

# HIT Policy Committee Transcript January 8, 2013

## Attendance

The following Committee members attended this meeting:

- Farzad Mostashari
- Paul Tang
- Christine Bechtel
- Christopher Boone
- Arthur Davidson
- Connie White Delaney
- Paul Egerman
- Judith Faulkner
- Gayle Harrell
- Charles Kennedy
- David Lansky
- Deven McGraw
- Marc Probst
- Joshua Sharfstein
- Scott White
- Madhulika Agarwal

The following Committee members did not attend this meeting:

- David Bates
- Neil Calman
- Richard Chapman
- Frank Nemec
- Latanya Sweeney
- Patrick Conway
- Thomas Greig
- Robert Tagalicod

## Presentation

### **MacKenzie Robertson – Office of the National Coordinator**

Thank you. Good morning, everyone. This is MacKenzie Robertson in the Office of the National Coordinator for Health Information Technology. This is the 44th meeting of the HIT Policy Committee. This is a public meeting, and there are two sessions for public comments listed on the agenda today, one right before lunch, and one before we adjourn. This meeting is also being transcribed, so please make sure you identify yourself speaking. And I'll now go through roll call. Farzad Mostashari?

### **Farzad Mostashari – Office of the National Coordinator, HHS**

Here.

### **MacKenzie Robertson – Office of the National Coordinator**

Thanks, Farzad. Paul Tang?

### **Paul Tang – Palo Alto Medical Foundation**

Here.

### **MacKenzie Robertson – Office of the National Coordinator**

Thanks, Paul. David Bates? Christine Bechtel?

**Christine Bechtel – National Partnership for Women & Families**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Christine. Christopher Boone?

**Christopher Boone – American Heart Association**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Chris. Neil Calman? Richard Chapman? Art Davidson?

**Arthur Davidson – Denver Public Health Department**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Art. Connie Delaney?

**Connie Delaney – University of Minnesota/School of Nursing**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Connie. Paul Egerman?

**Paul Egerman – Businessman/Entrepreneur**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Paul. Judy Faulkner?

**Judith Faulkner – Epic Systems Corporation**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Judy. Gayle Harrell?

**Gayle Harrell – Florida State Legislator**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Gayle. Charles Kennedy?

**Charles Kennedy – Aetna**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Charles. David Lansky?

**David Lansky – Pacific Business Group on Health**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, David. Deven McGraw?

**Deven McGraw – Center for Democracy & Technology**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Deven. Frank Nemeč? Marc Probst?

**Mark Probst – Intermountain Healthcare**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Mark. Joshua Sharfstein? Latanya Sweeney? Scott White?

**Scott White – 1199 SEU Training & Employment Fund**

I'm here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Scott. Madhulika Agarwal?

**Madhulika Agarwal – Department of Veterans Affairs**

Here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks. Patrick Conway? Thomas Greig? Robert Tagalicod? Okay. With that, I'll turn the agenda over to Dr. Mostashari for some opening remarks.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Thanks you, and happy New Year to everybody. The holidays are a good time for reflection, and there's the risk that you'll read something interesting. So my – one of my readings – one of my readings over the holidays was an interesting book that I would recommend to you all by Jonathan I think it's Haidt, H-A-I-D-T, called *The Righteous Mind*. And it talks about how humans are geniuses at cooperation, and that some of our – and it goes into an interesting diversion about group selection, about whether indeed, pure competition in the individual sense has yielded the human and – outcome, or if there is indeed group selection at work also.

The example he gives is around actually chickens. So if you take chickens and you breed them individually for chickens that will produce the most eggs, what you're going to end up with are a lot of very aggressive chickens who peck each other, who harm each other, high rates of death among the chickens, high rates of stress among the chickens, and you actually don't get optimal egg production. It turns out the way to get optimal egg production is to select for chickens coops that produce the most eggs. And after six generations, you get plump, happy, productive coops that lay far more eggs collectively than those coops that were bred individually for competition.

And he makes the pivot here to talking about what is morality. What is the purpose of morality? Not what should be moral, but why, why morality? And he makes the argument that what is moral is everything that is a source of solidarity, everything that forces man to regulate his actions by something other than his own egoism. And all of the different dimensions of morality that we have around harm, not doing harm to others, or caring for others, around fairness and – versus cheating, around loyalty versus betrayal, around respect for authority, and sanctity, are in some way mechanisms, institutions, norms, practices, virtues, identities, values, and mechanisms that work together to regulate self-interest and make cooperative societies possible.

Authority is one way we govern ourselves. When we say government is a way that we can do things together that we couldn't do alone, that's one way to do big things together, where individual self-interest, fierce individual competition within, for example, a marketplace, wouldn't yield the social benefit, but that's just one way. And we can't solve every problem through the appeal to authority, the I told – you know, or else.

In the work we do, regulation is but one means. Self-regulation, social regulation, social norms, not everything that is legal to do is right to do, right? That is fundamentally a moral argument. That derives from these social norms, these appeals to something other than our self-interest. That is in a way the role of civil society.

And when, whether it's in the work we do around this table, whether it's our call for vendors to step up in terms of certain behaviors, when we worry about patent wars between vendors, when we worry about behaviors in terms of market behaviors that end up in a shortsighted way helping the bottom line for one quarter, but hurting patients and hurting the bond between the community, when we have locking in of providers or locking in of patient data, limiting reporting of safety events, shifting liability, ignoring patient privacy and security. We can't regulate all of that, and this is why we need self-regulation, social regulation, social norms, and get to the point where just because it's legal doesn't mean it's right.

So we have in a number of instances here as a federal agency called on that intermediate level, that layer between self-interest and government regulation, and while we are not shirking from our duty, and we can always try to use more classic regulatory approaches, in a number of instances around governance, around safety, around information exchange, we are calling on what might be termed more moral behavior, not invoking a higher being here, but talking about what does it mean for professionalism, what does it mean for fairness and cheating, what does it mean for harm?

And I'm actually ever more convinced that unless we use all the tools at our disposal, we're not going to get the best outcome for our country, and we can't ignore this important set of tools. But it only works if the society enforces these norms and steps up to these norms, and we move away from a feeling of its okay, as long as you aren't breaking the law, you can do whatever you want to earn as much as you can to do things as expeditiously and – as you want to. And I think is a challenge, but it starts here. It starts around this table. Happy New Year.

**Paul Tang – Palo Alto Medical Foundation**

Well, happy New Year, Farzad, and thank you so much for that – your –

**Farzad Mostashari – Office of the National Coordinator, HHS**

Chickens.

**Paul Tang – Palo Alto Medical Foundation**

– your chicken story, your vacation – yeah. It's like your summer report. But also, really drives home a lot of what we're talking about in policy, and we're going to talk about both the accomplishments from last year, and what we've planned to work on this year. And I think it really – that's a really fine framework or spirit to go forward with. And your personal anecdote with your grandmother last time was also a fitting example of what's the payoff to each individual person when the society behaves in a way that furthers the coop. So thank you.

Let me get on with the logistics of the meeting. So happy New Year, and welcome everyone – body back. I think you're going to find it's going to be a very exciting and challenging, but in a good way, now that we have a lot of information getting in, and Rob will report – update us on that, into these electronic systems, we're going to be able to do just so much more good, both as individuals, individual organizations, and the whole society, as Farzad talked about.

Before I move on to the agenda, I want to get an approval of the minutes, or any additions you want to make.

**Christine Bechtel – National Partnership for Women & Families**

Well, I did make a couple.

**Paul Tang – Palo Alto Medical Foundation**

Yes. Christine sent a few minor edits. Anything else? Entertain a motion to approve.

**W**

So moved.

**Paul Tang – Palo Alto Medical Foundation**

And second?

**W**

Second.

**Paul Tang – Palo Alto Medical Foundation**

Any further discussion? All in favor?

**Several**

Aye.

**Paul Tang – Palo Alto Medical Foundation**

And any opposed or abstained? Great. Well, let me remind you of a couple of things coming up. We of course have the RFC going on for meaningful use stage three recommendations from this group. The comment periods close just short of midnight on January the 14th. Then we have a couple of hearings in the next approximately month. At the end of this month, we have Health Information Exchange January 29th, sponsored by both this committee and our sister committee, the standards committee. And then on February – right before Valentine's Day we have a hearing on clinical documentation, and I'll talk a little bit more about both of these hearings in our update on 2013.

We're going to start off then with Rob Anthony, who gives us always good news of the amount of accomplishments that really the society has accomplished, this country has accomplished, in the past year, and it just keeps growing. A combination of Farzad, Jodi, and I will update you on some of the priorities, at least draft priorities, for the coming year, and there are a lot of them, for your comment, and we'll be incorporating those in the work plan for 2013. It doesn't prevent us from incorporating new things as they arrive, and they certainly do, but this is our initial attempt at structuring the coming year.

Then we'll have Privacy and Security Tiger Team recommendations on cyberspace identities. We conclude the morning with public comment, and then after lunch, hear about the eConsent Project, which is very interesting. As you know, consent is an important concept, and to do it efficiently and effectively is the goal of this project. And then Jodi will finish with an update, a review of the year, a review of the EHR safety plan that was just released since our last meeting, and we will conclude with public comments, as we always do. Any changes to the agenda?

Okay. Then we'll begin with Rob Anthony and an update from CMS on the progress and accomplishments of the EHR incentive programs.

**Robert Anthony – CMS**

Thank you. We are 24 months now from where we started with the Medicare and Medicaid EHR incentive programs, and I hope what you're going to see here is actually very good news indeed. I will run quickly through some of the registration and payment data, and I want to highlight some of what we're seeing so far this month, what we know about December as well. So this is always a little bit challenging because of the way that reports get run and compiled and double-checked.

We are somewhat – two months behind. Even though this is a January meeting, the last month for which we have a full report is November. We are at a total of a little over 340,000 active registrations. This includes both Medicare, Medicaid, and all eligible hospitals that are involved here. The month of November was a slight dip from what we've been seeing in the last few months. I don't think it's actually anything to worry about, as we see in the December numbers we have a lot of people who are sort of rushing towards the end of the year, as we had last year, and we do expect January and February of this month to be pretty large.

We paid out through Medicare \$600 and – almost \$683 million in total, between EPs and eligible hospitals. That's an increase over last month. We saw a large number of hospitals that fit into this payment month, and you'll see in December we saw a large number of hospitals as well. So we're seeing the folks who attested in October, November for hospitals, they have up to 60 days after the end of the fiscal year to attest, are actually rolling into those payment cycles now.

[Background voices]

**Paul Tang – Palo Alto Medical Foundation**

If you did it in 2011 and 2012, you chose –

**Robert Anthony – CMS**

These are actually monthly, and they will show the number of providers paid. You'll see on a later screen that we actually showed the unique number of providers paid through the program and break it down by year. So these are – these are payments.

**Paul Tang – Palo Alto Medical Foundation**

Okay.

### **Robert Anthony – CMS**

This is a breakdown. We typically see – at one point in time I was sort of compiling the percentages for you, but the percentages don't actually change that much. Family practice and internal medicine are always sort of in the lead here, but this does represent that we continued throughout this year to see a pretty good representation of different specialties paid through Medicare. And then of course we do expect a fairly large uptick at the end of the year. You can see in the last two columns there, in October, November, we already had a large number of eligible hospitals that came in. We'll see a few more coming in December as we close out the 2012 fiscal year for payments.

Medicaid, you're going to see we have a slightly different report format, and I'm actually going to talk about some different reports you can find on our website in a second. But we are trying to break out here on a monthly basis the difference between AIU payments and MU payments, and also on a program to date basis, AIU and MU. So you can see that at least in November, we've got half as many meaningful users as we do AIU payments in Medicaid, obviously a smaller number on the program to date side, but it's only been this year that we've had the option for meaningful use for a lot of Medicaid providers, and of course, some Medicaid programs don't yet have their meaningful use attestation modules up, so there are some providers who are still waiting, because they're not able to attest on that side.

And the numbers on Medicaid are fairly consistent in November with what we saw through October as well. Already at this point, when you look at this, this is actually unique number of providers paid in 2011, unique number of providers paid in 2012, and then we resolve that for the unique number of providers paid overall. So if there is somebody who attested in '11 and then attested in '12, they only counted once in the unique providers paid column on the right there.

So you'll see that we're already at half as many in 2012 as we were for 2011. Obviously, it's going to take some time for 2012 to close out. We're going to have a lot of people come in January, February. We have a number of payments that continue through the cycle, so we may not really have a firm idea of what all of 2012 looks like until we get into even June or July of next year. But we do expect January and February to be pretty big months.

You can see already that we've got a pretty large number of payments, and these are, not counting hospitals when we look at eligible professionals, these are eligible professionals who are new in 2012. So we are not even including those who have come back to attest for a second year in Medicare. Already, we're at nearly \$4 billion, to a total of about \$5.3 billion that were paid out in 2011. We've got about \$9.3 billion paid out overall through the end of November.

I did want to point out that we broke out the program reports into several different reports, and we're going to continue doing this overall, and partially this is because we're breaking the data down more granularly, so you can look at Medicare and Medicaid, and you can look at Medicaid and look at AIU versus MU, and you can look at total payments versus unique providers. At a certain point, you end up with a PDF summary report that is about 40 pages long, and we didn't want to continue doing that. So we've broken it down to if you look at this very first arrow up here – apparently no pointer – the very first arrow up there on the right, that monthly report at the top is our summary report. We do break down both Medicare, Medicaid, and Medicare Advantage organization payments in separate overview reports, and we do provide those in Excel versions, in case people want to be able to track those in a database and do their own manipulation with the figures. We've had several requests for it.

But you can find this on the EHR Incentive page on CMS.gov. If you go down to the data and program reports, you'll see the – this is always at the top of the page, so you can always find our monthly there.

So at this point in time, we have – here's where the very great news is. We have almost 84 percent of all hospitals registered. We have almost 68 percent of all hospitals paid at this point in time. We're obviously going to see some more come in in December, so we'll see a larger number there. And as you're going to see in a little bit, we've got a larger number of those hospitals not just paid, but actually to meaningful use as well.

Obviously, things are not as large on the eligible professional side, but we're still continuing to see an increase. We've got over 63 percent of all eligible professional who could participate in this program registered for the program. Thirty-six percent of those are Medicare. Another almost 20 percent are the Medicaid.

I do want to point out for folks that going forward for this year we do have a slightly revised denominator for the total number of eligible professionals. Those of you who are familiar with the estimates that we do at the end of our stage one and stage two final rule, we do provide an escalating estimate of the number of eligible professionals who will be in this program. So last year, we had a total of 521,800 total EPs. It does increase to 527,200. There isn't a similar escalation scale for hospitals. That figure is set at 5,011. But you'll see that year to year we will increase with the total number of eligible professionals. That said, even with that slight increase in denominator, we're seeing the percentages go up.

And then on the paid side, at this point in time we have about one in three professionals who are eligible for the program actually paid under either Medicare or Medicaid or through one of the Medicare Advantages organizations. So one in three EPs paid through the EHR incentive programs. So at this point, that's actually nearly 68 percent of all eligible hospitals have received a payment. One out of every four Medicare EPs are actually meaningful users. One out of every three EPs have received a payment, so they've made a financial commitment to an EHR. And we continue to see, as we saw in the earlier slide, a large number of specialists. Over 58 percent of the Medicare EPs who are receiving incentives are specialists.

December holds some really great news. We made a large number of payments. You can see in December we will have a large number of payments coming up. These are estimated numbers. We'll release final figures in a couple of weeks. But 850 hospitals will fall into that December payment. We've got a – even a large number of Medicare and Medicaid EPs. There are always a large number of people coming in the month of December, and we expect more will come in in December, January. It'll bring up our life to date total over 180,000 providers paid.

And this is the really amazing news. We will pay out in December over \$1 billion in Medicare and Medicaid hospital payments, for December alone. This is our single largest month of payments by a factor of almost three, and a total of \$1.2 billion, which will bring our year to date, although it's not really the program year to date, but at least our payment year to date, over \$10.3 billion paid out in incentives as of the end of December.

**Judith Faulkner – Epic Systems Corporation**

How much of those are first payments versus second? Do you happen to know?

**Robert Anthony – CMS**

At this point I don't, but I can tell you that on the EP side, we're not going to see any second payments in that December, because all of those folks will be returning in January, February. So there are certainly some hospitals that we have repeat payments on, and that's why when we look back here, you don't see a huge jump in the life to date numbers of providers yet, because those are unique providers, and you won't see that.

**Judith Faulkner – Epic Systems Corporation**

Robert, what was the amount of money that was estimated at the very beginning, when this committee started, for the payments?

**Robert Anthony – CMS**

At the very beginning, it was estimated at \$27 billion.

**Judith Faulkner – Epic Systems Corporation**

Okay.

**Robert Anthony – CMS**

That was revised down by OMB at one point in time to \$21.5 billion.

**Judith Faulkner – Epic Systems Corporation**

So of that \$21.5, we have now spend –

**Robert Anthony – CMS**

About \$10.3.

**Judith Faulkner – Epic Systems Corporation**

What's your estimate for the rest of the time? How close are we going to come to that \$21.5?

**Robert Anthony – CMS**

I couldn't even begin to estimate. I think that we have to take a look at a number of factors. We're going to want to see – 2013 is going to be a very interesting year, because it will be – 2011 and 2012 were years for people to begin participation on the Medicare side, where they were still able to receive full incentive payments. That won't be the case in 2013, so we want to see what kind of a driver that will be. Twenty-thirteen will be the deciding year for many people as far as payment adjustments, so we'll need to see what kind of a driver that will be as well.

**Judith Faulkner – Epic Systems Corporation**

What's your gut? Will we go over or under?

**Robert Anthony – CMS**

I don't have a gut.

[Laughter]

**Robert Anthony – CMS**

Sorry. I'd have to defer to the actuaries on that.

[Laughter]

**Robert Anthony – CMS**

I will say that we are seeing some tremendous numbers even this early in January. On January 2nd, we had 2,200 EPs come in and attest. That is the first day that people could come in, and we had over 2,000 people the day after New Year's, which I thought was fairly impressive, until I started to see the daily numbers afterwards, and realized that we're starting to see those numbers virtually every day. So we're going to see a large number of people in January and February. Now of course, all of those payments won't roll in until maybe a March or an April, but we'll start to see those fairly soon.

**M**

\_\_\_\_\_ at all for 2013?

**Robert Anthony – CMS**

No. If you're looking for projections, I'd have to go back, and the estimates that are done as part of our regulatory impact analysis are actually done by the CMS Office of the Actuary, and I would have to ask them to revisit that.

**Gayle Harrell – Florida State Legislator**

Do you have any idea on those hospitals in particular that have not at least registered? We're talking about 20-some percent that have – or more – that have not registered. Do you have any indication, or are you doing outreach to find out why?

**Robert Anthony – CMS**

Yeah. You know, actually, we've been working with some of the folks at ONC, especially on the REC side, and I think that – we talked a little bit about some of the challenges that are facing some of those hospitals as we go forward. These are generally smaller hospitals, rural hospitals. They face particular issues in implementing that type of infrastructure, and I think that's one of the goals, really, for the REC, is to try and get those hospitals up and functioning in 2013. A lot of people aren't registering for the program simply because you can register and attest on the same day. I always encourage people to register first, because there are inevitably some system issues that need to be worked out. However, I think that's exactly the issue that we're facing as we're looking at the challenges to implementation that those hospitals are facing.

**Mark Probst – Intermountain Healthcare**

So I guess with the Policy Committee, and this is really going to be a basic question, AIU – how much impact do we, the things that we're doing, have on AIU versus MU? I mean, I know the energy we put into meaningful use, and what I have a hard time discerning is a lot of energy has gone into meaningful use and all the requirements that we've asked for that. And as I go through the numbers, it's hard for me to discern how successful meaningful use has been. I think overall, the program, as you're showing us, Rob, it looks very successful. And maybe I'm just not attributing enough of our efforts toward AIU, and I should be, and looking at it that way. So that was kind of one question. Should I be looking at it that way, or should, you know, I just kind of – I need to get a different mindset?

And then the second question I have is as I go out and deal with providers, there is the subset that have basically said, this isn't worth it. Are we able to get our hands around – and it's primarily providers, not so much hospitals – what that subset of providers looks like, and are there things as a policy committee we should be doing to reengage that group? Because, you know, we still think it's important to have this connected healthcare system.

**Robert Anthony – CMS**

Yeah. Those are actually both great questions. I think the question of AIU versus MU, I'm not sure that we have enough information at this point in time. We have a number of people, we have a lot of people who come in for AIU. We have over 65,000 Medicaid EPs who have come in and participated, and that's not an insignificant number. And those are people who have to make a financial commitment to implementing an EHR. They may not have it implemented right that moment, but they are making a commitment to do that. So an EHR that has the ability to achieve all of the things that we've laid out as part of stage one is – are going into those practices, are going to be used by those EPs.

The question of how quickly, when that will be implemented, when they will get to meaningful use, is a little bit of a question mark at this point in time. There's more flexibility built into the Medicaid program. I mean, obviously, it's on purpose. There is more – there are more challenges in – for providers who face those underserved communities. They're more resource strained. So we are waiting to see what type of conversion we really see, when we get people from AIU to MU, how quickly that happens.

They obviously have a stretch of time. I think we'll know more about how successful meaningful use has been on the Medicaid side once we see what that conversion factor really looks like. Hold on. There was a two-parter here.

The other question – I'm sorry, remind me.

**Mark Probst – Intermountain Healthcare**

The other one was just there is a certain level of provider, and this is more –

**Robert Anthony – CMS**

Yes.

**Mark Probst – Intermountain Healthcare**

– rhetoric, maybe, or just hearsay.

**Robert Anthony – CMS**

Yeah.

**Mark Probst – Intermountain Healthcare**

That are just saying, oh, no, this isn't going to be worth it, and are we getting our hands around that, and should we be doing anything to influence that group?

