

**HIT Standards Committee  
Consumer Technology Workgroup  
Transcript  
May 24, 2013**

**Presentation**

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

Thank you. Good afternoon everybody, this is MacKenzie Robertson in the Office of the National Coordinator for Health IT. This is a meeting of the HIT Standards Committee's Consumer Technology Workgroup. This is a public call and there is time for public comment built into the agenda. The call is also being recorded, so please make sure you identify yourself for the audio. I'll now take the roll call. Leslie Kelly Hall?

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**  
Here.

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

Thanks Leslie. Brian Ahier?

**Brian Ahier – Gorge Health Connect, Inc. – President**  
I'm here.

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

Thanks Brian. Christine Bechtel? Brian Carter?

**Brian Carter – Cerner Corporation – Executive Strategist**  
Present.

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

Thanks Brian. AJ Chen? John Derr?

**John F. Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant**  
Here.

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

Thanks John. Tonya Dorsey? David Harlow?

**David Harlow, JD, MPH – The Harlow Group LLC – Principal**  
Here.

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

Thanks David. Art Henderson?

**Arthur R. Henderson – Affinity Networks, Inc. – President**  
Here.

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

Thanks Art. Susan Hull?

**Susan Hull, MSN, RN – Chief Executive Officer - Wellspring Consulting**

Present.

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

Thanks Susan. Liz Johnson?

**Elizabeth Johnson, MS, FHIMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics**

I'm here.

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

Thanks Liz. Tom Jones? Mo Kaushal?

**Mohit Kaushal, MD, MBA – Aberdare Ventures/National Venture Capital Association – Partner**

Here.

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

Thanks Mo. Russ Leftwich?

**Russell Leftwich, MD – Tennessee Office of eHealth Initiatives – Chief Medical Informatics Officer**

Here.

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

Thanks Russ. Holly Miller? And Sally Okun, I know we had a switch, I'm not sure who's standing in for Sally today. Yair Rajwan?

**Yair Rajwan, DSc, MSc CS, MSc HIS, PFNLM – Visual Science Informatics, LLC – Director, Analytics Visualization**

Here.

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

Thanks. John Ritter?

**John Ritter, MS – HL7 EHR Workgroup – Co-Chair**

John is here, yes.

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

Perfect, thanks John. Anshuman Sharma? Fred Trotter?

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

Here.

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

Ah, thanks Fred. Kim Nazi?

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Here.

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

And thanks Kim. Susan Woods? And any ONC staff members on the line if you could please identify yourself.

**Mary Jo Deering, Ph.D – Office of the National Coordinator – Senior Policy Advisor, Office of Policy and Planning**

Mary Jo Deering.

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

Thanks Mary Jo.

**Erin Poetter Siminerio, MPH – Office of the National Coordinator**

Erin Siminerio.

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

Thanks Erin.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Pierce Graham-Jones.

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

Ah, great. Thanks Pierce.

**Jennifer Brown – Office of the National Coordinator**

Jennifer Brown.

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

Thanks Jennifer. Okay, I'll turn the agenda back to you Leslie.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Great, thanks everyone. What a wonderful turn out this Friday before Memorial Day. I really, really appreciate all of you attending. I think it goes to each or our commitment to consumers and patients. Today we're going to hear some pretty important information that will build on our work to come, and it is really a pivotal step in understanding our future work plan is understanding what has happened to date with regard to patient engagement activities. There are two things that always come up, one is, liberate the data and the other is to make sure that we are – its private and secure. And so understanding those foundations are very important going forward and we're lucky today to have some wonderful presentations, one by Deven McGraw and also from Pierce about the Blue Button Project. So with that, I don't want to take up a huge amount of time, and I'll turn it over to our first presentation, which is going to be from Dixie Baker and also Deven McGraw.

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

Okay, great. Does that mean me Leslie?

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Correct. Sorry.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

(Indiscernible)

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

You go ahead first Deven.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

You do a slide and then I'll do a slide Deven.

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

Okay, that sounds good. So I'm going to be providing you all with an update on the recommendations that the Health IT Policy Committee has endorsed that have come through the Privacy & Security Tiger Team, which is the privacy and security working group of the Health IT Policy Committee. I have a slide deck, I sort of – I'm only going to do the recommendations that I consider to be relevant to what I call consumer empowerment. You could use the "E" for engagement, I mean, I think all of our recommendations are of benefit to patients, but I really tried to focus on the ones that deal Directly with things like patient access to data, patient – consumer engagement and empowerment types of issues. So, next slide.

Just for reference, this is our Tiger Team charge it's really broad. It's basically an arguably all things privacy and security related to HIT and HIE. And so we have taken on a number of issues, as you can imagine, but again, we're just going to highlight the ones related to patient engagement today. Next slide. The topics that I'm going to cover are the recommendations that we have endorsed with respect to Stage 2 of Meaningful Use and specifically policies related to the view, download and transmit functionality in Stage 2. The patient's right to request an amendment to information that's in an EHR, and I know when we were thinking of this, we were focused mostly on provider EHRs, given that our recommendations come to the Office of the National Coordinator and are relevant to the HITECH program. I threw in a slide on our recommendations on improving accuracy in patient matching, was not sure how relevant that is, and I'll go over it quickly. And then the recommendations that we've done on consent. Next slide.

