

# Transcript

## HIT Policy Committee Meeting

### June 16, 2009

#### Participants

Tony Trenkle – Senior Advisor, Centers for Medicare & Medicaid Services (CMS)  
Judy Faulkner – Epic  
Christine Bechtel – National Partnership for Women & Families  
Rick Chapman – Kindred Healthcare  
Jodi Daniel – Office of the National Coordinator for Health Information Technology (ONC)  
Mike Klag – The Johns Hopkins University, Bloomberg School of Public Health  
Connie Delaney – University of Minnesota School of Nursing  
David Lansky – Pacific Business Group on Health  
David Blumenthal – National Coordinator  
Paul Tang – Palo Alto Medical Foundation  
Paul Egerman – Businessman  
Marc Probst – Intermountain Healthcare  
Gayle Harrell – Former State Representative from Florida  
Adam Clark – Lance Armstrong Foundation  
Deven McGraw – Center for Democracy & Technology  
Neil Calman – Institute for Family Health in New York  
Scott White – Service Employees International Union, 1199 Training & Upgrading Fund  
Roger Baker – U.S. Department of Veterans Affairs (VA)  
Frank Nemic  
John Glaser – Senior Advisor, Office of the National Coordinator  
Farzad Mostashari – Co-chair, Working Group  
Micky Tripathy – Co-Chair, Working Group

#### Public Comment from:

Ruth Perot – Managing Director, National Health Information Technology Collaborative for the Underserved  
Claudia Williams – Markle Foundation  
Virginia Silva  
Brad Rourke – Williams Group  
Frank Kyle – American Dental Association  
Rick Blank – Strategic Health Resources  
Amy Verstappen – Adult Congenital Heart Association  
Josh Seidman – Center for Information Therapy

#### Presentation

##### Judy Sparrow, ONC

Welcome to the second meeting of the Health Information Technology Policy Committee. Just a reminder that this is a Federal Advisory Committee, which means it is being conducted in public. We have public here in the room, and we also have an audience listening over the telephone and on the Internet. Those members of the committee present and on the phone, please remember to identify yourselves as you speak. We are making a transcript of the proceedings, and that will be on our Web site in about 10 days. Also, members on the phone, please remember to mute your phone lines when you're not speaking to reduce any noise.

What I'll do right now is just go around the table, and we'll briefly introduce ourselves, and then I'll check and see who's on the telephone. And I'll begin with Tony Trenkle, who's joining us from CMS as Senior Advisor. Tony?

**Tony Trenkle, CMS**

Thank you. I'm Tony Trenkle from CMS [laugh], Senior Advisor for today, I guess.

**Judy Faulkner, Epic**

I'm Judy Faulkner from Epic.

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

I'm Christine Bechtel with the National Partnership for Women & Families.

**Rick Chapman, Kindred Healthcare**

I'm Rick Chapman from Kindred Healthcare.

**Jodi Daniel, ONC**

Jodi Daniel, ONC.

**Mike Klag, Bloomberg School of Public Health**

Mike Klag from Johns Hopkins Bloomberg School of Public Health.

**Connie Delaney, University of Minnesota School of Nursing**

Connie Delaney, University of Minnesota's School of Nursing.

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

David Lansky, Pacific Business Group on Health.

**Dr. David Blumenthal, National Coordinator**

David Blumenthal, National Coordinator.

**Dr. Paul Tang, Palo Alto Medical Foundation**

Paul Tang, Palo Alto Medical Foundation.

**Paul Egerman**

Paul Egerman, businessman.

**Mark Probst, Intermountain Healthcare**

Mark Probst with Intermountain Healthcare.

**Gayle Harrell, Former State Representative from Florida**

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**Adam Clark, Lance Armstrong Foundation**

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**Devon McGraw, Center for Democracy & Technology**

Devon McGraw with the Center for Democracy & Technology.

**Neil Calman, Institute for Family Health in New York**

Neil Calman, Institute for Family Health in New York.

**Scott White, 1199 Training & Upgrading Fund**

Scott White, 1190—[inaudible]? Scott White, 1199 Training & Upgrading Fund.

**Roger Baker, VA**

Roger Baker, Department of Veterans Affairs.

**Judy Sparrow, ONC**

And on the telephone, we should have Latanya Sweeney. Are you there, Latanya? [Pause] Not yet. Art Davidson? [Pause] Charles Kennedy? [Pause] Well, they have all indicated they will be dialing in later, so...

**Frank Nemic**

Yep. Frank Nemic; I'm here.

**Judy Sparrow, ONC**

And Frank Nemic, good. Thank you. With that, I'll turn it over to Dr. Blumenthal.

**Dr. David Blumenthal, National Coordinator**

Thank you, Judy. I'd like to welcome the members of the Health Information Technology Policy Committee—thank them for being here—for their work. You will see that quite a lot of work has been done since our last meeting. And their dedication and commitment is absolutely essential to a successful mission for this committee and to the success of the Office of the National Coordinator and our health information technology agenda.

President Obama speaks of having a big table for the discussion of health care reform, and I think our goal is to have the same table, with many seats, for the discussion of this aspect of the health care reform agenda—that is, the implementation of the President's and the Congress's agenda in the area of health information technology, a critical part of improving the functioning of our health care system. And this particular body, the Health Information Technology Policy Committee, is a very important foundation for that dialogue. It gives the public and its—the members of the committee a chance to hear what's happening in Washington and to contribute to that discussion.

A couple of announcements that are useful for starting points: First, I'd like to welcome Paul Tang as Co-chair of the Health Information Technology Committee—Policy Committee. Paul is, as you all know, head of—the Chief Medical Information Officer at the Palo Alto Medical Group, a leader in the area of health information technology and someone who's always willing and able to help and extremely effective in that role. I'd also like to welcome the members of our sister agencies who have introduced themselves—Tony Trenkle, Roger Baker—to these proceedings.

This is the first meeting of the Health Information Technology Policy Committee where we will begin to delve into the very interesting, important, and sometimes difficult substantive questions that are coming and will continue to come before this group. And the work that we're going to be doing has been prepared for us—we've been prepared for it by the work of several working groups who have actually contributed a lot of time in intensive meetings on very short time frames in getting ourselves—getting us ready for these meetings. We appreciate that work. It is—everything we're discussing here is a work in progress. And we have asked a lot of those working groups and know that they are looking forward to the opportunity to continue to refine what they're doing based on the feedback that this—that you all provide to them.

At this point, I'd like to let Jodi Daniel talk—from the Office of the National Coordinator—talk a little bit about how the Health Information Technology Policy Committee's work on the topics we're going to be discussing today and the working group reports that you're going to hear fit into the context of policymaking under the HITPC law.

**Jodi Daniel, ONC**

Thank you. So I just want to remind everyone: This is a Federal Advisory Committee, and we have broken into three different workgroups of this committee. The presentations that you will hear today will be presentations of those workgroups. They will not be recommendations of the actual Federal Advisory Committee. The discussion that they will have today will be presented to you for consideration, and it will be up to this full committee to make recommendations to the National Coordinator.

So again, just to stress that the products, particularly the recommendations that are coming from the Meaningful Use Workgroup, are recommendations from that group to this full committee for fuller discussion and consideration. And then it will be up to this group to make any recommendations to the National Coordinator.

Now, David Blumenthal sits and wears two hats on this committee. He is both the Chair of the committee as well as the National Coordinator who receives any recommendations from this committee. So to the extent that there are any recommendations that come out of this committee, Paul Tang as the Vice Chair will make those recommendations to David as the National Coordinator. Of course, David still sits as a member of this committee and can engage in discussions as a member of the full committee.

The—we do expect that particularly the recommendations from the Workgroup on Meaningful Use—we would like, and as David had mentioned, to have a big table for gathering information and input on things that are coming out of this discussion, and so there will be a comment period that will start today, based on the recommendations that come out of that workgroup and discussions that we hold today at this meeting.

**Dr. David Blumenthal, National Coordinator**

Would you say a thing or two about the pro—the rulemaking process that then follows the [inaudible]?

**Jodi Daniel, ONC**

Sure, absolutely. So this is all input into HHS. We will be engaged in a couple of rulemaking processes in order to effectuate some of our other requirements under the HITPC Act. First, there's a requirement that HHS develop standards implementation specifications and certification criteria for electronic health records. And we are required by statute to have that rule out by December 31 of this year in an interim final format. Obviously, the standards and certification criteria will very much need to be informed by discussions about meaningful use. So this discussion will provide some input to us in thinking through that.

We're also working very closely with CMS and—why Tony is sitting at the table with us—on the definition of meaningful use. And CMS will be working on a regulatory process for their incentive programs, which will include defining and coming up with measures for meaningful use. So ONC and CMS are working very closely together on that. That regulation will go through the full notice and comment rulemaking, so there will be a proposed rule with an opportunity for formal comment and then a final rule on that regulatory process.

**Dr. David Blumenthal, National Coordinator**

Thank you. This is—so this is the beginning of a conversation that’s going to last for some time. And the recommendations of the working group—the discussion that you will hear about the recommendation of the working group will, I’m confident, be informative—useful. We will—the rulemaking process will be informed by them. But there is a long way to go before we get to anything like a formal governmental posture on the definition of meaningful use.

Okay. Before we begin the discussion, and before we have the Meaningful Use Workgroup report, there are just a couple of framing comments that I’d like to make, and I think you will hear these echoed in some of the comments of the working group report. This is, in some sense, the first time that we will be discussing health information technology in the context of our aspirations for a higher-functioning, higher-performing health care system. And that makes this an historic discussion—of course, not the end of it, but the beginning of that discussion.

You’ve heard about our deadlines for—the government’s deadlines, not this policy committee’s deadlines, for policy development. Those are very tight deadlines and place an enormous amount of pressure on the committee and on the government to make decisions quickly and in dealing with problems that are new and very challenging for the government and for the health care system as a whole. At the same time, we can’t allow those time pressures to short-circuit discussion of the committee in dealing with some of the very difficult questions that will be coming before us.

In a way, one of the first and most important things that we have to think about together is, what is the future state of the health care system that we hope our work will contribute to? What are we aspiring to? What is it that we hope to accomplish? Where will meaningful use take us? And I think we’ll have some opportunity to look very directly at that question today. We are on a journey; it helps to know where you’re headed toward if you want to be able to get there in the end. No matter how hard it is to navigate there, we have to have some directional sense.

But we also, in that direction, are going to have to balance difficult tensions—balance the need to stretch our health care system to higher performance but know how far we can stretch it without pushing it to the breaking point along the way. And that’s a very important set of balancing considerations that I’m sure will be on the agenda of this discussion today.

We want to make sure that we have a definition of meaningful use coming out of this committee that is both ambitious, but implementable in the 2011 and 2014 time frames that the policy that we work under requires. We know we want a definition that is both simple enough to be understandable but specific enough to be meaningful. So those are among the tensions that I think you will hear illustrated today.

And we are going to be, I think, engaging in a discussion about process measures and outcome measures, if you allow me to fall back into my—into the quality debate. In the early part of the discussion about quality of care, there were very avid camps that advocated for process measures, like measuring what people do with and for patients as measure of quality, and others who advocated strongly for outcomes—that is, what the health state was of patients who were treated by physicians or health care institutions. And after years of contention, that debate sort of came to a resolution, where people said, “Well, there are useful process measures, and there are useful outcome measures, and we shouldn’t take ideological stances about that.” I think we’re—we may be on the verge of entering a similar kind of discussion in the area of defining what constitutes meaningful use for health information technology, and we should learn from history in that regard.

We’re going to talk just in terms of the process that we’re going to engage in right now, and we’re going to dive in first into the meaningful use discussion. But we do also have two other working groups reporting

that I don't want to lose track of. They're also extremely important to our work. One is on certification and adoption; the other's on health information exchange. But we're going to start with meaningful use because of its high visibility and its importance. We're going to ask that Paul and—Paul Tang and Farzad Mostashari, who were two important members of the Working Group on Meaningful Use, to go through what the working group came up with. And that will take, I hope, about 25 minutes to a half an hour, and then we're going to have about an hour of discussion.

As you think about the discussion, I—the—there are these two things that I hope we could accomplish today, and I've referred to both of them in passing. One is to focus on where we want to get to, and the other is to focus on how the definitions that we are going to take into account today and think about could get us there over the time frame that the law sets out for us.

So with that, we ask Paul and Farzad to come up to the front, and John Glaser, who is a Senior Advisor in the Office of the National Coordinator and has helped to facilitate this discussion, is also going to join us.

### **John Glaser, Senior Advisor-Office of the National Coordinator**

Thank you, David, and also committee members; it's a pleasure to be here in this momentous discussion, which we look forward to. To my immediate right, as you know, is Paul Tang, and to his immediate right is Farzad Mostashari, who are the Co-chairs of the workgroup, who've led the conversations and will be reporting out to you. I have a couple of slides to walk through initially, just to establish the broad and specific charge of the committee, and then we'll turn over to the substance of their comments. I want to start with a—here we go.

Just to remind you all, these are the workgroup members of the Policy—or the Meaningful Use Workgroup. You see our two Co-chairs at the top, and a number of individuals from the policy committee obviously contributed significant time, effort, and intellect to this conversation. They were joined by Charlene Underwood, but also Farzad, as people who were brought in from outside the committee to contribute to our discussion.

The specific broad charge that the workgroup has—if you take this paragraph and tease it apart, there's actually three bullets in there. One is that they will be asked over the course of the months ahead to develop an ongoing process for the definition and revision of meaningful use and also national goals. So as you know, meaningful use is an evolving idea, and you will see that in the comments that they make. And so, in any given year, there's a need to establish or revise upcoming meaningful use definitions and to—we're looking forward to them [inaudible] figuring out how to do that with the right ongoing process by which we engage the industry, set the various ideas, and present a set of recommendations to the policy committee.

You also may recall, in the legislation, there were eight national goals, sometimes referred to as AARA 8, internal to us—sounds like one of those Charles Bronson movies. And in addition, those goals will be subject to ongoing evaluation and evolution. So again, the first bullet is to ask this workgroup to develop, over time, a process by which we manage, maintain, and develop these two areas in the years ahead.

The second is within that process—is to work with the health care field overall to front proposed definitions of meaningful use and propose definitions of national goals. In addition, the process is asking them to lead the conversation, which will produce definitions. And again, you'll see some—their first foray into that in a couple minutes here.

And then the third bullet is to—given a definition—is to also define and outline standards that may need to be put in place or other policy priorities that need to be put in place to help make sure that these

meaningful use definitions can be brought to life. In other words, what interoperability standards or data standards or other related policies need to be put in place for this to occur?

So that's their broad charge. This is refined a bit in a specific charge. But first—and this is where they've been focusing for the last several weeks, and they've done a remarkable amount of work in a relatively short period of time—is, they come up with an initial definition—again, you'll see that—for 2011 and 2013. You'll also see an initial definition of 2015, although they will have a little bit more time to refine that. And that will be the work that, again, you see today.

Moving on to the next one here—is that we hope by the end of this year that they return to the first bullet in the broad charge and have a presentation to you all about the ongoing process. Obviously, there's a process done, which I think produced some good results, but the way this was done in the last short period of time should be more inclusive, lengthier time, etc. And we all recognize that, and hence the process proposed will accommodate that as we look into the years ahead.

The second is—you'll see a similar thing—is to, on an ongoing basis, make recommendations regarding the AARA 8. And the meaningful use is just really an elaboration of the broad charge.

And then the last bullet here is, although we haven't really spent much time with them talking about doing this—is, once proposed, the definition of meaningful use is contributed to the conversation of how well is the country doing in moving towards that vision, as David talked about and Farzad will give a greater elaboration to; and to see whether there are barriers that are impeding the industry in its efforts, either collectively or specific items that occur within the meaningful use. And those barriers could be lack of standards, those barriers could be intellectual property or pad protections, those barriers could be quite diverse, but make sure that we've got a good read on those and approaches to addressing them.

So that is briefly the composition broad and specific charges of the workgroup. And so, let me just briefly touch on this, and then we'll get into Farzad. Their process, where we brought to them a wide variety of materials—as you know, we've had NCVHS testimony, terrific pieces of work that were done by a wide variety of stakeholders, in addition to—the Office of the National Coordinators received a range of opinions and thought pieces from various segments in the industry about how to tackle this. And so, these materials, along with some internal analysis, were presented to the workgroup, and they have worked quite diligently over a couple meetings and a phenomenal number of e-mails and phone calls in the intervening period of time. The notion of a weekend seems to have evaporated during this particular sojourn, and I want to credit all of them for having done a lot of work and leading to the conversation that you're about to hear now. So without further ado, Farzad will start the discussion, and there's the kicker.

### **Farzad Mostashari, Co-chair**

Thank you. I want to acknowledge all the terrific work of the subgroup that not only brought a deep knowledge of all the various aspects of the meaningful components that we are going to be talking about, but also brought a real spirit and sense of what's it all for and talked about the aspirations for a higher-functioning health system that Dr. Blumenthal mentioned. In resolving and trying to go through what really matters, it is—we found it to be absolutely essential for us to have that sense of the ultimate vision.

The ultimate vision for us is to enable significant and measurable improvements in population health through a transformed health care delivery system. The key goals that we have listed here also translate to the specific charges to the National Coordinator in AARA and have been adapted from the National Priorities Partnership convened by the National Quality Forum. They are to improve quality, safety, and efficiency of health care to engage patients and their families; to improve care coordination and

population in public health; and reduce disparities. Underpinning all of this and undergirding all of this must be to ensure privacy and security protections.

Although clearly health IT and adoption is not sufficient to achieve as the specific objective, we believe that meaningful use of health IT is an essential component of the ability of benchmark institutions to have achieved remarkable successes in delivering some of the outcomes that, if extrapolated to the nation as a whole, could result in these kinds of achievements: To prevent a million heart attacks and strokes by 2015, to make heart disease no longer the leading cause of death in the United States—something that the guys at Permanente System have achieved—to have 50 percent fewer preventable medication errors by 2015, to halve the racial-ethnic gap in diabetes control, to reduce preventable hospitalizations and readmissions by 50 percent, to give all patients and their families access to the health information they need to have and make sure the patient preferences for end of life care are followed more often, and to provide our public health department with the real-time awareness of outbreaks that we've seen is so necessary.

How will we get there? Now that we have the North Star of where we need to go, how will we navigate to get there? The committee came up with a useful framework that divided our goals and, in some ways, the meaningful use objectives timeline into three parts: the outcome that we all seek, the advanced clinical processes that are necessary for achieving those outcomes, and the data capture and sharing.