**Robert Anthony – CMS**

Yeah. No. And that – definitely. That's a great question, too. We've actually done some wave surveys where we've taken a look at what that group looks like, and I think we have an idea of not so much the demographics of that group, but what the issues are that keep popping up. And as we move through 2013, we have talked about developing resources that try and address some of that, and working with some of the RECs to implement some of those resources as well. They tend to revolve around issues of return on investment. We do have a certain number of physicians in the category who are older physicians nearing retirement – that is the best demographic that we can positively identify – who just look at it and say, you know, it's not worth my investing in X amount.

I think we anticipated some of that, and the estimates in our impact analysis sort of account for some of that. You're never going to capture 100 percent right out of the gate. However, I think there's – even though that is somewhat of the demographic, I'm always pleasantly surprised by the number of people who break out of that mold and who are – we do, as I said, these wave surveys, and we sit down and actually talk in depth with different providers. And I've sat down and heard from a 72-year-old physician who thinks that implementing EHRs is the greatest idea, and dramatically helps his practice.

So I don't think that those hurdles are insurmountable. I think that we have an idea of what the major issues are. I think our challenge is just to try and put information out there so that people can try and overcome some of those hurdles.

**Mark Probst – Intermountain Healthcare**

And I think it'd be helpful to get those issues raised here, because again, from a policy perspective, there may be things we can do, you know, as we look at that next level. And kind of in that first question – I know Judy's trying to get in here and I'm hogging the time.

**Judith Faulkner – Epic Systems Corporation**

Oh, that's okay.

[Background voices]

**Mark Probst – Intermountain Healthcare**

On that AIU issue, again, I go – I'm kind of thinking about what is the relevance of that number to what we're doing? I mean, are we really – and the answer can certainly be yes, and I just don't understand it. But are we impacting that number? You know, the meaningful use, this policy committee, the policies that we're setting, the things that we're doing, is that really a highly relevant number to the acts that we're doing, so that we're driving that number up and down? Or would that be happening anyway, and we should be really focusing on the success of the MU numbers, you know, and kind of not getting lost in the two? And it's a true question. I don't have an opinion, just I'm wondering.

**Robert Anthony – CMS**

That's okay. I have a trick answer for you. The answer is yes, depending on the provider. I think that there are certainly a certain number of providers that are operating on the program, and what the policy committee said, what the actual policies are for the program, are not necessarily the huge drivers. It's the incentive dollars behind it, and that's what's going to drive them forward.

I think there are certainly other providers that as they look at what the requirements are, how they'll have to change workflow, how they need to implement those things, the more complex – the bigger the lift, the longer it may take them to get to meaningful use. For some providers, the more that they have to sit and consider that ROI and see if it makes sense for them.

So I don't think there's a single answer to that. I think that in some ways, again, we'll know more as we get a little further along. I don't think they exist separately. I certainly think that there is a core of people who are thinking about what they're going to need to do, and looking at what those recommendations are, and looking at what the requirements of the program are.

**Farzad Mostashari – Office of the National Coordinator, HHS**

If I may add a comment to the AIU thing, so Medicaid AIU is only for Medicaid eligible professionals. Let's focus on that side. And you can get 22,000-something out of the 64,000 for just AIU. But to get the rest of it, you have to be a meaningful user. And I think for many, the AIU is the – you know, the first payment, and the – and their intention is to continue on to meaningful use. So it's highly relevant, what the – you know, okay, this is the first step for the AIU, but what's next? What comes next? And, you know, where are we going on this?

There is a feature of the legislation, which is that you don't get – if you're a Medicaid eligible professional, and depending on what happens with the expansion of Medicaid, there may be more such eligible professionals, you're not subject to the penalties. And the incentive payments can go out through 2021, and you can skip years. So those are all different than on the Medicare side, and those could all be factors that could lead a, for example, community health center to say, and we're seeing this to some extent with the regional extension centers, saying, okay, we're – you know, we're live on the EHR. We got our first payment. But now we're just going to – there's not that urgency to move on to meaningful use.

And the extent to which they do move ahead on meaningful use is going to depend on – it's really the test of our hypothesis that the payment and delivery systems that they're going to have to live within are going to value the meaningful use functions and capabilities, and particularly for some of the providers to underserved communities, whether it's the public hospital system, whether it's a community health center, whether it's rural health clinics, they do get community health in a way that is I think very much in line with what the population health management and care coordination features of meaningful use.

So that I think will be a real test for us. If we can help those providers who get the AIU payments not delay and delay and delay taking that next step to meaningful use, even though they can, that I think is going to be a challenge, but one that we should rise to.

**Judith Faulkner – Epic Systems Corporation**

I thought you asked a good question, Marc, which is what is really the success of this. And my brain went to another definition of success, which is we're doing this so that we can improve the healthcare of our country, and shouldn't we be looking to see whether in fact this is doing that, this is achieving what it's supposed to achieve? So can we take those who have – excuse me – attested for meaningful use and compare where they were before to where they are now to see if in fact in – I mean, that would be really interesting to see charts up there saying in these multiple categories we have improved, here's where we haven't, so that we can actually see where are we doing good and where are we not, and are we not doing good? Are we spending \$21 billion and it – we thought it was the right thing, but it isn't? And so it strikes me that what we're doing is we're looking at progress. What we're not doing is looking at success and results.

And I'm wondering if we can begin to move – to figure out what the parameters are that we want to do, and I don't know that we can compare those who have attested to those who haven't. I think that would be one interesting comparison. But there may be many other factors involved for those who have attested. They just might be better organized organizations to begin with. I don't know. But it would be interesting to see those who have attested, have they improved? All those statistics would be really interesting. In fact, what we're really saying is are we getting value out of this investment?

[Background voices]

**Christine Bechtel – National Partnership for Women & Families**

So it's Christine. I completely agree. I think that's a dashboard we would benefit from. But I would also observe that I think if we were to see that the meaningful users were not producing the significant gains in health outcome improvements that we want to see, I don't know that it's a function of the program as much as it is the criteria we designed, because remember that the first stage was supposed to be about data capture, second stage was supposed to be about information exchange, although I think that's debatable, in my opinion, and the third was supposed to be about improving health outcomes.

And so – but I do think that it would be incredibly valuable to think through a small set of, you know, good indicators that would tell us not only progress along the path, but also are we getting towards – you know, is that, you know, \$10 billion really laying the groundwork for improving outcomes? And at the end of the day, when we've spent \$27 billion or whatever it is, you know, what are we – what are we seeing? And we will have some quality measures I think available for that purpose.

**Robert Anthony – CMS**

Yeah. I think all of those are great points, and we're thinking along the same lines, because we want to be able to look at people who are meaningful users and see what kind of impact it makes. So we're beginning – how to put this? We're beginning to begin to think about it. There are many challenges. Some of them are exactly what Christine laid out, is that really we're at the beginning, where, you know, we have a large number of people who have implemented and have used their software for 90 days, primarily to record data. What type of impact does that really have?

The question, too, is that the claims that we might see now are not necessarily the claims that were impacted by the use of EHR. We might not see those for 18, 24, 36 months. And then the question really is, again, once you move into stage two and stage three, at what point – what do you design to look at and see has an impact? I think those are the questions that we're asking now, and ultimately that is the goal, is to look long term and see what type of an impact this actually has.

**Christine Bechtel – National Partnership for Women & Families**

I was going to say, Rob, just to build on that, I think it's really important that we work with you now to think about that, because stage three, my concern is that what will happen is that it will – we will try to push the envelope in some areas, really stretch the use of these systems, because we believe there's a direct link to outcomes, where we're not just doing data collection anymore, we're actually really using the systems to improve. But if we're not focused on here's the – here are the indicators that we're going to look at, whether it's 24 months from now or not, then I think we will get bowled over by the pushback. We've got an open RFP right now, and not, you know, kind of stick to the principle of improvement, which I think is a big chunk of what happened in stage two with respect to data exchange.

So I think if we can work together with you now in the meaningful use workgroup to think through, well, what should the indicators of success at the end of the day for stage two and three be, then we can really better design at least our recommendations to you guys and to ONC for stage three, so that they do produce some outcomes. Because my fear is if you look at the politics on Capitol Hill and what some of the stakeholders are saying, people are coming after the program rather than recognizing that hey, you know what? It's because we probably fell down in a couple of the requirement areas, as opposed to, well, the whole thing should be scrapped because guess what? I just found \$27.00 – \$27 billion we can put towards, you know, the fiscal cliff, or whatever.

**Robert Anthony – CMS**

Yeah. No. I think we can definitely have some discussions in the meaningful use workgroup. I'm not sure at this point how deep such a study could go, or how quickly we can pull something together in time for a stage three to inform those recommendations, but we could certainly talk about what we're able to look at –

**Christine Bechtel – National Partnership for Women & Families**

This is – yeah, here's where we're going, ideally.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Let me start by saying the starting with the outcomes in mind is absolutely what we need to do, and what I hope we've been doing, so –

**Christine Bechtel – National Partnership for Women & Families**

Conceptually, but not in a more how are we going to measure those kind of \_\_\_\_\_, is the question.

**Farzad Mostashari – Office of the National Coordinator, HHS**

So if we take the individual, and I think this has been in part a failure of communication in – if providers are seeing this list of what's in meaningful use as a more or less, you know, arbitrary grab bag of what, you know, some policy committee thought made sense, right, then we have failed in communicating why we are crafting meaningful use the way we're crafting it.

The first meeting of the meaningful – the first presentation of the meaningful use workgroup, where this gentleman to my left presented the framework for meaningful use, we had up there metrics, like we will reduce heart attacks and strokes, like we will reduce adverse events, like we will improve the coordination of care, and readmissions, and hospital acquired infections. That was the animating spirit for meaningful use.

**Christine Bechtel – National Partnership for Women & Families**

Right.

**Farzad Mostashari – Office of the National Coordinator, HHS**

And I think making sure that we link it back to, you know, the requirements, the what of meaningful use, to the why of meaningful use in those very specific categories, is, you know, absolutely something that we need to do a better job of in stage three.

I do think that we have done so. I think that – from my recollection of the deliberations of the meaningful use workgroup, it has always been about, well, our goal is to reduce medication adverse events. That's why electronic medication administration records got added to stage two. And so I think the question really on the outcome side is one, on communication, and two, on expectations.

So for those of you who have actually implemented these systems, and many of you here have, I think it is important for us to put into context the timescale within which you would expect to see improvements after implementation. So Judy, if you're – if you were to take a sample of your implementation installations and to take a look at what – how long does it take before you would be able to demonstrate improvements in quality or safety or efficiency, and then we should kind of project that to the country, right? And not – make sure that while we do aim the bullet at the outcomes we seek, we also temper expectations that if in year two of a – you know, a two-year-old baby, we're saying, well, why aren't you running yet, appropriately.

So that's I think kind of two points. Go ahead. Yeah.

**Gayle Harrell – Florida State Legislator**

I totally agree with what you're saying, and I think the level of expectation, especially when you go into the political arena, has been elevated, because we have been so out there in what we have claimed in the past that we are going to achieve, which is good. You need to set expectations high. But I think part of the problem is we also need to make the point that this is a long term process, and it doesn't happen overnight. Your point, Christine, that stage one is about data collection. You can't get results, you can't demonstrate those results, until you have that data. So this is a process, and communicating that is extremely important.

But I think we have – we have built within the system, and you talk about quality measures and how we are going to impact quality, we have, as we are moving forward with meaningful use, we are already building within that those quality measures. And when you get to that whole conversation on quality, it's where you can do the measuring that we will have to do. And the conversation – this is a very important conversation, probably the most important conversation, we've had in a very long time, as we go into healthcare reform, and as we really start the implementation of ACOs and a new method of delivery of care, that we make sure that with – that HHS understands and starts that measuring process with the tools that we are putting in place at this point.

**Christine Bechtel – National Partnership for Women & Families**

So just to clarify, I think we're saying the same thing, which is very helpful. And Farzad, I don't mean to imply that we haven't had goals all along. We've used the National Quality Strategy. We've mapped out where the ACOs, medical homes, all the delivery system changes need, and we've done a great job of doing that. But at the end of the day, if you look at an area like – we start with ACO, we go, well, they need to do care coordination. How are we laying the groundwork? We're doing a transition of care summary. Right now, all we can do is measure the numbers sent. Later, I would hope we could maybe the measure the number received.

But at the end of the day, there's a quality measure that needs to happen, and I don't know what that is. Is it going to be the, you know, CTM3 measure? So all I'm saying is it would be good to have a dashboard that, as you said, Farzad, is very time specific, that by the end of stage 3, is it reasonable for us to measure using the CTM3 measure, which is a little bit more meaningful than just the process of did a document go from A to B. To know at a more detailed level for public accountability, we should know now and make sure, you know, that we're designing towards making, you know, achievements in those areas.

[Crosstalk]

[Laughter]

**Paul Tang – Palo Alto Medical Foundation**

I've been waiting to get in as well.

[Laughter]

**Paul Tang – Palo Alto Medical Foundation**

But I really do want to echo what Farzad said. As someone who has implemented this multiple times, this is a multi-year process, and Judy knows this very well. You decide you're going to do this, you implement it, you optimize, you decide and implement interventions, you measure, and you record. That's multiple years from the time you first touch – see an EHR. And so it's un – so we shouldn't set our expectations that we can even measure this stuff at this point in time. We're only in stage one, even though we are progressing in terms of working on meaningful use objectives for two and three.

But Farzad's also right that we always thought about this. For the folks that have – we've tried to combine a lot of the country's experts in how is it done and what are the steps to get everyone there, and it's like the near everyone there is what we've struggled to make sure we do well.

The other piece is ONC has commissioned a study looking at – you know, there have been a number of reviews of what do EHRs produce, and one of the interesting thoughts is to look at in the leading edge, with the folks who have had EHRs that meet, quote, meaningful use objectives, how have they done? Now they obviously had to implement it before 2009, but to start tracking, because of this year-long lead time – years-long lead time you need, there's going to be a, you know, a study – the study was commissioned by ONC. So we'll have more information about that.

So I think we're going to learn more. We have to be cognizant of what we have to measure, but I think it may be premature to think we should have it in 2013, based on people who've just started with the program.

Let me give Charles a chance, and then we'll finish with Judy, and then I think we need to move on.

**David Lansky – Pacific Business Group on Health**

Oh, can I get in?

**Paul Tang – Palo Alto Medical Foundation**

Sure, David.

**Christine Bechtel – National Partnership for Women & Families**

I was just briefly going to say, you know, we have to – dashboards are great, and they will show trends, but I think there's a hunger out there for proof, and those will never give us proof, right? In order to get proof, we'll need a formal study, and either do a pre/post, or some kind of controlled type of study. And I think there are places you can do that today where the technology is far enough deployed that we could appropriately design some studies. And I think that's really critical, because as we look at the linkage or the value associated with the technology to a particular result, I think there's insights we would be learning now that would perhaps change decisions around meaningful use three. And I would just encourage us not to be exclusively caught up on dashboards, but make sure we equally weight formally controlled studies. And that's part of the –

**Paul Tang – Palo Alto Medical Foundation**

David?

**David Lansky – Pacific Business Group on Health**

Thanks. I think tying to Gayle's points on the politics as well, I think there's a mini-dashboard we should contemplate, and to me, a task in front of us, really a task for CMS, to tie the value-based payment programs in both the hospital and EP side to the functionalities that we are building through this program, so that – and maybe have a very small number of indicators that do require measurement by the providers in order to continue their full Medicare payment.

So we've had a disconnect in which meaningful use has been a low stakes, not performance-based quality measurement program, and therefore, providers have measured many, many different things, and the data is not public, and it's not used, and the incentive for improvement on those measures is separate from our program, where CMS has of course a high stakes program, increasingly, and PQRS as well is still not yet a high stakes program, it will be the foundation for something in the both physician and hospital payment programs.

And it seems that we could take some time in 2013-'14 to identify a handful of measures which demonstrate the value of successful adoption of HIT, and I'm thinking about, for example, adverse event reduction, medication adverse event, and other hospital adverse event, reduction in those, some of the continuity of care and care coordination measures Christine mentioned, three or four or five measures which CMS intends to make central to some of their value purchasing programs, and which we think are supported by successful adoption of EHRs, and have those – have the data, the actual performance results, made public on those measures. That would be a very powerful demonstration, hopefully, of success.

**Paul Tang – Palo Alto Medical Foundation**

Judy, brief, please. We're way over time.

**Judith Faulkner – Epic Systems Corporation**

Well, I'm struggling a little bit with first this data collection and its interoperability and then its outcomes, and the reason I'm struggling with that is because I do not think that the EMR vendors out there were sitting there saying, oh, we have to do data collection year one. That's what we'll do. There's nothing else in our software. And year two, we have to do interoperability. There's nothing else in our software. In year three, we'll work on outcomes.

I would say that most of the stronger systems out there have all those things in them, and therefore, we could measure them right now, because it isn't that until we get to year three we won't have that stuff. It is, well, when have people installed these? And then certainly there needs to be some time, and it's not very much at all, some time from when they've installed it to when you look at the outcomes. But I don't think we have to say – we can't wait for outcomes until the end of stage three, because I think the minute they install those systems and get them going, if they don't see some of the results that we're talking about, something's very wrong.

**Paul Tang – Palo Alto Medical Foundation**

Yes, sir?

**Mark Probst – Intermountain Healthcare**

Yeah. I think we set that bar, Paul, when we did meaningful use, that it was just the minimum to get these things started, and I agree with Judy, that there's a lot more happening. I bet there's a lot of benefit being achieved.

**Paul Tang – Palo Alto Medical Foundation**

I think we are asking for that to be studied. As you know, those things take time as well. But I think it'll be interesting to see some of the systematic review of –

**Judith Faulkner – Epic Systems Corporation**

But what I'm pushing back at is, oh, we shouldn't expect to see outcomes until the end of stage three, because that's when we put it in there.

**Paul Tang – Palo Alto Medical Foundation**

No.

**Judith Faulkner – Epic Systems Corporation**

I disagree with that.

**Paul Tang – Palo Alto Medical Foundation**

We're not saying that. We're actually pushing the bar, and as you know well, most of the systems didn't have stage one functionality completely, let alone stage two. So we are definitely pushing the floor up.

**Judith Faulkner – Epic Systems Corporation**

That – it's not – if you look at all – what the systems do, though, yes, there were a lot of things that were asked for in stage one. But if you look at those things compared to what the system has, that was maybe three percent of what the system already had. You had the other 97 percent that they already had in there that brings value as well.

**Paul Tang – Palo Alto Medical Foundation**

Nobody's debating that. But we tried to look for exemplars of things that we did consider critical. So for example, one of the things that wasn't in the systems were some of the disparity variables. So no matter how good your systems were –

**Judith Faulkner – Epic Systems Corporation**

Right.

**Paul Tang – Palo Alto Medical Foundation**

– you had no idea how – well, anyway, I'm not sure we should continue this discussion, but the point is that –

**Judith Faulkner – Epic Systems Corporation**

But what – the point is, I think it's valid to do measurements right now.

**Paul Tang – Palo Alto Medical Foundation**

That's correct. Okay. So I think we – I mean, we – I think we've gotten through the majority of your presentation, and the rest we've seen – a lot – not much has changed, but we've gone really over time. I think this discussion has been very useful. I think some of what Marc brought up in the AIU, and how it – people convert into meaningful use, and the whole discussion has been useful. So thank you, and thanks for the –

**Robert Anthony – CMS**

Can I highlight something just very quickly here, as –

**Paul Tang – Palo Alto Medical Foundation**

Sure.

### **Robert Anthony – CMS**

– I won't – you're right. You've seen much of this attestation data and very little has changed in the last couple of months. I just want to highlight a couple of things. At this point in time, we do have about 20 – well, a little over 2,500 hospitals attesting here, so we do have over half of all hospitals to meaningful use at this point in time. You'll see that in this data. As you go through this data, again, not much has changed, but the encouraging thing is I think we can look at this data and say very much that the high performances that we see here are indicative of what we saw from the first wave of people. This really incorporates the 2011 and 2012 early adopter folks, the people who first came in.

We'll begin looking as we go forward, obviously not in the next month or two, but moving forward down the line, at what returning providers look like. But this is a very good snapshot of the performance of people at least in their first year in '11 and '12. Thanks.

### **Paul Tang – Palo Alto Medical Foundation**

Right. Thanks, as usual, Rob. Tremendous accomplishment. So now I think we're going to move on to the priority areas for 2013.

[Skip in audio]

Okay. So this is going to be another section for discussion by the committee, and what you're going to see at the end of today's program is Jodi's going to review the tremendous accomplishments in 2012, and I think you'll be very, very impressed. We're already planning for 2013. This is an open slate. What we've done is we've incorporated a lot of the things – the continuing work, the work that's come up, the questions and points for discussion that's come up during the last year, as well as committee feedback. Remember, we asked for your feedback in terms of some of your priorities for 2013. So we've tried to incorporate all of that. That sheet – that spreadsheet has been passed out to you at your – at your spot.

It's three parts. One, I'm going to sort of discuss some of the topics that we have on the agenda for 2013. Farzad's going to add some areas of emphasis that he'd like to have us consider. We'll take committee discussion of those topics, and then Jodi will conclude with how she's managed to sort of schedule them into 2013, at least as we know them right now. But this is still work in progress.

So the first thing is meaningful use. We've been talking about it. It is not an EHR deployment program. It's really how do we use health information technology, not just EHRs, to improve the outcomes in health of the country? And part of that is to make sure that EHRs and other HIT tools are there – have functionality that would help us get to improved health.