So starting with what I suspect will be of high relevance to you are the recommendations that we have done on the issue of view, download and transmit. There are a number of slides here; we covered a number of issues. These are just really summaries of the recommendations, rather than the complete set of recommendations, although I definitely tried to hit the high points here. But I also have the date for the transmittal letter, where these recommendations can be found, in case – which makes it a lot easier to find them on the web, in case you need to or want to look at them in more detail. So, we dealt with the issue of transparency and providing consumers and patients with some sort of notice when they go on to a portal or through the view, download and transmit functionality, in order to see their data and then download and transmit their data. And we really thought that the patients ought to have some pretty clear and simple guidance regarding the use of this functionality. And that any time a patient wants to download or to have data transmitted, there ought to sort of be a secondary confirmation on the screen that confirms that in fact, that this is something that they want to do. Patients, however, should be able to turn this functionality off if they don't want to see it every time they do it. It's really for their benefit to make sure that what they're doing is intentional when they're downloading and transmitting data.

We relied pretty heavily on the Markle Common Framework for the Blue Button and the MyHealthVet Blue Button materials for good models. And the guidance is really quite simple, it's not voluminous, it's two or three points on a single screen with the ability to sort of be able to link – to click on links for additional information if patients want it. We did not, however, ask for a certification criterion for this notice for certified EHR technology; we were concerned that that would result in sort of a rigid, one size fits all approach to this issue, which didn't necessarily seem to be what we wanted. We wanted to give providers some flexibility for their patient base in working with their vendors on this notice. I will tell you, this is in fact how the recommendation was received by the Policy Committee and endorsed. I will tell you, however, that in hindsight I'm not sure that we're going to get this transparency notice, since it's not required as part of either Meaningful Use or certification, it's merely a recommended best practice. So, that's just an aside. Next slide.

Also on view, download and transmit, we had also made some recommendations on security functionalities for the portal and at least a couple of these have, in fact, did find their way into Stage 2, but not all of them. So, there should be audit trails for the patient's portal that patients can get upon request. So when data's accessed in the portal, downloaded or transmitted, that would be logged. A patient portal should have the mechanism to be able to ensure a secure download to a third party authorized by patients. And then certified EHRs should include an ability to be able to detect and block programmatic attacks. I think this one is one that did not; somebody can correct me if I'm wrong, but I don't think that one ended up in the final Certification Rule. Next slide.

We also, with respect to the portal, had a provision regarding data integrity. The portal should include appropriate provisions for data provenance, which the patient should be able to see. And the provenance should be present in the data and visible, both when the user accesses it and it should also transfer with the data when it's been downloaded or transmitted, but we acknowledge that there would need to be some further work on this issue. I don't know that that went very far post our recommendation, but that was our recommendation. Next slide.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Excuse me. This is Kim. Could you just provide an example for the provenance.

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

Sure. So the issue is – I mean, I'm a policy person Kim, so this is the way I understand it, is that when a patient sees data in their portal, let's say it's a lab result, that they're able to sort of look at that data and say, well, it came from "X" Lab. Or, if in fact it's a CCDA, which is the likelihood here, we know a lot more about Stage 2 now than we did when we were doing these recommendations, then you would have Consolidated CDA that would be identified as having been created by X medical provider or X medical practice, right, but if that gets transferred, that provenance would go with it.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Okay. Thank you. So one way to accomplish that would be kind of the required metadata approach, right?

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

Yeah. I mean I believe so from a technology standpoint, but I leave that to smarter technical people than me.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Okay.

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

We just were – we understood from a policy matter that this was at least technically feasible or should be considered for – the technical feasibility should be considered by the Standards Committee.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Thank you very much.

**Holly Miller, MD – MedAllies – Chief Medical Officer**

Leslie, this is Holly. A quick question. I'm assuming that if the CCD or the CCDA have been created by an HIE, then the drill down would be available for the patient to see each element and where that – the original provenance had come from, is that correct?

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

I think that's what we intended –

**Holly Miller, MD – MedAllies – Chief Medical Officer**

Uh huh, I agree.

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

– I'm not sure that that's the case.

**Holly Miller, MD – MedAllies – Chief Medical Officer**

Okay.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Maybe I can clarify. This is Dixie Baker. The – first of all, when you view – the patient viewing does not require a CCDA. The patient download is what is a CCDA, so that's when its downloaded to the individual, I'll show you – in fact, that's one of the handouts, you were provided with a whole patient engagement section. As far as the metadata for provenance and for sensitivity, I thin – the – I was on the PCAST working group of the Policy Committee a couple of years ago probably now, and we recommended that those metadata include the provenance, the name of the – identifier for the patient and any sensitivity metadata. None of those has really made into the standards, as of now, and my understanding is that that's because they are very closely related to data segmentation, and I suspect that once we get data segmentation standards in there, then that's where those metadata will come into play.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Okay. Interesting.