We looked at many different comments and testimonies that were put together. I pulled out this quote from the Markel Foundation's "Achieving the Health IT Objectives" paper that talked about the effective use of information being needed to support better decisionmaking and more effective care processes and a phased-in series of improved clinical data capture that can support the more rigorous and robust quality measurement improvements. The health IT adoption, the collection of information, is not the end in and of itself; it is merely the enabling mechanism for achieving the outcomes.

Let's look at a specific example of this. Our goal might be that 85 percent of all patients with high blood pressure and cholesterol have it well-controlled. This is probably the most important thing we could do as a country for reducing preventable and premature death. Well, there's plenty of evidence that use of evidence-based order sets, so that the right medication and lab tests get ordered consistently, can be helpful. Monitoring and addressing medication adherence will be critical. Clinical decision support at the point of care, patient outreach and reminders, and quality benchmarking and reporting are all evidence-based interventions that have been shown to be an essential part of improving control.

In order to have those advanced care processes operate, though, you need to have systolic and diastolic blood pressure in a way that it can be queried and trended. Medication and problem lists similarly, laboratory test and procedures, prescription fill histories have to be made available.

We had a lot of discussion around how this relates to health reform and how can this enable health reform and affordability. There are some of the objectives that we have laid out here and some of the meaningful uses that might result in direct cost reductions—reduction in medication errors, for example, or formulary adherence—fewer redundant tests. But the largest contribution we could make in meaningful use is to provide an information infrastructure for health reform, whether it's in clinical quality measurement for outcomes, for example; whether it's care coordination that would be necessary to reduce readmissions under bundled payments for accountable care organizations; reduction in appropriate care through decision support; expanding primary care capacity, for example—again, the work that Kaiser has shown—using non-visit-based care to expand primary care capacity and prevention.

I am not going to spend a lot of time on these, in the interest of time, as Dr. Tang will cover all of these as well. I just want to highlight one item on this slide, which is that wherever possible to reduce the burden on clinicians, we are recommending that automatic reporting from electronic health record systems be utilized, while recognizing that at the station—will be required for some time and for some issues.

It is true that, looking at 2013 and beyond, we will need additional metrics that can be generated automatically from electronic health record systems as a routine part of delivering care, particularly around efficiency or inappropriate use measures, patient safety, and care coordination. But a critical component of insuring the sustainability of meaningful use will be that these are not just a down payment on a new health care delivery system infrastructure, but that it is tied to long-term reimbursement reform. We thought that the transition from pay-for-reporting to pay-for-outcomes, as per the CMS EHR demonstrations, provided a useful model. Thank you.

### **Dr. Paul Tang, Palo Alto Medical Foundation**

Okay. Thank you. And now we're going to move into how do we get to this transformed health system enabled by the HIT tools that we're striving to achieve? As Farzad mentioned, we're—our eyes are targeted towards a state where we can continuously measure and continuously improve the health care that's delivered in this country. So we've—the workgroup thought of this as a series of steps, moving from, on the left, capturing data in a coded format as much as possible, sharing it among the people who need it, which include the patients, moving towards using that platform to change our care processes so that we really focus on the patients and the patient's needs. And finally, with that infrastructure in place, we envision that we'll have the ability to measure and constantly improve our system.

So the law provided some mile posts. Now, admittedly, 2011 would have happened anyway, even before the law, but there's some meaningful significance to these particular dates after the law: 2011, 2013 and 2015. So having described what we'd like to see health care be like in 2015, we are working backwards. And that—so we spin off a series of steps—hopefully they're logical; they're achievable, though ambitious. But we start by 2011 having data in the system-coded format; sharing it with relevant folks; moving on to managing more advanced care processes; focus on the patient, not about all of our limitations; and finally getting to the improved outcomes.

So I'm going to walk you through those, but before I start that, I want to talk to you about some of the tensions that David had mentioned earlier. One of the goals is to enable health and reform. This is not a software project; this is about the IT requirements to implementing health reform. We all recognize sort of the unspoken elephant that we do have to reform the payment system as well to align all the incentives, so—but—so acknowledging that is important.

The next point is that we—this is—even though it's labeled "HIT and meaningful use of HIT," it is not about the HIT. And although perhaps the early media coverage might have been, "Well, what's the certified EHR?" we really quickly transferred our attention from what its software does and what its features should be to what the outcomes we want from using—meaningful-using that software. So you'll find that our measurement that we proposed focused on the outcomes and, in the earlier years, focused on some of the advanced process changes that are needed.

I like what Jon Perlin said, which is, "We'd like to pull with quality and push with the certification." And actually, he said that in response to a NeHC (National eHealth Collaborative) panel with small providers. And when I actually asked them, "What's the one thing you'd like policy to do?" surprisingly and refreshingly, they said, "Well, help us with the quality measurements." So that's really the pull in this case.

Now, as much as we'd like to have that achieved, and also that achieved yesterday, we've got to meet the current realities, and that's where we hit up against the feasibility constraints. One is, if people are going to implement these things by 2011 or 2012, there is (1) time to develop system but (2), importantly, time to implement these systems. And it's really health care providers that spend that blood, sweat, and equity in doing so.

So realistically, we're probably talking about capabilities that are available today in a commercial market. We're balancing the sense of urgency with health reform against the calendar time it takes to just get the job done. And as a special consideration, we want to be sensitive to the issues of small practices—less than 10—less than even 5 physicians in a practice. As we know, the majority of Americans receive their health care from these small practices, so they have a special issue with dealing with—accessing not only the financial capital but the human resources needed to implement these things.

And finally, we talk about the time and money tradeoff. Well, in the Recovery Act provisions, we don't have a tradeoff; we have both the time and the money stated. So the time is 2011, and the money sequence—it's front-loaded, so—it's front-front-loaded, in fact. So if you get it by 2011 and 2012, you're getting \$18,000; and after that, it gets lowered to \$15,000; and then it decreases over time. That's to encourage early adoption, but it also becomes a constraint for us in terms of what can we move up as quickly as possible yet being sensitive to the things that we've talked about.

So this graphically shows for you the balance we have: the urgency of health reform, the desire to get to improved outcomes as a continuously improving process, and the realities of where we are. Let's focus mainly on 2011, since that's the most pressing need we have in the proposed rule to come. We focused on five categories of criteria and objectives. One is improving the quality, safety, and efficiency of the health system. Two is engaging the other partner that's rarely there, which is the patients and their families. Three is coordinating care. Four is raising the health status of the population. And five percolates through all, which is the pri—maintaining the privacy and security of both the systems and the data.

So you'll see up in—first we talked about capturing data, particularly in a coded format, so the machine, the computer, can operate on that and help remind us of the things we need to do. You'll see things like the problem list, the medication list, vital signs, and the patient characteristics that will allow us later to measure and to improve on—or to reduce the disparities in care.

Now, you might think that these seem like straightforward things. A problem list—shouldn't a field be in the database for that? Indeed, there is a field in the database. But it's yet a different thing; it's a cultural thing to make sure that problem list—those medication lists are maintained in an up-to-date fashion every day, every encounter. That will take calendar time to both implement and to create the culture that keeps those fresh. So that's not a—it's a nontrivial effort.

Then we do have to capture some things in noncoded format, such as progress notes. And the third bullet is particularly important: That's the CPOE or Computerized Physician Order Entry. What we want to do is create a system where, as you make decisions, you are informed by the things relevant to that decision. The only way to do that is to put that information in front of the face of the person who's doing it at the time they're writing the order. So CPOE is very important. Initially, we just want it to happen, and later on you'll see we've got to give the guidance and the decision support to the person doing that.

And then finally, we want to manage the populations. From this electronic system, you need to almost push a button and find out who are your diabetics, how well are they controlled, who do you have to reach out to—those kinds of things.

The accompanying—so those were the objectives. The accompanying measures get to be a bit more quantitative. Some things are, “Do you have the interfaces?” For example, labs are so important. “What percent of your labs?” Hopefully, if you have interfaces, the vast majority of your labs will come in electronically and in a coded format.

I mentioned how important the fact that the physician or the nurse is entering orders. That metric, which is how many of those orders are entered by the person issuing the order versus some workaround, like writing it out on paper and having somebody else to transcribe it—the only way the information’s going to get to the person authorizing the order is through real-time interaction.

Then we’ve listed a number of metrics. Now, some of you will recognize—but these actually are different than what you know: the little thing we have in parentheses, the HIT QMD—HIT-enabled quality measures. As you know, we have plenty of, quote, “quality measures,” but the vast majority are based on billing or claims data. That, we recognize, may be the limitation of where we are now, but we also recognize that it is limited in its accuracy and reliability. What we propose is to move some of those to being defined by clinical data out of an electronic health record system. And so, the measures that we propose below are those, indeed. So we find that we—there are certain measures that we can take the existing definitions and, quote, “tweak” them, in fact, in this calendar year and change them or transform them into quality measures that are derived from clinical data out of an EHR.

Now, some of those things might seem fairly straightforward: diabetics with an A1c under control. Well, it turns out it’s not so easy to identify who a diabetic is if you only have claims data. So changing that to defining it based on clinical data is, in fact, a real change. It also means that you’re using an EHR. Another example I’ll pull out is aspirin prophylaxis for patients at high risk for coronary artery disease—might also seem simple, but aspirin’s an over-the-counter drug. Most of the systems get their med list from prescribing. So this is not only a system change; it’s a cultural change on the part of the provider. So that’s why we think these are so important, and they illustrate or implicitly they mean you are meaningfully using an EHR.

And then finally, in order to address the health disparities issue, we want to have the ability to report on how are you doing with these things according to the various patient characteristics.

The next area is very important—that is, engaging the patients and families. We’ve talked a lot about—and typically we’re focused on—“Well, how do we get information to the health care team?” We rarely remember that it’s all about the patient. So we would like to set as an objective even for 2011 to get patients access to critical information like labs, problem lists, medication lists, and allergies. And we’d like them to have patient-specific educational resources and clinical summaries as a result of every encounter. So the corresponding measures are simply percentages of accomplishing those things.

Next we turn to care coordination. That’s getting everybody on the team access to the information so we don’t have these things falling through the cracks. Again, that includes the patient. So we would like to—the objective is that we have clinical—key clinical information provided to everyone who’s involved in that person’s care. One exemplar of that is to make sure we reconcile the medications, particularly at a transition, but for all relevant encounters. So likewise, the measures are percentages of accomplishing those.

Now, one of the measures we put up there is the 30-day readmission rate. We recognize (1) that it’s a key clinical problem, (2) that it’s a key cost problem, and (3) a lot of it has to do with not having the information move around with the patient. So when a patient is discharged, does the patient’s PCP or other providers involved in the care get access to that information? We think not getting access to that

information interferes with that—interferes with the quality of their care and contributes to the—to being readmitted. So one way of measuring the effectiveness of using these systems is to report on the readmission rate.

The next category is to constantly improve—measure and improve the state of the population's health and to contribute to the public health functions. So we are proposing that the objectives be to be able to submit data electronically to immunization registries where they are required by law and where they can be accepted. If nobody's home, then that's a capability but not a deliverable.

And the other things are to report electronically the lab tests that are required by public health and the surveillance of syndromic data. The accompanying measures are reflective of those objectives—that is, the percent of reportable lab tests that are resubmitted electronically and the ability to report up-to-date status of childhood immunizations, as a start.

And finally, as I mentioned, privacy and security permeates through all of this. And so, for 2011, it is to comply with the HIPAA and the Recovery Act provisions. So the objectives are to comply with HIPAA and the local State laws as well as to comply with the national privacy and security framework produced by ONC.

As a little twist on that from the measurement side, one would potentially measure not complying fully with HIPAA to say that an entity that is under investigation for a HIPAA violation would not be eligible for meaningful use payment.

I'm just going to mention briefly, forward-looking into '13 and '15—I want to backtrack a little bit on something I forgot to mention in the '11—the measures—for example, the percent who have received a flu vaccination or the percent of diabetics who are under control. One of the constants we had is to have a twofer. In other words, those measures many people recognize as measures that are sometimes already publicly reported and, in fact, may be part of P-for-P or pay-for-performance programs. To the extent that we're going to have the same measures applied to pay-for-performance programs and to meaningful use is a twofer. In a sense, the practice would—it would leverage the financial benefit to comply with these reporting requirements. In addition, one of the issues that face—that practices face is the administrative burden of reporting on different definitions of these measures. And what we're trying to do is not only consolidate them on—you know, focus on clinical data—clinical definitions of these measures, but the same clinical definitions. So I think that it has a number of objectives. One is to be derived on clinical data, and two is to be standardized.

Okay, turning to 2013, we're now getting into areas where we want to start pushing more toward the outcomes improvement that we're searching for. So, for example, under the "Improved Quality, Safety, and Efficiency," you'll see that decision support needs to be offered at the point of care. In engaging patients' families, you'll see that we now want to have elec—secure electronic communication between the professional health care team and the patients and their caregivers. And in coordination of care, there's medic reconciliation at each transition of care. In the population health, not only are you submitting information to the registries, but you're receiving information back, and you may be receiving alerts from the public health agencies.

Looking forward towards 2015 now, the bar is definitely raising—rising. So not only are you reporting on your performances; they—we imagine or envision that there would be levels or threshold levels of what you achieve with these measures before getting incentive payments. And you can see that we're increasing the availability of tools to support the patients and their family, to coordinate care, and to improve the population in public health. So we're going to move towards essentially a real-time clinical

dashboard at the point of care for physicians. This came up in the NCVHS testimony. In other words, it's nice for physicians to export data in the standardized format to some other registry or some other agency. It would be super nice if we got back the information and saw it and used it in the performance of individual care.

So the principles we have for looking towards 2015 include the following: We want to constantly—we want to move towards that goal of being able to constantly improve our performance, to constantly improve the outcomes. That's more important than just measuring performance, and that's more important than just measuring. But we're going to take steps from A to B. By the time we arrive at 2015, we want to push—be able to be in a position to push outcomes to the max. We want to, as I mentioned, align all of the reporting requirements to be based on clinical data and in a standardized way. We want to be able to prescribe the outcome but not necessarily the method, so we in no way want to have any kind of recommendations or rules that would limit innovations on how to achieve the meaningful outcome. And so constantly, we want to be mindful that this is all about the patient; the rules, the drive, the motivation/incentives should all be focused on maintaining patient-centeredness and a constant improvement in our performance.

So in closing, this is—as Dr. Blumenthal mentioned at the beginning, this is a journey. It's a journey not to implementing software but a journey to transform health systems that requires meaningful use of transformation-capable HIT. We envision a migration that goes from capturing data in a standardized format, using it to advance our care processes, and finally to measuring and constantly improving our outcomes. Initially, in 2011, we start with some basic—more basic measures, but it's a balancing act of trying to get the—consider the urgency of the need for health reform with what we can feasibly deliver at this point in time. We see this as a meaningful precursor to effective health reform that is contingent on health financing reform. Thank you. Mr. Chair?

**Dr. David Blumenthal, National Coordinator**

Thank you, Paul. Thank you, Farzad. Thank you, John. And thanks to all the other working group members. I'd like to engage in a three-part discussion at this point. First, I'd like to see if any of the working group members would like to add anything to the presentation. Secondly, I'd like to ask this group to step back and think about the vision, not about all the feasibility steps, not about all the measures; to rise above, if you will, the percent of patients whose diabetes is controlled and exactly where clinical decision support becomes available and for what problem; but to ask whether the—whether we can be more specific about the 2015 vision that Farzad and Paul talked about. And then, thirdly, I'd like to go from that destinational conversation to an examination of the 2013 and 2011 content of the workgroup product. But let's start with first asking if the workgroup members would like to add anything to the discussion. Yes?

**Connie Delaney**

Connie Delaney, University of Minnesota. Thank you for your outstanding work and presentation. I'd like to focus a question on—and I'm referencing slide 11 as the example for 2011, and—excuse me?

**Dr. David Blumenthal, National Coordinator**

Excuse me [inaudible]. Were you on the workgroup? Were you a member of the workgroup?

**Connie Delaney**

No, sorry.

**Dr. David Blumenthal, National Coordinator**

Okay, let's just start with the workgroup members—people who participated in this discussion, just for correction of the.... Anyone like to add anything?

**Neil Calman**

Nothing to add, other than to say that you all presented the—both the work that you all have done on the back end very well. And I very much appreciate, coming from the privacy side of the house, the attention given to this issue. And I look forward to hearing from the rest of the committee on feedback.

**Dr. David Blumenthal, National Coordinator**

Okay. So I'm sorry; please go forward.

**Connie Delaney**

Connie Delaney again, University of Minnesota. I'm referring to an example, slide 11, 2011, and I'm referring to the example as—to raise a question that might have an implication for the format for thinking about goals to the measurable outcome. In this example, one moves from goal to advanced care processes and then the implication for data capture. Might it be worthy of consideration to consider, in addition to advanced care processes, basic or early care processes such that one would be forced, if you will, to tend to the preventative nature of such health conditions?

**Farzad Mostashari**

The goal is absolutely prevention and to address the clinical issues as soon as possible. This will require practices to change what they do. Currently, few practices, particularly small practices, engage for example in sending reminders to a patient with high blood pressure who hasn't been seen. Few use evidence-based order sets. Few monitor medication adherence. These are the care processes that we are seeking—the workflows that we are seeking to encourage through the meaningful use criteria. Those are the advanced care processes—the advanced affixes to the process rather than the care in this case. Yes, absolutely.

**Dr. David Blumenthal, National Coordinator**

So let me—we've moved from the workgroup comments now to the first element of the discussion. I'd like to, just for facilitating the discussion, focus your comment—your attention to slide 9. It's called "The Achievable Vision for 2015." And it lists what look like some very important—some important visionary goals; for example, a million heart attacks and strokes prevented, heart disease no longer the leading cause of death in the United States, 50 percent fewer preventable medication errors, racial/ethnic gap in diabetes control halved.

We rarely—I can count on my hand maybe once or twice in my—I hesitate to say how many years of discussing these issues—stop to ask what we could achieve if we set our minds to it. This is an opportunity to have that discussion here, in this—in the hall of the Department of Health and Human Services, and to use it as a facilitation for what I am sure will very rapidly become a very detailed discussion of specific measures and specific technologies. But before we get into that, I want to be sure that we have stretched ourselves on where it is we want to go. It's not an easy conversation to have, because it launches you out into the unknown, and it fills you with questions about what's achievable, and it forces you to make a lot of assumptions about processes and how people can change and how institutions can change. But if we don't at least pause for a moment to have that discussion, we'll have no guidance as to whether we're moving fast enough or far enough at each step along the way. So we can go silent on it and just sort of say, "These are the kinds of things we think we should be going to," or we can elaborate on them.

