon White, this is the kind of discussion that, you know, could legitimately go on for a long time, I'm a little concerned since we're coming up towards 1:00 p.m. Eastern and I want to keep time to make sure that we can at least talk about the charge and the timeline. Let me offer this, if there's any pressing questions the Task Force members want to ask our presenters you can tee them up now but you've got to keep them to like one sentence or so.

My guess is that Kathy and DJ, and Stephanie are going to be willing to also have continued dialogue by e-mail as well. So, if we have follow-up questions we can bring them to them as well. Is there is anything that's super pressing from the Task Force that they want to ask?

Andrey Ostrovsky, MD – Chief Executive Officer – Care at Hand

I have a quick question, this is Andrey Ostrovsky, and this doesn't necessarily need an answer right now but it would be great to know what efforts are being taken to try to look at not just what medications and therapeutics or diagnostics can be developed out of some of this really exciting work but also what delivery system innovations can come out of this work and I'm kind thinking off the top of my head, but are there considerations for how interoperability standards can support consumer or patient with a particular gene that's been identified and think, well are they more appropriate to get focused on home delivered meals or more of a focus on housing and precision in relation to health if you...so to speak. I'm sure someone has coined a better term for that. But, I'd love to know if at the least level and policy implications are we looking beyond just drug or diagnostic can we create but also where delivery system innovations can we look into, but specifics.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Jon, this is Andy I have an even faster question.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

I'm stunned by what I think I hear is the squeamishness of about revealing data to patients. My own personal experience and that of Kaiser Permanente and many other delivery systems is you give it all to them if they don't want to look at it they don't. So, we should have that discussion later not today.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Here, here.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

Well, so let me respond to that, this is Kathy, so there is a significant difference between clinical information and research information.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Understood.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

And there is no squeamishness at all on the part of NIH or the administration in making sure that every patient has ready access to all of their clinical health information. There is no, you know...we're all a part of the data liberation movement.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Well but if you're asking a research question or are asked one they have a right to know that too but we should save...that's a longer discussion.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

There actually is no right to research information and so there is...

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

No, no I don't say it's a constitutional right or even a legal right. This is a personal opinion.

Kathy Hudson, PhD – Deputy Director for Science, Outreach and Policy – National Institutes of Health

It's a very important question that we are wrestling with and many important nuances it coalesces.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Yes.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

And the incidental one will be an interesting part of that too.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Yes, right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Finding things that you didn't really want to know about.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

So, you guys can see this is going to be an interesting set of discussions. So, Andrey and Andy both great points. I do want to...I think I'll, if you're okay I'll take that off line and we'll figure out how to tee that discussion up guys as we go along here. So, thank you so much to our presenters, fantastic dialogue and, you know, which is just completely constant with my experience with you all over the past year. So, thank you very much.

So, if I may take the prerogative let's move to the next phase here and the next slide which is talking about our charge and our work plan. So, the charges we currently have as written like the layout here and I'll just read it to you and I hate reading slides but I'm going to do it in this case because I want to make sure that you all have a chance to comment back.

First is to identify opportunities for innovative collaboration around pilots and testing of standards that support Health IT interoperability for precision medicine.

The second is to recommend existing standards that are currently ready to support precision medicine.

The third is to identify emerging standards and reference implementations that may require further pilot testing and/or support precision medicine.

And then finally, identify gaps in available data standards related to precision medicine.

So, you know, on the very surface of it relatively simple, but would love the Task Force's feedback at this point on that charge. Do we have it right? Are there things that we're missing? Are there things that you'd alter or change? The floor is open. What do you all think?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

So, this is David, and Jon you've heard me rant and rave about the role of standards and where they fit in the overall framework and I think these are all great questions. My only caveat is that we be clear to frame them in the business context for why the standard needs to be discussed in the first place and by business context I obviously mean the broad set of concerns that are not just business/business but regulatory and priorities and so forth, but, you know, to ask a standards question in the absence of a focused use and understanding for why the standard is important or we need the standard is to get the cart backwards, the cart before the horse.

So, I think today's call, you know, helps identify sort of what the goals are that you can then juxtapose these questions into those goals, but inventing standards just for the sake of inventing standards is pretty much a waste of time.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes and very much in line with the thoughtful skepticism that you mentioned earlier.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

I warned you.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

No it's all good. So, I think that's good. I think the business case for the purpose of the Precision Medicine Initiative is going to be achieving its goals, right?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

So, I think that is a great suggestion and we will absolutely frame it up in that context and I think that as we hear from folks who testified to us talking about what their business cases are I think we can kind of weave that in as well. So, I will stipulate that point so it's a good one.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah and so if I could just follow up on that for example the notion of patient's being able to donate their data and then expecting to receive some kind of a feedback about what's been learned from their data, I mean, that's a great use case, a business case and these standards will make sense in the context of a task like that. That's the kind of thing I mean. I don't want to over focus on the notion of business but I just mean that, you know, you've got to have a reason. What problem are you trying to solve is the first question you should ask...