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

All right. So, the other issue that we took on with respect to view, download and transmit was the issue of identity management of patients for use of these portals. And we recommended that ONC develop and disseminate best practices for identity proofing and authentication for patients. The best practices should really follow some key principles, and there were a number of them articulated. The ones I want to highlight are that the protection should be commensurate with the risks, protections for a patient's ability to make an appointment, for example, would and could be different than those that would enable access to PHI, to provide a simple example of commensurate with risk. And then – but overall people felt like – we wanted to have some protections here, but we wanted to make sure that the solutions would be easy for patients and consumers, be consistent with what they are willing or able to do and not set a bar that's so high that we end up inadvertently discouraging access. And that these best practices should really evolve over time in response to innovation, because there's a lot of it going on in this space, and that ONC should also keep an eye on the developments related to National Strategy for Trusted Identities in Cyberspace, or NSTIC or "nstick" or however you pronounce it. The multi-stakeholder process that's trying to develop trusted, secure, reasonable credentials for individuals online. Next slide.

We also – on this ID management issue, we also noted, we have the advantage here of in-person identity proofing by providers when patients come into the office to see them. But we also thought it was important that remote solutions be available for patients who would either have difficulty coming into the office or who are otherwise healthy and don't frequently come into the office. Remote ID proofing is a bit more risky, and one way to mitigate that risk is to also combine it with out-of-band confirmation. In terms of authentication, providers should be strongly encouraged to use more than user ID and password to authenticate, but again, not something that's too burdensome for consumers to use.

So, not NIST level of assurance 3, which identifies a number of sort of second factor criteria that are acceptable under that framework, but really more like what we called 2.5, and similar to what's customarily used in online banking, which a number of consumers are really accustomed to. And it's a little bit more secure than just a username and password. But in the event that username and password continues to be sort of the dominant model here, disseminating best practices and password management would also be helpful. We also had a discussion about patient use of Direct, which is the standard that is used in Stage 2 for the transmit aspect of view, download and transmit.

And based on some information that we learned from ONC staff about Direct and Blue Button, it was clear to us, and I know you're going to get a presentation from Pierce so I won't go into that in a lot of detail, but that patients would be providing the Direct address to the provider and therefore creating the link between the patient and the address, so that the provider can have certainty that when they're transmitting it, they're doing it to an actual patient account and not something that's being spoofed. And we didn't, at that time, see any need for any additional policy requirements with respect to patients use of Direct, at least on the ID management and authentication side. Next slide.

So the other topic that we took on was the patient's right to request an amendment to information in a provider's EHR. And we really took the HIPAA Privacy Rule as the – as setting the policy here. We didn't come up with any additional policy in terms of the right of a patient to request an amendment, because in fact, the Privacy Rule provides some pretty strong rights here. Patients can request, from the source of the information, an amendment to that information, or they can ask to, if there's a dispute about the information, to have information from the patient appended to the disputed data. In the event that an amendment is actually made, providers have to make reasonable efforts to inform and then provide that amendment to persons, including business associates that the provider knows have received the information and may rely on the wrong information to the patient's detriment. And if you as a provider receive one of these amendments, you actually are required to make the change under HIPAA. Next slide.

So given this sort of policy framework, we said certified EHR technology should have the capability in Stage 2 to support patient requested amendments to health information. And this means that the system should make it technically possible for providers to make the amendments to a patient's health information in a way that's consistent with the entity's obligations with respect to keeping a legal medical record. Meaning, you need to be able to still view the original data and then identify the changes that were made to it. You also need the ability to be able to append information from that patient in the event of dispute about data in the record. And then the entity also has the right under the Privacy Rule to rebut that patient information and so if the entity in fact does that, then all of that needs to sort of be attached to the data in some way, shape or form, from a technical standpoint. And then we also said that the technology should have the ability by Stage 3 to actually be able to transmit all of that to other providers to whom the data in question had previously been transmitted. Next slide.

And now I know you guys have a pretty big – full agenda and a short call today, so I'll just close by saying, the other two issues that we took on, that I was going to highlight for you today, include improving accuracy in matching patients to their records. There were – this – our recommendations came out of a public hearing that we had and so they're quite comprehensive in nature. Next slide. The last recommendation I was bringing to your attention is one on the issue of consent or meaningful choice. And when it's triggered in health information exchange environments is when the provider who normally is sort of the gatekeeper to disclosures out of a record about the patient sort of no longer has decision-making control over when information is released from that record. And there are certain health information exchange environments that exist today that sort of trigger that kind of concern, and we said meaningful choice about whether a patient's record should be in an arrangement like this should be provided to the patient. And meaningful choice has a number of prongs to it, being able to make – having the opportunity in advance to make the choice, doesn't necessarily mean opt in, but you have to have an opportunity to make it before the default of either opt in or opt out is applied. And then, of course, transparency about the risks and the benefits. In this particular letter, was also where we called on ONC to study or pilot technology approaches to enable to patients to make more granular choices than just all in or all out.

So I hope that was helpful. I'm happy to answer any questions. Also, again, the letters themselves, the transmittal letters have a lot more detail and that's why I included the dates, in case you need to look at them.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Thank you very much Deven. We probably have time for maybe two questions, and I'd also ask the ONC staff to place the transmittal letters references in our FACA website for ease of access for the committee. So do we have questions?