**Charles Kennedy**

David, Charles Kennedy with a comment.

**Dr. David Blumenthal, National Coordinator**

Yes.

**Charles Kennedy**

First of all, I would like to say, on slide 8, I—as the payer representative, let me applaud the notion of efficiency. However, when we talk about our vision for 2015, although we talk about a more effective health care system, we don't have the notion of efficiency specifically called out. And you know, just given the financial challenges that payers, employer groups, etc. face, perhaps it is worthy in stretching ourselves to more specifically call out the need for efficiency.

Secondly, these visions, I think, are all very compelling; I applaud them all. But I wonder, by 2015, if we will have kind of made an end-to-end improvement in any specific disease state. And what I mean by that is, might there be a consideration as we talk about a vision for 2015—this may be a little bit in the implementation side of things—to say we might look at a specific disease state, perhaps a chronic disease state that's responsible for 60 to 80 cents on the dollar spent, and look at, you know, quote-unquote, “transforming management” in a chronic disease state?

And then finally, just—I'll make one last comment. When we talk about the power of health information technology, it's the power of taking information and being able to boil it down to the individual and their needs. And so, when we talk about the individual, I think the vision might be well-served through the notion of highlighting the empowerment of the individual. So when we talk about educational resources, it may be one thing to put a bit of a generic PDF on a screen; it might be something else entirely to give someone information that's understandable and also contextually relevant to their situation. And I think this'll increasingly become important as we think about genomics and clinical research.

**Dr. David Blumenthal, National Coordinator**

Thank you, Charles. Anybody else? Yes, Judith.

**Judy Faulkner, Epic**

A couple things. I really like the whole list there. I like chronic diseases; I'm wondering whether it can be expanded more than heart attacks and heart disease as samples just—not meaning to be too funny, but that hits the older men nicely. But what I'd really like to see us aim at, if possible, is the children. How do we get kids getting to a better state of health so that over the years, we have set up our country for greater health, dealing with things that—I think there's, first of all, more chronic diseases that can be put in as an example. Secondly, I think not only children but childhood obesity as well would be great to be able to address in these.

**Dr. David Blumenthal, National Coordinator**

David?

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

All right, I strongly endorse Charles's comments about the need to address efficiency and costs in the system and for us to collectively envision a health care system that uses resources—scarce and expensive resources appropriately and efficiently, so I think we have to find a way to articulate that here. And on the subject of appropriateness, I think it would be helpful to have some sense in here that one of the things we'll target is a system that is making appropriate decisions about care.

The second thing that's kind of a meta-thought about a lot of this is the—we are not going to achieve this vision in a step function. We're not—the whole country won't at once on December 31, 2014, transition into this kind of model. And as Farzad said initially, some systems like Kaiser and Palo Alto and partners may already be doing many of these things very well. So I think we have to think of our steps of achievement of the vision as itself an element of the vision or, that is, our theory of change as part of the vision. And there will be early adopters and later adopters, and there'll be different types of models of care in the country which more or less capture this spirit of this vision, earlier or later. And I'm not articulating that very well, but I think we have to have a sense that those who are able to move more rapidly down the path and the linear track we've described are also successfully part of the vision, and we want to capture them and give them recognition as part of the vision.

**Dr. David Blumenthal, National Coordinator**

Neil?

**Neil Calman, Institute for Family Health in New York**

You know, I'd like to suggest a little bit of a modification for how we discuss the vision. And I think it's right on target in terms of the categories and the way we describe it, but I think we ought to take out the specific references to heart attack and to diabetes, because, you know, they're not specific disease references or anything in relationship to which medication errors. But I think what we really want to do is see a reduction in disparities across the entire scope of chronic illness. And I don't think a good goal is to not see heart disease be the leading cause of death. What would we rather see, cancer be the leading cause of death? I mean, I don't think our goal is to switch one cause of death for another. I think our goal is to see a reduction in chronic illness and in preventable causes of death. And so, I think we should, you know, sort of broaden the vision.

Having said that, I think we should consider putting efficiency in as a separate category. I think, you know, we really do need to be able to sell this to the American public not just based upon our vision of improved health, but as the discussion of health reform becomes more and more focused around whether or not we have the dollars to actually pay for it, I think it's really critical that we show that both through technology and also through increased prevention—that efficiency is achieved. I know we've talked about it as a result that if you do better care, you automatically sort of end up with more efficiency. But I think putting it in as a specific item that—will bring it to our attention and keep us focused on those things that could potentially have early wins in relationship to reducing cost.

**Dr. David Blumenthal, National Coordinator**

Roger?

**Judy Sparrow, ONC**

Can I just jump in with one thing? Can speakers please identify themselves before they speak for folks who are listening on the phone? Thank you.

**Roger Baker, Department of Veterans Affairs**

Roger Baker. I think—from an individual standpoint, I think privacy is key to adoption here. And I've seen it in several areas; I know you haven't missed attention to it. I think having that be part of the vision, you know, to recognize that the protection of the privacy of the individuals that this information is about as part of that vision is a critical piece.

**Dr. David Blumenthal, National Coordinator**

Gayle?

**Gayle Harrell, Former State Representative from Florida**

That was exactly my point. I think privacy and security needs to be—as I said at our very first meeting, needs to be foundational to everything we do. And if you're going to incorporate, you must incorporate that in your overall vision of whatever you're going to achieve. So before you have the conversation on any of the other things, you need to put that privacy and security element in there. You made my point exactly.

**Dr. David Blumenthal, National Coordinator**

Christine?

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

Christine Bechtel. Two things: Under patients and families, I think we can do better to your question. On the first one, Farzad, to borrow a phrase from you, I think access to information is an enabling mechanism; it's not an outcome. So the outcome really is how real-time access—and we need to build in the timely concept in a number of places throughout this, but real-time or timely access to their own health information can help patients and their caregivers to really better manage their own care, improve care transitions and coordination. The second thing I think we're really missing is that one of our goals ought to be measurably improving the experience of care for patients. We can't be serious about both, you know, improving self-management and quality if we're not willing to talk to patients about how their experience is going, which really informs both of those outcomes.

**Dr. David Blumenthal, National Coordinator**

Yes, [inaudible].

**[unidentified speaker]**

To try to echo some of the comments that were made by Neil regard—and Judith over there as we look at specific diseases, can we try to find ways to expand on that and really let science try to drive the policy by looking at groups like the U.S. Preventative Services Task Force, taking those recommendations, and having that be a body for information that needs to be recorded where we know that the evidence-based medicine actually exists? We can capture that and have ultimately larger outcomes that another body has been able to weigh in on.

**Dr. David Blumenthal, National Coordinator**

Yes, Mark.

**Mark Probst, Intermountain Healthcare**

Yeah, Mark Probst. Not to beat a dead horse, but first, I think this group did a tremendous job with a tremendous amount of information. On the same issue around the chronic diseases, does this have to be a national goal, or could it be more regional? I mean, if you did a Pareto analysis of what a problem is in a certain area, it may be different, and it may be more cost-effective for that region to focus on something differently.

**Dr. David Blumenthal, National Coordinator**

Let me—what I've—what we've heard so far is making broader reference to chronic disease as opposed to one, and I think—I'm sure that the workgroup would have agreed with that. These were just illustrations. They are illustrations in the sense that the question would be, "Do you want to single out chronic diseases and make comparable quantitative agendas or objectives for each of those chronic diseases?" The comparable objective would be for—let's say for childhood obesity, to reduce it by X percent. And I know it's hard to do that on the spur of the moment, but if we want more chronic illnesses

to be mentioned in this vision, we at least have to think about whether we can imagine specific reductions that are realistic and achievable under optimal circumstances in those particular illnesses.

Children—clearly an important group to—not to lose track of. The emphasis on efficiency—we would—it would be helpful in that regard for—to have, again, some specific outcomes related to efficiency. Privacy and security—there—that’s one that’s—I think would be particularly interesting to try to quantify, even if it’s only in terms of the level of confidence that the public has in our health information system as a goal, looking at what it is now and looking at what we’d like it to be. [Inaudible] the improvement of experience of care—another one that would be interesting to try to specify. And some levels of experience with care are quite high at the current time; reducing—improving them may be challenging. On the other hand, some may be lower and are more readily improvable or—and also, there may be some that are more important to improve than others.

So I guess what I’m saying is, what I’m mostly hearing from the group is that we should be broader. We would welcome any comments that they would have about other quantitative achievements or goals that would inform our work going forward. Sure.

**[unidentified speaker]**

[Inaudible] Part of what I’m suggesting is that, right now, we don’t measure patient experience of care systemwide in every setting. That’s an issue. So when we think about 2015, first getting to even measuring it in the first place—and certainly, there will be areas for improvement. The boards are doing it now in some ways, so there’s some good evidence out there.

**Dr. David Blumenthal, National Coordinator**

Judy?

**Judy Faulkner, Epic**

I think one of the things that you said in the very beginning which was extremely important was, it has to be both ambitious and implementable. And I think at some point, we’re going to have to stop, look at these, and say, “Does it meet those two criteria?”

**Dr. David Blumenthal, National Coordinator**

Absolutely, and that’s where we’re going to go next. So I think, you know we’ve painted a picture. It’s still a more Jackson Pollock than a realist picture, but we’ve begun to paint a picture. And the—and we don’t necessarily have, you know, firm end points yet, but we could work toward them. Paul, you wanted to say something?

**Paul Tang, Palo Alto Medical Foundation**

Yeah, I just wanted to give you an indication of how the workgroup discussed it and get your feedback. So one is, we could either try to measure everything for all diseases; or the other is to make sure that we have put in place the capabilities to effect all things. Another hedge was, we wanted to track NP– National Priorities Project that was convened by NQF is a group that is trying to track what are the—today’s national priorities, or today’s and the future national priorities. And that might be one way we say, “Let’s measure those things and keep tracking – evolve as the situation evolves.” So those are a couple things we wanted to just mention and get your feedback. Is that an approach versus measuring every disease or every outcome?

**Dr. David Blumenthal, National Coordinator**

Yes, David.

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

I really support that, Paul. And I do think, though, that like the comment Adam made about the Preventive Services Task Force, we have established bodies with good scientific methodology and so on, and National Priorities Partners is kind of in between. It's a policy-shaping body. To the extent we want to hitch a ride on the work of other established bodies, that may be very sensible and have some convergence in the signals that are being sent, whether it's PQRI or Preventive Services or NPP and, in that case, taking something like the area we mentioned earlier, overuse, which is a discrete area in the NPP. One thing we would have to think hard about is what—and even in 2011, do we have in place the capability of measuring current performance, even apart from intervening in current performance? In all the areas that have 2015, we want to be able to report on our progress, so we'd have to drive back to the immediate installations of tools to support our objectives. And in general, I think if we get clear today or otherwise about our 2015 outcomes, we should draw a thread back from each of those to 2011 and say, "Are we going to be in a position to assess our progress?"

**Dr. David Blumenthal, National Coordinator**

So that would be a vote for making sure that we inst—we get into installed systems the data capture that we need. That—am I interpreting that correctly? And the other point I heard was the importance of making any measures that are part of the health information technology work consistent with those that are being used by other payers and other groups that are developing measures and policies. That—Tony?

**Tony Trenkle, Center for Medicare & Medicaid Services**

I think that's critical, because we need to look at what are the various drivers that are going to get us towards these goals. And the meaningful use under the Incentives Program is only one, and it's also not a mandatory program; it's a voluntary program. So unless we include other drivers and look at other payers and other efforts that are going on and making sure we're harmonized, we won't be able to get to these goals just by meaningful use and the Medicare and Medicaid programs alone.

**Dr. David Blumenthal, National Coordinator**

Farzad?

**Farzad Mostashari, Co-chair of the Working Group**

Yeah, and I want to clarify or highlight that the focus here was not "What is it that we want to see in health in 2015?" It's "What is it that we think—necessary vision for us to have in guiding the meaningful use discussions of what is it that health IT can play a major role in?" So that's some of the challenges. Childhood obesity—huge issue. It's not clear what the role will be beyond, you know, the measurement and monitoring of it in terms of interventions, because there is no **USPS DF** intervention around childhood obesity that we can implement and seek adherence to.

Similarly, on the efficiency front, one of the things that the magazine articles by O'Toole that have gathered a lot of attention—that was remarkable was the absence of feedback on cost and efficiency—overutilization information to providers. But the best source of that information is not the provider's own electronic health record system; it is the claims information that is—you know, potentially could be leveraged. So we have to be clear about the goal for here. What we were thinking about was, "What are the objectives that we think are important North Stars to guide our design of electronic health record use in doctors' offices and hospitals?"

So some of those, I think, we'd have to be more creative about; for example, being able to receive – imagining the capabilities to—for health plans, potentially, in a consolidated way, to produce efficiency

measures but then present that to providers [inaudible] EHR. I'm not sure, you know, we have enough—thought enough about that.

**Judy Sparrow, ONC**

A comment on the phone?

**Dr. David Blumenthal, National Coordinator**

Yes.

**Charles Kennedy**

Hi; Charles Kennedy. You know, when I looked at these vision statements, they're all clinically related, which, in general, I applaud, but there's not one technical vision statement. And I think that might be something we want to correct. One of the things that worries me a bit about our current approach or that—many current approaches I see out there is that you never get a single representation of the patient. You have multiple different representations of the patient, depending on who's housing the record. And our experience—my experience in health plans and other large organizations is, multiple representations of the truth creates significant problems when you try and use the data for informatics and analytics. I think we should consider some kind of technical statement here about building a foundation that supports these things.

**Dr. David Blumenthal, National Coordinator**

Thanks. Christine?

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

I think this is one of the key—Christine Bechtel, by the way. One of the key tensions that we had on the workgroup was really around, “Do you try to, you know, drive the capacity to collect the data and use tools that will drive improvements, or do you try to drive the use of the information?” And one of the things that I think is important is that it is important to capture data structured and coded, but this isn't about meaningful data capture; it's about meaningful use. What I like about the goals on the vision slide is that it does drive us to how information is actually used to improve health outcomes for patients. I used the example in the workgroup of my own, you know, soon-to-be, hopefully, former physician who uses an EMR, and I—there is no difference. There's absolutely—they collect the data electronically; they don't use it to reach out to me, to help me manage care, to remind me about care; there is absolutely no difference. And that's really what I think we have to avoid.

So getting to the idea of balancing the tension—and at some point, I really would like to go to slide 21, which has that teeter-totter, and I think it's leaning the wrong way here, because I think you've mentioned [laugh]—you've left out two key points, so I'll just do a Julia Roberts at the Oscars and do my piece now, which is—on the left side you're missing two things. One is, the incentives come very early in this process. So when we think about balancing the tension to drive the use of information to get to clinical, you know, improvement, we have to think about providers adopting what is really meaningful data capture and then walking away the next year or 2 years later, because the money isn't robust enough in the out years for them to really make those investments in workflow and process change. The second thing is that those extension centers are a huge resource. They ought to be on the left side, not underneath. Those two things alone should not only balance out that scale but tip it back to the left. Rant over.

**Dr. David Blumenthal, National Coordinator**

Yes, Richard.

**Rick Chapman, Kindred Healthcare**

Rick Chapman from Kindred Healthcare, and I would like to—I had the same comment that Christine had, which was, first, [inaudible] to congratulate the group on a wonderful report and a well-thought-out report. But as it seeks to inform the other workgroups, a question that comes to mind is, “Are we sure that the current payment methodology will allow our phased approach to work? Will there be sufficient funding out in ‘13 and ‘15 to continue that?” And it brings specifically to our Certification and Adoption Workgroup—what comes to mind right away is, “Well, gee, if I install in 2011 or 2014, do I have to be—is the system that I have still certified? If I install it in ‘11 and it’s in ‘13 and ‘15, does it have to be recertified?” I certainly have to achieve a different level of meaningful use. And I think these are all great questions to ponder, but what I wonder is, in the provision of HITPC as it relates to the funding formula for how you—one would earn funding under this, if there’s sufficient incentive to manage it. I certainly agree in the incremental approach, but I just want to make sure that as we think about it—and did you all contemplate that in your deliberations?

**Dr. David Blumenthal, National Coordinator**

Farzad?

**Farzad Mostashari, Co-chair of the Working Group**

One of the—there’s two issues going on here in terms of the things on the right, right? One is the currently available technology capabilities, and that is calendar years, right? The technology’s going to be more ready in ‘13 than it is in ‘11 and so forth. The other is the practice’s readiness. And as David pointed out, different practices are going to be going live on a system in different years. So there is practice time and there is calendar time, and both of those are relevant. So one could imagine that if I am going live on a system for the first time in 2014, you may have different—you may have the vendor criteria—the certification may need to be the 2013 criteria. But what we’ve kind of laid out here is just the 2011 now, for a practice going live on or before 2011. We have not, I don’t think, definitively established whether the practice who goes live for the first time, for the first year in 2013 or 2015, would have to do all of the above. So I think we can—we have some time to figure out that issue, if that makes any sense.

**Dr. David Blumenthal, National Coordinator**

That’s a—it’s a very important question. And one answer might be that the clearer we are on where we’re going, the more likely it is that vendors will be able to design systems that will be capable of getting us there over time. But I don’t think we can make declarative statements about what certification in 2011 will mean for 2013 at this point.

**Charles Kennedy**

Yes, I was only wondering what the flexibility might be of this group or your office to make recommendations to some—in some way, maybe affect, to the extent we think appropriate, how these incentives are paid out based on these discussions that are going to come in the future.

**Dr. David Blumenthal, National Coordinator**

We can’t change the law here, but we can make recommendations about implementation of the law. Yes, David.

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

This discussion reminds me: I think it’s worth our considering—maybe you’ve done this—stating very specifically our 2013 objectives and criteria and looking at 2011 as a formal way station toward a more aggressive set of objectives for 2013, because of all the issues we just talked about, sending a strong suit to the vendors, to the providers, to Congress and others that we have a set of milestones which achieve a significant component of this vision or an increment of it. And then we realize that between the next 18–

24 months, people will have to be getting on the road at different on-ramps, and we accommodate that in the 2011 criteria.

**Dr. David Blumenthal, National Coordinator**

Great. Gayle?