So clearly on our agenda is our recommendations, due in the summer of 2013, to ONC and CMS for draft recommendations for meaningful use stage three, the objectives or criteria and the clinical quality measures. The RFC is out. The replies are due back next week. ONC will summarize them over the next month. The meaningful use workgroup will digest that over the following month, and we'll be back to you in April with updates of the draft recommendations we proposed in the RFC for your feedback before we come back with final recommendations in May for your approval.

Now this also is a good time to start looking at beyond stage three. There's no end, as you know, to this program – I mean, statute. And if you think of stage one as get data in there, as structured as possible, stage two was get it to the places where it's needed, which in today's changing world is more and more places and more and more settings, stage three was to measure and improve the outcomes, once we start having that data around and having access to it, including the patients, then you might think of stage four as a learning health system. That's the entire health professionals along with the patients.

So this is still that sort of arrow that goes up, and we make better and better use of this data and the systems we have available to us. So that's maybe a way to phrase stage four.

Speaking of the whole learning health system, and the team including the patient, this is – we're thinking about the health record more as a shared record. Think of shared care plans. Think of the data that's coming out of people's homes in their daily living, observations of daily living, and more and more active participation in shared decision making with patients. So that's a big – that's a big lift. That's a big ask. That's something we're going to start thinking about in this year, going forward.

Clinical documentation has been a major challenge. It's probably the biggest time sink from a human professionals point of view, and because of that, there's tools that have been created, let's say like copy and paste and those kind of things, would actually, ironically, threaten some of the accuracy and completeness of the documentation. Certainly it makes it harder to read. And then that can have implications in terms of billing and potential fraud and abuse.

So we're trying to look at this area of clinical documentation and look at best practices, potential innovative solutions to this high – highly valuable content, but we've got to make – get it in better shape than it currently is. And as I say, we have that hearing scheduled for February 13th.

The next piece has to do with safety enhanced design of EHRs. We have the IOM report on EHR safety, and the goal was to make it safer than it currently is. There's really not good evidence in terms of, well, are there – are there – are there key – is harm being done? There's certainly potential for harm, but we certainly want to make them better.

One way to deal with that is to actually design with safety in mind. That's user-centered design. It's one of the recommendations from the IOM, and one of the things that ONC has taken up in a number of its sponsored activities as well, and some of that which we'll hear about later in the ONC update.

People though –

[Crosstalk]

**M**

– as you go through them, or –

**Paul Tang – Palo Alto Medical Foundation**

I think I'll go through all of them. Otherwise, we probably won't finish. So I'll go through these, and then we'll have –

[Crosstalk]

**Paul Tang – Palo Alto Medical Foundation**

Yeah. The next area we just talked about in terms of outcomes. It may be easy to say, let's measure the – measure quality or measure outcomes. It's really not that easy. As folks who participated in the NQF consensus process, it's very hard to figure out what is worth measuring and what to attribute it to and how to measure the effectiveness of interventions. So one of the things that we found out early is that just electrifying the current measures, many of which have been designed for claims and abstraction out of paper records, doesn't do the trick. Not only is it very burdensome, but it actually doesn't answer the right questions, i.e., they aren't measures that matter.

So we've come to think of needing to think – take a fresh approach, a de novo approach to saying what – if you have this kind of information, including information from patients, like patient reported outcomes, you know, what really matters to patients? What could you measure, and what – and what meaning does that have? We need to sort of come up with de novo at least ways of thinking about quality measures or performance measures, leveraging the clinical data not only from EHRs, but also from PHRs.

We also found out that with the tension of time, a quick way that vendors have implemented quality reporting has been to hardwire it, and that has a lot of unintended consequences from a workflow point of view. So we've been trying to move towards a flexible platform for measuring these clinical data and reporting on these clinical quality measures, rather than hardwired versions. So that's been another goal we've had, and we need to make additional progress in that in this coming year.

The role of data intermediaries. So clearly the smaller practices and hospitals don't have the staff to do the heavy lift of getting useful information out of the EHRs and PHRs. There may be a role for data intermediaries to help, not only help do that for organizations, but also play the role of aggregating data so that we can create benchmarks. How do you create these organizations? How do you protect their privacy? How do you sustain them in this new world?

We talk also about dashboards, or near real time ways of in – today, looking at this patient, how am I doing with my panel? Where does this patient fit in? It's almost a heads up display as you face each and every patient. A good example is when you look at – it looks like the flu season's going to be a gnarly one this year. Every week –

[Crosstalk]

### **Paul Tang – Palo Alto Medical Foundation**

Yeah. Every week, there'll be new information from the public health sector in your locality that can affect the treatment of the patient right in front of you. Can we make that visible in a heads up display, in quotes?

And then finally we talked about quality measures. One is just – right now, we're at the state of reporting on them. What about using them to improve and to assess whether interventions are working? The most effective way we know of to change how well we do are clinical decision support tools. And so how do we connect clinical decision support with the outcomes that we're measuring, and have iterative feedback?

So that's in quality measurement and management. The next area is information exchange. You know that that's been just tough, because no individual or single organization controls how you exchange information with others, and that is more than a technical problem. It's a social – it's a social and cultural issue. So that's why it's been so hard. You just can't fix it by either throwing money at it or technology.

The hearing at the end of this month is to look at where are we, get a better handle on where are we with the state – there's probably more – there is more exchange going on than we – all of us know. What are the best practices in doing that? What's the role of HIE? There's a whole role of HIE in the new payment systems. When all of a sudden you're at risk for a population and you need to coordinate care, you've got to share the information, and that requires thought about governance. There's not going to be a regulatory approach to governance at this point, but there probably can be principles and models that can be suggested or developed that can help give everybody a head start on this. How do we facilitate that exchange across organizational and geographic boundaries, like our people move?

The safety plan which was in response to the IOM recommendations was just released a couple or three weeks ago, a very interesting piece of work, very responsive to the IOM. It doesn't take up the NTSB, but this is not the – we don't have the appetite or the money to do so. But a lot of leveraging of what already exists, and putting new activities into place. So it's a very thoughtful piece, and that's open for public comment. Our certification and adoption workgroup is going to take a very quick, like in the next month or few weeks, look at this, and provide some feedback.

ONC is also undertaking other activities to improve – continuously improve the safety of the systems we're asking to be put in place. And Jodi's going to take about that if she survives here to the end of the – end of the day.

Privacy, there's always – there are always topics for privacy, and thank goodness we have quite a Tiger Team on that. We're going to finish up with the identities in cyberspace, which is a gnarly problem, actually. And then you think about exchanges, query response exchanges, and the principle that had been put in place early on in the privacy and security workgroup is, well, if the provider, a trusted entity, is in the middle and controls that, then that's a good surrogate for the patient.

Well, all of a sudden if you have machines exchanging information without that provider in the middle, we just have to think about it. So that's one of the things we're going to work on this coming year.

Minors. Majority of the health systems for good cause, because minors' rights are controlled at the state level, have elected not to provide – not – it's almost a non-decision. In order to comply with state laws, you can almost not automatically share it with minors, although they have many rights to the data and the protection of data, let's say, not getting viewed by their parents, but at the same time, then it's difficult to make the – all the data available electronically, because the computer can't figure out what's covered, what's protected, and what's not protected. But because it's such a big problem and we disenfranchise the whole set of teenagers, we want to see if there are practices, best practices, so we can deal with this situation more intelligently.

The same thing with personal representatives. We tried to authenticate and ID proof the providers and the patients, and then we have another group, the personal representatives. How do we know they're personal representatives? How do we even know who they are? Same kinds of issues, yet they play an important role for – potentially, for example, as a caregiver to a patient.

So we've done all this work on data that's contained within the purview of a provider, and then also – and we have cloud computing, and it goes off into the ether. How do we extend the protection – so while it affords a way of exchanging information, how do we afford the protection that we need when cloud computing is a way we implement things?

Rights of access in the electronic world. You know, you get 90 days or whatever it is to get things on paper. Well, that shouldn't be in the electronic world, where you can just flip a switch. How do we convert the laws that we have into at least guidance for what we need to deal with in electronic world? And then patient generated data, and we'll speak a little bit more about that at the end, creates privacy challenges in and of itself.

Consumer empowerment is a – is an area we really jumped into with stage one, by making data available to consumers as well as to healthcare providers. Blue Button was – it was a wonderful invention that frees up the data for an individual. Now the first push of the Blue Button might be like getting a Xerox copy of your paper, but what about ongoing access? And how do we make sure they understand what's the implication of that? And now that we've got all this stuff in whatever devices they've downloaded it into, how do you protect it? And on top of that, now you have a lot of data. What do you do with it? We've been always worried about, well, what does the healthcare provider do with all this data. What's the patient going to do with all this data? Make sense of it? Make – have it affect their behavior? And protect it.

So these are challenges that have occurred, have arisen because of the new world we have with electronic information and sharing. It's a good problem, but there are a lot of policy issues to deal with it.

What it does make more possible, however, and that's one of our holy grails, is shared decision making, having the patients much more actively involved in their own health, their own healthcare, and deciding, making the decisions. That's one of the benefits, and we need to have this data flowing in order to achieve those benefits.

New models of care. Accountable care, it's not just the ACO that's in the statute, but just the notion of being accountable for a population, and the way we will have new payment systems, provides new opportunities and new challenges. So how can we make sure – just like we were talking about how do we make sure the systems support outcomes improvement, how can we make sure the systems support the new way of doing things from a healthcare organization point of view?

We need longitudinal data, shared care plans with the – with all the players on the healthcare team, including the patient and the caregivers, across the continuum. Medicare Shared Savings Program have requirements involved, as an example. We need to meet those. And ideally, we'd like to align the programs in meaningful use with the payment programs in Medicare.

And finally, if that's not enough, there are other miscellaneous topics that we couldn't adequately characterize. So one is innovation means – we're trying to get data stored electronically, but we also don't want to put it in a box and forget about it. So we have to untie it, untether it in a protected way. So the API, the application programming interface, is basically an API to where it resides, to where it could get even more use on behalf of the patients and the providers.

Quality improvement plan review. This is what's formally called CDF, but really, the function – it – the end is not clinical decision support. The end is quality improvement, or health improvement. So what is – how can we support ONC's efforts in this area in terms of using these systems for continuous quality improvement?

PCORI was called out in the ACA legislation. It stands for Patient Centered Outcomes Research, and the I is Institute, so there is a PCORI, but the goal is really how do we both support the understanding of what's effective for an individual patient, but also implementing those results in – for individual patients.

Continuous learning. So if stage four is about a continuous learning health system, then how do we also keep the humans involved in a continuous learning mode? We know that CME, continuing medical – or C – continuing education, lifelong education, is an important part of every healthcare professional. It's been difficult to do in the paper world, and just having these lectures \_\_\_\_\_. It's much better for adult learning to do it on the spot in the sense. So one of the – one of the directions that the professional accreditation organizations are going is sort of a maintenance of certification in an ongoing way. Can't these EHRs support both the learning itself as well as the documentation of that learning, so that it's more – so that Maine Certification, which is – which is a name in the trade, can't that be more than just a test that you take every ten years? Can't it be a continuous process using EHRs?

And then leveraging big data. Once we get the data in, let's make better use of that, rather than just retrieving information one patient at a time.

So let me pause here. That's sort of some of the – what's on the plate that we came up with. There's a combination of what have we posted as we've gone through 2012, what are the things we see forward – looking forward, and in the short term, in 2013, and let Farzad comment and highlight some things of particular interest to him.

### **Farzad Mostashari – Office of the National Coordinator, HHS**

Thank you. And there is a lot here, so maybe what I can do is just offer a perspective on how these can be prioritized or focused or grouped together. I think for 2013 and probably 2014 as well, our challenges and opportunities lie in three areas. The first is the meaningful improvement, the discussion that we just had. How do we optimize what we're – the implementation, the design, of our technology and of the implementation of meaningful use to lead to those outcomes? How can we become a health system and support a health system of learners, not just a learning health system, and be able to see improvement and to see through technology in every practice, in every hospital, the opportunity to get better, and to share that and to give light to that, to highlight those examples, to learn how we can use the technology to be better, and not just whether on average it – you know, what the results are, but to really focus on those meaningful implementations, meaningful optimization, of the tools that we have.

And it does include, I think critically, this triad of population health functionalities, of decision support, quality measurements, and dashboards or registries. That I think is going to be one really important focus area.

The second focus area is on meaningful interoperability and exchange, and being able to effectively implement – we have I think the right standards. We have really strong building blocks in place. But getting those into practice, working out the myriad of technical policy challenges that are going to be – need to be overcome in this year, to seeing the ubiquitous availability of some of these basic building blocks, and then to push on the – whether it's targeted query, whether it's connections to long term care facilities, whether it's notifications, that can have the most direct impact on things like reducing readmissions, to really focus our interoperability and exchange activities on the emerging business needs of the healthcare partners in the systems, and too to focus on policy levers in conjunction with payers, states, and CMS on what may be some payment policy levers or other policy levers to help improve and increase the business case for information to be exchanged whether than to be held siloed. That's the second area.

And the third area is of consumerism in healthcare, and increasing support for enabling the access of consumers, the real life self access to your own medical records in increasingly more complete form. The ability to take action on that data, to manage one's finances, one's health, one's healthcare, and to enable one's caregivers, uncompensated caregivers, to participate fully in that health system, and leveraging that – those resources, and, importantly, to help accompany that shift in attitudes that is going to be necessary as consumers become and patients become more partners in their care.

As we do all three of these, the meaningful use of meaningful use, meaningful interoperability and exchange, and meaningful consumer engagement, I think we have to be very concerned and very vigilant to do so in ways that increase innovation and support innovation in a vibrant marketplace in technology, and those I think are going to be what I would emphasize in the middle of these very – each individually very important activities. But I see those three as three of our most important challenges.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Marc?

**Deven McGraw – Center for Democracy & Technology**

I didn't even get it up. Okay. I had two – I had two comments. And first of all, this list of topics is really well thought through, so thank you. I really like it, and it – anyway, just a couple of comments.

One, as we talk about meaningful use, stage three and stage four, I mean, we're building a ladder that people are climbing with one and two, in each of them. Can we somewhere in our plan of this year, maybe early, really talk about the timing of those stages? And, you know, some of that's built into what we originally put together, but we ought to be learning from what we have. The number one comment why people aren't commenting on stage three, and I know people are, but the folks that get back to me and say the reason we're not commenting, we're so busy on meaningful use stage one, we're still trying to absorb meaningful use stage two, and, you know, a lot of the stuff we put in didn't seem to make a difference anyway. We don't have time to even comment on stage three.

So I really think it would be helpful for us to at least take a pause, a breath, and have that conversation about building the ladder, because that's what we're talking about, but the timing we're expecting people to actually climb that ladder, and what we're learning from, you know, history thus far in the process. So that was one comment.

And then the second one was an emphasis on IS security moving forward, and again, looking at it broadly, we're asking – well, we're asking for certain things, HIPAA does, OCR is definitely interpreting HIPAA in a more – in a different fashion than they have historically. And I think we need to have a conversation about what the residual impact of those potential changes or actual changes might have on the things that we're asking the industry to do from a functionality perspective or even some of the data sharing that we're doing. I just know it's a huge issue, and one that we probably can't hide from. And if we're going to be empathetic to the people we're asking to make these changes, we probably ought to understand what those are. But again, tremendous list, and that's what I had.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Since there's so many cards up, why don't we just go in a circle. Charles?

**Christine Bechtel – National Partnership for Women & Families**

Sure. I also think the list is tremendous and well thought through. One area I'd like us to consider, though, is more explicitly calling out efficiency and effectiveness. When you look at what's happening with ACOs, and I've spent a fair amount of time interacting with delivery systems around ACOs, there is a lack of understanding around how technology applies to an ACO, not so much from a quality or readmission perspective, but more from a risk manage perspective. Increasingly, we're asking our delivery systems to take on more and more financial risk, and they need technology to help them do that, and there is a specific clinical link. And I think we need to do a better job at making that link explicit and a shared understanding.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Josh?

**Joshua Sharfstein – Department of Mental Health & Hygiene, Maryland**

Thanks, and I appreciate the list and the comments. One thing that's not explicitly mentioned is public health on the list. You know, whether the understanding is that it's just, you know, vaccination and lab reporting and the same things, I would make the case that even if it's not what is sort of focused on as maybe the structure of what you're aiming for, that the – it is the super structure benefit, that when you set these things in place, there's some great things that can be done creatively in public health that would be great for the committee and for ONC to keep their eye on, because as you get into all these different, you know, day to day challenges, the fact that these systems are being used in some creative ways or could be oriented in some creative ways to really save lives could be a locomotive that helps pull through some of the more challenging parts.

I think someone mentioned flu. As just one example, the potential of EHR systems and HIE systems to totally transform the public health response to flu on an annual season, and use that as a model for responding to different infectious disease emergencies, is incredible. And so maybe, you know, you're not designing the EHR meaningful use requirements around that, but that there's some work that this committee could do, and some focus, there's, you know, some keeping an eye on that, that, you know, ONC could do, that really, you know, allows for great models to develop and be really promoted in public health.

**Paul Tang – Palo Alto Medical Foundation**

That's fair. Gayle?

**Gayle Harrell – Florida State Legislator**

Thank you, and I too want to commend you and commend ONC for really encapsulating where we're going and taking that forward leap and forward look. Several things that I think perhaps need to be perhaps defined a little bit more in how we get there and what we're doing. I know the number of breaches that have occurred over the last year are escalating. Every time I get a blurb on my email, it's another breach, and it disturbs public trust tremendously every time one of these breaches happens.

So when we're talking about exchange and the whole topic of exchange, we need to talk about breaches, and we need to talk about security and how we can make sure that there's that public trust out there, because it is destroyed every time you have something that goes on.

And the second thing I really would like to see us also include, and I'm so delighted about the consumerism role and really making sure that we include patients in this, and the role of the patient is going to increase dramatically as we move forward. And every time we get into that, of course, personal health records play such a key part. And although we statutorily don't have the ability to do anything in the way of regulation, perhaps we need to look at guidance on personal health records. This truly can be the wild west out there. It makes me extremely nervous in how people – what people think they can – who uses what information in personal health records, and how consumers do not understand, they don't have the technical savvy, perhaps, are not aware, on what can happen with those records. So I'd like to have a conversation on personal health records.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Paul?

**Paul Egerman – Businessman/Entrepreneur**

Yes. I have a couple of comments, but first, this is excellent material, and there's a lot of material here. First is in terms of something that's not here is people are setting up all over the country these insurance exchanges, the other HIE. And I always feel like the clinical side of the world and the payer side of the world are like in alternate universes. You know, they're just – they never talk to each other. But have we looked at all at the insurance exchanges to try to think is there something very creative we can view in here, as it relates to information exchange or, you know, any aspect of what we're doing? It seems like that perhaps there's some redundancy in the insurance exchanges. So that's just a question.

And the other comment, I also have some questions about your preliminary work plan, but you haven't shown that slide yet. Should I hold off on that, or –

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

**Paul Egerman – Businessman/Entrepreneur**

Okay.

**Paul Tang – Palo Alto Medical Foundation**

Chris?

**Christopher Boone – American Heart Association**

Thank you. I echo everyone's comments about it being an excellent list. I have a particular interest in the role of data intermediaries and their sustainability. I just wanted a little clarity on that what that was. I'm hoping that you mean clinical registries and all that they bring, as well as programs such as Million Hearts. I just want to make sure that we don't lose sight of those types of programs and those initiatives that are out there from a quality improvement standpoint.

**Paul Tang – Palo Alto Medical Foundation**

They're included. Deven?

**Deven McGraw – Center for Democracy & Technology**

Also agree, it's a good, comprehensive, and pretty daunting list, if you think about the number of things on it. So my question is about how to make sure we manage it all and get it done. And I know that with respect to the topics in the consumer empowerment category, we all received notification of the formation of a new workgroup along those lines. What are sort of the plans for sort of divvying up some of the rest of these? Some sort of fit neatly into some boxes. Some don't necessarily have a clear box in terms of our existing infrastructure. And then there's lots of stuff that overlaps.

Just by way of example, the big data key topic, there are pieces of that that are probably part of meaningful use. There are pieces of that that have privacy and security implications. And so how – what's our sort of thinking – I mean, maybe we need to think about this, how we sort of divvy up the work and then make sure that we are coordinating, working together, building on previous work, not conflicting with one another, etcetera.

**Paul Tang – Palo Alto Medical Foundation**

Excellent. Excellent comment. And part of what we were planning to do is use this input, build the natural list, and reserve the option of reconfiguring ourselves to get the work done.

**Deven McGraw – Center for Democracy & Technology**

But I think we may need some more workgroups than just one more, in addition to the ones we already have, is what I – but always mindful of the fact that they'd all have to funnel up to the same place.

**Paul Tang – Palo Alto Medical Foundation**

Right. Right.

**Deven McGraw – Center for Democracy & Technology**

Right? So –

**Paul Tang – Palo Alto Medical Foundation**

And one of the best ways of coordinating is to have cross-pollination on teams, but that means –

**Deven McGraw – Center for Democracy & Technology**

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

– the same ten people.

[Laughter]

**Paul Tang – Palo Alto Medical Foundation**

And you're one of those people. Christine?

**Christine Bechtel – National Partnership for Women & Families**

I had two suggestions. One, and probably the most important, is health disparities is totally missing explicitly from the list, and even I think when we were explicit about it, at least by naming it in a category, I don't think we did anything really to advance it in stage two. So it's something I'm very worried about it, and it has to get beyond – you know, we've created the capability to create lists of patients by demographic variables to identify disparities. Whether or not it gets used that way is an entirely I think different matter.

But I also think that there is a lot more that we can do, and if we need – and that we need to take a broader look at health disparities in general and the ways that meaningful use can support identification and accelerating their elimination. And I think we have to be really explicit about it, and it probably goes in as many categories as we can. So not just meaningful use, but, you know, of course also quality measurement. But I would also think about information exchange, and whatever the buckets are that we end up with. We need to ask ourselves explicitly every time, what's the role for disparities reduction here? What's the potential? And how do we accelerate that? I don't know if that means we maybe need a workgroup that is specific to health disparities, but I feel like we've struggled to really keep our eyes on that ball.