**Susan Hull, MSN, RN – Wellspring Consulting – Chief Executive Officer**

This is Susan Hull. What strikes me is that as we start to look at providers providing this information Directly to their patients, there's a different set of implications than we look at health information exchanges working Directly to provider these opportunities or portals to the patients. Have you given some differentiation in terms of policies that might relate more to a local provider and sort of the one time or the Direct relationship versus the HIE where the patient would then have access to multiple sources and multiple –

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

Yeah, we did not take on that issue specifically. It's a really good question. One of the – most of our recommendations, except for the ones on consent, which are sort of aimed at HIEs, most of our recommendations are toward – aimed towards the providers participating in the Meaningful Use Program. But we have always said in – as a Tiger Team and a Policy Committee and also with respect to other recommendations that providers can delegate those responsibilities to a business associate and an HIE is a provider's business associate. So, sort of envisioning that the portal responsibility could, in fact be delegated to another entity that would then ideally sort of take on all of the legal and policy requirements that would otherwise be met. But it is not the same sort of Direct relationship with the patient that sort of underlies some of the rights in HIPAA and some of the arrangements that we envision in these recommendations. So I think it's a good question, but we largely did not make a set of recommendation specifications.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Any other questions?

**W**

Yeah, I had a question about – I really liked the append and addend information that you provided, and I think it's critically important. But when an information has gone into an HIE and potentially then been disseminated further, how can the patient – because you've mentioned that the provider would be responsible for his or her dissemination of the information, but the HIE could then take that to the nth degree that the provider might not even be aware of where that's gone. So has there been any consideration about how that downstream would be appended and addended?

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

Not from a functional standpoint, I mean, it is the case that providers, if they make an – it's interesting, they treat amendments and appended data differently. So if you agree to make an amendment to data, then you do have a responsibility to notify entities that you know have received the information, which you may not always know that on the provider's end.

**W**

Exactly, with an HIE it may have been – that data may have been used downstream that the provider doesn't know about.

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

The provider doesn't know, and the obligations essentially are to those entities that the provider knows about. We did not – I'm trying to think if we sort of – we acknowledge – I remember that we acknowledged the issue that sort of HIEs would and could potentially play a role in – both from a negative standpoint, in disseminating data that ultimately was wrong. But also from a positive standpoint of being able to sort of track down where the data that was wrong actually went, so that it could be corrected. But there was – we didn't sort of take the next step to consider what role that we might ask HIEs to play. Again, some of this is about like who can we reach with our policy recommendations through the tools of Meaningful Use and Certification, which are the tools within the HITECH bucket, as opposed to does HIPAA go far enough? I mean sometimes we stretched that a little bit, to be honest, but for the most part, we – there are some limits with respect to what we're able to do. But I think you raise a really good point, and I – my understanding is that this is an issue that you guys may be delving into with a little bit more detail and I would absolutely welcome that deeper dive.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Super. Thank you Deven. I really appreciate all this and I know we will have questions as we go forward, because I think that you're right on, we'll be asked to do some of this deeper dive. So thank you.

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

You're welcome. Thanks for having me.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Yes. Dixie.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Okay. Hi, first of all, thank you for inviting me to talk to this group. I'm really, really impressed with how many people showed up for this group, obviously this is important. I've given you two things today, one is – are the PowerPoint slides that you're looking at on the screen. There's another document that is the extract from the Stage 2 or 2014 edition of the Meaningful Use Standards and Certification Criteria. And in that I've inserted and highlighted the standards that are referenced by the certification criteria.

The first thing I wanted to do is to make the transition from what Deven has just spoken about to what I'm going to talk about. I want to make sure that the people on the call understand this isn't a – it's a dotted line more than it's a straight line. The policy that the Tiger Team develops really doesn't go Directly into certification criteria, what it goes into are regulations like, as Deven mentioned, like HIPAA and Meaningful Use measures. And then what I'm talking about today, the standards and certification criteria, are for certifying EHR technology that would then be capable of supporting these policies. But they aren't like a – they don't really embody policy, they really are technical capabilities that are used to enforce the policy. So, with that, can we go to the next slide.

Okay, this is kind of a condensation, a summary of what's in that – the whole section of the patient engagement section of the criteria and standards document. The whole section on patient engagement was new in the 2014 edition, also called Stage 2. And on the left here, I have what the certification criteria are, so these are the requirements for EHR technology to be certified and then on the right are the standards that are specified in the 2014 edition. Under the area, as I mentioned earlier, the area of viewing, the patient – the capability to view EHR data does not require a CCDA, it does require that something called a Common Meaningful Use Data Set be viewable, plus a couple of additional things like the name of the provider and how to contact them. But the Common Meaningful Use Data Set is specified in that standard and its 16 different data elements like the patient name, the date of birth, ethnicity, etcetera and you can find that whole list in the standards documentation. The other thing, other standard that's required is web accessibility, that's the standard that says make it useful for people and usable for people.

The second area is the capability for a patient to download, and the final rule finally said that they should be able to download an ambulatory summary, an inpatient summary or a transitions of care referral summary. And in any of those cases, it should be an HL7 Consolidated CDA document. CDA is the Clinical Data Architecture, an HL7 standard. And the data elements that are contained in that CCDA are, once again, the Common Meaningful Use Data Set. The third requirement or criterion is the capability to transmit data to a third party, either an ambulatory summary, an inpatient summary or transitions of care referral summary. And the standard for that is something called the ONC Applicability Statement for Secure Health Transport, which is a certainly a non-descript title at the very least, but that is what the primary specification for the Direct Protocol is called, and I think you'll hear a little bit more about Direct later. But Direct is secure email basically, using a Direct address, in other words, an address that ends with direct.org.

