

**Meaningful Use Workgroup
Draft Transcript
January 28, 2010**

Presentation

Judy Sparrow – Office of the National Coordinator – Executive Director

The meeting is ready to begin. Can you please take your seats? Chris, can you please bring in the public?

Chris Weaver – Altarum

Judy, you're all set, ready to go.

Judy Sparrow – Office of the National Coordinator – Executive Director

Thank you. Good morning, everybody. And welcome, again, to the continuation of the sixth meeting of the HIT Policy Committee. Just a reminder, this is a federal advisory committee. It's being held in public. There will be opportunity at the close of the meeting for the public to make comments. A reminder, again, too to the committee members to please identify yourselves when speaking. Let's go around the table and introduce yourselves. To my left, I have George Hripcsak, who has been invited to sit at the table because he'll be chairing or moderating a panel meeting. George.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

George Hripcsak, Columbia University.

Gayle Harrell – Florida – Former State Legislator

Gayle Harrell, former state representative from Florida.

Marc Probst – Intermountain Healthcare – CIO

Marc Probst with Intermountain Healthcare.

Charles Kennedy – WellPoint – VP for Health IT

Charles Kennedy, WellPoint.

Mike Klag – Johns Hopkins Bloomberg School of Public Health – Dean

Mike Klag, Johns Hopkins Bloomberg School of Public Health.

Scott White – 1199 SEIU – Assistant Director & Technology Project Director

Scott White, 1199 SEIU.

Judy Faulkner – Epic Systems – Founder

Judy Faulkner, Epic.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Paul Tang, Palo Alto Medical Foundation.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Art Davidson, Denver Public Health.

Deven McGraw - Center for Democracy & Technology – Director

Deven McGraw, Center for Democracy and Technology.

Paul Egerman – eScription – CEO

Paul Egerman, software entrepreneur.

David Lansky – Pacific Business Group on Health – President & CEO

David Lansky, Pacific Business Group on Health.

Judy Sparrow – Office of the National Coordinator – Executive Director

On the phone, I believe we have Tony Trenkle. Tony, are you there?

Tony Trenkle – CMS – Director of OESS

Yes. Tony Trenkle, CMS.

Judy Sparrow – Office of the National Coordinator – Executive Director

Tony Trenkle from CMS. Any other committee members on the telephone, please? Thank you. I'll turn it over to Dr. Tang.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Good morning, and welcome to the second day of this two-day session. Dr. Blumenthal sends his regards because he is over in California at the moment giving a talk, so we're continuing without him this morning. I've heard all the discussion from last night, based on yesterday's panel, and I think everybody was duly impressed by how informative and how thought provoking the testimony was, and I think today will be no different. It'll be very stimulating and informative in terms of how we move forward with the criteria.

I'll remind ourselves that the objective of the meaningful use criteria or the whole stimulus program is not to put a computer on every desktop of every provider, but really to find some kind of criteria where we can help the government recognize and reward those who effectively use HIT to achieve the goals of the transformed healthcare system, which is to improve access, to improve quality, and to improve efficiency of the way we deliver care in America. Done right, I think the framework that we come up with, as well as the criteria, can actually be sort of a roadmap to get us from where we are today, which has a very low penetrance rate, to where we want to be to accomplish the president's goal of truly having all of American's health records in electronic health records. I think that's sort of part of the goal that we're setting before ourselves.

And, today, we have two panels that will help us consider a number of important topics. In the first panel, we're going to be talking with providers that are in smaller groups, so whether it's the smaller group practice of physicians or other healthcare providers, or smaller hospitals, rural clinics, community hospitals, safety net hospitals. And then our second panel will look at a number of other providers that may be covered in either the Medicare or Medicaid programs such as, let's say, dentists, nurse practitioners, other safety net providers. Pediatricians fall in this special group because obviously they don't see a whole lot of Medicare patients, so they're primarily covered under Medicaid. And another topic of different kinds of uses of health data, and that's for clinical research. So we have two very special presentations or panels this morning, and we'll turn it over to Art Davidson, who is going to moderate the first panel.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Good morning. Might we have the next panel present themselves to the table there? Thank you. Is Dr. Edwards going to join us, Judy, do you know?

Judy Sparrow – Office of the National Coordinator – Executive Director

He's supposed to be here.

Art Davidson - Public Health Informatics at Denver Public Health – Director

I hope she comes. Well, I guess we'll go ahead and start even though the fourth panelist is not here yet. So it's my pleasure to introduce the four panelists. We have Michael Lardiere from the National Association of Community Health Centers; Bonnie Britton, the CNO of Roanoke Community Health

Center in North Carolina; and Marty Fattig, the CEO of Marty Nemaha County Hospital in Auburn, Nebraska. We'll start first with Michael. We'll begin with a presentation. It should be five minutes. I would hope that you would stick to that, if you could, so we'll have time for discussion and questions at the end of the presentation of the four panelists. Michael, with you first.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Very good, and thank you very much. I'm Mike Lardiere, and I'm the director of health information technology and senior advisor for behavioral health for the National Association of Community Health Centers, and I appreciate the opportunity to present to the committee. The National Association of Community Health Centers, or NACHC, represents the federally qualified health centers across the country. There are 1,200 federally qualified health centers, make up about 7,500 different sites across the country, serve approximately 20 million people currently, and we expect that to grow by 2014 to serve approximately 30 million people by that time. We employ over 100,000 individuals across the country, around 14,000 eligible providers under ARRA and the stimulus package.

The type of patients we provide services for all reside in medically underserved areas or medical provider shortage areas. Approximately 36% of them are on Medicaid; 38% of them are uninsured, and that number is growing. About 8% are Medicare, so almost all the patients that we touch; everybody is actually paying for one way or the other. We have about 67 million visits per year.

In terms of the criteria, health centers feel that the meaningful use criteria would be very helpful to them in furthering their mission, which is really to provide good, quality care on a population based method to all the individuals that we serve. And we do that. Many health centers receive some funds from HRSA. There's a base funding through the Health Resources Services Administration, so we do receive some funds from there. The rest of it is really from other sources, Medicaid and other payment sources.

In terms of the EHRs and functionality in EHRs, we think that the meaningful use criteria will help move them along quickly and, in some areas, we hope move along more quickly than what is identified. Yesterday there was a discussion about disease registries. Health centers use disease registries already, have been using disease registries for years, but they're at the practice level, so they actually use them, monitor their patients, see trends in their patients individually and groups. Use those disease registries to recall patients for treatment, so these disease registry functions are not currently in electronic health records, as we know. We heard testimony yesterday about that, and so the quicker that we could get that functionality incorporated into the EHR, the better, from our point of view. It'll help us do our work much faster.

Or requiring the EHRs to have a smooth interface with a disease registry because right now we have situations where we're using disease registries, but the EHR doesn't talk to the disease registry. The interface costs too much, so we're dropping things to paper and having somebody type that in, and that's not a good thing. So the sooner that we could have those disease registries functions incorporated into EHRs the better from our point of view. And we do very well in terms of managing patients, using those disease registries. In the written testimony, we provided some numbers, but these issues are tracked by HRSA, and we're audited every year, and health centers need to report on that. And when we've compared those against the regular practitioners, health centers come out a little better than regular practitioners do.

In terms of clinical measures, we would request that – the measures, we're already using clinical measures, so we would request that the measures actually be harmonized across the government. The clinical measure for diabetes specifically is identified as an eight, and we use nine. We don't need to be reporting on two different measures. And, actually, we're working the patient, managing the patients, so we don't want to have two cohorts. We want to work with one.

HIE is an issue, and that may be an issue in terms of being able to – if there's additional costs associated with HIE, that may be an issue for health centers. And the last thing in my last few seconds, a barrier that is going to be present with bringing health centers up are two things. One is initial startup costs for EHRs. And I know, Paul, yesterday you identified that the money is there. Well, we don't know where the money

is there for the initial adoption for those people who don't. So we need that money upfront in order to adopt.

And there's also an area of the regional extension centers that have put a cap of ten providers on the regional extension centers per tax ID. That seems to discriminate against the health center model because, in our model, we just don't have an individual MD. We work in a team approach. We're medical homes, and actually it doesn't work out financially if you have 7 sites with 50 providers and they're 50 miles apart, which they are in many areas. You can't bring up 7 sites with 100 providers with the amount of money that you would be reimbursed for bringing up 10. It just doesn't work financially. I've tried to work that out in my mind, and I do other business things, so I've tried to take it on a business model. It just doesn't work, so we really would recommend that we change that immediately so that we could bring up more of these health centers more quickly. Thank you.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Thank you. Welcome, Dr. Edwards. We're glad you're here. We'll go ahead and save questions after the four presentations, so we'll proceed now with Ms. Britton.

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

Hello. I'm Bonnie Britton. I'm the chief nursing officer and telehealth director for Roanoke Chowan Community Health Center in Ahoskie, North Carolina. We are an FQHC. We have 20 primary care providers that cover 4 counties in very rural, eastern North Carolina. Seventy percent of our population is African American. A large majority of our patient population is uninsured. We are averaging – now this is 20 primary care providers at 3 sites – we are now averaging 185 new patients per month. Of those 185 new patients per month, 45% of those patients are either uninsured or self-pay. This number has dramatically increased since December of last year.

I was here yesterday, and one of the things that struck me is the primary conversation has been around electronic health records. And we really have not addressed health information technology that can be used in a meaningful way for our patients. And I'm here today to speak about patients and patients' rights. One of the things that has to be considered is the health literacy and the literacy of the patients that we're caring for, especially in FQHCs. We primarily have a large majority of elderly patients. By providing them a handout when they leave their doctor's office that tells them about their diagnosis and their medications, really does not assist those patients as much as they can. Education alone cannot change behavior.

One of the things that we believe is that by reaching meaningful use, that we've got to engage our patients. We've got to alter the way health is maintained and the way care is provided on an ongoing basis. The proposed matrix, as I've said, almost totally focuses on EHR, especially during the first two years. What we want to do is to bring forward to the committee the use of health information technology, primarily remote monitoring and chronic care management. Our health center has been using electronic health records for 12 years. All of our providers and all of our staff use EHR.

We, in the last three years, have implemented remote monitoring and chronic care management. Right now, we have 200 patients at 7 different community health centers and primary care provider sites across the state of North Carolina. I don't have a lot of time. I've given you the written testimony with the details.