The second thing –

**Jodi Daniel – Office of the National Coordinator**

Can I jump in on that one for a second?

**Christine Bechtel – National Partnership for Women & Families**

Sure.

**Jodi Daniel – Office of the National Coordinator**

Sorry, Christine. We do have an eHealth equity roundtable that the consumer eHealth workgroup – I mean, the consumer eHealth program is running in February, and we have it listed as something that the consumer empowerment workgroup would follow up on, some of the discussion and recommendations that come out of that roundtable. So that might be a good way of kickstarting that conversation, and maybe having the consumer empowerment workgroup identify how best to address disparities throughout the different workgroups, or whether or not it's something that the consumer empowerment workgroup focuses on. But we do have a roundtable in February, so it's something that we are looking at kind of kicking off right away, and maybe we can have, you know, a presentation here at the full committee to let folks know how that roundtable goes, and then have the consumer empowerment workgroup make some recommendations on how the committee should be looking at this in the future.

**Christine Bechtel – National Partnership for Women & Families**

It sounds like a great launch. What is the title of the roundtable, again? Do you know?

**Jodi Daniel – Office of the National Coordinator**

eHealth equity roundtable.

**Christine Bechtel – National Partnership for Women & Families**

Okay. So I don't know if it's specific to electronic health records, or broad, or whatever, but I think that sounds like a good launch point, and maybe we can take that on and sort of figure out, okay, then what are the gaps coming out of that? How do we operationalize what they recommend, etcetera.

**Jodi Daniel – Office of the National Coordinator**

\_\_\_\_\_.

**Christine Bechtel – National Partnership for Women & Families**

So the second recommendation that I would have is on – when we went through the stage three meaningful use process, particularly in the sub workgroups, and we had a process where we dialogued to a degree with the standards committee, I think there was a lot that came back to us, at least to me, that was fairly surprising. Like, whoa, we can't do that yet? I think it's worth looking back through the grid and understanding what it was that we had to pull out or change. So I'm thinking of things like home monitoring devices and the fact that we couldn't, you know, even get basic like blood pressure and, you know, height – not height – weight, you know, connectivity with electronic records. That's of concern.

So I think that it's probably a prioritization exercise. But I think if we start with looking back through what we were, you know, told, nope, not ready for that, and picking off the ones that are really important to make progress on, and adding those to these various lists, would be really helpful.

**Paul Tang – Palo Alto Medical Foundation**

Good thinking. Judy?

**Judith Faulkner – Epic Systems Corporation**

Okay. I'll be the odd man out. Daunting list, yes, and I think we have to be careful, very careful, about is there an arrogance that we have here that we can define the industry and electronic health records as a group here, giving so much work to the vendors that they can't do other things because they are busy doing this list, that this is the way to go. And I think that we have to be very careful, because it's very tricky that with the best of intentions, we will harm the industry rather than help it.

And what we have to realize is as we put these committees together, this committee is against the users groups meetings that the individual vendors have, where they have thousands of physicians, clinicians, different folks in different areas and specialty areas, meeting constantly to go over what they need the most, what's hurting them, why it's hurting them, how to do a better job, and they're doing that, too, with the very best of intentions. They're not saying, oh, do this for me because I want to make more money. They're saying, this is going to improve how I care for these patients.

But what happens is that the vendors do this list versus what they're being told by the customers they need the most, and I'm really scared about with the best of intentions our harming things. And I wanted to just give a little bit of background.

In the early seventies, that's 40 years ago, folks, COSTAR came out, Epic came out. That's when we started the electronic health records. But it was not in graphical user interface, because that didn't come around until the early nineties, when Microsoft came out with PCs, and when graphical user interface was there.

So we've got 40 years before these committees started. Then we've got about 20 years from when all the graphical user interface came out, and a lot of other vendors came out then, too. During that time, I wrote down some of the things that have been innovated, and I am concerned that if in fact these committees define the electronic health records, this innovation would not have happened to the extent that it did.

Okay. The after visit summary is over 20 years old, and I'm going to call it the post-appointment recap. I think right now I'll use that name instead. The post-appointment recap, because after visit summary is a brand name. The patient portals. Interoperability. So interoperability has been out with some vendors for a while before it was required here. Why? Because it was needed. Because people wanted to save lives.

Smoking cessation was done by different vendors. Clinical decision support. One of the things the vendors do now, which I think is just a big problem that this group does not concentrate on it, is childhood obesity, because it's the only way we are going to have a better future for the US. Don't just replace knees and deal with diabetes and congestive heart failure because of obesity. Work on it with kids.

Anyway, a lot of that is in some of the vendor systems. Mobile patient portals, mobile physician access, natural language process, research support, active guidelines, remote monitoring so you can see into the rooms and see into the ICUs and deal with that. Telemedicine, so you can help smaller hospitals and smaller clinics with the experts back in the main area. Device integration with patient monitors and pumps. Genomics, capacity planning, more done overseas than in the US, but that's interesting. E-visits, specialty work, ophthalmology, orthopedics, ontology, cardiology. These things, if in fact we squash innovation and become that the EMRs of the future will be designed by these committees, those things, if we had turned the clock back 20 years ago, might not exist.

And that's my great, great concern. I worry that we should be figuring out what do we leave to the vendors to do? And it's not that the stuff is wrong. It is that they take so many thousands and thousands and thousands of hours, and most of the things tend to be incremental, not groundbreaking, that we do here. And so we add these data elements, we add these definition, and we add these reports, and they – and to do it the way that you say to do it, I think we took 60,000 hours on it for a meaningful use one. So that's a lot of time. So if in fact by the time you get to two and three and four, there is nothing left, I am afraid that innovation is going to go away.

**Paul Tang – Palo Alto Medical Foundation**

Dr. Agarwal? Thanks, Judy.

**Paul Egerman – Businessman/Entrepreneur**

\_\_\_ \_\_\_ \_\_\_ I think they're going to do half this stuff. I don't think they'll be able to finish half the things there on the list in 2013. It –

[Crosstalk]

**Paul Egerman – Businessman/Entrepreneur**

I'm a little less concerned than you are, because I think this is more of a ambitious view of what they would like to do, but I don't think they will actually complete \_\_\_ \_\_\_ half this stuff –

**Judith Faulkner – Epic Systems Corporation**

Even if they don't – if in fact –

[Crosstalk]

**Paul Egerman – Businessman/Entrepreneur**

– these numbers of items. But that's my guess. There's good – this is an expression of good attentions as opposed to a real work plan.

**Judith Faulkner – Epic Systems Corporation**

But if in fact by phase four people get dinged if they're not doing this, and it takes three-quarters of the time that a vendor has available –

**Paul Egerman – Businessman/Entrepreneur**

Oh, I understand your issue.

**Judith Faulkner – Epic Systems Corporation**

– that's my point.

**Paul Egerman – Businessman/Entrepreneur**

I understand your issue.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Let me clarify one thing. Paul and Jodi, this is the work plan of topics for discussion by Health IT Policy Committee.

**Paul Tang – Palo Alto Medical Foundation**

And its associated workgroups. Yeah.

**Farzad Mostashari – Office of the National Coordinator, HHS**

And its associated workgroups. Rather than another iteration of what is planned for meaningful use stage three.

**Paul Tang – Palo Alto Medical Foundation**

Right. Right.

**Jodi Daniel – Office of the National Coordinator**

Correct.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Okay.

**Paul Tang – Palo Alto Medical Foundation**

These are questions that have come up.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Right. So I think there are many of the issues here, so supporting patient-centered outcomes research, it's important for this policy committee to be thinking about how the infrastructure that we're – the national infrastructure that's being developed is going to be supportive of patient-centered outcomes research, and to hear from PCORI in terms of what their plans are, and how they are, and bring what we've already done to them, and make sure that they are taking place aware of each other.

**Judith Faulkner – Epic Systems Corporation**

But I think \_\_\_ \_\_\_ careful thought to what areas we touch. And I do agree with you that when those areas are standards across multiple groups, then that really helps, because then we can all follow the standards. That's so much better I think than some of the detailed stuff that each vendor has to do. And I think one other area that's going to really make a concern with innovation is I think it's going to reduce in the end the number of vendors available to do this, because we're a larger group. There are a number of other larger vendors out there who can deal with all this stuff, but if you're a small vendor, you're not going to be able to.

**Paul Tang – Palo Alto Medical Foundation**

Dr. Agerwal?

**Madhulika Agarwal – Department of Veterans Affairs**

Just a couple of very quick comments. You know, again, it's a very comprehensive list for discussions, but two areas where I think we may want to be more explicit and all them out, one is telehealth that I know Judy has mentioned. This is something that is going to require a greater emphasis, especially for the rural areas. And I know some of have more experience with it, because having worked on it for a few years, but I think it's something that probably the committee should be much more explicit in talking about as we go forward.

The other is I know it's in the consumer empowerment, but I was hoping that the mobile applications, the web apps, that are sort of just multiplying rapidly, and are now being deployed by certain health systems, I think that may be something else that, you know, probably needs greater discussion here. Thanks.

**Jodi Daniel – Office of the National Coordinator**

Can I just jump in? One thing in response to what Judy said is that we – I mean, we've traditionally been doing – you know, we have workgroups, we have recommendations, we – you know, ONC looks at the recommendations and adopts many of them into our policies.

I think one of the things we talked about was how we can leverage the policy committee for discussing other kind of topics, like PCORI or patient-centered outcomes research, how we can maybe bring in some experts who are not on this committee to raise particular issues and have a discussion that may or may not result in specific recommendations to us, or that may or may not lead to recommendations for meaningful use, which is one, albeit large, but one policy lever we have.

And so, you know, like telehealth is one area where it may be that we can have a discussion and kind of bring together some expertise and some knowledge in front of this committee, and helping it by some of the thinking that we have, but not necessarily recommendations that then go towards, you know, standards and certification rulemaking.

And so we've talked about bringing in some experts from outside that might be able to do presentations before the full committee as another way of leveraging expertise we have on the policy committee, but then having a public discussion on a topic, but also bringing in some expertise. And we talked about that, for instance, with the continuous learning of healthcare professionals or the API for innovation, here we may just try to tap into some expertise that's outside and bring it before the committee for your information, discussion, and thinking as we talk about other issues.

**Paul Tang – Palo Alto Medical Foundation**

Okay. \_\_\_ \_\_\_. Okay. Christine?

**Christine Bechtel – National Partnership for Women & Families**

I guess I just had sort of a question. So if we're having a discussion but we're not necessarily making recommendations on a topic, what's the action or the impact that we could have? Because I think part of the issue is a lot of us devote this many hours to it because we feel like it's very impactful, but I'm sure that there are other alternatives and policy levers that ONC and CMS have at their disposal, other than the meaningful use rules and regs. I get that.

But I think it's probably – I'll just say that as a member of the group, it's very important to me that whatever we spend time doing has a road that we can have an impact, other than sort of just a public discussion. I don't know if it's a report generation. I don't know if it's, you know, more public/private partnership, or other voluntary mechanisms, but that it really continue to be action-oriented I think is important. And to facilitate that, if you guys are tired of getting recommendations, it would probably help to understand what are the range of, you know, kind of action-oriented pathways that we might have available to us for different topics, so that we can pursue those appropriately and within our scope.

**Paul Tang – Palo Alto Medical Foundation**

Okay. Gayle, then Marc.

**Gayle Harrell – Florida State Legislator**

One more comment, kind of jumping off of what Judy had to say, because I think you really stated very clearly some of the issues that the vendors are feeling, and the providers are feeling as well. It's not just the impact on vendors, but it's also the impact on providers. And I think if you – if you take that in context and say, you know, what we are doing here, and we are an insular group to some degree, and we tend to talk to each other, I get a lot of people calling me and talking to me. I'm kind of the bottom of the funnel.

But I think we need to hear from those users, and perhaps we need to really reorient. We did that to some degree several years ago, but I think maybe it's time again to hear from users in some kind of a public hearing, a forum, where you get the users and the user groups out there coming to us with what they see the impact of what we are doing has on them. And that may help us – that might really change some thinking and clarifying some thinking as well.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Maybe some of these folks should go to some of these various user group meetings –

**Gayle Harrell – Florida State Legislator**

That could be also –

**Farzad Mostashari – Office of the National Coordinator, HHS**

– because then you're going to have thousands, not just a few people going up there in the front.

**Gayle Harrell – Florida State Legislator**

Yeah. I get them calling me, believe me. And they – I hear it. And, you know, it needs to be 00 really, the whole committee needs to hear that. And the idea of perhaps going to some of these, I like that idea, too. But even – at least bring some of them here and do that.

But also I want to say your opening comments, Farzad, were so on target in that what is the role of government? What truly is the role of government? Yes, we have policy levers we can pull. Yes, we have laws and rules that can be implemented. But at the end of the day, is it not the society, the community, that is really going to have the most impact? And those users, the physicians, the hospitals, and the patients out there that are going to drive this. So we need to make sure we leave room in the process for that to happen, and come full circle, right back where you started.

**Paul Tang – Palo Alto Medical Foundation**

Marc?

**Mark Probst – Intermountain Healthcare**

Yeah. So I – I mean, what Judy said was very provocative and I think very accurate. I mean, when we define new functions, and early in meaningful use we did. We defined a lot of things. We want you to keep smoking status. We want you – the systems to do certain things, and we had outcomes, and that became a real development challenge for those of us involved in development. You know, as we've been able to take in the next steps of meaningful use, more application of the data that is now gathered, I don't know if – I mean, I'm sure it still impacts us as developers and as vendors, but it allows us now as a country to start saying, okay, maybe there's some benefit we can get out of these things that we asked.

So – and I just think we have to be careful about how many new functions we provide – you know, ask for the vendors to develop, versus how we're asking people to use these systems. And I think we can make some of that divide.

We've also created some challenges, and whether it's us or whether it's what I talked about security earlier on, there are challenges associated with the things we've asked the country to do with electronic medical records, and I think we need to focus on what challenges we may have created and how we can help through policy and then appropriate practices that come out of that policy to help people through it. And, you know, it goes to patient identification. We've identified that as a tremendous challenge. What can we do to help there, and what can we do in other areas of standards?

So I know I've been pretty vocal about standards. I'll continue to be vocal about standards. That's what helps us as developers, that if you'll define those, if someone will take the opportunity to define that set of standards, and I think as a policy committee we have the opportunity to set that set of standards and then pass it on to the standards committee to actually do some definition around it, it does create a much easier foundation than for us as developers to do the things that are being asked to be done.

So I – again, I really like the list, because I didn't go through it maybe in the same set of eyes, saying, uh-oh, a new function, a new function. I saw it as maybe some opportunities to use the systems that we have. Now if I went through it in that other eye of a new function, new function, I would be far more concerned, because of the impact. And again, going back to timing, I think it's okay for us to set a – set this ladder. We're trying to climb somewhere very cool, I think. And it's okay to set that. What becomes a challenge is when we try to set that timeframe, because everyone is dealing with a different set of issues, and it's becoming increasingly difficult for our health care organizations across the country to meet some of these times that we put in place.

And again, more discussion around what that means, and more reality than just Marc Probst discussing it, but I think that would be really helpful, just to get clarity around that, and empathy for what we're asking people to do.

#### **Paul Tang – Palo Alto Medical Foundation**

I want to thank the committee for really a very thoughtful discussion, and very thought provoking. It's been very helpful, and so one reminder that these are topics that have come that the – the topics and the questions and concepts just don't go away. So we have to at least start discussing them. They don't represent new meaningful use criteria objectives.

The other piece is a little bit of level setting, too. You know, in healthcare we've had our own fiscal cliff, and I think a lot of our healthcare organizations have to take dramatic cuts in order to respond to the fiscal cliff that we face. It's been some of the thought let's say of meaningful use that some of these functions are necessary to deal with the fiscal cliff in a – in a rational way, in a thoughtful way, rather than simply cutting or cutting people. So that part of the rationale, and so some of the time urgency isn't a statutory one, it's just a fiscal cliff kind of a one.

We're going to take this back and then rework it and bring it back to you. What Jodi's going to do now – and by the way, let me credit Jodi and Seth for many of the excellent, comprehensive items on this list. But so Jodi's going to walk through and see how she's sort of shoehorned some of this stuff into quarters of 2013.

#### **Jodi Daniel – Office of the National Coordinator**

Okay. Well, this is hard to read, and I know I'm getting old because I actually have to have my glasses to read this now. So – my birthday was just this weekend and I'm feeling a little bit old. Anyway, okay. So we tried to divide this up by workgroup, and then we have an emerging issues list so that people can see how the work plans might shape out by workgroup. And we will go back and look at the feedback we got from folks and adjust this appropriately.

But just so you know sort of what the thinking was coming into this meeting, so meaningful use, for Q1, we will be getting our comments back from the RFC, and we'll be working with the meaningful use workgroup to develop draft recommendations. We'll get final recommendations in Q2, which will then inform ONC's development of our proposed rule. Oh, thank you. I have the bigger version now.

Okay. So we also – because there were some concerns about what could be done with respect to patient-generated health data, one thing that we are – we're working on bringing together a group of folks through NEHICS to look at patient-generated health data and any best practices as they support the provisions that were put forward in the RFC to help folks in these workgroups who are chewing on the patient-generated health data recommendations, to inform that discussion. And then we'll have the clinical documentation hearing as well, that the meaningful use workgroup will be focusing on in Q1.

Q3 for meaningful use, we also have a potential hearing on safety enhanced design with input from our SHARP-C program. So that's meaningful. And then Q4, you know, it'll be a little bit quiet, because we'll probably be back at the ranch trying to work through our process and give you guys a little bit of a break, although you – you know, if you want to start on Q4, we'll work that in.

For quality measures, again, we have the MU3 draft recommendations. Same timeline, Q1, we'll have drafts. By Q2, we'll have final recommendations. Both Q1 and Q2 we'll be taking on the issue of data intermediaries, as Paul discussed. And then thinking more about population management tools and CQM development in Q3.

For information exchange, again, the MU recommendations, I'm sure they're going to have some input on that as well, and then the HIE hearing and potential follow-up, which may bleed into Q2 as well.

For certification adoption workgroup, Paul mentioned our safety and surveillance action plan, which we just put out at the end of December. We will have the certification adoption workgroup take a look at that. We are – have it open for comment right now. Comments are due February 4th from the public. We've talked about the fact that this is in fact a rulemaking, so the policy committee's meeting is not until after that date, and we still would be happy to receive your recommendations, slightly after our comment period closes, as our policy committee.

We would love the certification and adoption workgroup to take a particular focus on how we can leverage the meaningful use and the certification rules to support safety, particularly in the early stage, because we know you have a particular expertise in that, and we want to make sure that if there are particular action items that we can be taking through the meaningful use program, particularly in the early stages in Q1, Q2, that we get that feedback from you all then. So we would appreciate a focus on that.

For privacy and security, it's a very busy agenda for the year. Again, meaningful use draft recommendations and final recommendations in Q1 and Q2, the recommendations on patient trusted identities in cyberspace as well as recommendations on query and response authorization and the policy regarding the IE workgroup recommendations. We'll be looking in Q2 and Q3 to focus, as Paul had mentioned, on the privacy implementation issues regarding minors, personal reps, and proxies, and how to implement those policies in a – in the light of electronic health information exchange, and we expect that will take a few months to go through, so we have them in both Q2 and Q3.

And Q3, also starting to take on the issue of cloud computing and the privacy and security issues there. And then finally, Q4, looking ahead at access issues, the right to access in electronic environment, and patient-generated health data, and how – the privacy and security issues related to that as well.

For consumer empowerment, so we have put up a request for folks – for nominations for a consumer empowerment workgroup of both the – of the policy committee and the standards committee. I can't remember when that closes. MacKenzie?

#### **MacKenzie Robertson – Office of the National Coordinator**

We're going to be pulling the list of potential applicants on Monday the 14th.

#### **Jodi Daniel – Office of the National Coordinator**

Monday the 14th? So if there are folks who are listening who – or who know somebody that's interested or would be great to participate on either the standards or the policy consumer empowerment workgroup, please submit nominations through our website. There's an electronic submission process. And it's the first time we're using that electronic submission process to form a new workgroup, so we're really excited to be able to reach out to a broader array of stakeholders and experts than we have in the past by having folks nominate themselves through that process.

We have a very healthy agenda for our consumer empowerment workgroup of the – of the policy committee, looking at patient reconciliation of medical records from various sources, so when people are Blue Buttoning their data from multiple sources, how – recommendations on how to make that easier for patients to reconcile, as well as guidance on how to handle or protect health data, I think aligned with Gayle's comments.

We've been working on the S&I initiative, the Automated Blue Button initiative, so we'll be having the consumer empowerment workgroup take a look at some of the issues that are coming up from Blue Button, as well as follow up on this eHealth equity roundtable that I mentioned to give some recommendations on how we can better incorporate some of the – some of what we learned from that into the policy committee discussions and any next steps we should take there.

We've been working with this Person@Center, looking at sort of a longer term vision for consumer empowerment and putting the patient – the person at the center of their own health and healthcare, kind of a longer term vision than our current consumer eHealth program is looking at. And we should hopefully have a white paper by then, and we might want some inputs from the consumer empowerment workgroup on some of the next steps that we might want to take in that space to be kind of more forward looking. This is kind of five years our plus.

And then we – we'll – as I said, we'd be focusing on some best practices related to patient-generated health data that we'd be putting forward from the meaningful use workgroup, but we also expect that there are some areas that go beyond what we will have in meaningful use stage three. And some examples are genomics and personalized medicine, and to the extent that there are some guidance or best practices regarding patient generated data, beyond this stage of meaningful use, we will work with the consumer empowerment workgroup on that.