**Gayle Harrell, Former State Representative from Florida**

One minor—one point, and it's not really minor, that I would like to bring to everyone's attention is, as we look at these—the overall vision that we are going, this vision establishes really a roadmap for where we're going for the internist, for the generalist. I think we need to also realize that the health care is also broken down into many specialty groups, and I don't see the vision for where we're going to go for our surgeons, our pathologists, our—even referencing to mammograms for OB/GYNs. I think the vision needs to really hone in on how the players in the health care family are going to fit their pieces together and how they—I don't know many pathologists who measure and, when we get down to the specifics, who are measuring A1c's or are measuring various components of the kinds of things that you're doing. You don't fit together the whole health care puzzle and all the pieces. This is set for the internist. This is set for the medical home. It's not set for all the pieces that have to come together that really is what happens in health care.

**Dr. David Blumenthal, National Coordinator**

Yes, Deven.

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

This is Deven McGraw. Gayle, I think you definitely have a point, although I'm not sure that we haven't done that. And I think we also need to think about where the priorities for Federal funding ought to go with respect to improvement in the health care system. I had somebody come up and ask me, "What are going to be the meaningful use criteria for the dentists who are eligible to receive the funding under the bill?" And my thought was, "Well, I don't think there are Medicare dental reimbursement provisions." But even if there were, I mean, I do think, realistically, we have to think about sort of, again, thinking, "What are the outcomes we're trying to achieve?" So therefore, in terms of what we're trying to stimulate with respect to data collection and meaningful use, what does that look like, just from a realistic point of view?

The other thing is, medication errors are not just for generalists; that's across the board. And again, I'm focusing on—for just of some of the more specific, achievable vision outcomes that we have here, and there definitely was a desire to sort of be more broadly focused, and I heard that. Care coordination with respect to reducing preventable hospitalizations—that could be a surgeon's measure as well. If you do the operation right in the first place, people don't end up having to come back in. There's obviously more that has to do with that, but I'm not sure it is, in fact, limited in that way, although there may be agreeable—and I agree that there are some quality measures that are specific to certain specialties that we might think about incorporating, if not in 2011, then at some point down the road.

**Dr. David Blumenthal, National Coordinator**

I'd like to move the discussion—we're already doing this, but move the discussion along the way that David Lansky just suggested, which is—let's backtrack to 2013 and 2011 and see if we're—if we've—if the working group has presented a framework that we are comfortable with for 2013 and 2011. And keep in mind the general framework that they presented, which was mostly focused on clinical data capture in 2011, building the capabilities, if you will, for a higher-performing system but without an enormous number of outcome or performance change requirements; then moving to 2013 and, in a sense, pushing harder but with still limited focus on outcomes; and then focusing much more on performance in 2015. David has just suggested that in some ways, though the immediate, very, very strong regulatory

demands—practical demands on the department—on the government are to deal with 2011, 2013 could be a pivotal year for making sure that the transition from 2011 to 2013 works as easily as possible. Yes, Christine.

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

[Inaudible] I guess—I'm not sure that I heard—what I thought I heard, and what I would love it if David said, is that 2011 would get a lot more aggressive, because that's where the money is. And so, I would actually move some of the 2015 things into 2013; that's my take on that. But could you clarify where the money is going to get hooked to? Is it objectives, and that's where the measurement is going to happen? Is the—are the incentives going to be hooked to the measures themselves? Because I think it poses a different question, depending on the answer.

**Dr. David Blumenthal, National Coordinator**

I think the answer is that the relationship of funding or the incentives to meaningful use depends on the formulation of a definition and how the definition will be verified. So we need—you need a definition, and then you need a way to measure the actualization of the definition in practice.

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

[Inaudible] metrics, the definition is the objective. Is that right? In the—

**Dr. David Blumenthal, National Coordinator**

The metrics are the criteria for awarding. I think that –

**Tony Trenkle, CMS**

It's the demonstration of meaningful use, so it's in the metrics where you actually show that you met the criteria for meaningful use.

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

So just call them measures.

**Tony Trenkle, CMS**

Correct.

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

Got it.

**Dr. David Blumenthal, National Coordinator**

David?

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

I just want to clarify, in response to Christine's question: My feeling is actually a blend. I think I would like it if, in 2013, we are able to—we are now able to specify, with great precision and fairly aggressively, targets for 2013. I think we should draw a small number of those into 2011. In each area that is a very important signal that the vision statement as it's coming together wants to communicate, we should draw some number of those metrics into 2011. For example, I think there should be something on decision support that demonstrates you are actively doing decision support based on some connectivity in 2011. I wouldn't overextend the scope of that, given the—what's achievable, and I would certainly talk to our colleagues and say, "What's achievable in each of these areas?" whether it's decision support or connectivity or CPOE in 2011 so that we have something concrete and specific and meaningful in 2011. But for 2013, I would have a full slate of stringent requirements so that people know what's coming.

**Dr. David Blumenthal, National Coordinator**

Neil?

**Neil Calman, Institute for Family Health in New York**

A comment: I think what we're actually doing is, we're actually creating another incentive for people to adopt early, because as you—not only are we saying you get less money as time goes on, but the bar gets higher and higher at the entry point. And I'm not sure—you know, if that's what we want to do, I think that's okay, but I think we have to be really conscious of that, because there are real—for those of us who have implemented, there's a sequence to which you can develop the capacity within your system—within your delivery system to use the information. So first you capture it, and then it needs to be captured for a while before you have anything you can evaluate or look at in terms of quality. And then you need to overlay a set of improvement activities on that if you really want to be able to look a year or 2 down the road to see if that's—if the quality has really improved.

So I think what we're basically—you know, what we really need to think about is whether or not we need to talk about first-year adopters, second-year adopters, third-year adopters as sort of an overlay of this, because if we just talk about 2011 and 2013 criteria for meaningful use, somebody's going to look at the 2013 criteria who haven't adopted earlier and say, "This bar is now unachievable for a new entry into the world of electronic health records." And I think it will be unachievable, because it's going to require things that will have been in place. For example, you can't really open up your patient portal on the first day you have your electronic health record in place. I mean, there are things that require some sequencing of these activities.

So I really hear us talking about kind of two timelines, and I think we're confusing these in our conversation, and it's making it difficult to sort of nail things down. The one timeline is what we'd like the system—our delivery system to be able to do, and the other timeline is like, "So somebody flips the switch today; what can they actually achieve in the first year, the second year, and the third year of their use of that technology?" And I'd like to just have us think through which of those we're talking about.

**Dr. David Blumenthal, National Coordinator**

Farzad?

**Farzad Mostashari, Co-chair of the Working Group**

That is much more articulately put than what I tried to do earlier about the two timelines. Thank you, Neil. That's right. And the legislation provides for funding for practices that go live in given years for up to 5 years. So if you're in—you know, if you go live in 2013, you can get 5 years of funding. So—and then the question is, "What do you have to do in year 1 to show it, year 2 to show it, year 3, 4, 5?"

So now, what—I don't know that we have to answer that today, but we have to think about it today, because what we have to—in the first year, the two timelines are the same, right? 2011 is year 1 of all the practices that are ready, and it's year 1 of the incentives. But we may want to have that as—and we have—fortunately, we have some time to do that, but we may want to have that—have year 1, year 2, year 3, year 4, year 5 requirements for practices and, you know, for the cohort—the escalating requirements.

**Dr. David Blumenthal, National Coordinator**

So one of the things that I don't think we've ever discussed is this question of whether meaningful use—the timeline for meaningful use is calendar years or adoption years. Actually, it's not really adoption years; it's meaningful use years. So if your meaningful use year 1 is 2013, do you get rewarded in 2015 for

having done what someone else did in 2013 in the second year or third year? That's an interesting question. It changes—it completely changes the clock. It's, in some ways, more realistic about what David called the theory of change. it—But some might say, “Yeah, but Neil's wrong: In 2015, the systems will be good enough so you can do them—everything the first year that you could only—that took you 4 years to do if you just adopted in 2011.”

**Farzad Mostashari, Co-chair of the Working Group**

Yeah, so you're right: The systems may be able to do it, but the delivery system can't. The HIT systems will be able to do it, but the delivery systems can't, because this is not just about the technology; it's really about providers becoming comfortable with it, transitioning their systems, and learning how to use information to improve quality, learning how to not only connect with public health but use the public health information to change what their providers are doing. That's really what that goal is, and so that—it takes a while to get to that goal; whether you have the most advanced technology on day 1, it's not going to get you there.

**Dr. David Blumenthal, National Coordinator**

You mean there are humans involved here? Is that the problem?

**Farzad Mostashari, Co-chair of the Working Group**

Just one or two.

**Dr. David Blumenthal, National Coordinator**

Jodi, do you have a clarification?

**Jodi Daniel, ONC**

One point that I think might be helpful to this conversation is that—when we're talking about two timelines is that we're also talking about two things that have to happen for the incentives to kick in—is, one, they have to adopt a certified system, and the other is that they have to be a meaningful user. So it's possible that the technology has to continue advancing by calendar year, but the meaningful use is based on adoption year or, you know, when the doctor kicks in so that the technology is continuing to advance but that the provider might not have to demonstrate certain outcomes their first year that they're using the system. So those are just something to play into the discussion.

**Dr. David Blumenthal, National Coordinator**

Tony?

**Tony Trenkle, Center for Medicare & Medicaid Services**

Yeah, just to clarify: We can't have different tiers of meaningful use. So the meaningful use criteria that are set in 2013, whether you're a first-year user or a third-year user, is going to be the same. So it's—maybe that's a disincentive for someone to join up in later years, but that's the way the law is written, and it can't be—it's an up-or-down type of thing.

**Dr. David Blumenthal, National Coordinator**

Paul?

**Paul Egerman**

Yeah, it's—I was going to say, there's also—this is Paul Egerman—there's also another objective we need to keep in mind, which is, by 2014, we're supposed to have universal usage of electronic health records. And so, you know, we don't want to make it impossible for a provider who hasn't adopted yet to

use records that are 2013. And so, I believe there's a number of challenges here, and I'm not sure I know what the right solution is, but there are a number of challenges.

**Dr. David Blumenthal, National Coordinator**

Scott?

**Scott White, 1199 Training & Upgrading Fund**

Scott White. Tony actually trumped my comment, but if we were going with Dr. Neil's comment, we would have to have almost a catch-up in the meaningful uses, because you would extend out the criteria to a point where there would be such disparity between the doctors' offices that I think you would have to—a 5-year—and then if you came in year 3, you'd have to be done in 4 years; I think it becomes too difficult. So—but Tony's comment trumped me completely.

**Dr. David Blumenthal, National Coordinator**

Let me try to get us focused a little bit. So the comment that David made was the only comment I've seen that actually—that we've actually made that sort of looks at the criteria in a general sense and says, "There are some things that I think are in 2013 that ought to be in 2011." Is that a general sense around the table? Or are there some things that are in 2011 that you think ought to be in 2013 or 20—or not there at all or, you know...? Yes, Judy.

**Judy Faulkner, Epic**

Yeah, a couple things. One is that "Inpatient" is very heavily nursing, and there's a surprisingly little amount of nursing in 2011. And the electronic MAR, which is in 2013, was part of the—some of the standards that were out earlier, and a lot of vendors already do that. I think that could be moved into 2011 without many adverse problems.

The other thing is that, in some of these pictures, it shows data collection up front. And there's a lot of reporting that requires data collection. And yet, if you look at—what is it?—the Conduct—where is it? Oh yeah—"Record Clinical Documentation" in the "Inpatient," I don't know of any of the major systems that don't do that. I think that could also be moved in.

This thing that worries me about what's already in there is some of the reporting that's going to require an awful lot of physician or organization time. And that, I think, is a little scary. Some of it is stuff such as percent of the lab results delivered electronically. There's a lot of things in there that I think, if we look through, we'll see it is stuff that's delivered electronically versus the stuff that isn't. How do you keep track of a number of things that look like you have to have the simultaneous paper counter as well as an electronic counter? So there's a number of things—if you look at them more deeply, I think you'll see that there's a lot of behind-the-scenes—people are going to have to keep track of paper more.

There's another concern that I have also in what maybe should be moved out. In the picture on screen 24, percent surgical patients receiving BTE prophylaxis—again, I assume you mean "appropriate." But does it become easier, then, just to give everybody one of those tent stockings and say, "Okay, we got it," than have to figure out what does it mean to do those things and do them right.

So I'm nervous about the extra time spent from the provider organization and the individual provider. Some things, I think, can be moved in without a problem; some things, I think, when we look at, they're going to cause big problems.

**Dr. David Blumenthal, National Coordinator**

Are those things that are okay to demand but should be moved out, or just things that you think are problematic at any time?

**Judy Faulkner, Epic**

I think they're things that are going to need some discussion on—exactly how do you implement and achieve this, and what overhead is it going to have, and how can you do it in a way that's going to give you a lot of the same results but won't require that organizational overhead that's going to take them away from other things?

**Dr. David Blumenthal, National Coordinator**

Yes, Gayle.

**Gayle Harrell, Former State Representative from Florida**

I have—I agree absolutely with what Judy is saying. I think we have to look at what's achievable. This is a very aggressive model that I'm looking here. When I look at this and I realize—just having been to the University of Florida and looking at the system and talking with the physicians and the medical system with three different hospitals and many physicians—they run 35 clinics. They are very concerned about the time frame of doing this, because they are looking now to do a physician order entry system in their clinics. It's going to take at least a month of training for each of those clinics, and they're going to do it sequentially. You're talking 35 months out there to get their physicians up and doing this. They then are anticipating, at least from their prior experience, at least a 30 percent—33 percent drop in productivity for 3–6 months before everyone is comfortable in doing this. This is very, very aggressive. And I have great concern that it is, within the time frames, going to be very difficult to achieve. And how many—our goal is to have widespread adoption by 2014; 2015, we want all physicians to be using electronic health records. We then have to say, “Do we have the infrastructure in the States to do the exchange?” And when you look at the definition of electronic health record, “electronic health record” implies exchange outside your enterprise. I am not sure—as opposed to an electronic medical record, which would be within your enterprise. So do you have—are we setting goals that are unachievable? We don't have infrastructure to handle the exchange of physician orders. What are we really—I think this is very, very aggressive, and I'm afraid we will set ourselves up for failure if we are not a little more specific and really take smaller bites of the apple.

**Dr. David Blumenthal, National Coordinator**

Mark and then Neil.

**Mark Probst, Intermountain Healthcare**

Mark Probst. You know, we all see the world through whatever window we're looking through. And so, when Judy went through her list, I could see exactly where she was coming from. As I go through that list, the data items—they're relatively straightforward—and items that we could get to. But then when I look at something like CPOE and I look at the change requirements that Gayle was talking about, it becomes very difficult.

One of the things I think we have to look at is—and I like the concept of data gathering and each of the pieces, the steps we went through, but if you go buy a packaged system, you're buying more than data gathering. You're going to do more than that. You're going to do nurse documentation; you're going to do all these different components. And what we're trying to do is get people on that road. And I think it was David who said, you know, “We're all getting on at different on ramps throughout this.” I think we have to keep that in mind.

But I still really like the structure. I do think there is some discussion that needs to be had, because for some organizations, they've approached it a little differently. And some of these may be more easily attained, and then, for some, it's going to be significantly more difficult. And you know, we're just going to have to layer that in across this plan. But I really—I think we do need to be aggressive in pushing this forward, or we could achieve very little.

**Dr. David Blumenthal, National Coordinator**

Neil? [Inaudible] the phone?

**Neil Calman, Institute for Family Health in New York**

I just wanted to address Gayle's comment. And you know, I don't think that we should create policy based upon one organization's conjecture of what they think is going to happen when they begin to implement electronic health records and their rollout timeline over 36 months. I mean, that—to me, what that says is, there's an organization that's not concerned that 36 months from now, one of their major facilities is still not going to be supported by electronic health technology, which to me is a really serious deficiency.

So, you know, I will just tell you that our own experience was that we experienced a 20 percent reduction in productivity for 4 weeks and that since then, we've had a 20 percent increase in productivity since the implementation of HIT compared to the entire period that went before. So if you start thinking about that as a model, you know, it completely changes your perspective. And an organization would look and that and says, "It's crazy to do a rollout over 36 months when we could be experiencing our 20 percent increase in productivity 5 months from now across our entire organization."

So I think it really depends a lot on how we project this. And I think that's why it's so important for us to focus on places and models that have worked as ways of driving this technology, because we all know places that are—and I'm not saying this about your vision, but we all know places where there have been disasters based on bad advice, bad management, bad systems, bad everything. But I think we're beyond that. We now have lots of models where there's been good management, good implementations, with good products, with good experiences, and we should start to focus on those and say, "What are we able to achieve?" because that has to be the vision that drives this; otherwise, we're going to be at this forever, and I don't think that's our goal.

**Art Davidson**

David, comment from the phone?

**Dr. David Blumenthal, National Coordinator**

Yes.

**Art Davidson**

Hi, this is Art Davidson. I thought the committee was going to try following what was a suggestion from David Lansky to take the vision and work our way backward to 2013 and 2015. And from the earlier discussion, it seemed like we needed a statement in the 2015 vision about efficiency. I think there—the most recent discussion points to maybe reiterating what Charles said as well about a technical vision statement about 2014 and having EHR available to all Americans. And maybe we'd throw into that as well PHR.

And lastly, I think a statement on the vision for 2015 might actually think about what David Lansky said regarding change. I mean, change is not going to happen between now and 2015 and be done. We need a process to move forward beyond that. So if we could create some vision statements that deal with efficiency, some technical statement, and then this process of change, then we can start moving

backward, because I don't know that we're going to achieve identifying things in 2013 and 2011 until we've fully tagged those things to our vision for 2015—what we expect to happen.

When I try to look back at the 2013 slide and—it doesn't seem like we have all those things embedded at that time and that, you know, we need to take these incremental steps. But it seems like the work—the excellent work that Farzad and Paul have done leading us for 2015 statements could be tweaked, and then we could take the—what I thought was the effort now is to go backwards in time and tag things that bring us toward that vision.

**Dr. David Blumenthal, National Coordinator**

Arthur, if I could ask you, are there some specific things in—that you think should be in 2013 or 2011 or moved between them that you think would get us closer, or do you think we just don't have a clear enough directional—clear enough direction yet?

**Art Davidson**

Well, I think there were some comments from David in some e-mails earlier about efficiency, and we might ask Charles as well what he was thinking about. But David had mentioned things about using the right medication or right test and less duplication of testing. Those sorts of things could be measures of efficiency that we consider at this point—and making sure that we have a system that's capable of making that measurement. I don't know that we've even gotten to the point of thinking how that would be done. And that might be something that we could consider as we start collecting data for 2011.

**Dr. David Blumenthal, National Coordinator**

Do you have any specific thoughts for 2011 or 2013? I mean, efficiency I hear for 2013. Anything in 2011 that you think should be there that isn't?