The fourth criterion is the capability to generate and enable the patient to view an activity history log. And Deven talked a little bit about the – how this is related to policy. This is just that the patient should be able to see what information was downloaded, sent to third parties, who logged in and saw their data, etcetera. And the only standard that's specified there is the Network Time Protocol. For an ambulatory environment, they also need to be able to create a customized clinical summary. And this is the capability to create the CCDA that is then either downloaded or sent to a named third party. And then the final requirement or criterion is to securely send messages to patients and receive messages from patients. And this again is for the ambulatory setting only. And there's not – there's not a – they don't specify use of the Direct Protocol for this in the 2014 Edition. What they do say is that the patient identity must be authenticated and the identity of the EHR technology used for this secure messaging must be established. And then the encryption and – the data must be encrypted for transmission and integrity protected for transmission and the standard that's used for that is the FIPS Pub 140-2, Annex A, which is simply a – that's just a – it's almost like a repository for the currently accepted – currently acceptable algorithms that are used for encryption and integrity protection. So at any given point you can look at FIPS 140-2, Annex A and see these are the algorithms that are deemed acceptable by the National Institute of Standards and Technology at the present time. So that's what that one is.

Are there any questions about what's here? I know this is a lot of information. No –

**Brian Ahier – Gorge Health Connect, Inc. – President**

This is Brian Ahier. So Dixie, are these slides part of our packet, because I'm not finding them in my material.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

They should be, it's called – yeah, Level Setting for Consumer Workgroup.

**Mary Jo Deering, Ph.D – Office of the National Coordinator – Senior Policy Advisor, Office of Policy and Planning**

Yeah, they were sent out by – all of your incoming emails would show that they were from ONC FACA and the something else. And this came out what, about 2 hours ago maybe I'm thinking? It had both Dixie's –

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Actually, my materials –

**Mary Jo Deering, Ph.D – Office of the National Coordinator – Senior Policy Advisor, Office of Policy and Planning**

Okay, Dixie's went out yesterday, you're right.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Yeah. But Brian –

**Brian Ahier – Gorge Health Connect, Inc. – President**

I've got it here.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

But Brian, it's a pleasure to meet you. I read your blogs, it's a pleasure to meet you. And on the left of your screen, you'll also see they can – you can download them from the adobe meeting.

**Brian Ahier – Gorge Health Connect, Inc. – President**

No, I've got them in my email, thanks.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Okay. Thank you.

**Susan Hull, MSN, RN – Chief Executive Officer – Wellspring Consulting**

Dixie, this is Susan Hull. Is there any differentiation on these interpretation if we're doing things via mobile devices –

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

No.

**Susan Hull, MSN, RN – Wellspring Consulting – Chief Executive Officer**

– versus web? Same standards would apply whether it's web or mobile.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

That's right. That's right. I think that there is an inherent, built-in, almost, assumption that right now the – because certainly the standards right now are much more amenable to a portal environment than a web app – than a mobile app. But, there are no requirements that this be a portal, but it's easier to translate the standards into a portal environment than it is into a mobile app. Okay. The CCDA is a perfect example. It would be a little difficult to view a complete CCDA on a mobile app, but I guess – you can, but it wouldn't be a fun thing to do.

Okay, next slide. Okay this is the – I think – no, I guess she didn't mention. I chair two workgroups, one is the Privacy and Security Workgroup, which is kind of the counterpart of Deven's Tiger Team, and I also serve on her Tiger Team, several of us are on both so that we can kind of make it a little bit easier to translate the policy into technology. The other workgroup that I chair is the Nationwide Health Information Network Power Team, and the Power Team kind of does other technologies that are non-health care specific. And we also, one of the most important works that we've done is that we developed a set of criteria for determining when a technology standard is ready to become a national standard.

So right now – what the Power Team is working on now is, we were asked to recommend whether the ONC should consider enhancing the current portfolio of transport standards to support consumer exchanges for Stage 3 and beyond. And we were asked in particular to look at the HL7 FHIR standard, the RESTful Health Exchange standard that's being developed, the work that the collaboration – the CommonWell collaboration is doing using FHIR actually, and the Automated Blue Button Initiative. So we're in particular looking at those, but looking at other transports that should be considered. And then we've been asked to present our observations and recommendations to the Standards Committee at the next Standards Committee. So we're busy working on this.

As you saw in the previous slide, there really are only – yes, why don't you just go back to that slide so I can point this out more easily, if you don't mind. You can see that there are really only two transport standards there right now; one is the Direct, which is the transmission to the third party, and that's the secure email basically. And the other is a set of – are the two requirements really for securely sending and receiving messages between a patient and a provider. And rather than really siting an explicit standards development organization standard, they specified as the standard the two requirements, one is to authenticate the patient and the EHR technology and two, is to use a FIPS 140-2 endorsed encryption and integrity protection algorithm. So those are the transport related standards that exist today. Okay – and notice that the Direct is only used for transmission to third party, it's not required for download at this time. Okay. Now, let's go two ahead.