And then finally, our last, accountable care, we will be forming another workgroup, so two new workgroups this year. This one on accountable care, and you heard at our Beacon update from John Ivey last month a mention of this. We're still sort of working it internally to come up with a mission and some charge for that workgroup, but – so that one will probably start a little bit after the consumer empowerment workgroup. We will do a call for nominations on our website, just like we did for consumer empowerment. So anybody who's listening who has expertise in – or interest in this space, please get ready for that posting and put up your nomination for that as well.

And we have a focus in Q2 and Q3 for an accountable care workgroup to talk about the needs for technology to help support data aggregation and analysis, as well as the business needs of accountable care organizations, and coming up with recommendations there.

And then finally on the emerging issues list, and these are the ones that we weren't clear on which workgroup they would fall into, whether they fall into a particular workgroup, but we wanted to capture them and give some timing, was the API for innovation, the quality improvement plan review, and PCORI update. We'd like to actually bring in one of the senior folks from PCORI to let folks know on this committee what they are doing, and to help try to align their – to help them understand some of the health IT activities, as well as to help folks on this committee to understand what PCORI is doing, so that we can think about how to leverage some of that effort.

On the quality side, this is the working upstream and creating feedback on quality. So the CDS quality measures leading to quality improvement, and how we look at that to – how we look at quality to help support quality improvement better. And then finally in Q4 we have the aligning MU and healthcare professional certification and testing, which Paul mentioned. Looking at PCOR infrastructure, so it's just so folks know, there's PCORI and there's PCOR. There's patient-centered outcomes research, and there's an institute that is putting out a lot of grant funding for patient-centered outcomes research. But HHS also has a small amount of funding to focus on patient-centered outcomes research, and particularly looking at an infrastructure for patient-centered outcomes research. So we will likely have discussion in this committee on that. And finally, big data.

So that's sort of a nutshell of how we see some of this laying out, by quarter, by committee. We will go back and talk offline about how we can incorporate some of the input from the committee, from this discussion, into this work plan. But – do we have time to open it up for any –

**Paul Tang – Palo Alto Medical Foundation**

Yes, just a little bit of time.

**Jodi Daniel – Office of the National Coordinator**

– comments or thoughts on the work plan itself?

**Paul Tang – Palo Alto Medical Foundation**

It's really almost a shoehorn, because there's so many copies.

**Jodi Daniel – Office of the National Coordinator**

Yeah.

**Paul Tang – Palo Alto Medical Foundation**

Christine?

**Christine Bechtel – National Partnership for Women & Families**

It is totally overwhelming, so I can't really comment on the entire thing without falling on the floor, maybe being apoplectic, but I will say my earlier comment about the launching point for the follow-up to eHealth equity roundtable on disparities, I would just flag that I think that's good for non-meaningful use related health disparities work. But we do need to look earlier than that and have it be somewhere on this chart in meaningful use that we're looking at how to do a better job on health disparities in stage three. Thanks.

**Jodi Daniel – Office of the National Coordinator**

Certainly. All right.

**Paul Tang – Palo Alto Medical Foundation**

Okay. Well, thank you very much. Again, thanks for the very helpful comments. We'll incorporate that into the final work plan. So next we're going to hear from the Privacy and Security Tiger Team with Deven and Paul. Thanks you.

**Deven McGraw – Center for Democracy & Technology**

Thank you.

[Background noise]

**Deven McGraw – Center for Democracy & Technology**

Okay. Thanks very much. We are cognizant that we're in between all of you and your lunch. Usually we come afterward, and so in some respects this might be better, but we'll do the best we can to get through this. These issues are always of great interest to members of the policy committee, so we don't to rush them. But I do want to remind members of the policy committee that essentially what we're doing is coming back to you on a topic that we began to discuss with you last month. We had had a hearing on sort of best practices for patient identity proofing and authentication that would come up – arise as part of implementing the view, download, and transmit functionality, and meeting the meaningful use criteria related to that, as well as sort of implementing the automated Blue Button initiative, which is expected to create the sort of standards and policies that will also help facilitate view, download, and transmit.

So we came to you last month and sort of reported preliminarily on some of our findings, and got a little bit of feedback from the committee, mostly in the form of, you know, some head nodding. It was December, after all. But there's not much that's different in the stack of recommendations that we have today.

And I want to first thank my co-chair and the members of our Tiger Team who devote a significant amount of time to our work. We couldn't do any of this, and we won't be able to do any of what we propose to do in 2013, without the continued dedication of folks on a set of what are some really hard issues. And I just wanted to take the opportunity to thank people for hanging in on this topic and all of the topics that we deal with on a – on a regular basis.

So let's dive right in. Our recommendation today is in the – Paul, is there something that you want to – before we kick in?

**Paul Egerman – Businessman/Entrepreneur**

Go ahead.

**Deven McGraw – Center for Democracy & Technology**

Okay. I'm just moving forward without even –

**Paul Egerman – Businessman/Entrepreneur**

\_\_\_\_ forward. I don't want to –

[Laughter]

**Deven McGraw – Center for Democracy & Technology**

Yeah. Be careful. Don't step in front of the train here.

**Paul Egerman – Businessman/Entrepreneur**

Right.

**Deven McGraw – Center for Democracy & Technology**

We – our recommendations today are in the form of best practices. There are policies under the HIPAA privacy and security rules that do require the identify proofing and authentication of anyone who has access to protected health information in a record, but there's not a lot of detail on how you implement those policies. And here, we're not talking about changing the law in any way, but really educating both the providers that are going to have to implement this as well as the vendors who are going to create the technical capacity that will hand in glove really make this work.

And this of course has important security implications, because not doing this right could mean that somebody who's not supposed to be able to access PHI will be able to through a patient view, download, and transmit capability. On the other hand, as we've always said, where you're talking about making these capabilities available to patients, you don't want to set the bar so high that they really can't participate.

So mindful of sort of striking that balance, and with all of the terrific information that we got at our hearing and on the blog that we posted, here are sort of the set of best practices recommendations that we have here. And it really is that ONC develop and disseminate best practices to be able to identify proof and to authenticate patients for access to portal. They need to be demonstrated through the recs and other means in order to really ensure widespread distribution. It needs to be done in advance of when providers need to start complying with the stage two recommendations, and of course, the vendors are really key here. So there needs to be a way of getting best practices out to them as well.

We really started with a set of overarching principles. You know, the protections that are part of identity proofing and authentication really need to be commensurate with the risk, but of course, they need to be easy for patients to use and consistent with what they're willing and able to do. This is not a one size fits all situation. There needs to be some flexibility to meet the needs of a particular patient population, and an acknowledgement that, you know, healthcare isn't the first to try to resolve this question. You know, that folks in banking in fact have been doing it for years.

And while we hear from – that their solutions are not necessarily perfect, and we need to be mindful of that last principle, which is that the solutions need to evolve over time. There's a tremendous amount of innovation going on in this space. At the same time, what other sectors are currently doing is sort of a good initial space where we might want to aim for, especially, you know, since so many consumers are familiar with the concept of online banking, and use it regularly.

You know, education is always going to be key here, what works. Patients are going to need to understand it as well as the providers and the vendor. But ultimately, we sort of want to have our eye on the ball of a scalable solution, the National Strategy for Trust Identities in Cyberspace. We've heard from representatives of NIST on that. There is an enormous effort that's going on in the – that's sort of a public/private partnership to develop standards so that a patient could establish an identity credential that then a provider could use. It can be used in multiple contexts. We are not there yet, but that's a really good place where we want to go. We probably won't be there in time for stage two of meaningful use either, but we want to be encouraging and contributing to those efforts, and being able to leverage them for solutions that will be evolving over time.

So in terms of developing those best practices, we wanted to identify some of the key takeaways that we got from our hearing. With respect to identity proofing, in person identity proofing obviously provides the most amount of protection, and here where you have a relationship between the patient and the – and the healthcare provider, that offers lots of opportunities for in person proofing. At the same time, if you just rely on in person proofing, you're going to miss a lot of people, folks in rural populations, folks who don't have regular – you know, who are – don't see the doctor often, because they're basically healthy, but they'd like to open a view, download, and transmit account, and would prefer not to have to come into the office to do it. You need to have remote ways of identity proofing folks as well. So you really need best practices options that work for both.

You know, again, when you're doing it in person, having it done in the office setting, having it done at the – at the institution, again, provides that opportunity to do that, but there are also ways to rely on external parties for in person identity proofing. The notary public is one possible option. You know, again, with the National Strategy for Trusted Identities in Cyberspace, there may be additional opportunities where somebody can go in and get an in person identity proofed credential that then can be utilized in healthcare, ideally.

In terms of some of the ways to remote ID proof patients, you know, there are existing credentials that occur online. You know, Facebook, I don't know how many times you've tried to sign up for an app lately, but oftentimes they will ask you if you want to use your Facebook credential as a way to be identity proofed. You know, given that Facebook doesn't know who you – you know, it deals with you on an online context as well, whether or not providers necessarily want to rely on that or not is really up to them. But nevertheless, there are those sort of – there is a rapidly evolving space in which credentials are being issued that might be able to be relied on down the road.

Knowledge-based credentialing is frequently used to do remote ID proofing, but again, you know, this is – uses publicly available data, so there's not a lot of data available about minors. How well it works depends on the quality of that data. And we did hear at the hearing about how folks – patients do sometimes get a little put off by being asked questions to open up a healthcare account that is based on available data like their mortgage, and then suddenly they're wondering why their healthcare provider knows, you know, what their mortgage – the value of their mortgage or things – and the bank that they have the mortgage with. So if you're going to use a knowledge-based third-party identity proofing – identity proofer, you might want to prepare your patients in advance that they use publicly available sources of data, and that the purpose for which they're asking you these questions is to prove that you are who you – you know, that the account is being established by the right person.

You can do remote proofing as well, you know, in-house, by using information in your own system as a healthcare provider in order to ensure that the person is who they say they are, although it's helpful to let providers know that you might want to try to use data that only that patient will know, as opposed to potentially the patient's family members. We had a story from David McCallie, who's on the health IT standards committee, but also on the Tiger Team, about how he was being identity proofed online, and he realized fairly – through knowledge-based questions on the telephone, and he realized pretty quickly that they actually had information about his father and not about him, but he was able to correctly answer all of those questions, because he knows enough about his dad. And so certainly you want, if you're opening an account for that patient, you want to make sure that it's that patient, and not necessarily a family member, unless, of course, they've authorized that. But we're going to deal with personal representatives in a separate set of discussions, as we identified on the work plan.

And then of course, you know, being able to use a – you know, a camera on a computer to say, hey, you know, for the providers office to identify, oh, yeah, we know this person, and we can establish an account remotely. This is a set of ideas that can be utilized. It's – we're not suggesting that you have to use cameras. We're not suggesting that you have to use a knowledge-based provider. But there were lots of ways that this could happen remotely, and we think the more that you make providers aware of the poss – and vendors aware of the possibilities, the more likely it is that they can utilize technologies that won't require necessarily folks to come into the office.

Now given that remote ID proofing is riskier than doing it in person, you know, there are ways to sort of couple the remote proofing with what's commonly called out of band confirmation, which is just using an independent different channel to confirm in fact, yes, did you intend to establish this account? We got a request. Does this gel with – did you want to do this, frankly. And that includes, you know, sending a – sending a letter to the home address that you have on file in order to confirm it, sending an email to other email addresses that you have on file, a confirming phone call, or alerting to unusual activity on the account. This is of course after the account's been established, but nevertheless, it can be a way of sort of confirming a remote identity proofed solution.

With respect to authentication, now again, remember – yes, Paul?

**Paul Egerman – Businessman/Entrepreneur**

Just to break in –

[Crosstalk]

**Deven McGraw – Center for Democracy & Technology**

Yeah, stopping the train.

**Paul Egerman – Businessman/Entrepreneur**

\_\_\_\_ stop \_\_\_\_\_. The difference – make sure – the difference between identity proofing and authentication. Identity proofing is making sure that you're giving the credentials to the right person, that the person is who they claim to be. The authentication is once you've completed that, what is the process by which the person gains access to their information.

**Deven McGraw – Center for Democracy & Technology**

Right. Thank you, Paul. No, good to level set that. We had done that before, but it never hurts to remind people about the difference between those. So in authentication, this – as Paul mentioned, it presumes that you've been identity proofed already, but then when you go to access the account, how does the computer acknowledge in fact that you are you? And typically, this is – this has historically been customarily done using the good old user name and password, right? And this is referred to as single factor authentication.

It's really the minimum level of security, and there certainly is a lot of criticism about how well passwords work from a security standpoint. Several months ago when we initially looked at this issue, we said, well, you know, single factor is the baseline, but you might want to go a little bit further than that, but you don't want to necessarily set the bar so high that patients don't participate, right? Well, after having the hearing both on provider identity, provider credentialing, as well as the one that we had that was directed at patients, and understanding sort of where the authentication space is going in terms of acceptable – what's acceptable for that second factor beyond the password, that it's getting easier to do two factor authentication.

And given that, we really are encourage – urging ONC to strongly encourage providers to use more than user ID and password, what we're calling level 2.5. So it doesn't have to be quite at NIST level 3, but it is this sort of intervening level that is frequently where the banking industry goes for online banking, for example, where there are additional factors, some of them build into the computer system, some of them that recognize the device that you use to log on, that's more than just – that builds on the password and strengths the assurance related to authentication. And so we really think that providers ought to be encouraged to use at least a second factor, but an easily used second factor.

We also looked at the issue of whether in fact EHR should be certified for reaching an additional level of assurance, the .5 level, the additional authentication level, but our sense was that certification wasn't really the right set of tools here. It's not a one size fits all situation, as we identified earlier in our principles, and given how quickly the technology is evolving in this space, we really didn't think that certification was the right vehicle, but instead, the best practice dissemination and continuous development was really in our view the right way to go.

And, you know, given – passwords are far from perfect, but people are still going to be using them, at least for that – for the one level of authentication. And so the best practices in password management is important. And again, constant evolution in this space and keeping our eye on where this is going, and continuing to build that into the best practice recommendations will be important.

We also wanted to take this opportunity to emphasize that we have already as a committee endorsed best practices around transparency of the risks and benefits to patients of using view, download, and transmit, and we want to reinforce that those – that part of what needs to be disseminated to providers and vendors around best practices is not just this material on credentialing, but the transparency of the risks and benefits, and then the backup slides, we reiterated what those recommendations were. You have already approved those.

And then the final couple of things we want to say is with respect to the direct project, so with respect to the transmit function of view, download, and transmit, the vendors are going to be required to be certified to using the DIRECT specs. They can use others as well for transmit, but there will be opportunities for patients to be able to participate in DIRECT, and what is that going to mean on the ID proofing and credentialing side? I think there was a great deal of concern that the entities that patients are typically going to be using for transmit, like personal health records, or mobile apps, how are they going to be ID proofing and credentialing their patients, and then how would then the provider know that if they were sending it to a direct address, it really did belong to that patient?

And what we heard from folks who are working to implement the automated Blue Button initiative is that in fact the expectation is that it's the patient who's going to give the provider the direct address, which thereby creates that sort of link. So instead of – and gives assurance to the provider that when that transmit function is being utilized for the patient and the patient use – you know, asks that, you know, DIRECT be used to transmit information to their personal health record, for example, the provider has some level of assurance that in fact that address belongs to the right patient, because it's the patient who has given the provider that address.

And that created a lot more assurance among the members of the Tiger Team, who were sort of worried about, you know, sort of a PHR representing to the doctor, well, you know, send this information to me, because I have – you know, I'm holding the records for Christine Bechtel. Christine's going to be the one to say, hey, here's my DIRECT address. That's what I want to use for transmit. And that provided a lot of comfort.

And then I – we had an additional slide on DIRECT, and then we just decided in the interest of time to eliminate it, and unfortunately, we forgot to eliminate this last line in the slide that we have additional details. We don't really have any of those for you today.

The other thing to keep in mind is again, I mentioned this earlier, look, you know, there is this whole entire process that's working on developing a set of credentials that individuals could use for online transactions, and that set of credentials would be at a high enough level of assurance that in fact this could also be used in healthcare, and that would apply both to providers and patients. And we need to, again, to keep our eye on that process and be updating these best practices, and our policies, with respect to what evolves out of that. So anything you want to add in that sort of rapid fire?

#### **Paul Eggerman – Businessman/Entrepreneur**

First – I'll just say first that that was totally impressive. Yeah. That presentation. So thanks. Basically, on this very important issue of ID proofing and patient authentication, which again, relates only to the view/download/transmit function.

#### **Deven McGraw – Center for Democracy & Technology**

Yes.

**Paul Egerman – Businessman/Entrepreneur**

That's the only part that this recommendation is – we're simply recommending that ONC establish a group of best practices, and we have some data about that. And I guess we're asking for a vote on that, right? This is a recommendation for –

**Deven McGraw – Center for Democracy & Technology**

Yeah. We are – we are asking for a vote on the recommend – this best – set of best practice recommendations. And maybe it's along the lines of Dr. Mostashari's earlier comments about sort of setting the bar through a set of sort of behavioral norms rather than sort of going at a law change.

**Paul Egerman – Businessman/Entrepreneur**

And we do not think that – we do not think that – we thought best practices was the way to go because of this one size does not fit all concept, and so we – we're – we are not recommending any certification criteria beyond what exists right now, because I think they already – perhaps may already be single factor.

**Deven McGraw – Center for Democracy & Technology**

Yes.

**Paul Egerman – Businessman/Entrepreneur**

And so we would not recommend going beyond that, though.

**Deven McGraw – Center for Democracy & Technology**

In certification.

**Paul Egerman – Businessman/Entrepreneur**

In – on this issue.

**Deven McGraw – Center for Democracy & Technology**

Right.

**Paul Tang – Palo Alto Medical Foundation**

You keep pushing for the level 2.5.

**Deven McGraw – Center for Democracy & Technology**

Right.

**Paul Tang – Palo Alto Medical Foundation**

What's an example? Like in the banking industry, you have a card with a mag stripe. Are you pushing – is that the level?

**Paul Egerman – Businessman/Entrepreneur**

Well, 2.5 is sort of like – doesn't exist, you know. It's just sort of like – it's something that people say. But the kinds of things that people do is they ask extra questions. So this is like what's your father's middle name, or what was your best friend in third grade, or something like that. So it's a way to see if you have – if you are who you say you are. And so that's the way at least another industry is doing it. But as I say, it's not official. In other words, if you look through all of the various levels, that's not described anywhere.

**Deven McGraw – Center for Democracy & Technology**

Yeah. It's – so when we refer to the levels, we're really talking about the guidance that NIST provides to government, but that industry also relies on in terms of sort of levels – achieving levels of assurance on identity and authentication, and sort of matching the higher levels of assurance, requiring higher levels of both – on the proofing and authentication side. And frequently – so Paul's right. Two point five doesn't really technically exist. But what it says is, well, level two is really just user name and password. Level three, if you were going to meet it, per NIST standards, would – is a higher bar.

[Crosstalk]

**Deven McGraw – Center for Democracy & Technology**

Often in government they have to meet level four, as we've talked about before. We're suggesting that what happens in banking is some – often something beyond user name and password, and Paul gave the additional sort of knowledge-based questions, but the other thing that banks frequently do is rely on, you know, your – if you are logging in through a computer that you commonly use, they recog – the machines recognize that, and when you're not logging in using that computer, what frequently happens is you get asked more questions to make sure that it in fact is really you. Or you might get a confirming email later after the fact saying, you know, you accessed your account. Did you in fact access your account? We have a record that you did, and we want to make sure that it's you.

So sometimes it's knowledge-based questions. Sometimes it's tech – some stuff that goes on sort of behind the – from a technical machine to machine contact, and sometimes it's both. But it's – but it doesn't necessarily meet level three, and so people in slang called it 2.5.

**Paul Tang – Palo Alto Medical Foundation**

I understand what the 2.5 meant, but from a best practices, if you shared some examples, that might help people understand what you meant.

**Deven McGraw – Center for Democracy & Technology**

Yeah. No. Absolutely. And we got some in testimony, too. I mean, maybe in terms of – what's needed here is both a dissemination of best practices, and maybe – and even more soliciting what they are in light of the fact – I mean, we had a hearing, and we got a lot of them, and we tried to articulate as many of them as we could in these recommendations, but there are likely more, frankly.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Deven, just to clarify for me, this is where you don't have already the scenario where the person came in for their visit, and you ID proofed them sufficiently to deliver medical care for them, right?

**Deven McGraw – Center for Democracy & Technology**

Right.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Gave them a prescription, you entered information \_\_\_\_, presumably if the – if that had occurred in the context of that clinical encounter, you said, oh, and by the way, here, here's your user ID and password to the portal when you can log in to get your lab results –

**Deven McGraw – Center for Democracy & Technology**

Right.

**Farzad Mostashari – Office of the National Coordinator, HHS**

– that's sufficient? We're not talking about anything more than that?

**Deven McGraw – Center for Democracy & Technology**

Well, this is on the authentication phase, right? So when you initially give someone in an in-person setting, here's your user name, and usually it's a temporary password that they then are encouraged to reset, should be encouraged to reset, quite frankly, because then everybody's going to be using the same password. That's not terribly secure. So they reset it. But then it's about the next time that patient logs in, making sure that in fact it is that patient. So that's on the authentication side.

**Farzad Mostashari – Office of the National Coordinator, HHS**

Right. So I – so the part of the ID proofing, right, the ID proofing and authentication, as Paul mentioned. On the ID proofing, if you have in person, which I think most healthcare settings work it into the clinical workflow.

**Deven McGraw – Center for Democracy & Technology**

Yeah.