I want to tell you about a patient. I want all of you to think about what I'm saying as if you're a primary care provider or a specialist. We have a patient. She's 37 years old. She is African American female. She has a diagnosis of cardiomyopathy, and she is in heart failure continuously. She also is a long-term diabetic, has just in the past year received a kidney transplant and is on the waiting list for a liver transplant. She has a primary care provider who lives in Ahoskie. Her cardiologist is at the ECU School of Medicine in Greenville. Her renal physician is at UNC Chapel Hill. Her liver transplant doctor is located at Duke Medical.

When we first started working with this patient, she had no idea how to care for herself because she had four different providers telling her different things to do. What we were able to do is put a remote monitor

in her home and, every day, she monitors her blood pressure, her pulse, her weight, her blood sugar. If she needed to, she could check her pulse oximetry level to check her oxygen. All of that information is collected by the patient. She answers questions related to signs and symptoms, medical and nutrition compliance. That data is sent over the plain old telephone line. You don't need broadband because you don't have broadband. Our patients don't have computers.

And so, that information is sent to a secure server where a registered nurse reviews that data. If their patient is out of the range that is determined by the primary care provider, then the nurse contacts that patient by phone, completes a health assessment nursing assessment, and provides education. Then, through the electronic health record, we communicate the RN to not only the primary care provider, but to the specialists in the other locations, and so it's a primary care provider and the specialists that then make the determination of how to care and proceed with that patient. They make those determinations, contact that patient, document it in the electronic health record, and all of that comes back.

So it's completing. It starts with the patient. It ends with the patient. And we really have to think about health literacy. Are patients going to gain behavioral change and long-term care management when you're just providing education? Thank you.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Thank you, Ms. Britton. We'll proceed now to Mr. Fattig from Nebraska. Thank you.

Marty Fattig – Nemaha County Hospital – CEO

Thank you, and thank you for the opportunity to address the committee. My name is Marty Fattig, and I am here to represent the views of small and rural hospitals that serve so many Medicare and Medicaid patients across the country. Currently there are approximately 2,400 hospitals with fewer than 100 beds, most of which are in rural areas. These hospitals offer mostly primary care services, so that is the focus of my remarks.

The basis for my comments comes from my experience in implementing health information technology with the goal of developing a complete electronic health record at Nemaha County Hospital, a 20-bed critical access hospital in Auburn, Nebraska, a community of 3,500 people. We began our EHR journey in September of 2003. We chose to install an integrated system with software from a single vendor to meet all of our HIT requirements with the data residing in a single database. We found this type of system much easier to install and maintain than one made up of products from a number of different vendors.

Today we have a complete EHR, and we are exploring ways to participate in a health information exchange that would connect us to the Nationwide Health Information Network. For three of the last four years, we have been on the most wired list of the American Hospital Association's health forum. We have focused our EHR installation on those functions that are most likely to improve care, including generating an accurate patient record and providing access to all patients' information in a single view, supporting computerized provider order entry and clinical decision support systems. We also have an electronic medication verification system in place.

Such things as electronic reporting and quality measures, allowing patients to access their medical records, and the electronic submission of reportable lab results are beyond the scope of our HIT system. Adding these aspects to the 2011 objectives would take resources away from our care improvement goals and be challenging to meet. These functions and the necessary supporting structures are not yet well defined, and I doubt that our vendor will be able to develop them by 2011.

The journey toward EHR system adoption is incremental and, although it varies across institutions, certain system functions must be in place before other functions can be successful. Nursing documentation and pharmacy functions, for example, must be in place before CPOE can be utilized. In recognition of this, meaningful use objectives and measures should be defined in this same order and by use of system functions necessary to improve patient care.

Eventually EHRs should be able to routinely share summary data with patients, public health entities, and providers of care. However, hospitals need a clearer picture of what type of information sharing will be considered meaningful now and in the future, as more providers expand their capacity to share data. The HIT vendors that are able to meet the needs of smaller hospitals are different from those that are able to meet the needs of larger hospitals. Currently, all those vendors design their products to meet CCHIT certification requirements, and making those requirements different from meaningful use requirements would cause substantial delays in the development of products that are needed to achieve meaningful use.

Although cost is identified as a major barrier to HIT implementation, another barrier is the availability of needed technical resources. Smaller communities do not enjoy the large pool of technical expertise found in more urban areas. Talent is difficult to attract and retain, especially once a higher level of proficiency has been reached. It is, therefore, imperative that scarce resources focus on implementing technology that supports the hospital's mission of providing care. Meaningful use measures that require system modification, additional analysis, or other activities that extend beyond this basic mission would strain the hospital's ability to care for its patients.

Finally, it is important to recognize that HIT cannot be a one size fits all proposition. The differences in meaningful use requirements for hospitals and physician practices must be clearly defined, as each provides care in different ways, and each needs HIT systems that do different things. I understand the complexities surrounding this issue. I believe that by defining realistic objectives and measures for meaningful use, EHRs can be made available to as many healthcare providers as possible. This will markedly improve the quality and safety of healthcare in this country.

All healthcare providers want to improve patient care. We strive to do that every day. The EHR will be a critical tool as we, through healthcare reform, build a better healthcare system. We look forward to working with you to insure that meaningful use definitions move us towards that shared goal. Thank you.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Thank you, Mr. Fattig. We'll proceed now to Dr. Edwards from the National Medical Association. Thank you for coming.

Willarda Edwards – National Medical Association – President

Thank you. It's a pleasure to be here, in spite of the train system. I'm the president of the National Medical Association, and really appreciate the opportunity to be here to talk about the NMA's unrelenting quest to reduce health disparities, and that we are engaging our patients and families in improving care and coordination of public health, and insuring the adequate privacy and security protections for health information.

First of all, I wanted to respond to the question about how small practices or hospitals can demonstrate that they're improving care. I want to look at it from a process measures, as well as outcomes measures. On the process measures, we're reporting quality measures to CMS. Tracking the percent of improvement is an effective way in order to measure that. NMA would caution all concerned, however, that baselines differ among populations, so one improvement in one population may not make a difference in another. All quality improvement measures should bear this in mind, and all reporting should remain voluntary until we work out all the kinks.

Also, with an increased number of patients who have access to their own EHR, this would be an objective means of determining patient engagement. But the so-called digital divide keeps vulnerable populations on the wrong side of this innovation, however. A huge amount of outreach awareness building and improved access to technology is necessary on this front.

As far as outcome measures, it is one thing to have a goal, but achieving results is much more important. The following are very important to our constituency. Reduction in racial and ethnic health and healthcare disparities, reducing the incidents of prevalence of chronic disease, comorbidities, and limited access to

care due to language or cultural barriers, among other indicators would be an empirical evidence that HIT implementation has improved care among vulnerable populations.

Reduction in the 30-day readmission rate, this measure presents a unique opportunity for all providers to improve quality, reduce errors, and save the system money. It remains unclear, however, how much this reduction impacts a physician's cost of services. Our members are asking does the promised incentive balance out the required initial monetary outlay. Physicians all want to give quality care without concern of being penalized for bad outcomes. At the same time, if the physician is saving the healthcare system money by investing in health IT, where is the cost benefit to the physician? Or is it possible that they're running a risk of paying for major HIT investments and still being reimbursed less because of potential bad outcomes that are best documented by the HIT that they had to purchase.

Increased information and exchange between smaller providers and health departments, this means that disease surveillance, outbreak investigation, vaccination rates, etc. are all vital public health imperatives that are better served when there's an easy exchange of information between smaller providers and the public health apparatus at the local, state, and federal levels.

With respect to applying the use of measures, the following should be carefully considered, as we apply the MU measures in our demographics. Noncompliance of patients, often this is through no fault of the patients. Many patients are unable to comply with the doctor's instructions, and the reasons could include health literacy, the resource limitations such as money and transportation, or any other social determinants of health. Those social determinants of health include the lack of adequate housing, lack of access to nutritious foods within the community, and limited access to safe outlets for recreation and environmental hazards, etc. All of these contribute to the success or lack thereof of the prescribed therapies, which would in turn impact our outcomes. The resource restrictions that doctors and smaller practices have in terms of limited time to enter their lab test orders, referrals, and consult results, in many cases they lack the adequate staff in order to support the data collection.

The other measures that we agree upon, that we may not have considered everything, but our goal should be to orient these measures towards prioritizing prevention, primary care, integrating the office practice with public health infrastructure, and insuring that all measures help track the reduction in health disparities. The barriers that we see to adoption are, number one, affordability and maintenance. We suggest that there be grants, incentives, low or no interest rates, and technical assistance that can help the providers to provide better care.

Also, we need to recognize the patient mix. The small practice providers should be given EHR and health information exchange that's designed by the demographics based on the variation of the patients that they see.

Lastly, I wanted to say that finally our role in improving HIT adoption and implementation rates is, first, we should spread the word. Second, we can set an example with a lot of fiscal support. And, third, we should encourage minority vendors to get involved in the design and implementation. Thank you.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Thank you, Dr. Edwards. I think we'll proceed now with opening this up to questions from the policy committee. Yes, Michael? Mr. Lardiere?

Mike Klag – Johns Hopkins Bloomberg School of Public Health – Dean

I had two questions. You said the economics don't work, and as I understood it, one of the reasons is because a lot of the providers aren't physicians. Did I understand that correctly?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes. Under an FQHC model, under eligible providers in the stimulus package, we have physicians, nurse practitioners, nurse midwives and physician assistants, and dentists that are included for the regional extension center to cap it as the ten providers per tax ID. When you have one tax ID that has seven different sites that may have 40 or 100 providers, there's just now way for that to work.

Mike Klag – Johns Hopkins Bloomberg School of Public Health – Dean

So it's the number of providers?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes.

Mike Klag – Johns Hopkins Bloomberg School of Public Health – Dean

Last week, we heard a presentation from a group of – a representative of California, a group of federally qualified health centers who talked about, and Deven, maybe you can help me with this. The person presented a model, a subscription model, I think, of 60 federally qualified health centers who had gotten together, and it was a very cost effective model. I was wondering whether you were aware of that model.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes. We have a model. It's called a health center controlled network, and what happens is groups of three – this is regulated under HRSA. Groups of three or more health centers come together, and either they form another corporation, a nonprofit, or one of the health centers then takes the lead, and then they provide the infrastructure basically for the rest of the health centers, so it's a very efficient model. We did recommend that the health center controlled networks, and also primary care associations in the state who also do some of this work, be components of the regional extension center, and that was accepted. However, once you put this ten provider cap on a tax ID, that doesn't let the health center controlled network expand and be able to provide the services that it needs to provide, so that's where we get into the problem, and it just doesn't work.