**Art Davidson**

I don't have anything in particular right now. You know, the committee was not—we're under such pressure to sort of put forth the meaningful use decisions and descriptions that we have, that Paul and Farzad have put forth, that I don't know that we had time enough to really deliberate on that. And the comments from the group have not particularly, to this point, given us anything to point to.

**Dr. David Blumenthal, National Coordinator**

Okay. David?

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

I have tried starting to collect some of the examples in the efficiency area that I think—there are some things we could use to populate a 2011 and a 2013 cell. But another way to—I'm thinking about it is taking a category like drug safety, which is a goal; it's part of the vision statement. We don't right now have very good data routinely on a practice within the setting or the enterprise on terms of adverse events and avoided adverse events. But I think we could enable that data capture from the outset, and I would want to talk to Tony about ways the CMS examining or auditing—monitoring that data capture of adverse events and avoided adverse events.

But if we have a goal of 2015 or 2013 reduction in adverse medication events, we can capture them in 2011 systematically. Since we will be strengthened in our ability to detect potential—or avoid medication errors by having access to the dispensed medication data which is external to the practice through an RxHub, SureScript, or Medicaid or other repository—if we take a thread like that, I think it could combine the—looking back from 2015 to the present, enhancing the—enabling the connectivity to an external set of data which the one practice doesn't have; enabling decision support; and beginning to capture data

which is of great public interest and ultimately is also cost savings, as in Farzad's example, through one theme. And I think we should look for those kinds of high-powered, high public interests already connected to the e-prescribing implementation that data standards are already established. In other words, there's marriage of convergence that—if we really exploit them throughout the whole matrix, I think we'll get a lot of leverage.

**Dr. David Blumenthal, National Coordinator**

Yes, Marc.

**Marc Probst, Intermountain Healthcare**

Marc Probst again. So David, I'm not sure if this is what you said, but couldn't we, in 2011, close some of the loops? And Judy brought it up earlier. I mean, medication administration is bar coded. You know, that is pretty much embedded in most of these systems. Couldn't we, in 2011, close some of these loops? I mean, if we're going to do order entry, close that loop all the way around—that you know is going to have tremendous benefit and probably is achievable, from what we can see.

**[identified speaker]**

Was that similar to what you were saying?

**Dr. David Blumenthal, National Coordinator**

It sounded like what you—well, maybe we can get offline some of what that actually means for the meaningful use definition rather than clarifying it here. Yes, Christine?

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

I wanted to—I'm looking at patient-family engagement, and I just had a couple of things that I think we could slide around or consider. In the first bullet around providing patients with electronic copier access to their clinical information, I think we've got to add the word "timely." I think we also need to move secure provider messaging capability from 2013 into 2011. And then I'd like to see added to 2013 the ability to incorporate in the electronic record information that's been generated by the patient themselves—you know, height, weight, blood pressure, anything—well, maybe not height, because that doesn't change, hopefully, but you get the point there—and then also being able to make more robust the piece from 2011 around providing a copy or electronic access. I think that can be more robust than in 2013, where it really is some sort of—I'm not sure I would use "PHR" like we do here; I think it could be a PHR, but hopefully the market will evolve. It might be a portal; it might be something we haven't thought of—but some sort of consumer information tool, for lack of a better word. And then the last thing is, I think in 2013, we have to begin assessing patient experience of care. That's in 2015 now.

**Dr. David Blumenthal, National Coordinator**

Okay. We're getting—yes, Adam.

**Adam Clark, Lance Armstrong Foundation**

One question is, we look—as I'm now looking at the 2011 objectives and thinking about it, where it mentions maintaining active medication list, particularly for cancer patients as well as other groups out there, clinical trials are a key component. Will there be the capability to capture patients who are on a new drug in a new trial? Do we see this as something that is important in the 2011—in moving forward?

**Dr. David Blumenthal, National Coordinator**

That's a question for the committee. You know, there are—and again, we're talking here about general population versus specific illnesses—long-term/short-term burden on implementation balanced against other considerations. So if you asked me personally whether having the ability to identify patients in

clinical trials would be an important feature of an electronic record, I would certainly say, “Yes.” Having the ability to identify patients who are eligible for records—for clinical trials would be important. Having the ability to, for a physician, through decision support, take a patient with a diagnosis and see displayed for him or her the trials that are relevant to that patient’s condition would be terrific. Whether you would want that to be a 2011 definition of meaningful use is another question.

**Adam Clark, Lance Armstrong Foundation**

My concern is more making sure that, at one point, it does get included, because I think we’ll miss the mark. And I know pediatric populations were brought up earlier. Within the pediatric cancer community, so many of these children are on clinical trials. And I would at least like to bring it up that—a point to consider at least some core set ways to try to capture that information.

**Dr. David Blumenthal, National Coordinator**

Christine?

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

I agree with that, but I also think that it is part of a larger discussion that we should have around making some improvements in the areas of patient decision support; shared decisionmaking; educational resources, including connecting with relevant clinical trials. I think there is some confusion in the document about what each sort of is, so shared decisionmaking tools versus decision support tools for patients in more of an acute situation versus self-management tools, which is more of a chronic condition focus. I think there’s some work to be done in the next 2 weeks to clarify those.

**Dr. David Blumenthal, National Coordinator**

Judy, did you want to say something?

**Judy Faulkner, Epic**

A little bit on what Mark said a little bit earlier about the eMAR. And Mark, you mentioned that it would be fine to bring it over. The one thing I do want to say on that is, let’s separate what the vendors can do from what the organizations can do. Vendors can, for the most part, do bar coding; that’s fine. But for organizations, that can be a difficulty, making sure all the pharmacies are changed to enable the bar coding within there. So I would say move the eMAR over but not the bar coding.

Similar with reporting: Most of the organizations—we can do reporting easily. It is—does it add 3 minutes to the physician’s visit with each patient, and does it mean that the organization has to start keeping paper records because they’re comparing what is and isn’t computerized? So I want to separate what the vendors can do from what is really hard for the organizations to accomplish.

**Dr. David Blumenthal, National Coordinator**

Okay. Yes, Gayle.

**Gayle Harrell, Former State Representative from Florida**

Thank you very much. I would like to go to the improved care coordination section again and really look at—Judy brought up a thing about physicians or systems having to balance out what you’re going to do on paper versus what you can do electronically. Are there going to—when you talk about the percentage of transactions in care for—which summary care records are shared, whether they’re fax or paper records or whatever, that becomes, again, more time-consuming for offices if they have to count how many faxes they send. Let’s be realistic on what’s achievable, and let’s not drive people away from doing this because they might fear that that’s something they have to do. I think we need to really look at that—those kinds of measurements and make sure that we’re not putting onerous burdens on people who want

to do the right thing and want to become part of this, but when you make it impossible or difficult for them to do, they may not choose to do it.

**Dr. David Blumenthal, National Coordinator**

Farzad?

**Farzad Mostashari, Co-chair of the Working Group**

We—the one thing that we did have a lot of discussion—and at various times, it bounced between 2011 and 2013—is around the use of order sets and decision support, which is really—order sets is a kind of decision support—and obviously has huge importance both for the inappropriate care/appropriate care guidance as well as potentially efficiency and medication safety. We—you know, we had—in the small workgroup, we had—we kind of had genuine differences, and I would love to hear—I mean, in terms of specific guidance, David has proposed moving it sooner to 2011 in this group, but whether—you know, what other people feel about that.

**Dr. David Blumenthal, National Coordinator**

Neil.

**Neil Calman, Institute for Family Health in New York**

Neil Calman. I had that circled as something that I thought we should move to 2011. I think, you know, we're not saying decision supports about everything everywhere, but I think beginning to use decision support as a tool in improving care is an important piece and can be moved right up front. There are some kinds of decision supports you can't really use until you have a history of data in your system, so you can't really ask somebody to remind you if you haven't had something if there's no history in the system yet. But I think there are other kinds of decision supports, for example, around annual flu vaccination and other things that can be used and have been shown, at least in our practice, to be very effective.

And the other thing is, I would just support moving the clinical documentation on the inpatient side to 2011. I think that's really important. For those of us who have tried to make rounds in places that are partially implemented, where the orders are in one place, the lab results are in another, the nursing notes are still at the bedside, and the physician notes are still on paper, it's madness, and I think it increases the probability of clinical disasters taking place. So I would move to see that moved to 2011 as part of the initial implementation, and I think the vendor products are there.

**Dr. David Blumenthal, National Coordinator**

Yes, Richard.

**Rick Chapman**

As it relates to decision support, I would echo Dr. Calman's words. And one thing I think we should consider is the inclusion of another term that's an enabling technology, which would be the, for lack of a better term, clinical data repository, which means—as a precursor to the ability to do quality assurance and studies, the data from which—upon which you could build some of the clinical decision support hypotheses or plans. I also think that because in the conventional systems that are there today—that we should strongly consider moving into 2011 electronic medication administration and we should debate the five rights, which brings in the identification concept for positive identification—you know, right patient, right time, right dosage.

I also think nursing process automation in its entirety and the clinical documentation should be brought in to 2011, because it's already there today in most conventional systems, and it would be the enabler for

the achievement when you begin to set specific goals and many of the measures that you've outcome. But the productivity specifically is in nursing process automation and then the elimination of the 33 percent of the paper-based chart that you can get to and the interaction between the departments to eliminate manual processes. That's the productivity improvement. And if you've ever seen a time consuming process, one of them would be quality assurance studies doing manual chart abstracts. And that's going to speak to clinical data repository as an automated means to form those queries and questions. So that which would allow—I would echo that part of the chart that would need to be automated that would allow physicians to visit the chart prior to doing rounds in an inpatient setting. And to formulate some of their questions and maybe contemplations of interventions and go forward would be a kind of minimum for it, because that's the state of the art today. It's just not implemented everywhere. So that's—those would be my recommendations.

**David Blumenthal, National Coordinator**

I would say that on the whole—and we're coming up against the time limit for this discussion—the tendency has been to increase the demands on the 2011 definition and somewhat increase the 2013 definition. And the—I think that's, you know, a perfectly reasonable set of individual reinforcements. I think when we actually list all those things and all the requirements and see them all together, we'll then have to reconsider whether these are feasible as a way of getting people started. I don't know; some of you who've spoken to the human element of this process—and that's going to be I think an important question for us to continue to contemplate.

**Charles Kennedy**

David, coming from the phone.

**David Blumenthal, National Coordinator**

Who's that?

**Charles Kennedy**

Charles Kennedy.

**David Blumenthal, National Coordinator**

Yeah.

**Charles Kennedy**

There were—there was a comment regarding getting more specific on the efficiency measures, and I'm sorry; I was on mute and didn't respond. So before we move on, if I could just offer a couple of quick measures in that space, one, would be a number of patients per a given time period that a physician could see—in other words, a productivity measure. Two might be a record access per visit rate. In other words, how embedded is the EMR in the overall performance of the physicians' daily activities? And then three, to the empowerment of the patient, maybe an external data access rate, where someone outside the practice is accessing a record. And then—well, I'll just leave it at that for now.

**David Blumenthal, National Coordinator**

Thank you. Judy, last comment.

**Judy Faulkner, Epic**

Is there discussion after lunch, or is this the end of discussion?

**David Blumenthal, National Coordinator**

Any more discussion of...?

**Judy Faulkner, Epic**

Of the general stuff after lunch like this, or are we going to...?

**David Blumenthal, National Coordinator**

We're going to go to the other two working groups.

**Judy Faulkner, Epic**

Okay. Can I make a couple comments? And one is, I think we have to be very careful as we look through this about running into patents. There's a few places where, when I look through it, there may potentially be patents. One is on device interfaces; another is on specific education to patients within PHR. So I think if we authorize something that ends up with—we should think about that—number 1. Number 2—the standards that have to be done for the public health areas. There are rules for public health, but they're going to be hard to implement without the standards being done for them. And thirdly, I'm concerned about the States and HIPAA, because if you have one State who has archaic rules that were based on paper and it says an "and" in there that has to be HIPAA and meeting State regulations—and State regulations—if they are vague, if they are archaic—and lots of other things, then we're going to get into—a group in New York and a group in Pennsylvania may do exactly the same things—may be eligible, but one doesn't get it and one does because of the different State laws. So I have a concern about those.

**David Blumenthal, National Coordinator**

Okay. Tony.

**Tony Trenkle, Center for Medicare & Medicaid Services**

Yes, just one final thing is, there is separate incentive programs. There's one for hospitals; there's eligible professionals, both under Medicare; and then there's Medicaid. So in looking at these—also need to think about "Is there any differentiation that will create a disincentive if we apply this across all these different types of incentive programs?"—for example, the Medicaid program, as opposed to the Medicare program.

**David Blumenthal, National Coordinator**

Judy, I think we need to do something with respect to these recommendations. And we had the option of accepting or rejecting or tabling them for future discussion. Do you have any procedural suggestions at this point?

**Judy Sparrow, ONC**

It sounds like we'd want to table them, I would think, and bring it back, right?

**David Blumenthal, National Coordinator**

Yeah. So I'm going to propose, unless there's objection, that we table these recommendations with thanking the working group for a superb presentation and an enormous amount of work and bring back a revised set of recommendations for the next meeting of the working group—of the Health Information Technology Policy Committee. Any objection to that? [Pause] Terrific. I think you all have earned lunch and, Judy, are there any...?

**Judy Sparrow, ONC**

Let me just say, there is lunch available for purchase in the lobby—sandwiches and soda for the audience. And I will bring sandwiches to the group here, and you may also purchase your sandwich and your soda. So thank you.

**David Blumenthal, National Coordinator**

And I'd like—if we could get back here in a half an hour, please... [Break]

Could I ask the committee members to take their seats again, please? [Pause]

I neglected to take care of one procedural matter at the beginning, and that was to put forth or put on the table the minutes from the past meeting. And I'd like to know if anybody has any problems with the minutes, and if not, I would entertain a motion to accept the minutes.

Judy, I don't know—did someone—one of the public commenter's is misidentified. Okay.

**Judy Sparrow, ONC**

I got that, so I'll change that.

**David Blumenthal, National Coordinator**

So there was motion to accept the minutes. Do I hear a second?

**[unidentified speaker]**

Second.

**David Blumenthal, National Coordinator**

All in favor?

**[all]**

Aye.

**David Blumenthal, National Coordinator**

Any opposed? [Pause] Minutes are accepted. So it was so rewarding to accept minutes.

All right, we're going to—I mentioned earlier we have a very intense discussion of the Meaningful Use Workgroup recommendations. I want to clarify that when we said that we tabled them, we didn't mean we had put them in the circular file—far from it. We just—that's really just a procedural matter to keep them before the committee until we can bring back a revised set of recommendations. So the workgroup is going to go off, take your comments into account, modify them, and bring them back for your consideration at the next meeting. So it's a—they live on for another day.

We're now going to talk about the Certification and Adoption Work Group. And this is just as important and just as complicated a topic as the last one, but I think that we are a little earlier in the time frame of the work of this group, not to say it wouldn't be important to move it along quickly, but it—we haven't gotten quite as far along. But I'd like to invite John Glaser and Paul Egerman and Marc Probst to go up to the front and talk about the work they've been doing. [Pause] So who would like to start? Paul?

**Marc Probst, Intermountain Healthcare**

I think Paul's starting.

**Paul Egerman**

I'm Paul Egerman, and what I want to do is, I'm going to take you briefly through the information about what the Certification and Adoption Group is all about. And it's interesting: Dr. Blumenthal said it's just as important as the meaningful use discussion. In the legislation, indeed, there are two hurdles a physician or an institu—hospital has to go through in order to get the incentive payment. One is that they have to

have a certified system; and the second hurdle is, they have to achieve meaningful use, and so this is important.

Our group is called the Certification and Adoption Workgroup. It deals not only with certification policy but also issues involving adoption or—which include things like workforce training issues, because fundamentally, the challenge that we face with these systems is not really a technical challenge as much as it is a people challenge, in terms of how we get people organized around these systems and how we get them deployed.

So you see up on the board there or in the slides the list of the Co-chairs besides myself. Marc Probst from Intermountain Healthcare, is a Co-chair, and we have John Glaser from the Office of the National Coordinator. This is the list of the members that we have here. We have—[inaudible]. So I think an example of training—[inaudible]—this one; thank you. Great—workforce training. Here are the Co-chairs. The members are Rick Chapman, Adam Clark, Charles Kennedy, Scott White, Latanya Sweeney from—we have Steve Downs from Robert Wood Johnson Foundation; we have Joseph Heymann, who's the chairman of the American Medical Association; and we have Terry Takai, who is the Chief Information Officer (CIO) of the State of California; and as I said, John Glaser is the lead from the Office of National Coordinator.

This chart here shows a little bit of the broad charge that we have. As it says here—is, we make recommendations related to the adoption of certified electronic health records. That includes these issues of supporting meaningful use and, you know, issues relating to certification and the extension centers and the workforce training.

We have some very specific charges. The first one—it says here to review the existing certification standard-setting processes and make recommendations within four months. Now, a couple of things—one is that we're involved with processes and policy; we're not making recommendations on specific items, so we're not saying specific features but rather the processes and the policies involved with standards and with certification. And then it also says here, for months, how John attended our first two conference calls and was just so impressed with how good a job the workgroup was doing that it was decided that we would actually complete our first recommendation in 1 month. And so we will be doing a recommendation on certification policy at—by the next meeting, which is on July 16. And then, as it says here, we will be providing periodic annual assessments of the performance of the revised certification standard-setting processes.

And then we also are involved with the extension centers and workforce training. And not a lot has been said about the extension centers yet, except that that really is an extraordinarily important and powerful resource, and so we will be involved with monitoring their performance and improving it. And then we will also be involved with monitoring, over the longer term, the overall adoption of electronic health records that support meaningful use. So a lot of the discussion that we had this morning about issues about—“Gee, should we move things from 2013 to 2011? Does that raise the bar too high? Will people be able to really adopt the systems?” We will be measuring all of that as we move forward. So those are the specific charges that we have.

This is a chart—a flow diagram that tries to show how it all fits together. It starts with this concept of meaningful use, feeding into the standards and certification process. Basically, there's additional feeds into that process, because we, of course, want to make sure that the standards and certification process reflects all the security, privacy, and patient access rules that are in the legislation. So a number of things will feed into the standards and certification process. That is sort of like a front end to the technical assistance that we will be providing, which will come through the extension centers; that involves, as you

see the arrow pointing down, the workforce development. And all those things together aim towards adoption.

And I think—so that's, like, an overview. What we've done so far in the workgroup is to start to do information gathering to gather ideas from various stakeholders as to what should and shouldn't be done through this process. I think Marc's going to tell us a little about that.