**Farzad Mostashari – Office of the National Coordinator, HHS**

If it's part of the clinical workflow, you're all set in terms of the ID proofing side. It's really now – are you – we're still saying more than level two – level – more than level two on the authentication side?

**Paul Egerman – Businessman/Entrepreneur**

Yes. As a best practice. Okay? And so again, the issue there is just making sure that the person really – you know, is the person they say they are electronically, is the best way I can describe it.

**Deven McGraw – Center for Democracy & Technology**

Yes. Yep.

**Paul Tang – Palo Alto Medical Foundation**

Judy?

**Judith Faulkner – Epic Systems Corporation**

I wonder if you could make that patient – let the patient decide? Since a lot of patients just – I see a lot who say, I don't care who sees my stuff. And I think that they would prefer to make it easy as possible to do the access. And others might be concerned, and then they would be allowed to put on extra security. I think it might be good to do it by –

**Paul Egerman – Businessman/Entrepreneur**

And that's a good point. It also relates to the nature of the practice, too. I mean, you know, some practices just may not deal with information that most people think is all that confidential, you know. I mean, and so it's – and so I think that's right.

**Deven McGraw – Center for Democracy & Technology**

Yeah. And, I mean, it is exactly right. But we also wanted to make sure that providers were aware that there are ways to increase the assurance on authentication in ways that are completely – the consumer isn't even aware that it's happening, because it's all sort of behind the scenes, and that that's what frequently happens in online banking, for example. Again, not perfect. Things do happen in the banking sector. But in terms of sort of where we should have initially with this, you know, that is something that consumers are familiar with, they're used to using, and, you know, it is a set of solutions that are deployable at least in the short term.

And again, you know, when I log on online for online banking, when I'm not using my – the same computer, it knows, and then it asks me more questions to know that I'm me. It is not at all additionally burdensome for me at all, because for me, it's like, oh, it's user name and password. I just have to make sure I remember that darned password. And, you know, since I am working in this field, I practice good password management skills. But nevertheless, there's a lot of other stuff that's happening to authenticate me that's not hard for me at all, and it's sort of built into the system. And so that's why we want to make sure that people understand that more – more can be done here, and more can be done in a way that is – doesn't increase the burden on patients, doesn't raise the bar too high.

**Paul Tang – Palo Alto Medical Foundation**

Thanks. Gayle?

**Gayle Harrell – Florida State Legislator**

I just want to make two comments on – first of all, on identity proofing. There are times when you may have – you may have seen a practitioner six months ago, and they have a new system or whatever, so you need to ID proof up front the first time you go in to establish your account. So it doesn't always happen in person. There are many times when you may be a patient of that practice, but you're doing this online to get into the system and establish your account. So that's where we wanted to make sure that we had the flexibility, and that there was the ability to do that, because many people may not be seeing that practitioner for another two years, and they want to be able to get their previous records.

Secondly, I think patient education is a very important part of this, and provider education. So again, the RECs need to really disseminate these best practices. We can sit here all day and put up on a website best practices, but unless it gets down where the rubber meets the road at the provider level and at the patient level, they mean nothing. So we need – there needs to be a mechanism for getting the information out.

And yes, we have RECs, but we have a lot of providers who don't have access to RECs or don't use them, or whatever. So there needs to be some mechanism built in to make sure we educate those providers in particular.

**Paul Tang – Palo Alto Medical Foundation**

Okay. \_\_\_ \_\_\_ we need a vote for approval of these best practices. All in favor?

**Several**

Aye.

**Paul Tang – Palo Alto Medical Foundation**

Opposed? Or abstain? Thank you very much to the Tiger Team.

**Jodi Daniel – Office of the National Coordinator**

Thank you.

**Paul Tang – Palo Alto Medical Foundation**

Okay. I think we're open for public comment. Is that right?

**Public Comment**

**MacKenzie Robertson – Office of the National Coordinator**

Operator, can you please open the liens for public comment? And while we're waiting for any online public comments to queue up, I'll ask if anyone in the room has a public comment, to please come to the front of the table.

**Operator**

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

**MacKenzie Robertson – Office of the National Coordinator**

And just as a reminder, public comments will be limited to three minutes each. Thanks.

**Carol Bickford – American Nurses Association**

Carol Bickford, American Nurses Association. Thank you very much for the discussion about the preliminary priority areas and conversations that are going to really stimulate our thinking for the coming year. There are two items that I'd like to encourage you to include in that conversation. One is addressing health wellness and health promotion. We're focusing so much on the pathology, but if we're talking about healthy Americans and the obesity problem and getting best practices in place for children and young adults and older adults and fall prevention and all those sorts of things, we need to encourage that thinking for the consumer engagement piece.

And the second thing is addressing retention and disposition of information records. We have the cloud, some things in the cloud, but one of these days that cloud's going to come crashing down, because we've got all that garbage sitting in that needs to be disposed of, because the person has died, and those data do not need to be continued in perpetuity, in theory. It's a good principle \_\_\_\_\_ information management. So it sort of fits in the security/privacy space, but it's operational and has many implications.

**MacKenzie Robertson – Office of the National Coordinator**

Thank you. Are there any public comments on the phone?

**Operator**

We have no comments at this time.

**MacKenzie Robertson – Office of the National Coordinator**

And are there any other public comments in the room? Okay. Paul?

**Paul Tang – Palo Alto Medical Foundation**

Okay. We're scheduled to conclude with lunch at 1:15, if that's still possible. That would be 35? Okay. Then we'll adjourn till 1:15. Thank you.

[Lunch break]

**MacKenzie Robertson – Office of the National Coordinator**

Operator, could you please open the lines back up, and we'll pick back up?

[Background noise]

**Operator**

All lines are open.

**MacKenzie Robertson – Office of the National Coordinator**

Thank you. Welcome back after lunch, and I'll now turn the agenda back over to Paul Tang.

**Paul Tang – Palo Alto Medical Foundation**

Welcome back. We're going to start off the afternoon with Kathryn Marchesini telling us about the eConsent Project, which is a very interesting approach to managing the consent process in an other than face to face written form, and at the same time providing more education. So Kathryn?

**Kathryn Marchesini – Office of the National Coordinator**

Great. Thanks, Mr. Tang. Good afternoon. As Paul mentioned, I'm Kathryn Marchesini from ONC's Office of the Chief Privacy Officer. Thank you for giving me the opportunity today to provide you an update on ONC's eConsent Project. Today I'll discuss some of what we've been up to for the past year since we last updated you on this project.

Before diving into details about our project approach, I'll do a little context setting and provide some background information. I'll then discuss how we arrived at some of the areas we included in the patient education material, and provide some information about how we tested the material throughout our pilot. After providing the general overview of some of the logistics around the pilot, I'll touch on what we hope to get out of the project, and then answer any questions members of the committee might have.

A key purpose for developing a secure, private computer network over the internet in the healthcare industry is establishing the capability for healthcare providers to access and share patient health information electronically and securely over the internet to support patient care. However, the success of this exchange of information, as the committee well knows, is heavily dependent upon patient participation and recognizing and having the willingness to participate in the exchange of information .

As noted in the federal health IT strategic plan, ONC works to inspire patient confidence and trust in health IT as well as electronic health information exchange, by protecting the confidentiality, integrity, and availability of health information. Informed patient choice is one way to ensure a trust relationship between patients and providers for the success of electronic health information exchange.

As you know, this committee in September 2010 submitted individual choice recommendations to ONC, which stressed the importance of meaningful choice, and to operationalize these recommendations and further the strategic goal, our office initiated the eConsent Project in October 2011. Specifically, the focus of the project is on education collection and evaluation of patient choice with electronic exchange of information, and primarily this includes educating and informing individuals of their option to make a choice with respect to sharing – their provider sharing their health information, also ensuring individuals are knowledgeable and understand that decisions about sharing their information in a clinical environment, as well as electronically obtaining and capturing a patient's choice. And this is all being done while in a healthcare setting.

To level set a few things about the project before I go into further discussion, I'll just highlight on some general project assumptions before I go into more detail. At the outset, we noted we would gather patient input throughout the design and development process, and this would include gathering information before we developed the educational materials for patients. We also intended to provide flexibility in the delivery of this information to account for different types of learning styles.

We would then develop and test this solution at healthcare sites within the Western New York Health Information Exchange, which is the health information exchange, as a noun, or health information exchange organization, that our prime contractor partnered with at the start of the project.

And lastly, the overall project will electronically implement existing patient choice consent policies. We would not be studying any federal policy around consent. We wouldn't necessarily be endorsing any particular type of approach. It was to be agnostic to the extent possible around a consent model.

A snapshot of our overall project approach includes five phases. I'll take a glance at this slide, but I'll talk a little bit more about each phase in the following slides. But to talk about the first key phase of the project as mentioned earlier, seeking patient input, we had a multi-tiered approach in which this happened. We conducted surveys as well as focus groups.

The second phase included the design and development of the actual patient educational material that was informed by what we found out in phase one. The phase three actually consisted of a solution build or software script development which would be an open source tool and electronic interface that would be developed to present the actual educational material to the patients. The tool would also digitally capture the patient choice, as well as evaluate the patient's understanding and knowledge of the actual educational material that they would be shown.

Regarding phase four, we would actually pilot the education solution at a healthcare provider site, and we are currently actually in phase five, where we're actually analyzing the patient feedback and data that we gathered from the pilot, and we're also finalizing some of the open source tool materials.

So to go into a little bit more detail about how we arrived at where we currently are in phase five for the project, as mentioned, at the outset of the project, we wanted to get a better understanding, what are some of the key factors that patients are interested in learning about in this particular area. And as mentioned, we had a patient survey and we had patient focus groups, and I'll go into a little bit more detail. But we used this information collection period to then formulate the actual educational material, which ended up being one primary – one primary overview video, and then we had other videos in which if people wanted to find out more information, they had the possibility to do so at their leisure.

So to go into a little bit more about the actual survey that we initiated at the outset, we mailed a two-page survey with a corresponding cover letter to help identify and help patients understand kind of – to do a little bit of context setting of what we were asking about. We distributed to a random sample population, which was representative of the larger Western New York population where the pilot would happen. And as discussed, the random sample, we then further analyzed the data that covered both rural and urban areas.

At a high level, what we learned from this patient survey, in general, that patients want to know how people accessing their health information will be using it. They are concerned about the misuse of health information and the overall privacy and security of it. They want to know if their information will be shared with health insurance companies, whether sensitive health information will be shared, and whether or not they can change their mind about whether or not their provider can share their information with the health information exchange organization.

And aside from these high level factors that we gleaned from the survey, survey respondents noted that they prefer to receive educational materials on this topic from their provider, and we also learned that people seem to be really interested in this topic. As you can see on this slide, 30 percent of respondents actually took time to provide information in the free text field of the survey.

We used what we learned from the patient survey to drill down a little bit more into some of these areas through patient focus groups to help validate and explore some of the findings. In each of the sessions, before the facilitators did a deep dive into these topics, there was a general presentation given to help level set some of the education and knowledge about this topic within the group.

In regard to the focus group findings, at a high level, top consistent respondents from the focus groups can be divided into four categories, first being who might have access to their information, and the participants wanted to understand, you know, what actual providers, what their associated roles were in accessing the health information. The second area being the whats, they wanted to know what type of information was accessed. Was it identifiable? What about sensitive information being accessed through the health information exchange?

The third category being the why, why does a provider want to share my information with the health information exchange? And fourth being, you know, how is my information protected? Are there sanctions in place to punish someone if it's not, you know, their responsibility to access the information?

Based on what we learned through the patient survey and focus groups, coupled with some additional analysis, we included a legal review, and we also coordinated with the HI – the HIE's physician executive steering committee. We created the educational material which captured the key areas as what we identified as discussed on the previous slides.

We did develop additional content. So in addition to preparing a main video or a main option that provides a high level overview on the key areas, we provided the option as mentioned earlier, if there's particular areas, after listening to the overview, that they were interested in learning about, they had the opportunity to drill down, if you will, for a lack of a better term, to find out more information about a particular area. But we realize it's a lot to convey at one point, but we wanted to provide people with the opportunity.

In addition, the graphical user interface, as you see on this slide here, was designed to support intuitive patient interaction to display the educational scripts in real time and then accept actual patient input. And then also, the patient actually will, as they're viewing the video, they have the option, as you can see on the left side, there are particular choices that they can make. So it was interactive throughout the process.

In addition, at the end of viewing the information, the tool has the capability to capture the actual electronic choice, the choice that the patient makes, and we also provided at the end an optional survey if the participants wanted to provide information about their overall experience, with their satisfaction with the process, and information that they might have learned.

So now that I've kind of brought you to where we were ready to launch the pilot, this past fall, we launched – we launched a month-long eConsent Project at four different healthcare provider facilities in Western New York. We had a mix of primary care as well as specialists, different practice sizes, serving urban, suburban, and rural areas. And during the pilot, the adult patients at these four provider sites were given the option to use a handheld tablet within the provider setting to review the interactive education material, as well as they would have the option to electronically make their choice about allowing their healthcare provider to share their information and to exchange it with the health information exchange organization.

As mentioned earlier, at the back end, we did provide an optional survey in which we're currently, now that the pilot has ended, we are looking at the feedback and any results that we found on the back end of the system. The tool also was able to track whether or not a patient stayed on a page long enough, if maybe they got bored and they navigated, or they, you know, went through the educational materials fairly quickly.

So in general, some of the results of our efforts, we hope to help identify some innovative resources and sample educational materials to help healthcare providers as well as HIEs ensure that any choice patients make with regard to sharing their health information are meaningful, patients understand the consequences of their choices, and they can better understand their choices regarding whether or not their provider can share their information electronically, including exchanging it with the health information exchange organization.

And we hope to make these materials available on HealthIT.gov later this year, and just to help make all this happen, we've been working for the past year with various members of – comprising the project team you'll see listed here. We have various backgrounds and expertise that help this collaborative effort come to light. So that's a little bit about our eConsent Project, and I'm happy to answer any questions that maybe I didn't address, or welcome any comments.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Comments or questions? Gayle?

**Gayle Harrell – Florida State Legislator**

One quick question. Are these – can we view these? Are these on the website, that we could actually view the videos?

**Kathryn Marchesini – Office of the National Coordinator**

Right now, they are currently not up on HealthIT.gov. We've been working with our web team to get them up as soon as possible.

**Gayle Harrell – Florida State Legislator**

That would be very helpful, to put those up so that we could all view them and see what's going on. I think that would encourage others as well.

**Kathryn Marchesini – Office of the National Coordinator**

Thanks.

**Paul Tang – Palo Alto Medical Foundation**

Thank you. Deven?

**Deven McGraw – Center for Democracy & Technology**

This is – Kathryn, thank you very much. It's really terrific to get an update on this. It's terrific work. I'm excited to see it. Are you guys evaluating at all how the providers participating in these pilots are responding to the choices executed by the patients, whether in fact they're being honored? Because one of the things I periodically hear from folks about is, you know, I gave a consent for my information to be shared, and yet it wasn't, or I didn't give a consent and it was. Like, you know, making sure that the back end implementation is working as well as the front end gathering of the consent in the first place would be interesting to know.

**Kathryn Marchesini – Office of the National Coordinator**

No, that sounds great. Right now we don't currently have that built into this phase of the project, but it seems like a logical outgrowth of – since we already have information gathered, to kind of do a touch base back would be good.

**Paul Tang – Palo Alto Medical Foundation**

Any other questions? Good. Thank you very much, Kathryn.

**Kathryn Marchesini – Office of the National Coordinator**

Thanks.

**Paul Tang – Palo Alto Medical Foundation**

Very interesting project. I think it'll be very helpful to have the videos on the web, very useful resource. Okay. Next we're going to have the ONC update with Jodi and – Doug is going to help, or – yeah. Two things, the safety plan that was just released, and the year in review.

[Background voices]

**Jodi Daniel – Office of the National Coordinator**

Okay. I'm back. Got some lunch and some soup, but I'm okay. So I just wanted to take some time to walk through briefly our health IT patient safety action and surveillance plan, and then I'm going to give, with a tag team with Doug, a little bit of the ONC program, a little year in review covering a whole bunch of programs. Doug is going to cover the standards work, and just sort of highlight some of the accomplishments we've had over the year, and I'm going to give you a flavor of a bunch of different activities we have going on. What I hope to do in future meetings is I will be doing a brief update on just, you know, kind of things coming up that folks need to know, and we'll pick a particular program to do a deep dive in for each meeting, so that over the course of the year, you'll hear about a lot of things that we're doing more in specific, like the eConsent Project and the like. And Doug and I will be doing a tag team, so you'll get a standards – a brief standards update every time as well, so that – just to keep you all informed on our activities.

So the patient safety surveillance and action plan. So just by way of background, so one of the prime motivators of our health IT program in general is to try to improve the quality of the care and improve safety, use health IT to both delivery high quality care and improve patient safety. And within this, we wanted to make sure we were addressing the role of health IT within HHS's commitment to patient safety more broadly.

We also heard that folks were wanting to make sure that we were on top of any issues that the new technology may raise with respect to safety, so we wanted to look at it from both perspectives. We specifically commissioned the Institute of Medicine to look at this issue and to develop a report on health IT safety, which they released in November of 2011. This safety action and surveillance plan is in response to that Institute of Medicine report. It was something that they called on for us to do, and that sets forth our plan for the next few – couple of years on the actions that we plan to take, building on existing authorities to strengthen patient safety efforts across the government, using health IT, and to address and understand better health IT safety.

At this point in time, one of the things that IOM identified which I thought was really interesting was that health IT was involved in less than one percent of errors that were reported, and – but they also identified that there – we didn't know – that we needed to do a better job of gathering information, and better understanding the role of health IT in both improving patient safety and in adverse events themselves.

We took the approach in this plan to build on existing authorities, much of which was recommended by the Institute of Medicine, and as opposed to asking for – focusing on some of the new legislative authority, which Paul had mentioned before.

So broadly, we actually had a goal in our strategic plan, in our health IT strategic plan, that talks about inspiring confidence and trust in health IT, and we do talk about safety in our overall strategic plan that we put out a couple of years ago. In this plan, we specifically were kind of going in more detail on that, and we focused on two things: both using health IT to make care safer, so how can we leverage the technology to improve patient safety generally in the healthcare space, and then to continuously improve the safety of health IT itself. So the plan really focused on both of these objectives.

We have three strategies that we talk about in the plan to learn, improve, and lead. As I mentioned, the Institute of Medicine had said that we need to increase our understanding of health IT safety, and we wanted to increase the quantity and quality of data and knowledge about health IT safety. So we have a set of strategies on each, and I'll go into each of these in more detail. This is just the overview.

The second is to improve. So once we have better understanding of where there may be some risks with respect to health safety, targeting resources and corrective action to improve health IT safety and patient safety more broadly. And then third is to lead, to promote a culture of safety related to health IT more broadly. So I'll talk about each of these three.

So first, the learn, increasing the quantity and quality of data. We talk about strategies for clinicians, developers, and for some of the safety programs that we have. So with respect to clinicians, the focus is on encouraging and facilitating clinicians to report safety events, and particularly any safety events that have health IT components, as well as to better capture whether or not health IT had an effect on patient safety. For developers, to encourage health IT developers to embrace their share of responsibility for patient safety. And then with the safety programs, to incorporate health IT better into the safety programs that we have, through AHRQ, through the patient safety – patient safety organization, ONC's programs, as well as CMS's, survey and certification programs.

So with respect to clinicians, specifically, we talk about the AHRQ common formats. So AHRQ has put out common formats for recording of patient safety events to patient safety organizations so that data can be captured in a consistent, standardized way. And they have in there specific information to capture health IT – whether or not health IT was a factor in a particular safety event. So as we stated in the plan, we will propose to leverage our certification program to ensure that EHRs can facilitate the use of our common formats in order to help clinicians to report patient safety events, as well as to identify where health IT may have been a factor in a particular safety event.

AHRQ will provide technical support to patient safety organizations to incorporate health IT expertise so that as they receive reports about safety events that may have a health IT component, they are better able to analyze those reports and to understand the role health IT may have played in any kind of safety event, as well as having the PSOs work with clinicians to help them to use health IT to report the patient safety events and to identify and mitigate health IT-related patient safety events.

AHRQ is going to – will provide technical support to the PSOs in incorporating health IT into their existing programs in order to make sure that we have better information about the role of health IT and patient safety.

With respect to developers, the main thing that we put forward in this plan is encouraging vendors and developers to – and for ONC to collaborate with them to develop a code of conduct that ensures that developers work with PSOs or a similar entity to report, aggregate, and analyze health IT-related events, to support clinicians in reporting of safety events, as well as to cooperate with efforts to compare user experience across different EHR systems, and this is something we've talked with the developers about, and we will be working with them to encourage them to develop a code of conduct and to align with that code of conduct.

With respect to our safety programs, we have a variety of different places where we're trying to build in health IT safety. So I had already mentioned AHRQ and the patient safety organizations. The goal here is to both encourage reporting, but also for AHRQ to work with PSOs to support them in reporting to the National Patient Safety Database so that we can have better aggregation of information and be able to look across the PSOs to understand health IT safety events, and – as well as to use the common formats for gathering that information, again, to have better data.

With respect to – and then also using AHRQ accreditation programs, so specifically ONC's certification bodies, to leverage that, to leverage the surveillance piece of that, so that vendors are capturing complaints or concerns by users and addressing those issues appropriately, as well as to work with CMS and their survey and certification program to build health IT into the standards of care when they are looking at healthcare facilities.

Okay. So now we get to the improve, targeting resource and corrective action plans to improve health IT safety and patient safety. So this one, you know a lot about. We are – through our meaningful use programs, we have been and will continue to be using our meaningful use program to promote the use of EHR safety features, so specifically things like CPOE, clinical decision support, and the like. And we're also leveraging our standards and certification program. In the 2014 edition, ONC adopted two enhanced certification criteria regarding user-centered design and quality management systems to try to improve the safety of the products, and we'll continue to use our standards and certification criteria to improve patient safety. This is a place where it would be helpful for this committee and the certification adoption workgroup to weigh in and give us some feedback on. And there is language in the RFC as well about safety risk assessments, which we look for input on as well.