Judy Faulkner – Epic Systems – Founder

Where does the ten-provider cap come from?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

It was in the last, it seemed to be in the last guidance. It wasn't in ARRA. It seemed to be in the last funding opportunity announcement. It wasn't provided at a time where we could have made public comment on it. To us, it seemed sort of arbitrary and discriminates against that model of care. So the first funding round is coming up November 3rd. I know people are – some health center controlled networks think they may have to back out of their consortium with their regional extension centers because of this, so it's something that's important that we think we should try to change immediately.

Judy Faulkner – Epic Systems – Founder

Is it already a law, or is it just something that's projected?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

It's just was in this funding opportunity announcement, not law. Actually, federally qualified health centers, in the law, were separated out as a separate entity because of the way we worked, because of the multiple providers, the medical home that we provide for patients. So it seemed to us sort of strange that it was separated out in the law, but then lumped in back with other non-FQHC providers in this regional extension center.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Jodi?

Jodi Daniel – ONC – Director Office of Policy & Research

...funding opportunity? I'm sorry. I'm trying to figure out. This is a HRSA funding opportunity?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

No, this is the regional extension center.

Jodi Daniel – ONC – Director Office of Policy & Research

The regional extension center. Okay. Thank you.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

I'll try to read between the lines. The RECs, the regional extension centers, were to give preference to the smaller providers, so presumably what they did was try to do it by this tax ID, the ten cap. I think that's probably something under the control of ONC, and so your message is being heard by ONC.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

It's one of those unintended consequences, I suspect. Marc?

Marc Probst – Intermountain Healthcare – CIO

Mr. Fattig, you have done a terrific job in a very small environment. I had a couple questions. One was around physicians and what you're doing outreach wise to connect the records, share the data within the area that you're at. The second one is more around the issue of – I come from a very large organization, and we've got security and privacy and all the issues that regulation has placed on us, and it's beneficial in a large organization because I can leverage a bunch of people to do that across a large cost base. How do you keep up with all that regulation, and what's the impact on you, because it seems to me it would be pretty significant?

Marty Fattig – Nemaha County Hospital – CEO

Well, your first question regarding the physicians and how we communicate, we have one private practice clinic in town. If you see my written comments that I presented, we have a five-physician practice in town, and we have a number of medical providers from Lincoln and Omaha that come visit us on a regular basis to provide specialty care.

Our physicians have an electronic medical record in their clinic. It is separate and disparate from – there are two separate systems. But we have set up, our system has a Web based access for physicians that is secure, so the physicians can access their clinic records while they're in the hospital. We've set up a VPN so that they can dial into their, you know, get into their system that way. So the physicians can see both records. We can't, of course, but the physicians can.

It would have been better to have it all under one system, but, at the time, the docs wanted to move forward, and I did not want to throw up any obstacles that would slow them down from adopting an electronic medical record, and they have done an excellent job. They are currently using CPOE in our hospital. It's made a big difference on medication errors, as you know. You all know what the data shows.

As far as the regulations, security, HIPAA, now HITECH, it places a huge burden on us. What we have done is partnered with our legal counsel, and we have a law firm in Omaha that provides services to many of the hospitals in the Nebraska, Iowa, South Dakota, and Missouri area. They have sat down, actually, and developed a toolkit, kind of a plug and play type of system to help us adopt the HITECH rules and regulations so that the policies, you know, you put in your own number and your own name, and away you go. Since these are the guys that are going to be defending us in court if we screw up, I think it's a great idea to do what they tell us to do, so it's a win/win, I think.

Marc Probst – Intermountain Healthcare – CIO

Do you have the FTEs to make the modifications or changes to your system?

Marty Fattig – Nemaha County Hospital – CEO

We do. Most of our system, of course, was developed by our vendor, and our vendor, by our contract,

has to modify and make any changes required by regulation or law so that we can move forward and stay in compliance.

Marc Probst – Intermountain Healthcare – CIO

Good.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Yes, Paul?

Paul Egerman – eScription – CEO

I have a couple questions. First, I want to thank you all for your testimony, which is very useful. You're dealing with some very challenging environments and doing terrific work. The clear message I got from reading the materials and listening to you is what we have for meaningful use criteria is interesting, but it's not really sort of like the center of your radar screen in terms of what you need to do to best serve your populations.

I had a specific question on the issue of patient access to the record. Some people call it the personal health record, but patient access to medications and problem lists, which is in 2011. You all have shown some concerns about that for varying reasons: the digital divide and language issues being issues. My question is, what should we do? Should we simply have an expectation that you will have a much lower percentage of patients who actually access their record, or should we say, well, gee, there's some reason why federally qualified health centers should not be – that that requirement shouldn't apply to you? In other words, should we just lower our expectation, or should we eliminate the requirement?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

I think lowering the expectation may be okay. I think another area may be education of patients so that they are aware and know that they should actually access their record and use it. Another piece is maybe requiring the vendors to do some translation facilities so that we can provide the information in the language for the patient, which gets very difficult because we treat everyone no matter what language they come in with, and we need to get interpreters. So it's a very difficult issue. I don't like to lower expectations so much. Certainly not penalize anyone. I would leave the expectation there, but not have any penalty down the road that you didn't meet it because your patients can't really access.

Paul Egerman – eScription – CEO

I think the way the meaningful use will probably be written, and I don't think there's a specific threshold that's been proposed.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes.

Paul Egerman – eScription – CEO

It's really that you have to report the percentage, and so....

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes. I don't think there's any problem with reporting the percentage. I just look down the road that once you start reporting percentages some three years, five years down the road, someone wants to hold you to the line, and then there are penalties associated with it. We certainly wouldn't want to see any penalties, as long as people are making a good effort to allow patients access and provide it in the languages they can understand.

Paul Egerman – eScription – CEO

That's helpful, and that's reasonable. Then, Marty, you made a comment that you had concerns about whether or not your vendor could provide that functionality and other functionality, but you have to use a certified system to get – even beyond meaningful use, you have to have a certified system, so that functionality has to be provided by your vendor, doesn't it?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

It is not required in the CCHIT requirements at this time. Our system is certified, and it is not required.

Paul Egerman – eScription – CEO

I see. Well....

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

If I could expand on that—

Paul Egerman – eScription – CEO

Go ahead.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

What I would like to see happen – first of all, you've got to get the data in the system. I mean, you've got to develop. You've got walk before you run, so let's get the requirements. Let's get the measures. Let's get the objectives in place that allow small hospitals and other healthcare providers to build the system, you know, to get a nursing system where the nurses are documenting, where physicians are documenting, where lab results are flowing freely into the database, where medical images are there, and then let's start looking at providing a patient portal. But until we have the basics in place, there's nothing to look at. So let's build that base and accumulate data for patients to look at.

The other thing is, how do you want patients to look at data? We can provide them with a CD. We can give them their data on a zip drive. But we do not have a patient portal where the patient can log in on a computer and look at their data.

Paul Egerman – eScription – CEO

Part of your point, if I make sure I understand it right is, a portal in 2011 is not going to be useful for patients anyway because you won't have it yet populated with—

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

We will.

Paul Egerman – eScription – CEO

You will, but other people might not.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

But the majority, the vast majority of small, rural hospitals will not.

Judy Faulkner – Epic Systems – Founder

When is it needed for the hospital? Typically the patient interaction is 90%, 99% ambulatory care, and so would it be required for them to have ... is it critical for them to have it in a hospital environment, in an inpatient environment?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Excellent point. We do provide. You know, we can provide them with the data at this time. But as I said, the vendor does not have a patient portal, which I mean as Web access at this time.

Paul Egerman – eScription – CEO

Who is your vendor?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

CPSI.

Paul Egerman – eScription – CEO

Thank you.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Out of Mobile, Alabama.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Any more questions, Paul? Neil?

Neil Calman - Institute for Family Health - President & Cofounder

This is directed towards Bonnie. I guess, first of all, thanks for your discussion about the disorganization of care for people. I think that's an incredibly important point. I actually thought New York was the only place where people could have five organ systems treated in five different institutions, so I'm glad to see that we're not unique in that regard.

I guess I have two questions. One is, it sounded to me like you were sort of putting down the EHR requirement piece of the work that we were doing in favor of this sort of home monitoring stuff, and I'm hoping you're not doing that. I was hoping you were basically saying that we should be considering other types of technology as well.

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

Absolutely.

Neil Calman - Institute for Family Health - President & Cofounder

Because I was trying to follow up on your example, so the patient has this home monitoring device, which is now sending information back to an organizing primary care provider who is helping them to put all this together, but you still have the issue of communicating with all of these institutions because you're not taking over their specialty care. My question is, what are you doing now about that, and what do you see happening in the future in your particular community that might help integrate the information that has to get passed around?

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

First, I would like to say, as an FQHC, we completely support meaningful use, electronic health records. I didn't mean to be putting down the work that you have been doing, simply raising a point that we need to expand what we are doing, and I think we need to expand rather than restrict because there are a lot of community health centers and other practices that do have health records that we, at this point, are either meeting or almost meeting meaningful use. For us, we want to take that a step further.

In regards to communication with the specialist providers, the information that is collected from the patient is sent to a secure Web site, and that Web site for each of the specialists in Chapel Hill and Durham and in Greenville, each one of those specialists that's caring for that patient have access to that patient's information via the Web site. What we are trying to do right now in January, the vendor that we have for our remote monitoring is working with integrating the software from the vendor side over to the electronic health records, and that has been occurring in California with this vendor, and we're very hopeful that, within the next six months, we will have integration with all seven of the community health center EHRs that we're working with.

Until we get to that point, what we're doing is making phone contact with the specialists in the different areas and explaining to them what services we are providing and offering for us to be able to, you know, to give them access to that Web site. Now the primary care, the specialists at this point have not given us access to their EHR. However, the seven community health centers that we're working with in this program, our nurses do have access to all of those electronic health records, so it doesn't matter where the primary care provider is located. We have access to that electronic health record to be able to send information to the primary care provider and then be able to view the action that was taken. Does that answer that question?

Neil Calman - Institute for Family Health - President & Cofounder

Thank you.

Art Davidson - Public Health Informatics at Denver Public Health – Director

I might ask, how many different vendors do you have at those seven community health centers that you're trying to integrate with?

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

We have five different EHRs in those seven community health centers.

Art Davidson - Public Health Informatics at Denver Public Health – Director

Gayle?

Gayle Harrell – Florida – Former State Legislator

Thank you very much, and I have spoken with many of our local community hospitals and also our critical access rural hospitals in Florida. We have quite a few of them. People think of Florida as being mostly Miami, but it's not. There are a lot of rural areas in Florida.