Good. I mentioned that the Nationwide Health Information Network Power Team developed criteria and metrics for assessing whether a particular standard is ready for prime time, whether it's ready to become a national standard. I know that a lot of us have our favorite standards and would love to see them make it into the – into a regulation as the national standard, but the NwHIN Power Team developed a number of metrics that are related to the criteria that you see on the screen now. To the right you'll see this grid, and on the Y-axis, you see the maturity of a standard, so we measure just how mature the standard is and on the right, we measure adoptability, how easy it is to adopt. And we look at adoptability not only how easy it is to implement, but how easy it is to operate, how dependent it is on other organizations and what they do and how easy it is to maintain it over time. And the maturity also takes into consideration the fact that some standards go beyond where they are reasonably mature and they start becoming retired. So that criterion does take that into consideration. On the left side you see the criteria that we use in these – for these two categories, the maturity criteria are the maturity of the specification, how completely developed it is, the maturity of the underlying technology. So this is – these are the technologies that a particular specification uses, like the Direct specification uses the simple mail transport protocol, SMTP technology. So, you look at both of those, and then market adoption. And we looked at both, how extensively a standard is adopted within the health market, but also how broadly it's adopted outside the health market as well. And then the adoptability criteria are how easy it is to implement and deploy, and how easy it is to operate over time and then its intellectual property constraints. How expensive it is to use a particular standard in development and in maintenance over time.

The reason I bring this up is that all of the workgroups under the Standards Committee are asked to use these criteria as they select standards to recommend. And I – we can send, we can make sure that your workgroup has the metrics as well as – the deep dive metrics as well as these top level criteria, Leslie, I should have sent you those as well.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

That would be great Dixie. I think an important point here, this group did a great job of looking at both maturity and adoptability of standards outside health care and in health care. But this is very consistent with our direction that we've been given to harmonize, repurpose, reuse existing standards, because even though we are bringing a new concept of patient engagement or care collaboration with the patient actively involved in their data, and that's new. The idea of using mature and adoptable standards is not inconsistent with this new, emerging participant health care. So we need not to be discouraged by this but actually encouraged to use and repurpose and harmonize with existing standards wherever possible.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Yeah. Yes. And it is really important that we do consider how implementable standards are, because they just won't be used if they're –

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Right.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Are there further questions? I think that's the end of my presentation. Okay.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

All right. Well thank you very much Dixie really appreciate this –

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

I have a question.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Oh, go ahead.

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

I'm so sorry, I was on mute there for a second. I – this evaluation of adoptability is very interesting. Are we – is someone measuring how actually Direct adoption is going in any specific way? I ask because I'm hearing rumors of balkanization and, of course, those kinds of issues which are political decisions and not technical decisions impact adoptability in the wild. And it seems like, as we're considering the criteria and adoptability is much less important than adoption and are we measuring adoption, and how are we feeding that back into the adoptability scores?

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Well the adoption is one of the criteria. But I can tell you the Direct standard was one that was part of the NwHIN Power Teams initial evaluation. The first time – as we developed – in fact, our first assignment was to evaluate the exchange standards, which is about 10 different standards, and the Direct standards. And in the course of doing that, we developed kind of version 1 of these criteria, after which the ONC asked us to refine them further and into their current state, which has been delivered to the ONC about a year ago at this point. But that evaluation of Direct was probably a year and a half ago by now, so we haven't done a more recent evaluation of Direct, and that might be a good thing to do, actually.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

This is Pierce –

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

Is there a way we could ... ongoing data about that?

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

I beg your pardon?

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

Is there a way we can get ongoing data about that?

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Ongoing data about what?

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

The rate of adoption of the various protocols?

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

We can, based on the Meaningful Use 2 report out and attestation, because each measure requires if you use certified EHR with a specific standard, we can gain information from that as well. I'm mindful of our time, Pierce is going to present on the Blue Button. Did you have a comment or question as well Pierce?

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Well I was interested in the comment about the balkanization of Direct. I just – could you provide a little more clarification on what you mean by that?

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

This is Fred Trotter. What I mean by that is cases in which for usually certificate-based reasons, different networks of Direct don't work together because vendors don't prefer to work together or different hospital chains don't work together. That's okay, because Direct was intended to handle that, so to speak, in a graceful way, but only if we can see it transparently happening and we can work around with it. And it's never supposed to interfere, and this is the reason I'm concerned about it, it's never supposed to interfere with a patient's capacity to move their data between networks.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Yup. Got it. Okay.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

But the certificates should be interoperable. So are you saying the certificates are not interoperable – are not useful – are not usable across with any Direct.

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

So the certificates are always attached to something like a DURSA which is to say an agree – what importing those certificates mean. So if two organizations, say Planned Parenthood and the Catholic Church, have not imported each other's certificates –

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Right.

**Fred Trotter – Not Only Dev – Founder and Healthcare Data Journalist**

– they can't communicate across the network, which is fine, as long as there's a mechanism for the patient to say, well email me my stuff and I'll email into that other network. So what I'm concerned with is cases where the balkanization goes so far that that is not possible for some reason.