Also in the area of improving, looking at corrective action, AHRQ will be providing technical guidance to help PSOs, and working with providers not only to understand where health IT may have an impact on a safety event, but to help providers to understand how to mitigate any harm that – or any risk for – from health IT, and to improve safety using health IT. CMS will be providing guidance to surveyors and accreditation organizations to recognize health IT-related adverse events when they're conducting surveys on CMS's behalf, so building it into the survey and accreditation programs for CMS. And then finally, using our ACBs to conduct live testing in clinical environments to determine whether clinician safety complaints are addressed, and whether EHR safety features are being performed adequately.

The last strategy, to lead, promoting a culture of safety. So first, ONC's safety program, which will be primarily headed up through our Office of the Chief Medical Officer, they will be – we'll be coordinating the implementation of the health IT safety plan across the agencies. So we talked about CMS, AHRQ, ONC, as well as data that is received through FDA. We'd be looking at all of that information to both coordinate the implementation as well as to comprehensively analyze the data from the different safety programs and the different mechanisms we have for getting in information. Our hope is to both get better data, as well as to eliminate or reduce the inefficiencies across the program, so that we have a unified approach in dealing with safety, and particularly in the health IT space.

We will also be developing priority areas, measures and targets related to health IT safety, in order to align efforts. We are working – FDA has been – has been tasked with developing a report with recommendations on a risk-based regulatory framework for health IT, something that we are working with them on. And so that's something that will be within about a year's timeframe. And we also will be encouraging private sector – our program will be focused on encouraging private sector leadership and shared responsibility for health IT safety.

This was something that was really a big focus of IOM about the fact that developing a health IT safety program really required this – a multi-pronged approach where there's shared responsibility among a lot of different sectors. It's not just about safe products, but safe implementation and use, measuring safety, understanding health IT safety. And so we will be both working on coordinating the efforts within HHS, but also working collaboratively with private sector leadership to make sure that we're addressing the problem from all of those different perspectives, so that we can have the best safety with respect to health IT and using health IT to improve safety, if we can.

So just finally, next steps, we released our safety plan on December 21st. We have it open for public comment right now, with comments due on February 4th. Like I said, if the policy committee would like to provide some input on that and it goes beyond the 4th, that's something that we've talked about, and that would be fine. Our final plan we anticipate having in early summer. As we have had with the – we are going to start working towards some of the things that are in our plan that we feel pretty confident are important priorities, but we do look forward to comments, and we will revise and tweak the plan as appropriate, based on that input.

And then I've given you a site for more information. We do have a health IT and patient safety landing page on our website now, which links to the report, the IOM report, and some other helpful information. So for folks who are interested in this top, it's a good place to go. Should I take comment on that before going to the update?

**Paul Tang – Palo Alto Medical Foundation**

Yeah.

**Jodi Daniel – Office of the National Coordinator**

We can do a couple of quick comments or thoughts?

**Paul Tang – Palo Alto Medical Foundation**

Comments or questions?

**Jodi Daniel – Office of the National Coordinator**

Okay. Well, we'll just keep moving on, keep everything on target. Okay. So here's our program update. So I'm going to blow through this pretty quickly, make sure that Doug has enough time to talk to you all about standards, and take comments.

Okay. So I'm not going to spend a huge amount of time on our – on our meaningful use data, because you all have just gotten the update from Rob Anthony. But I love some of these slides, so I figured I'd throw a couple of them in just to highlight some of our successes and our hard work that has led to some of those successes in 2012.

So of the 521,600 eligible professionals, we have now paid 1/3 of those as meaningful users on our incentive program, and we have 2/3rds of those that are currently registered under our meaningful use program. So we've really made a huge amount of progress on meaningful use and the professionals that have been engaged with our program. We hope to clear our 2013 goals pretty well. So this is a huge success.

With respect to hospitals, again, the thermometer looks great on this one. You see our goals, 2012 and 2013. Currently, of the 5,011 total eligible hospitals, 68 percent of those have been paid under our meaningful use program, and 84 percent have been registered. So we've hit a huge percentage of those. And you already heard the great numbers from Rob Anthony, but this is the month by month with the cumulative total of over \$9 billion that has been paid out under the meaningful use program. This is through November. And you saw his projections for December, going over \$10 billion.

I want to highlight one of the programs that ONC has been doing that really has led to some of the success that I mentioned in – particularly with respect to the eligible professionals, the regional extension center program. This has been a huge assistance to particularly primary care providers and particularly those in smaller practices or in rural areas. Looking at the first graph, there are over – sorry, it's been – I think it's 40 percent of all the primary care providers in the United States are affiliated with a regional – or working with a regional extension center. It's 60 percent of all rural provider, and 85 percent of the FQHCs, which is striking numbers.

We also have – importantly, GAO found that 47 percent of the providers who received AIU payments were working with an REC, and that those Medicare providers that were working with RECs were over 2 times more likely to receive payments than those who weren't working with an REC, showing that folks really needed some of this help in getting started with implementation, and that the services that are being provided through the regional extension center program really are helping some of the primary care providers to become meaningful users.

With respect to health information exchange, again, this is a great story. We have 94 percent of pharmacies that are actively e-prescribing. We have 43 states and territories that have directed exchange, and this is – means that these numbers I think are great, 60 – over 60,000 clinical and administrative staff nationwide have access to directed exchange. And during Q3 of 2012, there were almost 80 million directed exchange messages.

We have 20 states that have statewide query-based exchange, and 12 states – additional states that have query-based exchange within regions, but not statewide. This accounts for over 71,000 clinical and administrative staff nationwide having access to query-based exchange, and again, during Q3 of 2012, there were over – there were 2.7 million patient queries.

We have only four states and four territories reporting not having any directed or query-based exchange, so clearly in the small minority. And I also wanted to highlight, because it was direct – directly based on recommendations from the health IT policy committee, that we had consent guidance that were issued to the ONC state HIE grantees directly based on the input from this committee.

Okay. With the Beacon, so you had an update from John Ivey from our Beacon program, so I will go through this fairly quickly, since that was just last month. But some of the featured successes, we've had – early results have shown improvements in quality, cost, and population health for all the 17 communities. They all have at least two measures that are trending positively for their program. There have been launched of new exchange capabilities in New Orleans and San Diego. In New Orleans, they were specifically focused on facilitating exchange between safety net clinics and hospitals in New Orleans, and they will connect this HIE with the state HIE, so this is building into the state program.

In San Diego, the San Diego Regional Health Information Exchange was allowing – focusing on information sharing between many of the region's large systems, as well as unaffiliated providers. They're also partnering with the California Health and Human Service Agency, which oversees the state HIE efforts in California.

There have also been collaborations between eight Beacon communities and six EHR vendors to advance interoperability and exchange, and support better transitions of care for – include – as well as to populate community data repositories and registries. And we have a lot of fact sheets for the Beacon program on HealthIT.gov talking about the progress in the 17 Beacon communities, so I encourage folks to take a look at that. There's some great information up on our website. Excuse me.

Our workforce training programs have also been showing great success. As of November 30th of last year, we had 16,228 students successfully completing our community college training. For all of them, there was a requirement for enrollment that they had some previous experience in IT or healthcare, and so therefore, we had a lot of folks who were enrolled in these programs that did have a number of years of work experience, as well as a wide range of educational backgrounds. We've had students with bachelor's degrees, master's degrees, PhDs, and nursing degrees.

All the schools are offering distance learning or hybrids as well, and the training programs are providing hands-on experience with generics – with Vista, although internship opportunities for hands-on experience with EHRs has been identified as one of the critical needs for these students, so it's something that they're working on. Many of these programs are planning to modify their training to incorporate some of the new development initiatives.

With respect to the university workforce – university-based workforce training, there have been – it's 828 students have graduated as of October. I think the numbers went up to 981 by November, and a total of 1,685 were anticipated to graduate by the end of the funding period. Again, there has been an expressed need for more hands-on experience with clinical systems, and internship opportunities, and again, this is an area of focus for these folks in improving their programs.

Our consumer eHealth program. So this – \_\_\_\_\_ has talked with you about our consumer eHealth program before. The three pillars of it are access, action, and attitude. To give you some of the highlights in each of those three areas, with respect to access, I think this is where we've had some really great success. There are 88 million Americans that have access to Blue Button information, and 1.4 million Blue Button downloads to date. We also have 450 organizations that have joined our Blue Button pledge program in order to either make data available or to communicate the benefits of access to patient data.

With respect to action, we have the Automated Blue Button S&I Framework Initiative, the ABBI Initiative. We have 68 volunteer organizations that are participating in that. We have also – we did a health record design challenge to get designers to help think about how to better display health records information, and there were 230 submissions to that, which I think is – might be the largest number of submissions we've had for a challenge to date. And we hope to actually build the winning application and make it available and open source.

There were three winning apps from our Blue Button Mash-up Challenge, and as Farzad had talked about, we can now go – anybody who's a Medicare beneficiary can use the app and Blue Button their data, and have it easily accessible on their iPhone. And I had mentioned in another meeting, but I actually did do this with my father, and it worked great. We were able to get his information. Unfortunately, he has an Android phone. It wasn't quite ready yet. But I got it on my iPhone, and we were able to look at his information from Medicare very quickly.

As well as we have our model PHR privacy notice. This is something we put out a couple of years ago, but we are – the ABBI S&I group is now looking at how they can leverage the PHR model notice in order to help create a trust framework for PHR.

With respect to attitudes, lots of use of our Health New Year Challenge, of our animated – health IT animated video. If you haven't looked at our animation video yet, you should. It's only three minutes long and pretty great. We had our consumer health IT summit, our – that we did in 2011, and then we had another one in 2012. And lots of other stuff here. We have some roundtables, and the hearings here on patient-generated data, and we will have some follow-up on – in that space as well.

With respect to policy and planning, we had our final rules on meaningful use stage two and our 2014 edition standards certification criteria, gearing up for stage three with our – the RFC from this committee. Our health IT patient safety action and surveillance plan was released. We are using the information from the RFI on governance for a nationwide health information exchange to develop a non-regulatory approach to looking at governance that's more focused on collaborating and partnering between the government as well as those who are actually on the ground and trying to make governance work for health information exchange. And we've made progress in making prescription drug monitoring information available electronically in real time for prescribers and dispensers.

Okay. Certification updates. So ONC transitioned to our permanent certification program in 2012. That was a big step for us. We completed development of the 2014 edition test method materials, in collaboration with our colleagues at NIST. We did multiple waves of direct test procedures and test data, test tools, and got public input on those, and the revised 2014 edition test method materials were approved for use on December 14th of 2012 by ONC.

A quick look at our certification dashboard. This might be hard to see from the back of the room, but if you have the slides, it's – there's some really helpful information on here. We have – as of – as of this month, 2,910 total certified EHR products. It's about half complete EHRs and half modular EHRs. And we've had a huge number of use of our CHPL, the dashboard – the interface for looking up the certified products. As of 2012, the total usage was 1,848,648 page views. So it's getting a lot of use, and hopefully that is a that is helpful to folks in becoming meaningful users of health IT.

eQuality measures, and I am almost done, and I will turn it over to Doug. Some of the things that we focused on with respect to eQuality measures were aligning the measures across the HHS program, letting folks report once and getting credit for many programs, as well as standardizing the measures and building on common components, common logic and value sets. This was really a focus of the eQuality measure effort. Excuse me.

ONC worked with CMS, NLM, and AHRQ to release these web-based tools for measure developers, health IT software vendors, and MU providers, and I'm going to actually walk through each of them. We have the – just a couple that were released by NLM, the Value Set Authority Center, the Data Element Catalog. We have the CYPRESS software to test vendor capture, calculation, and submission, as well as our PopHealth tool to enable providers to look a patient level view of e-measures.

And last, but not least, our HealthIT.gov site has been redesigned. We think it's new and improved, and there's lots of great information, new information available on there. So if you haven't been on our site recently, I encourage you to do so. One thing I wanted to highlight is that we have our health IT dashboards available on HealthIT.gov now, so you can get some good data. There's also just a wealth of information for providers, patients, policy makers, and if folks – if there's content that folks think needs to be up there that we have not made available up there, that would be good for us to develop, don't hesitate to let me know, and I will bring that feedback back. But there really is a lot of new stuff, and I think it's a lot easier to navigate. So please do check out our website and keep us informed about things that we should be including on there.

With that, I'll turn it over to Doug to do the standards update, and then we'll open it up for questions on all of that, or comments.

#### **Doug Fridsma – Office of Science and Technology, ONC**

Great. Well, that's a very hard act to follow, given the amount of work that's gone on. So I'm going to do my best to talk at least about some of the standards work that we've done as well.

So this is a graphic that we've used on multiple occasions within the HIT standards committee, but it talks about some of the standards development and interoperability initiatives within the standards and the interoperability framework. Currently, we have about 1,200 people who have signed up to the S&I framework. Of that, about 600 will participate on weekly calls. It represents about 400 organizations. And the mean interval, and this has been constant for the last year and a half, is 3.5 hours between meetings in the standards and interoperability framework. So the pace and consistency is really quite remarkable, and just as a tribute to the number of volunteers that have come forward to help accelerate the standards development process.

If you take a look at the ones that are on the very top of the S&I framework portfolio here, these really reflect some significant milestones within the establishment of national standards across the United States. So the DIRECT project created a national standard for how health information can be securely exchanged. In the regulations, we included an option to include web services as well, so we now have two, one required and one optional, ways to securely transmit information.

The second one on the list is called Transitions of Care, and in that, we brought together a series of standards efforts, merged them together, and came up with a singular way to describe clinical care documents, particularly those related to transitions of care and summary of care documents. That's been balloted, and in fact, it's not just a national standard. I was in New Zealand last year, and they have adopted this as the standard for New Zealand as well.

Laboratory Results Interface is our effort to standardize a single way for us to exchange laboratory information for public health reporting and for laboratory results. This is based on an HL7 standard as well. And so for the first time we have a standard for how laboratory information can be exchanged.

As you go down the list, you'll notice the bars are a little bit closer to the kind of early work, but it's important to understand that this work is going to go forward in some – in some fashion. Query Health helped us understand how to distribute queries, bringing the question to the data rather than the data to the question, and that has informed as well some of the work that we're doing on quality initiatives around HQMF, a standard for describing quality measures, because we found a lot of similarities there. That's going through ballot next week in HL7.

Provider Directories is essentially completed, although we do need to have some pilots there. We worked very closely on data segmentation for privacy to understand how to break up data and protect those portions that can't be shared. This is an area that we've developed some very nice pilots, and working very closely with Tiger Team and Joy's group to kind of identify what those issues are and make sure that we've got technology to match the policy objectives that we've got here as well.

The next two, Public Health Reporting and esMD, are two initiatives that we've learned a great deal from. esMD is about submitting – electronic submission of medical data as part of audit reporting or auditing within CMS. So after a report is identified for auditing, there is a series of transactions that currently occur in paper. And so we've been working very closely with them to identify – to break down some of the barriers to doing this in an electronic format, and that includes digital signatures, and it includes other ways of sort of doing pre-authorization or pre-approval authorization for things like mobility devices that you see in the – in the evenings on television.

Both the Public Health Reporting and the esMD, we realized that case finding as well as the kinds of things like pre-authorization actually involve taking structured information, some of which is in the EHR and some of which is not, combining that with EHR information to accomplish some task. And we're going to be moving forward with an initiative called structured data capture – I'll talk a little bit more about that – that combines a lot of these into a singular way that we can establish a few standards, but have it applicable across a broad range of different use cases.

Longitudinal Care Coordination is a volunteer effort that people have come together to talk about longitudinal care. They've been working very closely on care plans, and so one of the things that's an HIT policy priority they started a year ago to really start to figure out what the details would be around care coordination, and we can give an update on that perhaps at a future date.

Laboratory Orders Interface is to complete the cycle for laboratory results. So rather than just ordering – I'm sorry, rather than just resulting things electronically, create a way that we can create a compendium of orderable items and a standard for how you can order and then get the results back and complete that loop in electronic format. That's getting close to ballot, and we probably over the course of the next cycle or two within HL7 should be able to bring that forward.

Health eDecisions, leveraging some of the work of Query Health, is going to ballot next week. And the Automatic – Automate Blue Button Initiative, or ABBI, is developing an implementation guide that really leverages a portfolio of existing standards for a new use case. It says, can we use our transport standard, our standard for clinical content, and combine that with the kind of access that we have around Blue Button, so that that data is not only accessible, but now is available for computable purposes, to be able to be aggregated and the like? And it's an example of really sort of leveraging that existing portfolio for new purposes.

Not on this list are four other things that happened. We identified a standard vocabulary for laboratory, for clinical information, for medications, and for administrative transactions. And really, the first time that that's been articulated clearly as a national priority.

So if we just take a look, this is sort of in text some of the things that we've got. We've got all of these initiatives, these implementation guides and other things that have gone forward, and we're now working to actually develop test data that will help us with testing around meaningful use, as well as helping organizations that have used the C32 and the CCD, and transitioning to the Consolidated CDA, the new standard. So we've developed some tools that will allow organizations to smoothly transition and support moving from meaningful use stage one to meaningful use stage two.

Now as we move forward, as you know, the – our dollars are going to be declining, and we should be – the monies that were used to support standards are going to be going down over the course of the next couple of months. As a result, the current state of the standards kind of interoperability framework is going to change over time. What we realized is that there's two communities that we access. We access expertise in standards, and we access expertise in implementation.

And the challenge is that you don't want those two communities not to communicate, because then what happens is that we develop standards that can't be implemented, or we create implementation requirements that need to be fed back into that – the standards community, and used appropriately.

So as we go forward, we're actually going to create sort of two different communities linked by a series of underlying sets of technology that track different issues, one devoted for getting use cases ready all the way to the point of implementation guide, and another one to help us link together implementation and testing so that as we identify challenges in interoperability, we feed that back and identify where we've got to improve. So we either need to fix our testing to make it more robust, we need to – we have to make our implementation guides less optional, or we have to add attributes to our standards to make sure that we can accomplish the task at hand. And knowing that we have three things to work with means that we don't have to just change our standard or just change our testing. We can find out the right way to do that to support interoperability going forward.

So as we go – as we look ahead, we've got the standards and implementation initiatives. We've got about an 80 percent decrease in our resources to support the standards development work. And so we're going to be very, very focused in what we do. We are going to try to combine some of the work on public health reporting to PCOR initiatives to help us with clinical research, as well as some of the work on the AHRQ and adverse event reporting to come up with a common framework that allows us to accomplish all three of those tasks with a relatively parsimonious set of standards that will help support that.

We're working as well across the series of initiatives, and so there are some things that are happening within NIEM, which is a federal to federal standards kind of governance process. We need to make sure that we have an understanding of their approach, particularly as we look at the insurance exchanges and the like, and how we can best support that as that begins to bleed outside of the federal agencies and starts to impact the private sector as well.

We're supporting the quality measure work with the Office of the Chief Medical Officer, and that's an activity that will be our first try at supporting implementation and making sure that we can do that. And then we're working very, very closely to try to engage some of the other offices as well.

So in addition to sort of the work that's going on in the standards and implementation framework, there's two other things that I think are important to talk about. In – on 2012, we transition the eHealth Exchange, or what was previously known as the NwHIN, into a public/private partnership. So we successfully migrated that into a consortium of participants that are now working separate from the government to create sort of that governance around how health information exchange can occur. And so they're working right now with our federal partners and others to kind of create this public/private partnership. That transition successfully occurred at the end of December, just a few weeks ago.

Within the federal health architecture, we've had a very busy year in 2012. We've established new governance that provides greater strategic alignment between our federal partners, and I think that will help us as we try to move forward meaningful use and to leverage our federal partners. We're engaging right now in a strategic planning initiative, and we are refocusing our efforts on the interoperability architecture, aligning that with the standards work that's going on within ONC, and making sure that there are synergies, both within ONC and across the federal agencies.

CONNECT also is in the process of being transferred into an open source – it's always been open source, I should say, but we're trying to create a way in which more responsibility and leadership can come from the private sector. We've come up with a few little snags, but we are continuing to work over the course of this next year to do that.

And then we saw a lot of leadership within the federal health architecture and our federal partners to develop a RESTful Exchange, a way of kind of using web URLs securely to exchange information. And so we had some pilots with the Army and TATRC as well as with HealthInfoNet to help support some of those activities.

So it's been a busy year as well over at the standards side of the world, and we look forward I think working with this group, providing updates as needed. And certainly as we go through looking at recommendations for meaningful use stage three, our hope is that the HIT standards committee and the work that we're doing in the Office of Science and Technology can help provide some support about what are the things that we can do easily, where are the low-hanging fruits, and think creatively about how we can achieve the policy objectives that we have within the kinds of technologies that we have currently available.

So with that, we'll open it up for questions.

**Paul Tang – Palo Alto Medical Foundation**

Good. Thank you. Deven?

**Deven McGraw – Center for Democracy & Technology**

This is really helpful, Doug. Thanks. It's just an enormous amount of work. How are you going to get this done with 80 percent – or less – a lot less money? That's actually a rhetorical question. I know you – I know you will.

I'm sort of looking at the eHealth Exchange strategic roadmap slide, and where it says align with NwHIN governance, since we're not having an NwHIN governance rule, I'm – it sort of jumped out at me. I didn't understand what you meant there.