### **Marc Probst, Intermountain Healthcare**

Okay, I'll give you a quick status on what's happened. We've had two workgroup meetings. The first one, we were primarily getting organized and understanding the scope of what we were looking at and came up with a series of questions that we wanted to ask to get some input from various groups, be those vendor organizations or be those some of our peers in the industry. So we've gone out and done personal interviews; each of the members of the work group have done that as well as asked questions through e-mails and that type of data gathering. And luckily, there is very little controversy or input into this process. Everyone seems to be well-aligned.

So now we have about 35 pages' worth of input that we've organized into various categories. And I'll give you the questions that we've been asking, and that may open up for some of the discussion we can have today or input that you might have.

The first question we ask is, "Who should conduct certification?" And that could be a wide variety of groups. I mean, obviously, CCHIT comes out as an organization currently involved in certification. And we have quite a bit of input from that. "Should there be more than one certifying body? Given the complexity of what we're likely to have to do and from certification, is one body capable of doing that or would we need multiple bodies? What role should CCHIT play?" So they were specifically called out. "How should non-vendor systems be certified?" So self-developed systems or open-sourced systems—how should they be certified in the process? And things—questions such as research and development—"What might happen with research and development through certification of some of these self-developed systems?" Questions such as fairness and then "What are we certifying for? What's the purpose of certification?" were all questions that came up as we discussed that topic. "Should certification be viewed as a seal of approval process? Or even further into that discussion, how often should one be certified, or when is the system changed enough to be certified? Should certification be broad based, or should it be specific?" So we look—we know what—well, we have an idea now where meaningful use is going, and "Should that be the boundary for certification, or is certification something more broad than what meaningful use suggests? How should certification criteria apply to privacy aspects of the ARRA?" And finally, "Should the certification process also certify vendor fitness? Should it certify provider readiness?"

So those are the questions we've gone out—like I said, we've gathered a lot of information. And in our last call, I think we got through two or three of those questions in the 2 hours that we had on the call. So we do have a lot of work left to do as we look going forward.

So our next steps right now are on July 14 and 15. We're going to hold a meeting here to get a series of testimonies from various organizations that would like to do certification or that would be applicable to do certification, talking to physicians, talking to people that would purchase or have recently purchased a system requiring certification; and from that meeting, continue to gather our recommendations for this committee on July 16. And I'm sure we will be having several conference calls as well over the next month. So that's the status of where we're at and the things that we're doing.

### **David Blumenthal, National Coordinator**

So why don't you put some really tough questions to us [laugh]?

**Marc Probst, Intermountain Healthcare**

Can we change the acronym [laugh]?

**David Blumenthal, National Coordinator**

Any comments—thoughts about either the work direction or the questions? Yes.

**Gayle Harrell, Former State Representative from Florida**

Gayle Harrell here. Yes, I'd like to add some more questions to your list, if you would not mind. If there are not products out there for specific groups that are looking for an EHR that are not—that are certified, are you going to—how are you going to deal with that? For instance, if you're an OB/GYN practice, there's no electronic health record that is certified that meets the needs of an OB/GYN practice. How are you going to address that if you—in order to meet meaningful use and to receive reimbursement, you must have a certified product? There's no agenda in the next 2 years for CCHIT to do a certification of that. What about pediatric records? I know there's a process that's going forth with that. How about some of those other specialties out there, whether they're surgery practices, pathologists, radiologists? Where are you going with that? How do they integrate? What kind of integration are certif—is a certification process going to require for subspecialties?

**David Blumenthal, National Coordinator**

Questions or comments?

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

On the privacy and security issue with respect to certification, at CDT, we've done a fair amount of thinking about this, because, you know, I think the tendency is sometimes to think that there's a lot you can accomplish on privacy and security through certification, whereas we tend to think that there's a role for it to play, but it's not a replacement for policy. But I'd be happy to share those with you if you're—you'd take it.

**Marc Probst, Intermountain Healthcare**

I'd love it.

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

Okay.

**Marc Probst, Intermountain Healthcare**

Deven, that's a good point, because when we ask that question, that's the response we get a lot. [Inaudible] that's an issue for policies and procedures. In the health care organization, perhaps the issues can be dealt with by the accreditation organizations. But there is a role on this certification cri—I mean, certification's a chance where we get to talk about the software, and so we can talk about it there.

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

Right, I mean, to the extent that the technology actually enables us to do things on the privacy and security side that we in fact can't do very well in a paper-based system, then that's one place where certification can play a role.

**David Blumenthal, National Coordinator**

Yes.

**Gayle Harrell, Former State Representative from Florida**

As we move forward, if you—when you're looking at certifying bodies, if you say stay with just one certifying body that exists currently, if you open the door for more certifying bodies, are you going to have—what's the process to certify the certifier so that—because this becomes difficult. You can have groups that come together to certify, and you wind up really not meeting standards. So you—who is going to authorize the certifying bodies? Is that a role that the ONC is going to play? Is that a role that CMS is going to play? Who is really going to certify the certifiers?

**John Glaser, Senior Advisor-Office of the National Coordinator**

I mean, those are good questions, Gayle, all of them. And one of the options that this workgroup will look at is, "To what degree does ONC and the Federal Government develop the criterion that others certify against?" And to the degree that model emerges at all, there needs to be an accreditation process to deem someone a capable certifier. We've been fortunate that NIS has a lot of experience in guiding how people think about facing the pros and the cons. And so one of the mentions of Mark and Paul is on the 14<sup>th</sup> and 15<sup>th</sup>, and we'll hear from the NIS folks about "If you're going to do that, here are some of the things you ought to consider." But if you want—if we—the workgroup decides to go down that path, it'll have to address those questions you just raised.

**David Blumenthal, National Coordinator**

I was wondering if there—if you've given any thought to the adoption side of your work beyond—you have a series of questions related to certification—any plan related to the adoption part.

**Paul Tang, Palo Alto Medical Foundation**

It's a great question, because the adoption part is the biggest challenge we have. We don't really have a technical challenge; we have a people challenge facing us. And all we've done so far is simply listen to presentations from ONC about what are the plans for extension centers and workgroup training. And we've been trying to address the short-term needs to produce us some certification policy, because the vendors need that, and it's needed for regulatory process. But that's an area that we need—that we'll be focusing on after July 16.

**Marc Probst, Intermountain Healthcare**

I don't think we're doing this in a vacuum, so we understand the adoption criteria and requirements, but really our focus has been on certification.

**David Blumenthal, National Coordinator**

David?

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

I was just wondering how you're thinking about—I'll call it broadly—innovation or on anticipated developments in the technology, and how are you—in terms of people, for example, who'll testify on the 14<sup>th</sup> and 15<sup>th</sup>. How is the workgroup thinking about capturing the unpredictable and the opportunities for some of the meaningful uses to be met with emergent technologies or vendors who aren't on the scene yet and not locking in a set of incumbents, because that's what we know about today?

**Paul Tang, Palo Alto Medical Foundation**

That's a very good question. So far, all that we've considered is concerns that the certification process might somehow throttle innovation. It might create a barrier to entry for smaller organizations. So that has been raised as an issue, but if there's more that we should be doing, then we'd love to hear your feedback.

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

I just want to encourage you that whoever is on your cast of presentations next month—to include people from McLeod Computing and the Mobile Computing and the other sectors who might have in mind other solutions to some of our meaningful uses—that we'd want to see if there's a way for certification to accommodate them if they may not have a full, sweet solution but may have some other value add.

**David Blumenthal, National Coordinator**

Okay, any other questions or comments? [Pause] If not, thanks to the workgroup. We look forward to your next presentation after your additional work. And we'll move on to talk—to have the Information Exchange Workgroup present. We're going to have to change the name tags up there.

**[unidentified speaker]**

You probably should. [Inaudible]

**David Blumenthal, National Coordinator**

Oh, they're up there? Oh, brilliant [laugh]. I thought we were making history.

We have Micky Tripathi, Deven McGraw, and Kelly Cronin. Kelly, do you want to lead off?

**Kelly Cronin, ONC**

Yes, that'd be great. So obviously, our Co-chairs here are Deven and Micky. Deven is known to the full committee. Micky is currently the CEO of the Massachusetts e-Health Collaborative and, prior to that, was the CEO of Indiana Health Information Exchanges. Many of you know that's one of the leading health information exchanges in the country. So he brings a lot of practical and strategic thinking to this issue that the workgroup is going to be taking on.

Just to briefly review our workgroup members, we have seven full committee members: Judith Faulkner, Connie Delaney, Gayle Harrell, Charles Kennedy, Frank Nemic, Michael Klag, Latanya Sweeney. And then we included four additional people to round out this experience base of the group and bring in different perspectives, including three different State leaders who are involved in advance and health information exchange within their States, and all three instances actually happen to be within the State government. So it's Marty LaVenture, Dave Goetz, and Jonah Frohlich, coming from very different States at very different stages of development, and then Steve Sacks from the AMA.

So we have both a broad and specific charge. The broad charge is to make recommendations to the full committee on policies, governance, sustainability, architectural and implementation approaches to enable the exchange of health information and also increase the capacity for information exchange over time. Excuse the typos; we were rushing to get these slides done. The specific charges were make recommendations to the full committee within 6 months regarding priority policy areas and other issues that are necessary in the short term to exchange—advance the exchanges health information through the implementation of HITPC and then also to make recommendations to the full committee to inform and provide guidance on the implementation of the Nationwide Health Information Network.

So we're looking forward to working with the workgroup on this effort. There's obviously going to be a lot of close coordination with ONC so that we know that what we're thinking about internally, in terms of our implementation and planning around relevant programs and HITPC, are taken into account as we move forward.

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

Thanks, Kelly. We've met twice as a workgroup. The first meeting, we spent much of the time really looking at the draft charge and refining it a bit and had a fair amount of discussion on what we mean

when we say “health information exchange,” and are we talking just about the formal exchanges that we know are out there today and that we want to build in the future? Or are we also talking about, you know, exchange of data that occurs not necessarily within a formal HIE or RHIO infrastructure? And essentially we decided that we meant both, and that we will be dealing with issues that come up with respect to the formal exchanges as well as particular discrete issues that involve the exchange of health information that may not necessarily be occurring through a formal body. So that was the first meeting.

The second meeting really dealt with some general discussion about the grants to States or State-designated entities for health information exchange, which is under Section 3013 of the HITPC Act, and what we might hope to get—from a general standpoint, again, without talking specifics, what are some general goals that we might want to accomplish through those grants, and I’ll talk in a little bit about some of the discussion that we had there. And then we spent also some time on health information exchange and how that facilitates meaningful use. And so, I’m going to talk a little bit again about our discussion on the grant program, and then Mickey is going to talk about meaningful use, the topic du jour.

So in general, again, we were somewhat confined to talking in more general terms about what might want—really should be in the grant criteria, in part because, you know, this is an ongoing initiative, and there are likely several participants on the workgroup who might be potential grantees. So you always have to be careful about how much specifics you can get into, but nevertheless, you know, clearly what we’re trying to do here is really build the capacity for health information exchange across the country that leverages what we’ve got in existence today and then support further capacity building in areas where there bas—there really isn’t anything or it’s really just on the ground. And certainly the statute creates vehicles for that, but I think it’s going to be a challenge in the implementation phase to grow those exchanges that are at a fairly high-functioning level today while also making sure you are seating those that either don’t exist or are really just in the beginning stages, but again with the overall goal really being, you know, enabling the information flow for a patient-centered, evidence-based, and performance-driven health care system, which is also what we’re doing on the meaningful use side. So we’re all aiming to the same thing here, which is good.

You know, so some of the other concerns that are likely to come up and that will need to be addressed through these grants are, you know, obviously, we want them to be interoperable, both within the States or the regions in which they’re created, but also, you know, ultimately trying to create a national system here. And that is no small task. Scalability—sort of similar issues there with respect to whatever you’re creating at a—again, at a State or a subnational level—being able to scale that—and then, of course, the privacy and security issues that are raised that might actually be somewhat more unique to formal exchanges versus when you’re talking about exchanging data on a one-to-one basis, which has been characteristic of our health care system for decades.

So we identified some key issues that would need to be addressed along the way. Obviously, they need to—you know, the States are—and regions are going to need to figure out what works best for them. At the same time, you know, we do have some national goals and priorities that we’re trying to set here. So you know, kind of balancing the need for flexibility and not trying to create a one-size-fits-all approach while also making sure we’re actually facilitating the creation of a system here is an ongoing challenge.

Governance issues—you know, this is a discussion that, you know, began over the last 4 years and continues and is one that we’re going to need to resolve. And when talking about governance of formal exchanges, again, both within states or regions, but also on a national level and its closely related cousin, accountability, you know—and it’s not just about accountability for the receipt of Federal funds and how you spend it, but also, if you’re going to set standards and criteria for these organizations to meet, how are you going to make sure that they’re meeting them and how are we going to help them meet them?

And then ultimately, we want these things to be sustainable over time without needing to depend on public dollars. And that has always been a big challenge, and I think we hope that the grants will give us some flex—I think some of us hope that the grants will give us some flexibility to try out different models of financial sustainability.

So, Micky—and please add if I forgot anything.

### **Micky Tripathi**

Okay. I think you covered it, but we can cover it in the discussion as well. So I'll talk a little bit about the second part of our conversation, which was about HIE and meaningful use. It was really just the beginning of the conversation, because, you know, it's the second workgroup, and also because meaningful use wasn't yet available in sort of a definitional form for the workgroup to discuss. So we're really sort of, at a high level, just thinking conceptually about, you know, the interrelation between them. And as Mark Probst had described with the Certification Workgroup, we have absolute consensus already, particularly in privacy and security. There was no issues there. And we're ready to tidy up the final presentation and move ahead.

Just two things I would note, really, because there's no real consensus coming out of the group yet. Obviously, it was a beginning conversation to, you know, really just get different peoples perspectives on what these connections might be. But the first, you know, I think, overarching kind of understanding, I think, of the workgroup was that HIE and meaningful use are just fundamentally connected. And even though they're not programmatically connected right now—if you look at, you know, the HITPC provisions, they're not programmatically connected—they are fundamentally connected. It's very hard to discuss one without discussing the other in some way. And so we recognize that and then, you know, really left as a placeholder the further meatier discussion that'll happen once meaningful use is out there in more of a definitional form, you know, for us to actually start discussing the pieces and how they relate to health information exchange.

The second part of the discussion—and we put it in bullet form here—you know, some of the things that we talked about related to, you know, the importance in the way they're connected—the importance of setting high-level expectations for HIE over time, for example. And as you're looking back at the vision that Paul and Farzad had laid out, you know, you can already start to see how those connections, you know, might start to form, but I think that there's an alignment there that you want to make sure is happening.

You know, the last two bullets really speak to the fact that there's a lot of traction being made already in a number of States. You know, HIE, whether it's a noun or a verb, in both forms, even in the noun form, is actually making a tremendous amount of headway in a number of States. This is not just sort of coffee klatches operating now; you know, this is real organizations that are starting to do real things, and they're starting to develop this over time. So in a way, we're, you know, in parallel, you know, trying to line this up, but also in parallel starting to think—you know, the importance of developing the small P's and the big P's with respect to policy, I think, is going to be an important part of how we deal with this going forward as those States and organizations are developing governance policies, technical approaches—that we don't want to be undercutting, because I think most of us would agree that they're actually doing the right thing, and we want to make sure, you know, that we're setting objectives that they can actually, you know, keep moving forward on, because they are—you know, just as we were talking about with the provider organizations, you have partners—Intermountain Healthcare, Palo Alto organizations—who have moved ahead, and you want to be encouraging those organizations to keep moving ahead. So I think that's, you know, sort of a recognition as well and part of the conversation about that.

The second big topic that we covered was really just the beginning of a conversation of what might be some enablers—HIE enablers of meaningful use. And then we put just a, you know, few bullets to—really just to give a flavor of the different things that we talked about. Don't want to represent these as consensus, you know, kind of conclusions or, you know, that one had higher priority than others, but really more as a sampling of the things that we had discussed as—you know, just to give you a flavor, you know, of the things that we're probably going to be discussing going forward as we think about HIE and meaningful use.

So in terms of where we're headed, I mean, the immediate next steps are, first, to set some priority areas. And I'll back up to say that I think the first step is really going to be about laying out in a more concrete form what are the various dimensions of HIE and privacy and security, which is, you know, a part of it, obviously, that we want the workgroup to focus on—and really laying out those dimensions and then starting to have a conversation about what the priorities are now that we have a meaningful use definition that we can, you know, sort of bounce that off against. And then I think an important part of all of this is going to be identifying and aligning the interdependencies with the other workgroups as we think about what all the other workgroups are doing, both from a standard side and the policy side, wanting to make sure that's lined up. And then finally, you know, timelines, milestones, deliverables—the regular process kinds of things that we all have to get to.

**David Blumenthal, National Coordinator**

Great.

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

You know, we may be the one workgroup that doesn't have an enormous deadline looming over our heads—not that we don't have to move relatively quickly on a number of things, but it is. So, you know, will we have something by the next workgroup meeting? We'll definitely have something to report, but again, we're not under the same sort of really high-pressure deadline, which is actually nice. So I don't know if any of the other members of the—of our workgroup who are here want to add anything.

**David Blumenthal, National Coordinator**

Comments from other members of the workgroup?

**Gayle Harrell, Former State Representative from Florida**

I have one.

**David Blumenthal, National Coordinator**

Sure.

**Gayle Harrell, Former State Representative from Florida**

Thank you very much. The only thing I would like to add to what already has been said—and I think it's—I want to commend our leaders especially, Devon and Mickey, for everything they're doing to really pull the group together.

One of the things that really needs to be discussed and perhaps a little bit more is the—here again, the need for that national model and having that national connection, yet you want to keep the cauldron of innovation going on down in the States. And we don't have a model that everyone can agree on and look to that is the model for everyone. So you have that dichotomy, again, between looking to make sure that if I live in Florida, my record will be available when I come visit in Washington and that I—that at some point, that's going to be exchangeable. However, you don't—we need the flexibility, and I think that's

where we need to go—is to make sure that we maintain that level of flexibility and make sure that the States and local regions are able to connect at some point. And we have not set deadlines or timetables for that yet.

And perhaps this group can give us a better direction as to—do you—when we come to meaningful use—and this is where meaningful use connects directly with HIE—are you going to say, in meaningful use—do we have to have that connectivity—that interoperability in order to achieve meaningful use outside your enterprise? In other words, if you have a hospital system that's exchanging data within their system, do you achieve meaningful use simply by doing that in 2011, or do you have to exchange outside your system?