From what I am hearing from our local hospitals is the initial investment is very difficult to make. They have a large percentage of Medicaid, and if you know what Medicaid pays in the state of Florida, it is well below Medicare, and we all know that you can't make it just on Medicare, and there's very little private insurance. So the upfront costs are significant for rural and community hospitals. There's not a large patient base that is a full paying base.

How did you access the original investment? What did you do? How did you leverage to get your original investment? That's my first question.

Secondly, what's your lab situation? The HIE committee workgroup had a discussion last week, and we had many people come and discuss with us the interface situation from community laboratories and how difficult that the requirements and difficulty of interfacing with physician practices. There's a whole nomenclature issue. There are a lot of issues, but if you could give us some insight on the laboratory situation. If you only have one practice, it's very different, but if you have several different groups, the interface situation, how you're dealing with that and if your laboratory in the hospital, in your rural hospital provides most of the laboratory work.

Marty Fattig – Nemaha County Hospital – CEO

Thank you for those questions. Very good. The cost ... how we funded our system, frankly, I was very fortunate when I took over the hospital in 2002 that the previous administrator had done an excellent job of leaving me a nice war chest, and I did have funding for that. That being said, critical access for us is the perfect tool and the perfect vehicle to fund an electronic medical record simply because the cost associated with implementation and ongoing upkeep are allowable costs through the critical access hospital cost report. Our inpatient volumes run around 75% Medicare, so 75% of the costs of this system are allowable each year under Medicare allowable costs, and we get reimbursed for those.

If I would not have had the war chest in place, I certainly would have leased the system, borrowed the money, something because I know the critical access system will pay for it. And where you can depreciate desktop units in three years and servers in five years, the return is pretty quick. It simply works well for us.

Now the other piece of that question that you asked, I couldn't have, if I would have asked you to ask me a question, that would have been the one is the laboratory thing because laboratory is my initial background. I am still a medical technologist even though I'm a hospital administrator now and have been for a number of years. And I have also been a laboratory information systems manager in a regional reference lab up in the panhandle of Nebraska.

Incorporating laboratory data into an electronic medical record is difficult. Into a combined record from many different organizations is a real involved task simply because you have to take normal ranges and everything with you when you go. You can't just pull a number out of the air and put it in the system and

assume everyone knows that everyone's cholesterol is the same as everyone else's cholesterol, for instance. So that is a huge issue.

What we have done, we actually have an interface with our reference laboratory. Being a small, rural hospital, we have limited laboratory testing capabilities. But we work with a reference lab in Omaha to provide the rest of our testing. Those results are interfaced. We can order those tests online. A courier comes by and picks up the specimens. The testing gets completed in Omaha, and those results come back across an interface and are dumped into our system.

Gayle Harrell – Florida – Former State Legislator

What did the interface cost? You only use one reference lab, so you only have one interface.

Marty Fattig – Nemaha County Hospital – CEO

Right. That system was \$2,500.

Gayle Harrell – Florida – Former State Legislator

We've had estimates locally of \$10,000 to \$50,000 per lab.

Marty Fattig – Nemaha County Hospital – CEO

And I'm sure different systems are different. I know some. I've worked with other vendors when I've been a different organizations that had higher interface costs, also the complexities. A lot of laboratory information systems that are out there today are actually developing these interfaces on a pretty large scale, so if they've done one CPSI interface, they can interface with the rest of us pretty inexpensively, so they kind of share the costs, those types of things.

I must admit, and this is probably giving away the secret of our success, but that is, a 20-bed hospital can do what we've done much simpler than a large metropolitan medical center. We are the canoe, and they are the Titanic, and we can turn on a dime, and they can't, and that's just the reality of it. It's not a....

Paul Egerman – eScription – CEO

...thinking....

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

This is a very interesting and informative panel, so thank you very much to everyone. I have a follow-up question for Ms. Britton on the remote monitoring. It's a followup of what Neil was talking about. You made a plea for us to consider more than just – not putting down the EHR, but considering more than EHR as part of HIT. And you talked about how you effectively used remote monitoring for some of your critically ill patients, particularly when they're far away from you. Is your point from a policy point of view that there be consideration of remote monitoring in the reimbursement, the stimulus package for HIT, or the reimbursement rules for payers to reimburse for that kind of remote monitoring? I'll remind you that in the 2013 draft, at least, we did include incorporation of remote monitoring data into the EHR.

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

Yes. Thank you for that question. What we are asking is a couple of things. One is we would like for ONC to include remote monitoring as part of the strategic plan, and if the target is going to be 2013, then what we would like to see or ask for is for ONC to identify community health centers that currently have EHRs are near compliant or compliant with meaningful use, and to fund some more studies on the use of remote monitoring in preparation for the 2013 guidance because if we wait until 2013 to do that, there won't be enough large-scale programs being able to look at what are the barriers to implementation. What are the barriers to the cost of being able to provide all of the same questions with EHRs, but we need to address that also with remote monitoring.

I think that one of the things that I want to make sure that the committee understands is, in the past, the majority of remote monitoring and home telehealth have been provided in a home health agency. We are not a home health agency. In home health, remote monitoring has been semi-effective, but they're usually not in with that patient but 60 days. For us, our average length of stay with our patients is six

months. And so, every day for six months we are making contact with the patients, and the patients start understanding. You know, you give them a handout that says don't eat country ham and don't use fat back and all these things that people are still using across the country. They don't understand that when they get that piece of paper.

What we do is, if a patient's weight is up, we say, okay Mrs. Jones. What did you eat last night? Well, I had Chinese food. Remember, if you eat Chinese food, it has a lot of sodium in it. That's why your weight is up. Patients start making that correlation between my behavior and the outcome.

One of the other things that has really struck me the most about the program, I've been in telehealth for 12 years, and one of the things that strikes me is that the large majority of these patients say to us, this is the first time anyone has cared enough to help me figure out this maze. It's not that patients want to be noncompliant. They have issues that they don't know how to overcome. And so by being there and being there every day, and delivering that information back to their primary care provider, and then to their specialists at secondary truly makes that impact on the behavior.

As well as, it reduces the healthcare expenditures. With our patients that we have had so far, the ones that we could obtain hospital admissions and readmissions and emergency room visits, we have decreased healthcare expenditures by 70% while, at the same time, lowering patients' hemoglobin A1c, lowering patients' LDL and having patients that are compliant.

This patient I told you about, she's had her electricity turned off three times. It's not that she doesn't want to pay for her electricity. She doesn't have the money to pay for her electricity. We can go into that electricity company, and we can say, you have to turn her electricity back on because she has medical equipment in her home. She has to have that access. And so we've got to get down to some of the social issues, and again, I'm not criticizing at all what you're trying to do with meaningful use because I believe in it completely. What I'm trying to do is to bring a face to the committee of the patients that we're caring for, especially in community health centers that even if you have all of the things that are explained in meaningful use, I still think there needs to be something in addition to that to make behavior change.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Could I just ask, are you reimbursed for the home, for the remote monitoring?

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

No, we are not. We have absolutely no reimbursement. We are in a three-year grant. It's in collaboration with North Carolina Medicaid. We're only focusing on North Carolina Medicaid and dual eligible patients, and North Carolina Medicaid is going to be providing the financial data component so that we will have a sample size of 500 patients at the end of three years to be able to say should there be an adjusted reimbursement for community health centers for this monitoring.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

The ... payment reform is a very important issue around here because there are a number of health centers across the country who would be able to do this, but are not able to do it financially because they don't get reimbursed for that either.

Willarda Edwards – National Medical Association – President

And if I could add also that your primary care doctors in a lot of communities are unable to do that as well because of the fact that they need the financial support in order to be able to provide those services ... health information technology.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Judy?

Judy Faulkner – Epic Systems – Founder

I have a couple questions. The first one may be to Marty, but may be to everyone. Yesterday we were discussing something I thought was very interesting, which was how deeply do we get into managing

what we want to see out. We got into the discussion of specialists versus primary care and who is supposed to do what and how do we know whether we're even measuring the right thing for the right person.

My question, because of what you were saying about your hospital is, do you think that all we have to do is measure that they are getting the electronic health record and using it through CPOE, through alerts, decision support, etc., and not measure the outcomes because doing that brings in those problems that we discussed yesterday? Of course, it would take a lot more time and cost more. Do you think that that, in the end, is so likely to drive the results that to get into the outcomes is almost unnecessary?

Marty Fattig – Nemaha County Hospital – CEO

Thank you for that question. That is exactly what I was going to ask or some comments I wanted to make. First of all, I think it's very important that we measure outcomes, and we have done everything we can to measure outcomes in our organization. We participate in hospital compare, all the results there that we have to. We beg to participate in the outpatient measures that initially critical access hospitals weren't allowed to participate in. We've participated in all of Dr. Berwick's IHI programs, the 100,000 lives campaign and the 5 million lives campaign. We believe in outcomes measures because I think they make us better.

The problem, I believe, is that, again, first of all, we need to develop an electronic health record. Let's get the data in place, and let's go ahead and submit measures the way we're currently doing it, whether that's electronically or manually or ticks on a piece of paper or however we get that done, but continue to require people to – I mean, it holds us accountable. Let's face it, so let's continue to do that. Then once we get this basic electronic health record put together so that we have the data, then let's start trying to figure out how we can submit that stuff electronically. Again, let's walk before we run.

My concern with my colleagues, again, I had this health information technology background when I became a CEO, so I approach these things a little differently than most of my colleagues. But most of my colleagues are doing a cost benefit analysis of the meaningful use criteria, and a lot of them are saying I'm just going to take the penalty and be done with it. It just isn't worth it. That does not benefit the patients, and that's what we're here for is to improve care, make it safer.

My thought would be, let's get the system in place. I'm all for that. Let's help everybody get on the train, and then let's start pulling in all these other really, really important pieces, but let's do them at a later date.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

And we would echo that as well. We feel that measuring outcomes is very important. We feel that's how health centers have come to manage their populations that they treat so far. They have a long history of PDSA cycles: plan, do, study, act, and redo it, and always striving to do better. So measuring the outcomes is very important. I guess the piece I would just want to add is when you get to down the road, and after you've measured them for a while, then people say, oh, well, you didn't reach this level, and so then your reimbursement is cut in some way or fashion. I think that's where we would, you know, you can't do that until you look at all aspects of why you didn't meet that criteria, but measuring is important, and having that review cycle, quality assurance, and continuous quality improvement is very, very important.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Judy, go ahead.