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

And then go figure out what the standard is.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes, totally right. Okay, good. Other comments from the Task Force on this charge? Going once, going twice.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

There is...

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Jon...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Oh, go ahead.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
I'm sorry.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Go ahead, Andy, go ahead.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
Yeah, this is Andy I wanted to get off mute. I would add David to what you said that we might make one more rule which is that if an existing standard would mostly satisfy what the business requirement is because we've identified the problem and the use case as David has described, instead of asking that it be tweaked the default position be we use existing standards to the best of our ability.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Unless they're really problematic.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
Unless they're really don't work.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
So, we have to have a definition that says this really doesn't work rather than...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, yeah.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
If it mostly works or could mostly solve the use case we need to be satisfied with that because I'm not interested...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)
In proliferating standards as we proliferate genes.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Right, this is Leslie, it's just we do have...we have new stakeholders being added right, this is patient generated health data or data coming from research it's not our usual sources. So, we just have to keep that in mind as we evaluate standards and the uses.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

And to piggyback...

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

You know...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

On Leslie's comment there, you know, the breadth of what precision medicine covers is more than just genomics and exposure data. So, we may want to rethink...I mean, we've heard mostly about the exciting genomics side of it, but there may be standards relevant to some of the other things like Leslie suggested with patient generated outcome data which is part of personalizing your care but isn't genomic necessarily.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yeah, you know, this is Jon, there's something that's worth highlighting here that Leslie and I had talked about before but I think is worth saying, you know, a lot of the discussion that has happened at the Standards Committee and the Policy Committee has been around the context of the incentive program, right, Meaningful Use Incentive Program, for which, and certification which supports the incentive program and other federal contracts.

This is slightly different, right, this is not that incentive program but instead this is a broader administration initiative. It is still supported so it's still aligned with the kind of...the authorization of the Standards Committee but the context is slightly different. So, you know, we can kind of noodle over that as we go along but just wanted to highlight it for you.

Okay, good comments so far. Other folks anything else you want to say about the charge?

Okay, I'm going to take that as a...and of course happy to have comments off line as well. So, if we could go to the next slide because I think this is probably important to talk about. And this is the meeting dates. So, this is aggressive and I'm just going to outline it for you here. So, we're meeting today to review charge and action steps, two weeks hence we'll meet to review workgroup comments on what we've got so far and testimonial from experts and discuss action steps and then on Wednesday the 5th we'll look to review workgroup comments and have further testimonial from experts as necessary.

By the 19th we would really like to be able to start developing preliminary recommendations, okay, and maybe that's something we develop off line and throw out to the Task Force to discuss. By the end of August try to finalize recommendations and start preparing for our presentation to the Standards Committee in September and then on September 10th present our recommendations to the Standards Committee.

There are a couple of reasons for the aggressiveness of this timeline, you know, number one, it's a starting point I think, you know, for discussion. The reason for the aggressiveness is that, you know, the Precision Medicine Initiative, the funding for it comes in the Fiscal 16 budget so that means that funding vehicles to use that funding to support precision medicine are going to have to start happening in the fall or in the winter. So, for the recommendations to be helpful in terms of getting incorporated into, you know, funded initiatives it's really got to happen this fall. I am open to talking about some flex in these.

I'm also open to talking about, you know, if we can say where we think there are stuff that works, stuff that works now, okay, but if we want to have further discussion afterwards we can gen up a second phase after an initial set of recommendations, but, you know, we kind of wanted to see how it went along.

So, with that let me stop and have folks, you know, kind of start taking the shots at "what are you thinking" in terms of the timeline.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah, this is David, just, you know, given our previous comments about use cases and what problems are being solved I think this is still a new enough space that we may not have a whole lot of clarity about that in this timetable so we're going to have to either come back for a second pass or be fairly vague in our recommendations. This is again, standards getting at the cart ahead of the horse.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes, you know, I'm also...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

And...

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

I'm also hoping that we can leverage, you know, the excellent previous six years of work by a lot of the folks on this Task Force and across the committee and recommendations that have already been made that we can just highlight and say...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Right, you know, this is, you know, stuff that's gone ahead of us that we think, you know, is good, but, yeah, I agree with you David. I think that, you know, taking a first pass at it and getting a first work product that is good but, you know, that a subsequent look, you know, might be worthwhile.

Claudia Williams, MS – Senior Health & Health IT Advisor – Office of Science & Technology Policy – White House

This is Claudia...

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

And this is...