**Doug Fridsma – Office of Science and Technology, ONC**

Well, I think what our goal there is although we did not issue regulations around the NwHIN governance, I think there are some clear things in which ONC has responsibilities for. So for example, we have a responsibility Congress gave us in HITECH to establish this – the standards implementation guides and certification criteria for health information technology. That needs to be sort of coordinated and organized, and there's a responsibility there. I think if you take a look at what we've got, it's perhaps not NwHIN governance with respect to regulation, but aligned with the actions that we're going to be taking within – with respect to governance, and making sure that we pay attention not only to the work that's going on with eHealth Exchange, but with DIRECT Trust and some of the other agencies out there.

So I think that reference is really to say we want to make sure that this is something that remains part of that portfolio, and that we have that bidirectional communication, not so much that this is related to regulation, but there's a whole host of other activities that are going on with regard to governance, and that this is going to be an important part of it.

**Deven McGraw – Center for Democracy & Technology**

Okay. Thanks. Appreciate it.

**Paul Tang – Palo Alto Medical Foundation**

Judy?

**Judith Faulkner – Epic Systems Corporation**

Just a few clarification questions. When you said, Jodi, that there were for quarter three 2.8 million patient queries, there's two kinds of queries. One is for documents, and one is for all the information about the patient, which consists of documents. Usually it's about five to one. So I'm wondering, do you mean the patient queries are – each is – each of the documents is a separate thing, or do you mean that that is a patient query representing the multiple documents?

**Jodi Daniel – Office of the National Coordinator**

You know, I don't know the answer to that. I'm not sure what the data is. Do you – you have – okay.

**Doug Fridsma – Office of Science and Technology, ONC**

I can help.

**Jodi Daniel – Office of the National Coordinator**

My other half. Go ahead.

**Doug Fridsma – Office of Science and Technology, ONC**

So my understanding is that they were counting on the receiving, not on the query side of things, and much of that data comes from sort of the eHealth Exchange activities that happened there. So that's where that information came from. When we think about query, it's not necessarily the targeted queries, but it's in that broader kind of query response paradigm that \_\_\_\_\_ ExchangeNet.

**Judith Faulkner – Epic Systems Corporation**

It's interesting. We might want to look further into that to see whether it is a patient or whether it is individual documents.

**Doug Fridsma – Office of Science and Technology, ONC**

Yeah.

**Judith Faulkner – Epic Systems Corporation**

I could maybe get you a list of what the documents consist of, because I don't know off the top of my head, and then you could look –

[Crosstalk]

**Doug Fridsma – Office of Science and Technology, ONC**

Yeah. That would be – that would be very helpful.

**Judith Faulkner – Epic Systems Corporation**

Sure.

**Doug Fridsma – Office of Science and Technology, ONC**

Thank you.

**Judith Faulkner – Epic Systems Corporation**

Okay. The next question –

[Crosstalk]

**Christine Bechtel – National Partnership for Women & Families**

I was just going to comment real quickly, we are in the throes of putting together a health information exchange dashboard that's similar – well, obviously will have a completely different kind of information, but it'll look and feel similar to the meaningful use dashboard. So as we do that, we may be really interested in hearing more from some of the vendor groups in terms of exactly how can we measure this most easily. So we will definitely be in contact with you.

**Jodi Daniel – Office of the National Coordinator**

Yeah.

**Judith Faulkner – Epic Systems Corporation**

By the way, just as long as we're advertising dashboards, you know, we went through a lot of meaningful use data this morning, but to let you know that there is state-based data, and in some cases, the ability to drill down to county-based data related to meaningful use on the HealthIT.gov dashboard website, so you may want to poke around there. I know it's not something that you necessarily want to go to every day, but it's got some really interesting information.

My next question was on slide five here that you have the graduates, I wonder if there's any information on – there \_\_\_\_\_ number that I just \_\_\_\_\_ – on – or was it page five? On – \_\_\_\_\_ – jobs. How successful they are at getting jobs.

**Jodi Daniel – Office of the National Coordinator**

Do you have the answer to that, Judy?

## W

I know that we've had a hard time measuring that, because we don't necessarily have a good way of tracking it after they graduate. There are some examples of some of the community colleges in particular that have been able to register their students and keep track. Overall, I can make a comment that the university-based program has generally been more successful, but I think that's because some of them were already in the space or near the space. I won't say in the space, but might have been a nurse, for example, who then got the informatics training, and therefore probably within their own organization could even get an informatics kind of job, whereas in the community colleges it's been tougher, because we're pulling from in many cases a broad array of backgrounds, in some cases unemployed folks and those kinds of things.

I've heard numbers like 20, 25, 30 percent not getting jobs in health IT, but I think those are more guesses than accuracy. Farzad, have you heard anything more accurate than that?

### **Farzad Mostashari – Office of the National Coordinator, HHS**

I would echo what you – what you said. The – as Jodi pointed out, the key challenge and future direction is to get the workforce folks more real, live, on site in a health care facility training with real, you know, EHRs in market – in the marketplace. That continues to be a challenge, and some of the community colleges have done – you know, Ohio has a good partnership with Ohio Hospital Association to have those placements and apprenticeships, but that's something that if there are any ideas folks have at the state level, at the vendor level, to how do we get these committed students opportunities to learn in the real world, it would be great.

### **Judith Faulkner – Epic Systems Corporation**

Yes. I've heard anecdotally about it, but I haven't seen –

### **Gayle Harrell – Florida State Legislator**

I'd like to comment on that, too, Farzad. I know that has been a major problem. I have heard very specifically from individuals who have gone through the training, and it has – it's totally web-based. There's no hands-on contact whatsoever, and there's no real introduction to using and implementing and going through all the processes. And this has been a major problem, because then when they do get hired and they're expected to perform, they have no hands on experience. So I think whatever you do in building the curriculum, that's where this needs to take place, is in the expectation of the curriculum, that if you're going to get the scholarship and get paid for it, you have to have a practicum, some kind of hands-on training and use of an implementation. It's got to be part of it, because you are so on target.

Twenty-five – if it's only 25 percent, I'd be surprised, that a lot of these people can't get jobs, or if they do get jobs, they – they're not successful –

[Crosstalk]

### **Doug Fridsma – Office of Science and Technology, ONC**

Just to clarify, Gayle, there are some programs that do offer online curricula, but for the most part, these are in person classroom and with some laboratory, but –

### **Gayle Harrell – Florida State Legislator**

Even with the in person classroom –

### **Doug Fridsma – Office of Science and Technology, ONC**

– it's not substitute for being in a healthcare setting.

### **Gayle Harrell – Florida State Legislator**

Correct. And there needs to be some kind of internship, some kind of practicum, something that gives them that kind of experience.

### **Doug Fridsma – Office of Science and Technology, ONC**

That's right.

### **Judith Faulkner – Epic Systems Corporation**

I agree with you, Gayle, but I think that bringing it into an artificial classroom situation isn't the right thing.

**Gayle Harrell – Florida State Legislator**

Correct.

**Judith Faulkner – Epic Systems Corporation**

They need to go to the healthcare organization to really get the right –

**Gayle Harrell – Florida State Legislator**

You need to face the everyday problems –

**Judith Faulkner – Epic Systems Corporation**

Right.

**Gayle Harrell – Florida State Legislator**

– that you're going to face on the job site.

**Judith Faulkner – Epic Systems Corporation**

Exactly. Right. And my third question is for you, Doug. I thought it was really interesting when you talked about you're working on standard vocabularies, and you mentioned four, and I only got one. They were lab –

**Doug Fridsma – Office of Science and Technology, ONC**

Lab, clinical, administrative, and medications.

**Judith Faulkner – Epic Systems Corporation**

And what are you going to do with them?

**Doug Fridsma – Office of Science and Technology, ONC**

With those vocabularies?

**Judith Faulkner – Epic Systems Corporation**

I'm sorry?

**Doug Fridsma – Office of Science and Technology, ONC**

What am I going to do with –

**Judith Faulkner – Epic Systems Corporation**

Right, with those – so in other words, in some of those areas there already are standard vocabularies, and they're critically important. I'm – there's lots of fights about which ones are the best ones to use. So I'm wondering –

**Doug Fridsma – Office of Science and Technology, ONC**

Well, I mean –

**Judith Faulkner – Epic Systems Corporation**

– where it goes from there.

**Doug Fridsma – Office of Science and Technology, ONC**

We didn't create any new standards.

**Judith Faulkner – Epic Systems Corporation**

Oh, I thought you were creating new ones.

**Doug Fridsma – Office of Science and Technology, ONC**

We – no, no. These were the identification of those. So SNOMED, for example, is one that has – is typically used in clinical.

**Judith Faulkner – Epic Systems Corporation**

Yes.

**Doug Fridsma – Office of Science and Technology, ONC**

RxNorm. So – but previously, we had – in meaningful use stage one had said, anything that maps to RxNorm. In meaningful use stage two we said, RxNorm is what we should use. So it's really the first time where there are lots of options out there. We've begun to constrain those options, and then really trying to make sure quality measures, data that's used in the transitions of care documents, all of those are consistently using the right vocabulary.

**Judith Faulkner – Epic Systems Corporation**

Okay.

**Doug Fridsma – Office of Science and Technology, ONC**

Yeah.

**Judith Faulkner – Epic Systems Corporation**

Thank you. I misunderstood.

**Paul Tang – Palo Alto Medical Foundation**

Just a comment on the training. I mean, Epic has a very formal classroom experience for people who were actually already in the field, in – in situ in the organization. I wonder if there's some way to add to the Epic-specific training to do more informatics and implementation – at any rate, I mean, just there's other ways of maybe taking advantage of the workforce that's already in place.

**Doug Fridsma – Office of Science and Technology, ONC**

Well, figuring out how we continue to support the workforce needs in – as the – both the university-based training and the community college grants go away, is going to be important. And I suspect it's going to be more on the – on the curriculum side that's feasible to scale, with – what with, you know, massive online open courses as exemplars. It obviously still doesn't address the apprenticeship matchmaking, although we are working with the Department of Labor on – in terms of linking to some of their existing apprenticeship programs on that side. But something that we are going to be taking on in 2013 is kind of the future of a health IT curriculum that can evolve and kind of be more of a living and improving resource.

**Paul Tang – Palo Alto Medical Foundation**

And then – and mightn't the RECs play a role in that? So instead of finding a place to go apprentice somewhere else, go to where the apprenticeship is and train them – it's like – yeah. I had a couple of questions for Doug in particular. So we tried, the policy committee tried to work with the standards committee, more in synch with it. How did we do, and how do we do better?

**Doug Fridsma – Office of Science and Technology, ONC**

I actually think that we had some – we've made really great progress over the course of the last year. And frankly, going into the request for comments, once that was issued, you know, we immediately went to the HIT standards committee, and they're going to review all of the kind of request for comments, with a kind of standards readiness to help. We've also done internally within ONC a similar analysis. Happy to share that at some point. But trying to figure out how we can get economies of scale when there are related policy objectives that with some creative thinking can be solved with a parsimonious set of standards that will be useful across the board. Those are the sorts of conversations that we're having both within the Office of Science and Technology, as well as within the HIT standards committee.

So I think what will be important is that – and I think it's one of the reasons it's nice to have Jodi and I both here, is that there is a conversation that needs to happen so that it isn't waterfall, where policy says this is what I want to do, and standards says, oh, my God, because sometimes there might be little tweaks to policy that will make it highly implementable, and it's that kind of conversation that I hope after we close the RFC and we have a – have that dialogue, we can within this committee and elsewhere be able to share that, so that it could have been a low priority for policy, but it's a real big win for standards. That may be something that we need to consider as we think about the recommendations.

**Paul Tang – Palo Alto Medical Foundation**

So that leads me into my final question, which is Christine, when we got – we did some checking, some readiness checking ahead of time, and some of the times we got back, well, it's just not ready, and I certainly know that from – like in the remote devices. It's a mess out there. When do we get advice on, you know, it's a mess, but what can we do to make it less messy, make it prettier? Should we start working on making it prettier, rather than giving up because it's a mess? Can – you know, would you be able to give us advice there on –

**Doug Fridsma – Office of Science and Technology, ONC**

So you need to know, I don't give up.

[Laughter]

**Doug Fridsma – Office of Science and Technology, ONC**

Even if it's not pretty. So the thing is, I think what we have to think about, and this may be something that is a good conversation to have here as well, is that there are some things that, you know, we're looking ahead to meaningful use stage three, and there are things that are ready or there are things that are low hanging fruit to get there, but there may be something that we can't accomplish in a standards or a technology way in a 18-month regulatory cycle or development cycle.

And so maybe we need to start, as you say, what is it that we need to do incrementally that starts to clean things up so that for meaningful use stage four or meaningful use stage five, we've got the right pieces in place? I think part of our strategy, at least in the standards world, is to create this assembly of building blocks that allow us to sort of – like we did with the ABBI project – pull together some pieces and accomplish a task. And we hope that over time, as we get a robust set in our portfolio of standards to use, we can be more responsive as policies come to say, if you pick this vocabulary and modify it, this kind of construct for how those vocabularies fit together, use this transport, we actually can deliver some value.

There are some things to think about, though. You know, things like is the consolidated CDA the end game, or is it an inter – is it an intermediate place on a path to a cleaner and easier way to do things? We need to make sure that as we're thinking about where we're going, that we leave open the option for things like mobile, and for things that are going to use smaller platforms, that aren't going to be so EHR-centric.

So I always like to talk about taking a path of least regret in what we do around standards.

**Paul Tang – Palo Alto Medical Foundation**

Yeah. Yeah.

**Doug Fridsma – Office of Science and Technology, ONC**

And I think it's something that we need to think about it, that it may be that we're not quite ready for meaningful use stage three, but we need to make an incremental step to make something simpler, to create more modularity or substitutability among the different components, knowing that it isn't the full solution, but it lays – it sets the foundation that allows us to do much more robust and interesting things come meaningful use stage four or five.

**Paul Tang – Palo Alto Medical Foundation**

So we're real interested in the path of least regret for the home monitoring stuff, because we had that on our original stage one placeholder, and we got to stage three and just – it didn't happen. So in particular, that's an example where we really built the market, and we would like to –

**Doug Fridsma – Office of Science and Technology, ONC**

Well, and I think we've made progress there. Again, part of it is – has to do with devices and kind of who – who's in charge of being able to monitor those things. But there is progress that's been made in terms of device taxonomies, and actually a path we hope forward to help us identify these things uniquely.

**Paul Tang – Palo Alto Medical Foundation**

Judy?

**Judith Faulkner – Epic Systems Corporation**

Yes. I'm going to make a suggestion for two things. One, the path of least regret, because there might be good ideas here, and two, for the future, and that is, as you talk about these standards and how they might work together, look at what they're doing overseas, because some of the different countries have some – have also been developing standards in – and one, you might learn from it, but two, I am going to predict that some years in the future, I don't know how many, this type of \_\_\_\_ will be replaced by a global type of meeting doing the same thing. And therefore, the more we can get a little bit of a step, at least aware of what it is, the more we'll be prepared for that future.

**Doug Fridsma – Office of Science and Technology, ONC**

So absolutely. I think there's a lot that we can both leverage and learn from those – from the international community. And again, I – in addition to sort of path of least regret, I tell my team, I don't care if you make mistakes as long as they are new ones, because we shouldn't go down a path in which others have tried an approach and it hasn't worked, and then we do the same thing and wonder why it didn't work.

So part of what we can learn is from the international community in terms of what has worked and what hasn't worked, and chart a path that even if it – even if we falter to some degree, at least we're doing something that's different as a result. So we have – we have relationships with the UK. We have relationships with the EU. We've got a whole series of different groups. We track the ISO TC 215. There's a whole series of activities that are ongoing as well. But it's – I think it's an important recommendation.

**Paul Tang – Palo Alto Medical Foundation**

Any other final comments or questions? Good. Thank you for the dynamic duo. Thanks. Thanks for the presentation. Okay. I think we're ready for public comments to close off the meeting.

**Public Comment**

**MacKenzie Robertson – Office of the National Coordinator**

Operator, can you please open the lines for public comment, and if there's anyone in the room, if you could please come to the table.

**Operator**

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

**MacKenzie Robertson – Office of the National Coordinator**

And Carol, I know you're going to be presenting a comment on someone's behalf, so please go ahead.

**Carol Bickford – American Nurses Association**

Robin Raiford has asked if – she's on the line, if she could speak for a moment. Is she available? Is she logged in? Okay. This is Dr. Carol Bickford from the American Nurses Association. Robin Raiford has asked me to present her comments. I might not be so fluent in speaking them, because she sent them to me electronically in our virtual community.

She starts off by identifying to the members of the HIT policy committee, thank you for this opportunity to make a public comment pertinent to the discussions on HITPC preliminary priority areas on the work plan, eConsent, and patient safety. I've learned some things recently to share with the policy committee about connecting the dots from the nurse call button all the way to care coordination and interoperability out to discharge planning and medication reconciliation, and all the way to the patient portal.

We have missed a couple of steps in laying the bridge for stage three, specifically around patient engagement. The bottom line, we can have all the NEHC patient engagement diagrams and plans we want to plan for care coordination at the national strategy level, but won't be successful until we get caregiver accountability and listening to patients straight. This is not about them. It is about us, the patient in the bed. Until we stop treating people like dismembered body parts in our healthcare, we are never going to get the American public to think we care enough about them to trust them and engage as partners in their care.

We have to convince them that we care about them and their quality of life, and not just the dismembered body part that they have been taking care of. My life has been turned upside down since arriving back to DC from a trip to Texas on December 12th, in a horror in the hospital with no EHR drama that even Steven Spielberg could not have orchestrated. Bottom line: if I was not a registered nurse, I would be dead.

The drama started when I was seen in the emergency room in a hospital with an EHR. Since then, I've had three hospitalizations in 24 days, no bed reconciliation, botched Prednisone wean, four 911 rescue square events, pulmonary hypertension, and severe obstructive airway sleep apnea, with my entire upper airway collapsing in my trachea during sleep, and basically got told there was no medical reason for me to still be alive.

I endured eight days of errors, no EHR, no coordination of care, no meds reconciliation between discharge from hospital number one and then being readmitted one hour later to hospital number two. Unbelievable. At admission number three, which occurred less than 12 hours after discharge from hospital two, a pharmacist was standing at the stretcher in the ER with a list of about 40 meds, saying, what exactly are you taking? I burst out laughing. I had no bed reconciliation between hospital visits.

For now, thank God, I am finally on the mend, have a definitive diagnosis of pseudo-acromegaly, a treatment plan, and a specialist with EHR is coordinating my wacky orphan diseased body. My thoughts to share with the HIT policy committee include the heart song of a patient in a hospital without an EHR. Smile and grin and bear it and hope they do not kill you before you are discharged. The words of "Smile" are, smile thought your heart is aching, smile even when – though it is aching. When there are clouds in the sky, you'll get by, if you smile through your fear and sorrow, smile and maybe tomorrow you'll feel the sun shining through, if you just smile.

**MacKenzie Robertson – Office of the National Coordinator**

Carol, that's the three minute mark. Is there much more?

**Carol Bickford – American Nurses Association**

There are a couple of para – couple of sentences.

**MacKenzie Robertson – Office of the National Coordinator**

Couple of sentences?

**Carol Bickford – American Nurses Association**

I'll –

[Crosstalk]

**MacKenzie Robertson – Office of the National Coordinator**

Okay, because we can email it around to the committee, too, as well.

**Carol Bickford – American Nurses Association**

She is going to be submitting written comments as well, and it gives more detail. I've stripped out a lot of the content because of the confidentiality issues that she may wish to prevent being spoken.

Hospitals need to keep in mind they should delay rollout of EHRs – they think that patients only smile in hospitals on the outside and cry on the inside, that you're treating a piece of them, and you can do – you can kill them without knowing all their data and history.

She identifies that we have the foundation to make patient engagement a success in this country in stage three, and to infinity and beyond. Regina Holiday and I will not give up. We are going to fix this and stand up for the rights of the patient, and expect and rely heavily on Deven McGraw and Chris Bechtel to be our voices.

[Laughter]

**Carol Bickford – American Nurses Association**

Let's just keep – get on – let's just get on with it and make it right. I thank you for this opportunity to supply this public comment on this incredibly important next step, forming the moral character and backbone of the next generation of meaningful healthcare delivery, including patient engagement. We won't get it right until we get accountability and listening straight at the bedside, showing care and concern for the entire person and the history that has come to seek our care and advice as healthcare professionals. This is not impossible, but it is hard.

I could try out for the show *Survivor* now, but I think I will stick to writing a book on patient survival. And she indicated that she dedicates this to the 12-year-old who died in New York Hospital \_\_\_\_\_ recently. We are going to get this right. We will make you proud.

**MacKenzie Robertson – Office of the National Coordinator**

Thank you. And Robin, are you on the line now? Did you want to just make a brief comment?

**Robin Raiford – Public**

I am. Thank you, Carol, for saying that, and I'm out my three minutes, I know, but Christine and Deven, I really want to have lunch with you and tell you more. Thank you very much.

[Crosstalk]

**MacKenzie Robertson – Office of the National Coordinator**

Are there any other public comments on the phone?

**Carol Bickford – American Nurses Association**

This is Carol Bickford. I'd like to speak.

**MacKenzie Robertson – Office of the National Coordinator**

All right, Carol Bickford, if you would like to make a public comment.

**Carol Bickford – American Nurses Association**

I wanted to share with you this button that says, but we've always done it this way. If any of you would like one, I have a collection of them in my pocket.

[Laughter]

**Carol Bickford – American Nurses Association**

I thought this was very pertinent to your words.

**MacKenzie Robertson – Office of the National Coordinator**

And are there any other public comments on the phone?

**Operator**

There are no other comments at this time.

**MacKenzie Robertson – Office of the National Coordinator**

And seeing no more public comments in the room, Paul, I'll turn it back to you.

**Paul Tang – Palo Alto Medical Foundation**

Okay. Well, thank you for a very productive meeting. Great discussion. And have a happy New Year. Look forward to the next meeting. Take care.