Judy Faulkner – Epic Systems – Founder

Yes. Just a couple more things: One is that I know the community health center ... qualified health centers, the safety net providers, proportionate share, small, rural hospitals are working on thin margins if they're lucky that they're positive. It could be in negative margins. Is it possible that for those who are the disproportionate of share safety net providers that, for them, the money could be provided up front rather than after the fact because they may need it differently than the rest of the – those who don't serve the underserved? That's just a question that I am throwing out as we do this, if that would be possible.

Paul Egerman – eScription – CEO

It's Medicaid money for the dish hospitals, so it's hard to get it up front.

Judy Faulkner – Epic Systems – Founder

But that was paid after the fact, though. How do they get the money up front to do the purchases?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes, that's an issue because, even for federally qualified health centers, and I know, Paul, you mentioned yesterday that the money is upfront, but if you can tell me where that money is, I would love to know. But there's nothing that we've identified so far where the money is upfront. For the adoption year, for the federally qualified health centers, you are eligible for adopting, and that's still, we don't know what that means yet, but that money is not available to you until after adoption. So we do need to have some mechanism to have the money upfront to get people to adopt and then, year two, begin to meet meaningful use criteria.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

When you're saying upfront, it's my understanding, and I'll look to my own sea of colleagues, but that in Medicaid, you're reimbursed. And the question is, your definition of upfront, for the installation and the cost of installing up to 85% in your first year, and so the meaningful use criteria, per se, don't apply until after year one.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Correct.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

So when you say upfront, you mean even before you make the purchase?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes, because I have 20 providers. It costs me at least \$5,000 per year per provider for my software license. That's \$100,000. I'm a federally qualified health center. I work on a 0.8% margin across the country. I have to have certain reserves in place to meet my HRSA demands. I don't have another \$100,000 that I can put out, and that's just for the software license, and doesn't include, you know, other training that you need, a decrease in time for staff and billing that you might have during that implementation. So to get the money to get you to adopt is really something that needs to be available upfront.

Paul Egerman – eScription – CEO

Paul, I want to add to that if I can. This goes back to an issue that we talked about yesterday, which is that the Medicaid money is supposed to come through the state piece, and so you're looking at the FQHC model, which is really a national model of health centers across the country, and each of them is going to be dependent upon what their states are doing in terms of being able to figure out how to get this money and how to implement it and how to get it out in front. Honestly, given the timeline, it probably isn't going to come before 2011. They have to put their plans in place. The plans have to go to CMS for approval, and I think there's second round of plans. I'm not totally familiar with all of the details, but then once they do that, they have to figure out how they're going to qualify the centers.

And I know, in New York State, there's an issue about just understanding sort of what the denominator issue is, like you can report on the number of Medicaid claims, and the health centers have certified audits that sort of put this in place. But for the rest of the Medicaid providers, there's no way to know how many privately insured patients they have. So when you're looking to figure out if somebody meets a percentage of Medicaid, you have to know what the other percentage is, and those claims are going all over the country to private insurers, and so the states are trying to figure out, how do we validate that piece of it in order to comply with the federal law. I think there are a lot of pieces that are going to have to come in place, and so the issue of getting the money upfront is even more complicated than just the timeline and the legislation. It really depends a lot on how the state piece sort of rolls out.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Dr. Edwards, do you have...?

Willarda E

Certainly. On that point, as far as, I'm also the president of NMA, but also a private practicing physician in Baltimore. And my partner and I, in our practice in internal medicine, are part of the demonstration project that CMS has with respect to use of medical records, electronic medical records. When we became a part of the demonstration project, we were very excited about being a part of that, and then learning more about how we would access the information and improve the quality for our patients.

As we went to the group discussion about what you do as a participant, we found out that there was no money for us in terms of accessing or getting electronic medical records. They would give us some direction because they had already gone through several vendors, giving them information about their electronic medical records, but there was no grant available, no funding at all. In order for us to do this, we had to dig in our own pockets and find the \$30,000 or \$60,000 to invest in EMR, and who was to know whether or not that was interoperable with whatever was going to be developed on a national level.

And so, needless to say, we have been measuring those quality measures that they have asked for. We have accumulated that, sent that in, in terms of our reimbursement for patients, but we don't have the medical records at this point in order to be able to pull that information out easily. That is the problem that many single or private practicing physicians in primary care that want to provide quality are faced with right now that they don't have that upfront money in order to be able to access a good EMR in order to be able to qualify for many of the programs that are going forward.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

And I would just like also to interject, and I would be remiss if I didn't bring it up from my behavioral health hat. There are many providers who are not included in ARRA, and who we need to interface with, specifically behavioral health providers, community mental health centers. Even if 50% of your patients go to a primary care and get your behavioral health treatment, the other 50% are going to community mental health centers and behavioral health providers.

They're not all psychiatrists. Social workers, there are community mental health centers that are out there, and if we don't provide the funds to be interoperable with them, then we're missing a whole piece of the patient, and we're not really going to be able to treat the patient in a total way, so we also need to look at those providers. There are other safety net providers that were not included in ARRA that some of us share those same patients across the spectrum, so we need to look at that as well, so thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Christine is next. Do you have a comment about this? Okay.

Christine Bechtel - National Partnership for Women & Families – VP

I don't know where to start. I'm Christine Bechtel with the National Partnership for Women and Families. Michael, you just actually started to address one of the questions that I had. Your testimony was fantastic, and I appreciate it. The written testimony is really helpful because you pose a number of challenges, but you also offer your thinking on solutions, so that's much appreciated.

One of the challenges that you pose is exactly what you talk about, which is behavioral health patients. In your written testimony, you say we would encourage the policy committee to make recommendations to insure that providers for these populations have the tools necessary to coordinate care with the FQHCs. CMS is limited by the law in terms of being able to add and reimburse new provider types. I just don't see that as an option. I know there is an amendment in the Senate finance bill, as I'm sure you know, around free clinics, for example. But right now we're limited. Can you talk briefly about how can we promote a set of tools that might drive some coordination and collaboration in that area?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

One way that might help, and there'd still be costs associated with it, but it would be to allow, help, encourage community mental health centers to participate through some of our health center control networks. I described that structure a little earlier. It certainly drives down the cost of implementation. You have some licensing fees could be reduced because they buy licenses in bulk, and the infrastructure is there, so you don't have to have every health center implementing everything, all the backup, all the redundancy, all the extra pieces that you need to have if they joined a hub so-to-speak. So that might be one way. There'd still be costs associated with that.

I'm not sure where – I don't know where that money would come from. I believe that the Office of the National Coordinator has to come up with a plan within a year for those other providers, is what I thought I read in the stimulus package. But until that happens, it's still going to be difficult. But I would encourage them to join the health center controlled network models to build on those economies of scale and those infrastructures that are already in place, and we have health center controlled networks across the country who are willing and open to do that. I think also the money from the states, when the states roll down their Medicaid money, they should be encouraged to look at that as well.

Christine Bechtel - National Partnership for Women & Families – VP

I want to come back, thank you, to the back and forth between Marty and Judy about outcomes versus sort of getting the EHR in place. And I actually have a question for Dr. Edwards that's going to come immediately following that. But one of the concerns that I have about getting EHRs in place is the experience that a lot of providers have had, and that I personally had with my own family doctor where you have an EHR in place. They have data. But they're absolutely not using it to provide high quality care, to engage patients and families, to reduce disparities, and these guys are applying to be a medical home, I just found out. I mean it's unbelievable, and they've had an EHR for some time.

So it is not enough to automate paper, and I know that we all get that. But what we did in the meaningful use approach was not to say, and I want to be clear about this, that somehow reimbursement depends on outcomes. It doesn't. What we did, and I thought it was a fantastic approach, was to evolve what we currently, the sort of approach we currently take, which is reporting of process measures, but begin reporting only of outcomes. It doesn't matter what the measure says or how poor it is or how fabulous it is. If you report, that's what the recommendation was from this committee that you would be reimbursed. But it gets provider eyes on outcomes, and it makes them start to think about getting beyond automation of practices.

And so that leads me to my question for Dr. Edwards, which is in your testimony, I'm not sure I was understanding, so I just want to make sure that I understand. You talked about tracking percent improvement is as effective a metric as any, but you caution that baselines differ across populations, so that improvement in one population might not make a difference in another. Can you clarify that? Did you mean, so are you talking about one disease condition across different populations? Are you talking about different disease conditions across one? I just wasn't sure what you were recommending.

Willarda Edwards – National Medical Association – President

The fact is that, and you are all very well aware of health disparities and the fact that various minority communities are more highly impacted by almost every disease entity there is, whether you talk about cancer or HIV/AIDS, diabetes. The minority community is highly impacted, and so when you start talking about disease measures and outcome measures, then we need to consider the amount of disease burden in that community, as well as the social determinants of health that may also affect their outcomes in the long-term and the treatment that you give. And so when you start talking about outcome measures, you've got to recognize that difference in that denominator there as opposed to other communities.

Christine Bechtel - National Partnership for Women & Families – VP

Terrific. Thank you very much. That's helpful.

Willarda Edwards – National Medical Association – President

Thank you.

Christine Bechtel - National Partnership for Women & Families – VP

I'll just have one last quick question. This is what happens when I get farther down the list is, the more I hear, the more questions I have. Let this be a lesson to us. That is, for you, Bonnie, you have great fans in North Carolina. They made sure that I saw the press release about the fact that you guys have decreased hospitalizations by 71% and decreased ER visits by 69%, and that's phenomenal, and congratulations.

Paul started down the logic here that I have or the question here that I have, which is that in 2013, we have what I think is sort of a placeholder right now because we need to figure out how to do this, but we have – it says, upload data from home monitoring device. Our hook here is meaningful use, so going back to what I said to Michael earlier. We're limited by that, and we have to leverage that. We can't create a new reimbursement stream for remote monitoring. And it may be that the question I'm going to ask is just a food for thought, and let's come back.

By my question is, what is appropriate for a criteria or a requirement in meaningful use, given the fact that, by and large, the majority of physician practices, particularly small practices across the country, are not really engaged fully in remote monitoring in the way that you are. But we want them to start down that path, and the fact that there are no reimbursement streams. I'd like to ask you to think about and talk to us about where do we start. What's the first step that is a reasonable step because clearly remote monitoring and patient engagement and having patients being able to track their own information and submit it to providers and really have more of that coordination, that's enormous, particularly given the aging of our population and the huge demand that we have on family caregivers now? I think the question is where we ought to start and if that's something you have thoughts on now, fantastic, and if not, to come back would be terrific.