**Dixie Baker, MS, PhD – Martin, Blanck and Associates – Senior Partner**

Hmm.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Sorry, I was on mute. I think that it – we do have the ability to mitigate some of those concerns from view, download and transmit for the patient to be able to move and interact where we don't see those connectivities occurring. But I think all of us recognize this will be a very fast evolving landscape and we don't know all the answers as of yet. But thank you for that. Mackenzie, I'm looking at the time and Pierce I'm looking at the time, can we get through a portion of the Blue Button in the next 10 minutes?

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Yeah, so, what I was going to propose doing, especially since we have truncated time, was kind of race through a couple of slides that are probably a little more technically oriented than what Erin went through last weekend – last week. But then try and do maybe some Q&A as quick as possible, because I just kind of got the sense that people had questions about Blue Button Plus that maybe I could just answer.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Yup.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

That would be easier.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

That would be great. Thank you Pierce.

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

Leslie, this is MacKenzie. If you guys run over five minutes, that's fine.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Okay.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Okay. All right, so let's jump through, I'm going to quickly jump through a few slides, could we go forward, forward, forward, forward, forward, forward, forward, this is all stuff you guys know, I think. Forward, okay great, here. All right, so as we probably – as Erin probably covered last week, Blue Button Plus is implementation guidance that does two things, one is to make the transmit requirement of view, download, transmit really easy to meet and provides some more specificity to what's required in Meaningful Use Stage 2. And that's all the stuff in green here. But it also kind of expands on, and makes easy for the patient and better for the patient, a way to meet that transmit requirement.

And so in particular, some of the sort of differences or deltas between Blue Button Plus and the basic transmit requirement is we recommend using a bundle of patient endpoints that we've created to discover certificates of those endpoints, and I'll get into that in a second. We recommend including a context about the transmission, that it was sent on behalf of a patient and requested on behalf of a patient. And we recommend providing means for a patient to automate the transmission of their data, so rather than it just being a one-time send, it can be a sort of set and forget or ongoing transmission of their data as it's updated in their data holder's system. Next slide please.

The Blue Button Plus Implementation Guide is live at BlueButtonPlus.org. It's draft guidance because we're still working through our initial – with our initial set of adopters, whether the guidance works for them and whether there are edits that we need to make, but it's meant to be a manual for meeting transmit requirements of Meaningful Use Stage 2, and it's at BlueButtonPlus.org. It's sorted – there's a section there for data holders and providers that want to send data on behalf of patients, and then there's a section for third party applications that want to receive data on behalf of patients. Some of this stuff – some of the other sections that I want to point out that are in the Implementation Guide are – so, the meat of it is about using the Consolidated CDA and using the Direct Protocol to transmit data for patients.

But we also have sections, for instance, we have a section for payers, and we had a workgroup in the S&I process that created this implementation guide that made recommendations on data elements and starting towards a standardized structure for sharing electronic explanation of benefits data with consumers in a machine readable and human readable format. We also worked with OCR on some privacy and security guidance related to the use cases for Blue Button Plus. Next slide.

I mentioned that there's a section on automation in here, and we've left it up to data holder systems for how they already have their triggers installed for when an encounter is closed or when an update to a record comes in. But the suggestion is that when those updates happen, there should be an option for consumers to be able to transmit the update automatically to their third party application of choice.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Hi, this is Kim. May I ask a question?

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Sure.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

So having faced data refresh challenges in our own system and trying to balance the need for data refresh with I guess information overload, even given these triggers, has thought been given to what happens on the recipient end? So for example, healthcare provider is a recipient of a CCDA, now it's housed within their Direct mailbox. Patient has a series of tests over the sequence of a week and suddenly there's kind of the data refresh each in sequence might be an update to the previous and the provider now has an inbox full of CCDAs, do you know what I'm saying?

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Yes. Yes, I do.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

So I'm curious to the thoughts about that because data refresh on the surface always seems to make conceptual sense, but when you get to the details, there's lots to think about.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

So our use case is not provider to provider exchange on behalf of a patient, it's provider to third party – a patient's application.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Yeah, and I'm actually thinking about that scenario in my comments.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Sure, and so what our applica – so the third party applications that participated in our process have said, don't worry about it, let us – we just want – we want refreshed data and we'll figure out how it – if there's a situation where it's kind of information overload, we'll figure out how to manage that.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

Okay, thank you. And I'll be curious to see how that unfolds, but I would also suggest the same set of questions for patient to provider in addition to patient to third party.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Agree, totally agree. So, and I will say, we have not tackled patient to provider yet, although that's going to be an important next step for this work and other's work.

**John F. Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant**

This is John Derr and I sort of represent long-term post-acute care. I just wanted to let you know, and one I'm a Blue Button person, because I'm on Medicare, that we are encouraging the ven – the IT vendors in long-term post-acute care. And I just gave a speech last week where I introduced the Blue Button and the providers to possibly use the Blue Button when patients are admitted to a nursing home or to home care –

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Excellent.

**John F. Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant**

– as giving them a nice 3 year look-back and a head-start on doing the mostly chronic care, longitudinal care plans. And in fact, there was a session – as many of you know, there's an LTPAC HIT Summit on June 17 and 18 in Baltimore, and there's a section on that Summit on the Blue Button.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Oh good. I hope someone on our team is going to be there.