Claudia Williams, MS – Senior Health & Health IT Advisor – Office of Science & Technology Policy – White House

I'm sorry. This is Claudia from OSTP. I mean, one thing that I think might be really helpful input to this process maybe from ONC folks or others is an assessment of where we are with data standardization and schema for the different types of data we're thinking about genomics data and EHR data with an eye to how we'd use it in a precision medicine context, mHealth and wearables data to identify what can be leveraged but also gaps that could be filled in a very rapid way. So, I don't know if that's a...it does look from the timeline like there is a pretty...that would need to be produced pretty quickly to inform the conversation, but it does feel like some just lay of the land environmental scanning would be extremely helpful.

M

I completely agree and I think following that you can sort of prioritize based on the timing of when certain things are needed and where they are in terms of, you know, towards implementation and availability like there are many omic technologies that you can imagine being part of this but the most, you know, genomic maybe the first in most, you know, ever present and ready to be implemented in EHRs. So, maybe that, you know, is something we need to think about more than proteomic data.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yes. This is David, I'm going to have to leave to go to another call actually with the data access framework people talking about this very same topic but maybe a little bit more granular level, but I wanted to let everybody...remind everybody if you don't know that there's an HL7 conference Monday, Tuesday and half of Wednesday of next week on policy issues around genomic medicine and a number of the vendors are going to be talking about the current standards that we are using and intend to use so if you're available or I think there is a live webcast on some of it I think we're going to go deep on some of these subjects...

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

This is Leslie...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

At that conference.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Jon, I think that we were also asking, going to ask the group if they had recommendations for people to testify and expertise to be considered and perhaps David as you're there you can look at those people with some...with that in mind and then other Task Force members could be asked to provide suggestions as well.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yeah, good idea.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Yes, both of those are absolutely correct. I'll also say that I think I'm actually giving a short talk at that same conference so David I will look forward to seeing you there...

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation

Yes.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

And that would be wonderful. So, other Task Force members at this point, and again we can continue to have dialogue off line by e-mail, but other comments either on the timeline that we've laid out here or if you would like to start making recommendations Leslie opened the floor to recommendations for other potential presenters to this Task Force.

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

This is Michelle, so Jon, if I could ask that we solicit those names off line. We just don't want to talk about people on a public call, but we'll follow-up from today's meeting to remind people to send those names. And I just want to clarify the last item on the work plan that last meeting is to prepare for the final presentation but the final presentation won't be until September 22nd so a little bit more time.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay, whew, got me a whole extra 12 days there.

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

So, we'll fix that for the next meeting.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

All right, fantastic. Okay, so we're very close to time so let me just stop and give the Task Force, other members of the Task Force any extra comments that you want to put out there, any discussion that we...anything that you want to flag for further discussions we didn't get to? I hope you all are excited about this. This is going to be quite a ride but it has been quite a ride the whole way along. So, all right, so with that I'll say thank you for your attention. Michelle do we have an open comment period for the Task Force?

Public Comment

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

We do, so Lonnie or Caitlin if you could open the lines?

Lonnie Moore – Meetings Coordinator – Altarum Institute

If you are listening via your computer speakers you may dial 1-877-705-2976 and press *1 to be placed in the comment queue. If you are on the telephone and would like to make a public comment, please press *1 at this time.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

So, while we're waiting for public comment to get gen'd up because sometimes it takes a little bit, other members of the Task Force I kind of cut you a little bit short does anybody else have any additional comments that they want to make?

Leslie, I also probably didn't give you too much bandwidth to talk. Is there anything you'd specifically like to add to the discussion?

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

No I think we've heard some great feedback today and our job is to come back with good recommendations for going forward with a successful structure.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Awesome.

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

Jon, we do have a public comment.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Okay.

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

So, just a reminder to our public commenter's public comment is limited to 3 minutes. Aaron if you could please go ahead and state the organization that you're with.

Aaron Seib – Chief Executive Officer – National Association for Trusted Exchange (NATE)

Sure, hi, this is Aaron Seib with the National Association for Trusted Exchange. I have a very brief comment which is just to applaud Jon and Leslie on bringing together such as fantastic Task Force and looking forward to the incredibly valuable contributions you will all make. Thank you.

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

Thanks, Aaron.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

Thank you.

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

And it looks like we have no more public comment so we will follow-up with the Task Force members just to remind you all to share ideas of participants that could present at future meetings.

P. Jonathan White, MD – Acting Deputy National Coordinator – Office of the National Coordinator for Health Information Technology

All right, thank you so much everybody and we look forward to talking to you in two weeks' time.

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

Thank you, everyone, have a nice weekend.

Andrew M. Wiesenthal, MD, SM – Director – Deloitte Consulting, LLP – International Health Terminology Standards Development (SNOMED)

Thank you, bye, thanks.

Leslie Kelly Hall – Senior Vice President of Policy – Healthwise

Thank you, bye-bye.