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

Thanks for that question because I do have thoughts on that. One of the things that I hope everyone here is aware of, and if not, to update you. The Veterans Administration years ago in the year 2000 started doing pilots within their ... on remote monitoring. And now it is mandated that all Veterans Administration sites have remote monitoring by the year 2010, which is right around the corner. There are 35,000 veterans right now being cared for in the manner that I described earlier.

What I see is the next logical national transition for remote monitors is community health centers. We are the second below the Veterans Administration. We are the next highest federally funded, even though it's partially funded, health centers, and I believe that we need to identify community health centers or the networks of community health centers that are currently participating in electronic health records in what Michael was describing earlier, to focus and target on doing standardized pilots, studies for community health centers in remote monitoring with the chronic care because I believe, because of the nature of the patients that we provide, and all the social issues we have, as well as the high level of uninsured, if we just focused the monitoring on our uninsured patients and keeping those uninsured patients in their home. If we focused on patients with health disparities, which that's what we've been doing, patients that don't have transportation, patients who are having to pay \$25 each way to get to a doctor's appointment.

I really think we need to start with community health centers. And we've started that in North Carolina, and we hope to expand that even further than we have right now. I hope that answered your question.

Christine Bechtel - National Partnership for Women & Families – VP

Thank you.

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Jodi?

Jodi Daniel – ONC – Director Office of Policy & Research

Thank you. I'm Jodi Daniel with ONC. I really enjoyed all of your testimony. I think this is important to have your perspectives brought to the table. One of the things that we're very concerned about and very interested in is making sure that our health IT efforts are not increasing health disparities and, in fact, hopefully there are activities and things we can do to reduce that gap through the use of health IT, so I really appreciate all of your thoughts on that.

I have a few questions. Following up on Christine's last question, and this is for Bonnie. You talked a lot about the need for behavioral change and remote monitoring, but it seemed to me, and it was very compelling, and agree with all of your thoughts on that and really appreciate your experience. The question is, is a lot of what you were describing sounded like it was very people intensive instead of technology intensive. My question for you is, what are some of the things we can be doing since we're talking about health information technology to help support those efforts and promote the behavior change through the technology since that's the lever we have and that we're talking about?

Bonnie Britton – Roanoke Chowan CHC – CNO/Telehealth Director

That's a good question. With our program that we have right now, it's not as people intensive as it seems. We are currently monitoring 200 patients, and we have 2 RNs, so it is a scaleable model that can be implemented without a lot of upfront.

One of the things that we're finding is, for an example, Piedmont Community Health Center in Chapel Hill came to us, and they said, we want to do telehealth. We have an EHR. We want to integrate the remote monitoring into this, but we don't want to go through, number one, the learning curve or, number two, the extent of having to hire the staff to do that. So they are contracting us to provide those services for them.

And so, we have developed a model where if someone wants to start a remote monitoring program at a very low cost, we are able to actually be the infrastructure for them to not only – we have a telehealth manual for them. We implement their policies and procedures. We write them. We do all their training. We help them do their installs, and we do all the monitoring.

What we ask of those community health centers is the amount of money that it takes to cover part of that RN because I've got one RN that's covering seven community health centers. All seven community health centers don't have to pay for an RN. They're paying for a portion of the RN.

The other component that has just happened is initially telehealth technology was extremely expensive. When I started in 1997, an in-home monitor was around \$20,000, which is completely, you know, people can't do that. Right now, the vendor that we're using to purchase the technology and all the peripherals is \$795. Then, on a monthly basis, after that first year, it's \$20 a month. That's affordable. And that's ... we have to find affordable ways to be able to meet the needs of these patients if we're going to have behavior change.

I think, number one, with the community health centers, there's not competition between the community health centers, and that's why I think the community health centers, there can be a model per each state. Matter of fact, I'm meeting tonight with the CEO of BlueCross BlueShield of Tennessee. They're going to implement a program, and what they're saying to us is we don't want the upfront costs. We don't want to do all of that. We want to pay somebody a set amount of money per year to manage all of this for us. Can you do that? And so we're getting requests like that all of the time, so I don't think every site has to have full implementation as far as all the staff that you need to go with it.

The difficult is, though, if you, as a community health center, I can't go to the other private practice physicians in our area and say, we will monitor your patients. They'd see that as competition and stealing their patients. So the approach that we took with that is we went to the hospital, and we said, okay. Of all these diabetic patients that are coming in, they now have a nurse in the hospital who is providing diabetes education, and then for patients that don't come to our practice, our community health center, they're doing the monitoring of those other providers' patients because they don't see that as competition. I think there's a way for community health centers and local, especially small hospitals, to partner together to

utilize their resources to be able to expand remote monitoring further than in the models that we've had in the past.

That's why I wanted to make sure that everyone understood, our model of the medical home model for remote monitoring, it is not home health. We're there for the long-term. We've got some patients that have been on the monitor for 18 months, and their providers won't let them come off because the patient continues to do so well. That's another transition that we have to look at in the future as well.

Christine Bechtel - National Partnership for Women & Families – VP

Another question is, we were talking about the disparity gap in health. My question is again tied to the discussion of this committee and meaningful use. Are there certain things, objectives or measures that we should be considering for meaningful use to help with the disparity gap? I guess, Dr. Edwards, if you could start....

Willard E.

That would be, and particularly, what we were asking for as well that we be at the table to give you those measures, those measurements as well, and that any measurement that we talk about should make sure that we're trying to address the issue of health disparity. I can't give you all of them right now, but I certainly think that that needs to be primary in our measurement tool.

Christine Bechtel - National Partnership for Women & Families – VP

One more quick question. There was one discussion about the upfront money, and one of the possible things that we're allowed to do under the HITECH Act is a loan program. I wanted your thoughts on whether or not, even if it were a modest loan program, how that would impact the ability to adopt, and at what level that may work or may not work for your program.

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes. I think the loan program would be essential, and with the caveat that you get the loan upfront. And when you get your meaningful use money, you pay back the loan immediately, so I think that would be very, very helpful. In terms of what amount, is that what you're asking...?

Christine Bechtel - National Partnership for Women & Families – VP

My question is – no. As far as the total cost ... if we're only able to provide a little bit of help, not full cost, does that get you over the hump, or are people not going to adopt unless they have all of the money upfront to purchase it?

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes. I guess that....

Christine Bechtel - National Partnership for Women & Families – VP

In the....

Michael Lardiere – NACHC – Director HIT, Senior Advisor Behavioral Health

Yes, I guess that gets to the amount because anybody who really wants to do it, if they have enough to get them over the hump to do it, they'll be able to do it. I think any amount would be worth considering, and then some of the executives that are a little more savvy than others would be able to make it work, and some won't. So it's hard to say what amount, but I think anything would be helpful.

Christine Bechtel - National Partnership for Women & Families – VP

Would be appreciated, okay.

Willarda Edwards – National Medical Association – President

I'm going to say that your primary care, single practicing physicians will need a lot more help than others.

Christine Bechtel - National Partnership for Women & Families – VP

Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

I just want to offer to Tony, if you're still on the line, if you want to make any comments about this subject in terms of the upfront or the loan for the smaller providers.

Tony Trenkle – CMS – Director of OESS

No.

Art Davidson - Public Health Informatics at Denver Public Health – Director

All right. Well, I want to thank the panel. It's 10:00, and it's time for us to take a break. I really appreciate the panel coming here and sharing this with the committee, very insightful and thoughtful comments. We heard about upfront funding, the face of the patient, remote monitoring, social determinants, and how nimble a critical care access hospital can be like a canoe, so I appreciate you coming and sharing that with us today. Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

We'll have a break until 10:15.

Judy Sparrow – Office of the National Coordinator – Executive Director

Hello? We're ready to begin, if you could take your seats, please. The meeting is ready to start.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Welcome to the second half of this morning's presentation and hearing. We're now going to hear from a variety of folks having to do with folks that are covered only on Medicare, as an example, and other safety net providers and, as I mentioned before, other users of health information that are captured through EHRs in an appropriate way such as clinical research. Dr. George Hripcsak is going to moderate this final panel.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thanks, Paul. Our panel comprises of Dr. Greg Downing of HHS, Dr. Alan Zuckerman of Georgetown, Dr. Thankam Thyvalikakath of Pittsburgh, Dr. Melinda Jenkins of New York, and Dr. Andy Steele of Denver. This panel continues our theme of looking at various constituencies and how they're affected in various ways, be they providers or infrastructural, of how that is affected by meaningful use. Again, will the presenters please notice, we have our timer at the front, and we're asking for five minutes at most, mainly because you've already put in your excellent written testimony, and now the value of the session is more in the questions since we have that already. Let's begin with Dr. Gregory Downing of HHS.

Gregory Downing – Office of the Secretary, HHS – Program Director

Good morning. Thanks, George, and thanks to the members of the panel. My name is Greg Downing, and I'm here from the Office of the Secretary at HHS. I, first of all, want to thank all of you for your hard work and efforts towards this future of health enterprise, health information technology. And so, in looking at the future, one of the problems is that it's not the same as the past, and we're trying to understand how a healthcare system will work when it runs on widely diffused and integrated electronic information. It won't be the same as the system that we know today that runs in a paper-based information world, but it will behave differently. And that's sometimes difficult to conceptualize.

Clinical research is one of the fields where the new powers of electronic information will truly change the game. It may not change the nature of clinical research itself, but it will change and greatly influence and enhance the role and potential in the contributions that clinical research itself can make. It will render clinical research and the information it generates much more central to the total healthcare enterprise, and that's a huge opportunity. My hope today is that I can show you in a system changed by health IT that clinical research will be a veritable keystone to the new way of doing business and one that we should support at the earliest opportunity through meaningful use processes.

I am here today on behalf of federal representatives who have been working to support the use of electronic health record systems to support clinical research activities. In particular, this testimony

represents the input from the FDA, NIH, the National Cancer Institute, the National Libraries of Medicine, AHRQ, the Indian Health Service and the Office of Minority Health, and CDC, in the recognition that the future for improving healthcare will come through research.

I'm also here on behalf of the patients and their physicians. It is their information that is relevant to the data needs that support the full range of healthcare enterprise research needs from clinical trials, outcomes research, population based epidemiology studies, comparative effectiveness research, and more. Patients should have and be provided with the technical means to voluntarily participate in research studies and use their information to do so.