**John F. Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant**

I was going to check on that to make sure. I know Liz is helping us out and Doug Fridsma's our keynote speaker.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Oh, okay. Good, then I'm sure the – could we just go forward one more slide. Okay, so one of the big contributions I think that was made to the Blue Button Plus effort was the creation of an anchor bundle, it's still on the site, called a Trust Bundle, but I don't think that's the right nomenclature. It's a bundle of certificates of third party applications that want to receive data on behalf of patients in scalable fashion. And really, what it is – I mean, it's essentially a zip file or a locator service to find those third party services so that if a patient shows up with a direct address of a random PHR, a data holder can find the certificate associated with that direct address and send it to the patient's location of choosing. And so this bundle now exists and is live and there's third party applications participating in it and it's a means of using the Direct Protocol for the consumer use case.

It's already 2 o'clock, so I was going to do a little bit on the payer piece, too, but maybe it's better to just open up and see if there's any other Q&A I can help with before we have to drop.

**Kim Nazi, PhD, FACHE – Veterans Health Administration – Management Analyst**

So this is Kim. And just to not lose the point again, as kind of this set and forget evolves, I think there are two considerations, in terms of the patient-mediated exchange. And one has to do with patient to third party and the other has to do with patient to external provider, both of whom will be recipients and to give thought to the cycle of data refresh so that it's as elegant at the recipient end as it is at the producing end.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Yeah. Yeah, we need more – we could definitely use more detail on that section of the Guide, too. So, if there's sort of best practices that EHR vendors or others are using, then we could incorporate that into the Guide.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

That's great. And I think we've got a long way to go still with regard to transmit to third party, to the provider or care team member that the patient identifies in the future. So this is an amazing start and I think that John's point of having other vendors and others very interested in this goes to the need for data liberation and the interest in many parties to participate. So thanks Pierce, I know that we'll come back and ask questions as we go along and help to provide some future guidance for new applications of the Blue Button, with regard to patient engagement. So thank you very much.

**Pierce Graham-Jones – U.S. Department of Health and Human Services – West Health Innovator in Residence**

Thank you, that sounds great.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

And MacKenzie, I think we're out of time, but I do want to talk one more – about our next steps and our inventory step. So as you guys know, we've asked for you to fill out a form for us to know where your areas of interest are or what teams you're working on with regard to standards that promote patient engagement. The purpose for doing this is as we go forward with our work plan, we'll be dividing work up. We'll also be asking each of our team members to pass the word and to provide information about the work we're doing to other organizations that are working on standards for patient engagement. So for those of you who have not done this already, you'll be receiving another email specifically asking for your areas of interest or areas of current work. Our goal is to align the current meaningful use criteria and measures, the standards that are in place, the gaps for those standards for now and in the future and the work plan going forward consistent with the overall Standards Committee and the direction that we see evolving out of policy. So I'll ask if MacKenzie or Mary Jo, did you have any other comments to make?

**Mary Jo Deering, Ph.D – Office of the National Coordinator – Senior Policy Advisor, Office of Policy and Planning**

No. Thank you Leslie.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

And did we have any housekeeping items with regards to the rules of the road of the committee members that we wanted to discuss briefly?

**Mary Jo Deering, Ph.D – Office of the National Coordinator – Senior Policy Advisor, Office of Policy and Planning**

Oh, thank you very much for that reminder Leslie. Yeah, you remember that on the very first call, since many of you are new to the workings of Federal Advisory Committees, we talked about different ways that they work, and one thing that I neglected to share with you, and by the way, this is Mary Jo speaking. We are delighted to have you on this workgroup, I think your presence here today is just testimony to how important you think this is, and we really value your contributions. As one point though, when you are out doing your work, you really may not represent yourself on behalf of the workgroup or on behalf of the Federal Advisory Committee; you can't introduce yourself to people as, I'm a member of this workgroup. We value your work here, but your work for the workgroup is purely for the workgroup and for Federal Advisory Committees. Certainly, it can show up on your resumes that you were a member of it, but it shouldn't be used to represent yourself in any way. So again, with thanks for all the expertise that you are bringing to this effort and best wishes for a restful long weekend.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Great, thank you Mary Jo. I would also encourage any of you who would like to learn any more about these topics or go deeper on them, to please contact me and let me know, because I think we've covered a good deal today and this is such a foundational piece of understanding that we all need to have. So if there's more education on any of these needed, please feel free to reach out. So with that, MacKenzie, I think it's over to you.

**Public Comment**

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

All right. Operator, can you please open the lines for the public comment?

**Rebecca Armendariz – Altarum Institute**

If you would like to make a public comment and you are listening via your computer speakers, please dial 1-877-705-2976 and press \*1. Or if you are listening via your telephone, you may press \*1 at this time to be entered into the queue. We have no comment at this time.

**Leslie Kelly Hall – Healthwise – Senior Vice President, Policy**

Good. Well thank you very much and I hope everyone has a wonderful weekend and please don't work too much, just have fun.

**John F. Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant**

Have a nice holiday.

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

Thank you everybody.