So I think we need to—our group needs some direction from the Meaningful Use Group as to how we set up that time table and make it incremental to achieve the meaningful use. I don't think, at the State level, by 2011, we're going to have the infrastructure in place to have complete interoperability.

**David Blumenthal, National Coordinator**

Neil.

**Neil Calman, Institute for Family Health in New York**

I guess I'll start with a question and then maybe make a comment. I guess my question is, "Are there people in your workgroup who have different visions other than sort of regional—the traditional sort of RHIO regional health information exchange kind of model all tying into some national exchange? Are there people in the work group who are bringing other visions to the table other than the one that we're currently—the path that we're currently marching down?"

And so, the reason I'm asking the question is because I think some of us—I'll only speak for myself—have less confidence that that vision is the one that will actually rule the day at the end of time. I think that, you know, there's—we—in every single slide, including yours, the business model thing comes up. And it's sort of like we always raise it as there's no business model or it's a difficult business model, but we don't really ever come up with real solutions for what that looks like at a national level.

That's one thing, and then the other thing is just looking at the experience in New York. You know, you have to think, if what Gayle's talking about is to come true, somehow these exchanges have to connect every single person in America. And I just can't imagine this sort of, like, letting-flowers-bloom-whenever-they-may thing is a model that, at some point, is going to connect everybody in every rural area and whatever, and somehow this spread will just sort of happen, and everybody will end up being connected.

So I think there are other models that have been, you know, sort of proposed. Using the vendors to play more of a role would be one; using the Internet to play more of a role would be another. I think there are people who are beginning to conceptualize other ways of sharing information—the PHR stuff that's coming out and people wanting sort of more control over their own information. And I just think, in this workgroup in particular, it would be incredibly important to have people at the table who have different visions of what the endpoint might look like at some point down the road, because I'm not convinced that the current model that we're working on is really going to take us there.

**Micky Tripathi**

When's our next meeting, Deven? Neil, you're welcome to join [laugh].

**Neil Calman, Institute for Family Health in New York**

I don't have the answers, just the questions.

### **Micky Tripathi**

I don't know the answer to the question of where—you know, what the spectrum is, and I think that's certainly, you know, something to consider if we feel that there are, you know, certain strong perspectives that are underrepresented. I don't think that we have any restrictions on who we can invite, you know, to join the workgroup. You know, I would point out, just as a point of reference historically, that, you know, [inaudible] —in one of my presentations, I have an article from the *New York Times* from 1905 that talks about telephone exchange—the telephone exchange market. And it points out at the time that there were about roughly 2 million telephone users in the U.S., and about two-thirds of them were covered by the Bell Company at the time. And then it points out in the article that the other one-third, about 700 phone users, were covered by 2,800 independent exchanges across the United States. It was 2,800; I checked to make sure that wasn't a typo. So—and you see how the phone system is developed today to the point that we don't even think about it. We don't even think that it's actually just network and that it was a point-to-point system for a very long time that started to converge toward a governance model. I'm not, you know—just pointing out that, you know, we are at a moment in time, and there are various models and can take various paths. But I take your point; I think it's a very good one.

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

And I think, you know, you can look at the—we didn't actually poll people to get them to put on the table what their particular preference was for exchange, but I—and perhaps I didn't make the point strong enough. You know, they're—the committee is not just—or the workgroup is not just dealing with “exchange” as a noun, because, you know, I—and this was discussed a fair amount, which is that there is no one model for “exchange” as a verb. We know we want to facilitate information sharing in the health care system. It doesn't necessarily mean that it has to take place through a particular exchange as a noun model. You can imagine how these conversations took place in the first meeting, where they were—the word “exchange” was flying all over the place, and it was interesting.

But, you know, I do think we're going have to be mindful of that, but I think you have to consider the topics that we took on in the first two meetings, one being a specific grant to State for HIE program, which is not the same as the amount of money that's going out to meaningful use, which also involves health information—exchange of health information, as we just discussed for the last few hours. But, you know, we're always open to, you know, thinking about—if we don't have enough representation from folks who, you know, are looking more at a one-to-one model versus the use of some sort of formal exchange infrastructure to have that input. But I don't believe that at this point, people—in fact, I don't think it is at all the case that they're tilted towards one model.

I would just add that I think the other thing that we talked about and, I think, have recognized for a while now—there's an evolution for a governance model and mechanisms. Right now, a lot of communities and States/regions have tried to organize in a multistakeholder group that has been called a lot of things over the years—sometimes a RHIO. So that's been sort of a model of governance that was at a point in time along this continuum of interoperability and information exchange that we'll see over many, many years. So I think that what we've talked about is to try to figure out what will mature over time and what forms of governance—what forms of technological approaches and policy—or privacy and security policies will have to enable not only exchange on the summary record between hospital and physician's office but general, you know, connectivity that works across a community and across regions and across States over time.

### **David Blumenthal, National Coordinator**

Adam?

**Adam Clark, Lance Armstrong Foundation**

Yeah, Adam Clark, Lance Armstrong Foundation. Going to the privacy and security discussions, the Institute of Medicine recently released a report on the HIPAA Privacy Rule, where they really made a strong recommendation that we need to differentiate between what is personal health information—so the information discussed between a patient and their physician versus other information that really is more for the public health record. And this is particularly important, and any type of chronic disease management—screening prevention where we can look at an intervention over time. Is the workgroup looking at this and trying to put in—maybe evaluate different policies or figure out policies that will differentiate those two different areas?

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

I think we're still coming up with our deliverables. I don't think we can say at this point, but it—that's—to me, hits at the heart of policies that facilitate the exchange of data and what does that data look like in different contexts. So I suspect that it will be, and we will at least be able to report on that at the next meeting—what we're going to do.

**David Blumenthal, National Coordinator**

Paul.

**Paul Tang, Palo Alto Medical Foundation**

One of the challenges in any information exchange is simply identifying the patient. And so, I'm curious: Is your workgroup addressing this issue of whether or not there should be a national patient identification number?

**Micky Tripathi**

[Laugh; inaudible] You know, again, you know, we're at the very beginning of defining what it is we're going to talk about. I think patient identification is clearly one of those fundamentals that, as you point out, is an important fundamental for driving an exchange. You know, whether the specific question of a national identifier, you know, becomes a point of the conversation, I think, will be up to the workgroup as we think about patient identification as a category.

**Paul Tang, Palo Alto Medical Foundation**

That's great, because I really liked your analogy to the telephone exchanges, but I think we all know why it works well the way it does right now: It's because everybody has one phone number, and with that phone number, you can find the person. And so, part of the reason why you need to have all these State-oriented systems is difficulty identifying patients.

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

Although I actually have several phone numbers, and it's changed over time, but that's for another—it's still worth a conversation [laugh].

**David Blumenthal, National Coordinator**

David?

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

Far be it for me to say something nice about the phone company [laugh].

**David Blumenthal, National Coordinator**

That was David Lansky. I think I would appreciate it if the workgroup at some point would provide some high-level overview of this space because of the issues we just, in the last few minutes, teed up. And I

think, not only even among the people who do a lot of this work, but in general, there's a lot of confusion as to what is meant by "health information exchange." And there are three areas that I hope you guys can speak to at some point.

One is, "What do we mean by 'exchange'?" Is it point-to-point sharing of a document, of the summary document, of primary data? Is it—does it mean that there's receipts at the other end via computable form? And just try to lay out for us whatever number of varieties we should be considering as we look at policy implementations. Sometimes the policy language is very broad, and the reality is very granular.

The second thing is the business model question I think Neil is alluding to. The good news is that meaningful use and some pay-for-performance programs will become the business model for information sharing, but we haven't done a lot to knit these together, even this morning's discussion. I know our—the Meaningful Use Subcommittees work on connectivity has been very skeletal. It'd be nice to connect your work and the meaningful use work so that the incentives that are provided by the HIT incentive money stimulate a reason to exchange information among health professionals, which there is generally lacking today.

And the third is Charles Kennedy's point this morning, I think, about, for whichever of our groups, creating part of the vision statement around a technical layer, because again, whether it's the RHIO or whether it's big repositories or whether it's PHRs or health data banks, I don't think we have any kind of set of pictures in our collective heads about what is the technical layer of the vision going to be that all of us will contribute to as parts of the network. And if you can lay out some pictures for us of what the options will be and how we all fit in, that will be really helpful. Christine and then Judy.

#### **Christine Bechtel, National Partnership for Women & Families**

You covered a good chunk of my point, but I'll get slightly more specific on his second point, and that is, it would be, I think, really helpful if the workgroup looked at the definition of meaningful use specifically and told us, "This is the implication for HIE." As we were going through it, I thought to myself, "Gee, I don't know if this is going to help drive the business model for HIE, if it's going to actually decrease the business model" —I think we have to know that. I think we also would benefit from understanding—you know, if we look at some of the detail around care summary, what does that mean? What's possible now? What should be a realistic expectation given a state of health information exchange for 2011 versus 2013? Is it moving around as, you know, an e-mail; a, you know, PDF attachment; or something? Or, you know, what can we really do? I think we need to know more before we really finalize the meaningful use definition to the extent that the group can dig into that a little bit and understand—help us understand what are the key implications. I think that would be terrific.

#### **David Blumenthal, National Coordinator**

Judy?

#### **Judy Faulkner, Epic**

I've got two things. One, I'm not sure if David and Neil were saying opposite things. Neil, you seem to be saying, "Let's not define technology; let's leave that open to be whatever works well." And David, you seem to be saying, "Let's make sure we have a vision statement about what the technology should be." So I'm curious if they are opposed and which one is the right one. I'm—I'll put in my own opinion, which is that we're much safer saying, "Here's what needs to be done, and how it's done is left up to however it evolves so that we get innovation in there."

So that was my first comment. And the second comment is, when you spoke, Gayle, about having your record go from Florida to—was it New York? I don't remember.

**Gayle Harrell, Former State Representative from Florida**

Washington.

**Judy Faulkner, Epic**

Okay. Let's pick a State instead; how about New York [laugh]? Or, okay, Washington—I don't know how that fits with the rules. The implementation challenge there is going to be, "If all the States have different HIE rules, then will your organization be able to send it to Washington or New York, and will New York or Washington be able to send back if they have all those combinations of rules?"

**Gayle Harrell, Former State Representative from Florida**

May I comment?

**David Blumenthal, National Coordinator**

Sure.

**Gayle Harrell, Former State Representative from Florida**

I think that's part of the challenge. And you also then combine the privacy issues State to State, because what is required—the kinds of consents that are necessary in Florida are not necessarily the consents that are necessary in New York, especially when you come to mental health issues, you come to psychotropic medications, you come to HIV status, STDs, abortions—a whole variety of things of this sort that—that's where it becomes a sticky wicket, and that's where we really have to establish some policy that is going to mesh together. But yet, within the confines of how things are done, you enable the innovation to happen at the State and local levels. So it's a large issue that is going to take some time to work out, and it certainly is not without controversy.

**Micky Tripathi**

Yeah, I guess on some of this, I would just, you know, point out that we're—it's not like we're starting, you know, just from scratch. So there's, you know, a tremendous amount of work that has been done on—you know, with HISPC, with HITSP—and, you know, being able to sort of build on what's already been done, I think, is going to be an important part of this, because, you know, we're not—the workgroup is not staffed with, like—you know, like those organizations and those efforts. You know, we're going to lay a lot of these groundworks. So I think, you know, building on those things and seeing what the common threads are, I think, is going to be an important part of this.

**David Blumenthal, National Coordinator**

Yes, Paul.

**Paul Tang, Palo Alto Medical Foundation**

Paul Tang. Thanks for the work of the workgroup—and wanted to share some of the time pressures with you with the [laugh]—from the Meaningful Use Workgroup. Would the HIE Workgroup be in a position to opine on the HIE—I think it's as a verb—for 2011 in time to input into the meaningful use update to the recommendations for next month?

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

I think—I'm without my calendar, but I believe so [laugh]. We can get back to you on that for sure. We'll make it so that that happens.

**David Blumenthal, National Coordinator**

Okay, thank you to the workgroup. I appreciate your work—appreciate your presentation. We've not made your work any easier.

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

Yes, I think, like, 25 things just got added [laugh].

**David Blumenthal, National Coordinator**

But we have a lot of confidence in you. I think we're at the point in our proceedings now where we want to open the mic for public comment.

**Judy Sparrow, ONC**

[Inaudible] The operator will now tell us how to dial in to make a comment on the phone. Chris, can you do that while they're queuing up here in the room?

**Christian Weaver**

I certainly can. Anybody who is currently connected on the phone, all you need to do is press star-1 to indicate that you have a question, and we'll queue people up one at a time. If you're on the Web and want to make a comment, please dial in on the number on the screen, or if you don't have it, it's 877-705-6006. And once you're dialed in, press star-1 to indicate that you have question. We'll open up the lines one at a time. And Judy, did you want to mention anything about the comments that come in via the Web?

**Judy Sparrow, ONC**

Yeah, comments on the Web—unfortunately, we don't have the people here to read your comments out loud, but please submit them, and we'll make sure they're part of the record of this meeting. And let me just also state: Those of you that are going to be making your comments, please identify yourself, the organization; try to keep it relatively short; and we would appreciate no sort of commercial interruptions here. So with that, the lady in the front.

**Ruth Perot, Managing Director of the National Health IT Collaborative for the Underserved**

Good afternoon. My name is Ruth Perot. I am the Managing Director of the National Health IT Collaborative for the Underserved and also serve as the Executive Director of a group called—organization called Shire.

I was going to thank Dr. Blumenthal; I think he left that way. But I do want to thank the members of this committee for the opportunity to bring some recommendations from the collaborative with regard to meaningful use. And actually, we have a few related to certification as well.

The National Health IT Collaborative is a public-private partnership established in June 2008 with a very clear focus. And that is—our goal is leveraging access and advances in health information technology to expand health access, to improve quality, and particularly to eliminate health disparities—those disparities experienced by communities of color and other underserved populations.

As you shape your definition, we're delighted to have this opportunity. I'm going to share with you some of the recommendations that come from 50 members of the collaborative, who have presented 23 recommendations. I will clearly not read them. I have a few that I'd like to share with you, and I do have a document that I'd be happy to share with the committee as well if that's possible.

We do have some general observations about how meaningful use might be defined. We believe that the essential meaningful use of certified EHRs should be patient focused—that is, contributing to health improvement for a patrons or health consumers. We believe that the ONC definition of meaningful use

should underscore the need for HIT to help reduce and ultimately eliminate disparities in treatment and outcomes experienced by a community of color and other underserved populations through the delivery of culturally appropriate and higher-quality services. We believe, too, that the ONC should have a clear vision for the future state or goal of the public's health in order to monitor and track HIT. The importance of preventive care is in part—should be part of that vision; the priority of patient, consumer, and provider education; and the need for definitional language that is easily understandable by stakeholders—all the stakeholders—and highlights the value of propositions for those categories of stakeholders.

And finally, ONC should integrate its definition of meaningful use into the broader concept of health reform. We feel with regard to implementation—and I do want to just speak to that—we really are concerned that there be a phased or incremental implementation to allow appropriate information and outreach efforts to inform providers of their requirements, incentives, and potential penalties. We think about the Medicare Part D Initiative, which was designed to make certain that seniors were aware of the potential benefits and disadvantages if they did not participate in that program. We think something quite comparable is involved here.

And then finally, safety net providers should get additional incentives based on the proportion of Medicaid patients seen, given the fact that they already received limited reimbursements. And we define safety net providers very broadly with regard to free clinics; mental health centers; other facilities that may not be federally qualified; and, of course, small-group practices and even fellow physicians.

I have many other recommendations. There are other people standing, but I do want to thank you for that opportunity, and I do have a document.

**Judy Sparrow, ONC**

Thank you very much. Next person in the room?

**John Haughton, National Institutes of Health**

Hi, I'm John Haughton. I'm a physician and engineer of Sun and a parent—sit on the NIH Patient Advisory Committee and run a small company called DocSite that focuses on HIT. And my comment—there are two of them. One is, thinking through the use case of the buyers of these systems as time evolves—so over the next few years, you're going to have things like ICD 10, which may fundamentally change various architectures and systems as they evolve—the idea of some of the things in 2013 versus 2011 in terms of decision support and elements that need to be put in place. If it's possible to think through—if I'm sitting in my office, as a physician, buying something or in a hospital buying something, “Am I buying it once, and will it evolve over time?” becomes an important piece. And then the second piece is around the language and aura of qualified, certified—and the various records and how they've evolved to meaningful use, and if there's a possibility of focusing on those things that are proven in the literature to improve care as being the element of either certification or qualification, which line up pretty well with the law, versus statements of various levels of technical connectivity that really aren't proven one way or another to improve care. Thank you.

**Judy Sparrow, ONC**

Thank you. Can we take the first person on the phone next?

**Chris Weaver**

Yeah, I would say we have a number of commenters on the phone, just FYI. Ryan, can you give us the first person?

**Ryan, Operator**

Yes. Our first question comes from the line of Anthony Guerra with Healthcare Informatics.

**Anthony Guerra, Healthcare Informatics**

Hi. Well, I guess I've been introduced, so I don't need to do that. My question revolves around process. I think I've heard one or two people mention that the workgroups are making their best effort at moving forward, specifically certification and information exchange, while making their best guess at meaningful use. And also, I listened to the Standards Committee meeting, and again, the group is trying to move forward with the best guess at meaningful use. Might it not have been better, or is there any room for tweaking the process to arrive at that definition so that the subgroups and the Standards Committee have a better vision and their work to date or going forward in the near term is best—is based less on their best effort and more on actually an agreed-upon definition of meaningful use? I guess we could direct that towards Dr. Blumenthal, if you're there, or John Glaser.

**David Blumenthal, National Coordinator**

This is David Blumenthal. What you describe is, I think, a kind of ideal engineering solution to this problem. Unfortunately, though, we talk a lot about engineered products; we're not talking about engineered processes. And we really don't have the luxury of waiting for meaningful use to be defined before we do these other things. For one thing, the final definition of meaningful use will await a rulemaking process that will last months so that we need to be—have mechanisms that support the adoption and use of health information technology underway before we actually have a meaningful use definition. So we just have to kind of do the best we can and move along on multiple fronts at the same time.

**Anthony Guerra, Healthcare Informatics**

Can I ask one other question?

**David Blumenthal, National Coordinator**

Sure.