In the past, I think we've had a binary view of the way in which healthcare and health research are looked upon. We know, of course, that research leads to healthcare advances, but I think we've looked at these two aspects as occupying different spheres with different rules and, in particular, different information needs. The clinical research enterprise, which is today hobbled by decades old information techniques, will truly flourish once it can take advantage and leverage the interoperable health information technology we're all here talking about. In the same way that contribution that clinical research makes today, significant as it is, it will be dwarfed by the information resource that can support not only our traditional types of research, but also comparative effectiveness, quality measurement and research, public health safety and monitoring, post marketing surveillance, and more.

I'm proposing that there are basic elements of the clinical research enterprise that are appropriate for application now as a part of the meaningful use incentive approach. In fact, I believe that these are actually essential elements to include in meaningful use if we're to use this process to help build a bridge to the future of an information based healthcare system. I'm sensitive to the way that this area, clinical research, may seem at first glance to be too far reaching for the job we're here doing today, but in truth, there are practical steps that we can take now in the 2013 timeframe that will provide near term benefits to patients, physicians, researchers, benefits that are not only achievable through health IT and adoption, and benefits that are part and parcel of the new way healthcare will be supported by information technology. Clinical research is the lynchpin that connects our basic science enterprise with the applications that constitute progress in medicine. Our nation has been the world's leader in developing these innovations and using them to improve patient care.

We need an IT environment where clinical care information from electronic health record systems can be seamlessly integrated into clinical research information systems. We need a standards based EHR data set that can also help us from stopping the waste from the information resources that today are isolated and siloed either in paper or in electronic systems that don't communicate with each other. Integrated EHR systems and information needs for clinical research will help reduce the time spent on data entry, the time needed to customize EHR products, will increase data accuracy, and increase data availability throughout the research community. Further, it would enable data integration from multiple sources and support long-term study and reuse of data overall.

These efficiencies will leverage billions of dollars of our current research investment and will expand the numbers of clinical studies. They will accelerate new medical knowledge and, in a word, they will take advantage of the opportunities that health IT is giving us to change and improve the way we do business in healthcare. These improvements do not need to wait, and the foundations for standardized clinical research information are already in place, and they can be supported through the meaningful use approach.

It is true that not every physician will take part in the clinical research activities, but many will welcome the opportunities that they cannot access today. And not all IT vendors will need to incorporate clinical research elements into their products, but many will find this as a viable and growing market in this area, especially as clinical research information grows to serve a growing number of causes. The nature of the information in the ITH and its seamlessness and interoperability presents an opportunity for clinical research that can only be described as sweeping a nature of change. In turn, it enables clinical research information to contribute in new ways to the healthcare advancement and the quality improvements that we all aspire for.

Finally, in integrated information resources for clinical care, we feel that this is an opportunity that we must engage now in terms of understanding meaningful use in its fullest extent. Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thank you, Dr. Downing. Dr. Zuckerman?

Alan Zuckerman – Georgetown University – Pediatrician

Thank you to the committee for giving me this opportunity to share my concerns, those of my colleagues about applying meaningful use to the health of children. My name is Alan Zuckerman. I'm a general pediatrician practicing just two miles from here over at Georgetown University Hospital. We're a Medicaid provider in Maryland, D.C., and Virginia, and we see about 25% Medicaid patients in our practice. And we're so pleased that D.C. got its statehood under ARRA.

Although I've been involved with EHRs for over three decades now, it's only over the last year that my practice, forced by audits of our documentation, have gotten serious about implementation. And, for the last eight months, our general pediatricians have been entering every encounter into our EHR. I also served on the health information data exchange taskforce, the state alliance of e-health that looked at the role of Medicaid in HIE. I am cochair of the advanced interoperability workgroup at CCHIT, and I also am a member of the executive committee council on information technology at AAP.

In terms of the primary impact of your 2011 and 2013 objectives, the most visible area is in that of immunizations. And although the measures now are just going to count doses that should have been given by 15 months, at some point between 2 and 3 years, in the future this has to accommodate response to epidemics and other important considerations. I want to thank the committee for the wonderful framework that you've put together, but many of my colleagues fail to see its value because it hasn't been applied to pediatric situations such as that all important first transfer of care of newborns out of the hospital. Hopefully the first generation born under ARRA is going to have a different experience with newborn screening and other events.

I'm very familiar with the benefits of interoperability because, in my practice, we have one EHR for all subspecialists. But whenever my patients go across town or to the nearby city, we're still dealing with paper. Yesterday, I had three new patients arrive at my practice with records, and it was quite a project, even though they were computer generated, to get them in. The same experience I have with the registry. But one of the things that meaningful use is going to do is give the vendors guideposts of what they need to do first, like connecting to immunization registries.

What's different about kids? They're not just small adults, and you've got to adjust measures appropriately. Chronic disease in children is totally different. The big things we deal with are asthma and attention deficit are chronic medication and self-management issues. The early onset of adult diseases like hypertension or diabetes is not managed the same way because children's livers wouldn't survive a lifetime on medications we use in adults. We've got to adjust our measures appropriately.

Pediatrics is also, you know, half primary care. It's also half specialist. Hemoglobin A1c is in the province of the endocrinologist. I use it occasionally in obese preadolescents to pick up their adult onset diabetes. But even hypertension follows very different norms, and we can't just simply apply things. A BMI of 19 that most adults would love to see is profound obesity in many children. Weight based dosing has to be done carefully because we can very quickly exceed adult doses and get into toxic ranges, so AAP does have some guidelines.

In terms of things to add, getting the newborn screening by two weeks, following a hearing screening, which is missed so often, just getting the reminders in there, weight based prescribing. All you have to do is add weight to the prescription to know what happened. Tracking growth by norms, blood pressure, documentation of assessment, and sharing immunizations with parents and, of course, having a family history context for both social and genetic reasons. Don't forget goal number five about security and privacy, which is special in kids in foster care, adolescents, and other settings.

But perhaps the most important issue regarding adoption remains cost, and pediatricians are really worried about the extent to which they may be excluded because of the tremendous churn in and out of Medicaid. We know about state variations and things, but you must be aware. Once you enter Medicare at age 65, you're there for life. But Medicaid, you're in and out all the time. In foster care, any given day, 500,000 kids may be in foster care. By the end of the year, it hits 800,000. By the time they hit 18, it's a much larger number who have had the experience.

Right now, according to our surveys in AAP, over half of the small to medium practices can't approach the 20% level, a third can't even hit the 10% thing. We have to live with the law, but maybe we can find ways to adjust for regional variations in Medicaid levels and consider that our goal is really equity, that Medicaid patients aren't excluded because, if we can't get buy in, it's a problem.

We also have a major role of safety net providers, but they're nervous about the fact that their revenue stream, other things don't give them the return on investment. In addition to their Internet deficits in rural and inner city areas, they have a bigger deficit in personnel to help support their systems. But one of the biggest concerns no one talks about, is anyone going to share the results of these meaningful use measures, which undoubtedly are not going to look at good as safety net providers and private providers who take in Medicaid patients would like to see, so concerns in that area are also very much worth addressing.

I've included a number of other things in my comments, but I think the most important thing I want to emphasize is when you turn to your strategic plan, be sure we have some approach that applies to all children, not just those who are receiving Medicaid today with the churn that comes. Let's do something about immunization registries, newborn screening to prepare to send the data because most of the practices, even if ready to receive it, have no one to communicate with us and, of course, both myself, many colleagues at AAP would love to work with you on developing your mapping to your objectives and helping to constrain those for the special needs of children. Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thank you, Dr. Zuckerman. Dr. Thyvalikakath?

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

Thank you very much. My name is Dr. Thankam Thyvalikakath, and I am an assistant professor in the Center for Dental Informatics, and in the department of Biomedical Informatics at the University of Pittsburgh. I am a dentist and a biomedical informatics researcher, and currently my research is focused in integrating risk assessment tools in the dental practice and evaluating clinician outcomes and patient outcomes.

Today I am here to testify regarding the appropriateness of using the objectives and measures for meaningful use of EHRs in dentistry. I see great changes in monitoring health outcomes in dentistry, even though it's only partially applicable and feasible right now. For instance, we typically generate problem lists of oral health conditions and maintain active medication lists and allergies to medications.

However, dentists do not typically enter orders or perform medication reconfiguration. Therefore, there is a need to define and develop measures to monitor oral health outcomes such as cavities, tooth loss, periodontal disease, oral cancer, and other oral conditions. While there has been a limited coordinated response from dentistry, I would like to say that this meeting has galvanized the community, and my recommendation would be to develop a set of criteria by a panel representing the different stakeholders in dentistry, such as the American Dental Association, the American Dental Educators Association, American Association of Dental Research, and dental informatics researchers.

Now coming to the multiple barriers we have, we have multiple barriers for EHR adoption. First of all, only very few of the 160,000 dental practitioners in the United States will qualify for the EHR initiatives in the HITECH Act. This is because the vast majority of the Medicaid patients and the patients from the

underserved population are seen in the major academic dental institutions and the federally health qualified centers.

In addition, these providers will have great difficulty in achieving the 30% Medicaid patient requirement to qualify for the EHR initiatives. We also do not have any certified vendor EHRs until now, and we also do not have any process to achieve that right now in place. In addition to this, other major barriers include we have a lack of standards to capture patient information such as dental diagnosis and patient findings, and there's varying patient information storage in the different dental EHRs. The current dental EHRs are also not currently interoperable and, therefore, significant work needs to be done to facilitate information exchange between the different dental EHRs and with the medical EHRs. This is important if we need to realize the objective of improving care coordination across the different care providers.

To summarize, in the near future, there is a need to develop meaningful measures compatible with the current framework to measure oral health outcomes. There is also a need to work towards certifying the dental EHRs and also work with relevant stakeholders to determine the eligibility criteria for the EHR initiatives in the HITECH Act. At the same time, we need to continue working towards developing standards for capturing patient information, storage of all relevant patient information in the dental EHRs, and facilitate exchange of patient information across the different healthcare systems. Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thank you, Dr. Thyvalikakath. Dr. Jenkins?

Melinda Jenkins – Community Healthcare Net – Family Nurse Practitioner

I'm Melinda Jenkins. I'm a family nurse practitioner. First I want to say thank you very much to the committee for your service, your public service to us. I know you're working very hard. In general, I support the meaningful use document, the matrix. I just have some comments to clarify and add to that.

I'm speaking from my own experience. I'm not representing any national nursing group. I have had some very helpful input from others that I acknowledged in my submitted testimony.

I have to say there are some errors that appear in my bio, and I'm no longer working with CCHIT. I'm no longer working with Primary Care Information Project in New York City. But I did learn a tremendous amount from both of those experiences.