**Anthony Guerra, Healthcare Informatics**

I've heard, I think, two times earlier in the meeting where the reference was made to Kaiser and, you know, the results that had been achieved at that institution and that organization. Do we think it's important to be careful of comparing the general population of hospitals and health care systems with a system like Kaiser that is unique in its structure? Maybe somebody who mentioned Kaiser could touch on that.

**David Blumenthal, National Coordinator**

We certainly—this is David Blumenthal again—we certainly have to take into account the enormous variety of health care delivery settings and institutions in the United States. And it is on our mind, and there have been discussions about the individual practitioner and what it—the challenge that that individual practitioner faces and the need, I think, to tamp our expectations accordingly. The one thing we do get from the large organizational experiences is the example that it is possible for human beings and delivering health care, you know, either organized or not organized—because there are certainly many individual practices that have adopted—it is possible to do this. If we didn't have those examples, it would be a lot harder to go forward.

**Anthony Guerra, Healthcare Informatics**

Thank you.

**Judy Sparrow, ONC**

And why don't we take another question from the phone—comment from the phone, rather?

**Ryan, Operator**

Our next question comes from the line of Charles Parset with GE.

**Charles Parset, GE Healthcare**

Hello, yes, I am with GE Healthcare. I'm also a member of the board of HITSP, where I represent the EHR Association. My question goes to the last report from the HIE Workgroup. And this workgroup has rightfully identified the needs to link the meaningful use and whatever policies and incentivized choices are made on the EHRs with what is being driven in terms of HIE. I'm wondering if there are plans to actually link between this HIE Workgroup and the HIE Standards Committee, because I think the HIE Standards Committee would greatly benefit to be focusing both on the incentivized standards that EHRs will support and be certified against as the HIE should be incentivized to offer and support. Otherwise, if EHRs do not connect to HIEs, we will have an interesting disconnect. Any thoughts along those lines?

**David Blumenthal, National Coordinator**

Go ahead, Jodi.

**Jodi Daniel, ONC**

I was just going to say that ONC is supporting both of the workgroups, and we have staff that are participating on both the Policy Committee and the Standards Committee and bringing the information and thought coming from one of the workgroups—I mean, one of the committees to the other committee and making sure that the folks have the benefit and richness of discussions on both sides. Thank you.

**Judy Sparrow, ONC**

Take the next person in the room.

**Claudia Williams, Markle Foundation**

Hi, Claudia Williams in the Markle Foundation, and just a very quick couple things. First, I think that the vision laid out on page 9 of the slides was a tremendously great place to start the conversation and provide discipline against the metrics and against the more detailed operational aspects of the matrix. My understanding is that the group will actually go back and sort of just sit with it again and make some revisions based on Tuesday's call, and that brings me to a couple questions about process. I—what will be the deadline for public comments? Will that be revised to reflect an opportunity to comment on whatever the revision is that will be produced by the working group? And what will be the timeline for the CMS that—because I think as those of us are looking to this—and today's rich discussion reflected just how critical and how important these conversations are. I think those of us from the public want to be sure we understand opportunities to comment and what those opportunity points will be.

**Judy Sparrow, ONC**

Sure. Just quickly, there's a public comment process on the document that was presented by the workgroup today and the discussion that happened today that should be on display in the *Federal Register* today; correct?

**[unidentified]**

Yes.

**Judy Sparrow, ONC**

—and will be open for 10 days. We will make sure that all those comments are fed to the workgroup and members of the committee for their consideration and revision of their recommendations to that. We

would expect that there would be—that they would present at the July meeting, whatever that workgroup comes up with as the recommendation to this full committee, and that this full committee will make a decision whether or not to pass on that recommendation to the National Coordinator or further consider it. And then we will go through our full rulemaking process, and I don't know, Tony, if you want to make any comment about that.

**Tony Trenkle, Center for Medicare & Medicaid Services**

Yes, we plan to put out a notice of proposed rulemaking towards the end of this year with a 60-day comment period, and then a final rule will follow sometime early next year.

**Claudia Williams, Markle Foundation**

And will there be an opportunity—I think the iterative nature you've engaged in is important. Will there be another opportunity to comment? I think once you go into rulemaking, it's more difficult to sort of reassess. Is there another chance to comment once you have something final in recommendation form?

**Judy Sparrow, ONC**

The only formal process at that point would be through the rulemaking process.

**Claudia Williams, Markle Foundation**

Thank you.

**Judy Sparrow, ONC**

Yes.

**Virginia Silva**

Virginia Silva, a Nursing Informatics Consultant. And I just have a little statement here: Patient care by nurses and other health professionals are generally not included in the CPOE system to ensure quality—continuity to care in order to generate meaningful use information. However, since nursing services are still in the room rate and are not reimbursed by CMS, it is very hard for the vendors and hospitals to spend the money to include them into their systems that they've purchased. So I'm wanting to recommend that somehow they need an incentive to include coded nursing terminology into these systems so that we can get at, by 2013 or 2015, the meaningful use information that a lot of people here are talking about, which comes in the form of outcomes.

**Judy Sparrow, ONC**

Thank you. Let's take the next person on the phone.

**Ryan, Operator**

Okay, our next question comes from the line of Brad Rourke with the Williams Group.

**Brad Rourke, Williams Group**

Hi, thank you. As you said, Brad Rourke of the Williams Group. We're an EHR vendor for eye doctors. And my comment is with regard to the certification process.

The situation, I believe, is, there are probably thousands, if not certainly hundreds, of EHR vendors, which I think is going to create a potential challenge or complication in the certification process with respect to a bottleneck, potentially. So between now and 2011, there could be X number of EHR vendors that are trying to be certified.

So I would suggest potentially an alternative for the certification process similar to, potentially, the way in which we all file our 1040s or, corporately, our 1120s, in that we providers—at least in private practice situations, whereby providers could submit an attestation form such that it would outline two things. And the attestation form could be as detailed as potentially would be necessary to do, attesting to one of two things: one, that the EHR meets the certification standards; and secondly, that EHR meets the definition of meaningful use—because I believe that the consequences potentially would be if each and every EHR vendor requires certification—and that certification process could take up to, as I mentioned, a month or 2 or perhaps months—6 months of time involved in certification—we’re certainly going to run up against a time crunch for the 2011 certification, at least with the EHR vendors, which could potentially or effectively, for those who are unable to get to the front of the line, so to speak, prohibit those vendors from future sales or effectively eliminate the number of sales that are going to occur after 2011. So I appreciate it. Thank you for your time.

**Judy Sparrow, ONC**

Thank you very much. Next comment in the room.

**Frank Kyle, American Dental Association**

Yes, Frank Kyle with the American Dental Association. I believe it was Ms. McGraw that asked about dentists or making a comment about dentists earlier, and there certainly are dentists that participate in both Medicare and Medicaid. To the point, in AARA, the definition of “physician” in the Medicare section is the definition that includes dentists, and dentists were specifically mentioned in the Medicaid portion of the AARA as well. But even if that weren’t the case, if an electronic health record is going to include the patient’s health, it needs to include the patient’s oral health as well.

To that end, last week, our president, Dr. John Finley, sent Dr. Blumenthal a letter offering the ADA’s assistance not only for the Office of the National Coordinator but also for the Standards and Policies Committees. And I’m here again to make that offer. Specifically, I think we have something to add to not only the meaningful use discussion but certainly the discussion on health information networks and on standards and certification. So again, the ADA is here to assist you as you need us. Thank you.

**Judy Sparrow, ONC**

Thank you. Next commenter in the room.

**Rick Blake, Strategic Health Resources**

Rick Blake, Strategic Health Resources. And unfortunately, I was the one who was misidentified in the last minutes that Devon pointed out. But anyway, I wanted to underscore something that David Lansky said in terms of—about bringing in new and other technologies into the certification discussion and also wanted to urge the Certification Working Group to avail itself of minority- and woman-owned business in the certification discussion as well. Thank you.

**Judy Sparrow, ONC**

Thank you. And let’s take another caller on the phone.

**Ryan, Operator**

Okay, our next caller is Amy Verstappen with Adult Congenital Heart Association.

**Amy Verstappen, Adult Congenital Heart Association**

Hi, can you hear me?

**Judy Sparrow, ONC**

Yes.

**Amy Verstappen, Adult Congenital Heart Association**

Great, thank you. I really appreciate you taking my call. I, first of all, want to thank you for your tremendous work. I just have a brief comment on the measurable goals in terms of—I did hear some conversation in—meaningful outcomes, rather, in terms of health care transition and some conversation about the pediatric involvement. So I—would strike me that if the goal is to find markers that are not disease specific but span disease states—which maybe isn't the goal, but if that's part of what you're looking for in meaningful use—that including some addressing of health care transition issues between the pediatric and adult cohort would give you an opportunity to both engage pediatrics specifically—make it not disease specific and also give a potential for a very measurable outcome, which would be—we know right now we fail miserably in transitioning newly chronic pediatric onset disease. So that would be both pediatric cancer survivors, cystic fibrosis, TL heart disease—all of these new patient populations bring very big lifelong health care challenges that might be something you think about including in this system.

The other question I had for the group is, “Just how are—how can we, not just my organization but we the rare disease communities and the health advocacy communities, partner more with you?” And I recognize you probably don't have an answer for me today, but I—strikes me that in the same way, you know, it sounds like this is a situation where there are many balls rolling at once, so at the same time your work's looking on the meaningful use criteria—also working on infrastructure. There's going to be a whole patient education piece and outreach. Certainly in our community, there's tremendous anxiety and concern as well as real excitement about electronic health records. So we, our organization and, I'm guessing, most organizations like us, would love more opportunity to partner with you to help prepare our patient communities and work together about what health IT is. So more information that we could get designed for us would be great.

And the last thing is just, I just would note that I don't see research specifically as foundational, although I may be missing that in terms of meaningful use and seeing health surveillance but not clinical research. And we're—we, as an organization—and I suspect, like many rare diseases—for many of us, research—planning for research use, not just surveillance, should be foundational, or we would see that as key in terms of the—having the #1 goal being making sure that everybody managing any kind of health care challenge lives as long as they possibly can with high quality of life.

**Judy Sparrow, ONC**

Great, thank you, Amy, for your comment. And we'll take one more short comment here in the room.

**Josh Seidman, Center for Information Therapy**

Hi, Josh Seidman from the Center for Information Therapy. I'd just like to support what Christine Bechtel had said about some of the things regarded as being patient and family engagement, regarding timely access to information, secure messaging, patient-generated data, and then sharing use of consumer information tools and measuring patient experience with care.

I'd also like to make—sort of urge the Meaningful Use Workgroup to, as it's thinking about care coordination—the current grid said that the care goals is around exchanging meaningful clinical information among the professional health care team. And we certainly have a lot of research to suggest that engaging patients and families leads to greater care coordination and things like reducing readmissions and other important things in terms of our outcomes.

So I would urge, as we're thinking about some of the specific measures, such as, you know, producing and sharing electronic summary, that those kinds of things are ensured not just within the professional care team but within the full care team, including the patient and their families. Thank you.

**David Blumenthal, National Coordinator**

I think, I'm sorry to say, men, that we're going to be closing these proceedings. Thank you for your patience.

So this has been an absolutely terrific meeting. I want to thank everyone around this table. I want to thank the people who were present on the Internet and on the telephone and our audience for being here. I don't think our tasks have gotten any smaller during the day, but perhaps it has been defined more clearly. And we're looking forward to further reports of the working groups. Our staffs will be working hard in the interim—ONC, CMS, others—and when we next meet, we will, I'm confident, have made things even clearer, even if we haven't resolved them completely.

Any other comments from the folks who keep things running here? Okay, then we'll stand adjourned. Thank you again.

**Public Comments:**

1. **Alexander Saip:** I posted two comments on meaningful use of EHR at <http://betterhc.blogspot.com/2009/06/how-meaningful-can-be-meaningful-use.html> and <http://betterhc.blogspot.com/2009/06/what-ehr-can-do-for-us.html>, and started a few discussions on the subject on LinkedIn. Obviously, there is a wide range of opinions. But most agree that it has to be a phased and prioritized process, and the real challenge is to demonstrate to providers, patients and payers how they will personally benefit from use of EHR systems beyond the implementation period set by the HITECH provisions, as well as to get the public at large on board regarding benefits of EHR on the national scale.
2. **Dr. David Rosenthal:** How do you plan to measure so-called adoption? What is the metric or metrics?
3. **Lawrence Shields:** Is there thought being given to the number of man hours required to produce "Meaningful Use" Reports specifically for the 5 Physician and less Practice. It should be kept in mind to not make Meaningful Use reporting a burden to the work process.
4. **Kelly Yori, DaVita Dialysis:** My question is as a provider, what can we expect as far as education, outreach and communication with the Private payouts, State Medicaids and Providers as it related to the HIT initiatives and incentives available to be ready early, 2011?  
  
Is 5010 implementation by Medicaids and providers part of this incentive?
5. **Gwen Auman:** We are a small rural hospital in Pennsylvania. Our plan is to be up and running by 2011. Are you saying that the system that we implement in 2011 may be antiquated and outdated in 2013?
6. **Shane Downs:** I would like to explain the network my organization has in place for in regards to HealthCare IT
7. **Bob Brewin:** I would appreciate comment from Dr. Blumenthal on need to have privacy included in definition
8. **Reed D. Gelzer, MD, MPH, CHCC:** Where in the vision is the current unreliability of EHR-sourced data addressed (due primarily to non-standardization of source systems).

Until we can be assured that the data in EHRs is reliable, belief in its fitness and utility for secondary uses seems, at best, premature.

9. **Ed Larsen:** Where is hospital meaningful use and goals?
10. **Nick Appolonia:** Will Providers be required to utilize a CPOE, as well, the coding aspect?
11. **Mark Segal:** Will there be specific percentage criteria for the measures to demonstrate meaningful use?
12. **Anthony Guerra, Healthcare Informatics:** I have heard Kaiser mentioned as an example of what the country should be imitating. Is that realistic given Kaiser's unique structure?
13. **Narciso Tan:** how about making vital signs capture in real-time from hospital based monitoring devices?
14. **Brad Rourke, Practice Director Software, by Williams Group:** To clarify, my not so well communicated telephone comment, regarding the Certification Process, has the Committee considered how it will address the potential bottleneck of EHR vendors requiring certification. There are perhaps thousands of EHR vendors, in our vertical (optometry) alone there are likely over 20. There will certainly be a rush to get in front of the certification queue if that is the process. An alternative, as I mentioned, at least for providers in private practices could involve providers/practices completing annual attestation forms in a similar manner to the methods personal and corporate tax returns (1040's 1120's) are completed attesting to the extent the EHR deployed system meets certification standards and is utilized to meet the definition of meaningful use. The completed attestation form would be subject to audit by the certifying organization/organizations. The consequences to having one certifying body or even a handful ...
15. **Charles Penoi, CMHC IT Consulting [cpenoi@cpconsult.com](mailto:cpenoi@cpconsult.com):** At some point in the near future, the exclusion of incentives for behavioral healthcare will prove detrimental to achieving overall healthcare system goals. When those providers enter the EMR regime, the bar will be so high they are likely to do poorly. Even if BH is placed on some subsidiary track, they will need to know what that would be soon so they can connect to the process.
16. **Guest:** While the American Physical Therapy Association (APTA) shares the committee's vigor for improving patient primary care, we believe that it is also important that efforts to improve the quality of patient care, through the expansion and widespread adoption of health information technology, not exclusively focus on primary care and physician services. Too often discussions about health information technology are centered on physicians and hospitals and conducted in a vacuum with no relationship to the "end-game," which is better performance by the health care provider and improved health outcomes. Although, we understand the natural progression to focus initial efforts in these areas, it should be noted that several non-physician providers and specialties such as physical therapy present a unique perspective that have a significant impact on the quality and continuity of care to maximize independence and activity.
17. **Denise Hines:** What should a physician practice do right now to prepare for accessing the funding to implement a practice management system?
18. **Shelly Spiro:** I am a pharmacist and very active in many Pharmacists based HIT initiatives including President Elect of the American Society of Consultant Pharmacist and Co-Chair of the NCPDP Long Term Care Work Group. Although EHR uses electronic prescribing, pharmacist play an important role in medication management outside the transmission of the electronic prescription. Many of the meaningful use quality measures relate to medication management but it is unclear how the pertinent information and outcomes documented by Medication Therapy Management by Pharmacists will be adopted.

19. **Guest:** 1. Given the large proportion of physicians that are close to retirement age, it might be important to consider the impact of the meaningful use "pressure" on physician retirement decisions.
2. The discussion of whether meaningful use should include reporting proportions of patients who receive appropriate care ignored the fact that science does not currently exist to define those standards --- and once that type of reporting is instituted, the reporting system might make innovation more difficult.
3. The meaningful use discussion ignored the fact that "healthcare" is not the only input into the production of "health". If childhood obesity or racial disparities in diabetes incidence have causal factors that lie outside the healthcare system, it is not reasonable to hold the healthcare system accountable for those issues.
20. **Paul Thomas:** When selecting certification bodies for HIT, there should be a consideration given to the cost of testing to the vendors. The current CCHIT only certification can be cost prohibitive to smaller vendors. The current cost is about sixty thousand dollars which many small companies cannot afford in combination with their R & D costs added in.
21. **Tonio Cutrera:** How do meaningful use and certification apply to health care providers with reduced need for comprehensive EHR, such as chiropractors and physical therapists, who for example, do not prescribe medication? Will some aspects of meaningful use be optional for such health care practitioners?
22. **Michael Schwartz, MD:** From Michael Schwartz, MD: Are "field level" clinicians involved in improving the user interface for easier clinical "point-of-care" data capture? Can we get updates on the technology and systems if available. Thanks.
23. **Maud Naroll, Nevada HIT Workgroup:** Thank you much for posting meeting materials on the meeting site. Would it be possible please to post them on a more permanent site, and send the link out to those who have signed up for HHS HIT email updates?
24. **Tracy:** I was wondering what standards would apply to providers that are only eligible for the first time in 2013 or after, the 2011 standards or the 2013 standards.
25. **Jay McCutcheon:** What are your thoughts about limiting payments to providers or physicians for meaningful use if they chose not to engage in HIE the verb or join and participate in an HIE that exists (noun).
- The comment about the questionable service or business model for HIE as being absent, isn't time to reassess the existing working models and to refine them with recent product and services and new technologies which have shown value to the point of generating revenue. I believe there are many clear products and services with a logical progression, benefits and beneficiaries which would support the HIE organization.
26. **Bruno Nardone, IBM Global Services, Healthcare:** Will the Committees be making recommendations to stakeholders for what they should be doing today to be best positioned to engage effectively as policy matures.