I will give you a condensed version of my write-up, and I'll be looking forward to questions and discussion. Nurse practitioners and certified nurse midwives are directly paid by Medicare, Medicaid, and many private insurances. We also call ourselves advanced practice nurses, so I might interchange and use those words.

The research now shows that the quality of care for advanced practice nurses is equal to or better than that of physicians. We are shown to have increased patient satisfaction, increased time with the patient, and increased patient education. We can substitute for physicians up to 90% of the time. Actually, if you want to look at history, physicians substitute for midwives. There are lower salaries for advanced practice nurses, and there's added value of the patient education that we do, and to retain case management care coordination.

It's very important to record advanced practice nurses as such under their own NPI because this is the way that we will be able to track the work of the nurses and find out the best practices and provider mix. This would be in spite of sometimes billing that is done under a physician's name. We want to use the same primary care metrics. We want to be able to show improvements in our work, and we want to encourage practice based research networks where we can share across sites, improvements and processes that improve patient outcomes.

As far as defining primary care, the majority of nurse practitioners are educated in primary care specialties that include family, adult gero, pediatric, and women's health. I couldn't find really agreement

in the numbers of nurse practitioners, but there are a lot of us, 100,000 or more, and I educated at least 200 of those, so I'm happy about that.

Regarding the patient, I echo especially the testimonies from behavioral health and the telehealth and the peds presenters here. We need teamwork. We have multiple professionals working together. We're working with vulnerable patients who have comorbidities. We have a very large task in terms of the social needs and the care coordination. That's important. And there are new technologies coming every day that we want to be able to use to the fullest.

I think my priority in terms of moving forward is populating the personal health record and accepting patient entered data into that. There's a measure to measure its access. I'd like to say that I hope we will include the content of the CCD, so the patient really has a full summary they can transmit, and they can keep in case they move or change providers. Also, can we measure the use of the PHR in the future? I think the PHR should include links to patient education and community resources for it to be useful to the patient.

I have recommended additional measures and providers, and most importantly, I want to say that nurses in the community, home health nurses, care coordinator nurses, are the glue, I think the superglue for care coordination and holding things together, as we just heard very, very well from Robin, who was here just before me. I included in my written testimony a model of the record that's already generated by about 65% of homecare nurses in this country, homecare agencies, and it includes functional assessment. It includes patient education. It includes goals and timeline and follow-up.

Also, just to point out, in my written testimony there is a small amount about education that I think is very important, and I would love to work further with this community and this committee on anything that would be helpful in moving us forward. Thanks.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thanks, Dr. Jenkins. Dr. Steele.

Andrew Steele – Denver Health – Internist

Thank you. It's great pleasure that I speak to you on behalf of my institution, Denver Health, to provide our insight on the meaningful use measures. I've been an internist for 20 years at Denver Health and director of medical informatics for the past 10 years.

Now to set the stage, Denver Health is the integrated ... institution for Denver and the Rocky Mountain region. Our system focuses on the needs of the vulnerable populations that are largely excluded from healthcare cover. Denver Health includes multiple link components of a public healthcare delivery system such as the 911 trauma system, a disproportionate share hospital, eight community health centers, the county public health department, and an HMO. Forty-six percent of our patients are uninsured, 70% are minorities, and 85% are below 185% of the federal poverty level. Since 1991, we have provided \$3.7 billion in uninsured care, that's billion with a B, and we have invested more than \$330 million in health information technology, which resulted in a comprehensive electronic health record used throughout all of our sites.

Now concerning the first question, how would the proposed measures demonstrate that they are improving care? Our analysis demonstrates near current compliance with approximately 85% of the 2011 measures. For instance, we're already seeing improved care by leveraging our data warehouse to build a disease registry to help manage outcome measures for diabetic and hypertensive patients. We also use CPOE order sets to drive compliance with the VT prophylaxis guidelines.

In order to meet the 2011 criteria, we will need to expand and focus our current improvement efforts in a few areas such as the use of high-risk medications in the elderly, CPOE for eligible professionals, and improving access to personal health information and clinical summaries electronically. In addition, we are in close communication with our EHR vendor, Siemens, and have confidence that their systems will support full compliance with the upcoming measures.

I have two main comments concerning the second question, what are some special considerations? First, as the economy continues to decline, we are seeing a dramatic increase in our line of uninsured patients. We are predicting a total of \$362 million in uncompensated care in 2009, a 32% increase in just 2 years. Clearly this trend is unsustainable for the future financial strength of Denver Health. Given our large Medicaid population, we are concerned that without strict guidance at the federal level, the amount and method of HIT incentive payments will be quite variable between the states.

Second, the vulnerable population has special needs. Our vulnerable population includes the poor, uninsured, minorities, homeless, mentally ill, and victims and infectious diseases. Many of our patients have low literacy levels with unique cultural and educational issues and, thus, have a limited access to or understanding of technology. For these populations, many concepts such as electronic discharge summaries and patient portals on the Internet have much less relevance than a more basic personal connection such as relations with caseworkers. To improve healthcare outcomes for vulnerable populations, we see as most important the investment in integrated delivery systems, which include public health departments, community health centers, school based clinics, and the information technology, which links them.

Now concerning the third question, what other measures will be proposed, we believe that to truly improve quality, the meaningful use measures must reflect both the development of new systems and a systematic approach to care delivery and improvement, in addition to the use of information technology. In 2004, Denver Health embarked upon a new approach to performance improvement and healthcare redesign called *Getting It Right: Perfecting the Patient Experience*. The genesis of this approach is the recognition that healthcare delivery processes have not changed substantially in decades, while other industries have dramatically transformed their systems to better meet customer needs.

One cornerstone of our approach focuses on developing the right process of care, utilizing ... production system tools with lean principles to drive quality improvement by eliminating waste. Coupling this redesign of our care processes with the HIT implementation has led to both improved quality and financial benefits. We are on target this year to attain more than \$20 million in net financial benefit attributed to this approach alone. Now developing meaningful use measures to focus on a systems approach facilitated by health information technology such as comprehensive redesign of the patient care processes may lead to better outcomes and improving patient care, then we'll have focused on specific clinical and laboratory parameters. Specifically, this could be addressed by accelerating the development of the proposed 2015 efficiency and safety measures.

Concerning the last question, what are other EHR adoption barriers? For now, I would just focus on one item, and that is cost. One of the main EHR adoption barriers remains the cost of the implementation of the technology. Safety net providers are particularly challenged by this, as they are experiencing both increased numbers, as mentioned previously, and a decrease in funding streams to support them. Just this week in an article in *Health Affairs* reports on an emerging digital divide among hospitals that care for the poor. Further, the investment in technology needs to be made now, but substantial health reform, which hopefully will reduce the number of uninsured, will not occur until 2013 or later. Efforts to accelerate payment of incentives may help mitigate this issue, and we would support that strongly.

In conclusion, we would encourage the committee to consider meaningful use criteria that incorporate the process of comprehensive care redesign and quality improvement strategies, coupled with information technology implementation. In addition, working as a provider for the underserved population, we need to remain cognizant of the unique characteristics of this population and how they will interface with the new technology. We would like to thank you for the opportunity to participate in this panel, and we look forward to helping you in any way we can, as we move forward together.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thank you, Dr. Steele. Thank you all for your presentations, and especially thank you for coming and agreeing to help us out. I open it now to questions. Adam?

Adam Clark – Lance Armstrong Foundation – Director for Health Policy

Yes. This question is for Dr. Downing. On Monday, I was able to go down to the Moffitt Cancer Center where they'd built what they call the total cancer care program where they're enrolling patients. They have about 18,000 patients in there that they profile, they collect bio specimens for. They try to link you with clinical trials, but track you throughout your life to actually look at some of the outcomes from the different types of treatments. The goal is what you illustrated in your testimony in looking five, six, seven years down the road that a patient, when they are diagnosed, can talk with their physician, and their physician will look for the matching profiles and actually see what the best outcomes were for that individual patient.

Now they're bringing in very many regional centers for this, many of the community centers and, for cancer patients, 80% of cancer patients are treated in a community center. Actually, what their finding is that the community centers are very interested in being a part of it because they cannot, they themselves cannot participate in clinical trials, clinical programs. They don't have the expertise.

As we look at some of the underserved populations, the racial and ethnic minorities, the adolescent and young adult populations that Lance Armstrong Foundation focuses on, we see that there are many access issues already to clinical trials. In fact, one of the issues with the 30 to 34-year-olds who are diagnosed with cancer, it's the only group that we've actually seen survival decrease since 1975. One of the areas they're looking at is it might be this clinical trial issue contributing to that at least. I was wondering if you could comment on the challenges that we're going to face as far as access if we do not incorporate some of the clinical research protocols into meaningful use for health IT.

Gregory Downing – Office of the Secretary, HHS – Program Director

Thank you for the question. The issue in terms of access, I think, is probably a key one, particularly to patients who are either not aware of clinical trial opportunities or live in remote areas or receive their healthcare in communities that are not necessarily linked in as a clinical trials enterprise. In the preparation for this, we received many, many examples of trials that were not achieving recruitment of goals, and the costs associated with doing that. And as there's growing needs for much more evidence for care guidelines around not only new therapies or new interventions, but those that exist today. It's a big question mark as to how those bodies of knowledge are going to be developed without participation from human subjects that wish to participate in those trials and studies.

I think there's a great deal of innovation that's already occurring in this space through the use of electronic technologies to identify potential populations within various EHR systems in which people have identified themselves as being willing participants and want to know information. That the ability to match clinical trials recruitment criteria to clinical conditions is something that's being done now in certain settings and with certain vendors' products because certainly the capacity to expand on that exists, and the meaningful use parameters would provide a great deal of utility to incent the communities to engage more in those activities.

There's a great disparity, we think, from the context of many people who want to participate in clinical studies. Research America, and many other groups now have published data on studies that indicate a vast majority of people, if asked, wish to have their information used in research programs and studies. However, their access and ability to do so is quite cumbersome. And if any of you have been in Washington this week, undoubtedly on metro or on a bus or on the streets, you've seen advertisements for federally sponsored vaccine trials.

Those are not targeted and not – certainly very important, but the access and the ability to identify eligibility requirements probably can be a lot more strategic in the future by utilizing known populations

and known electronic information of people who wish to engage in that. We can be much more strategic. We can use a lot more innovation in this space. And, ultimately, enhance the capabilities of improving care.

Adam Clark – Lance Armstrong Foundation – Director for Health Policy

Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Charles and then Paul.

Charles Kennedy – WellPoint – VP for Health IT

This question is also for Dr. Downing, Greg. In your written testimony, you talked about various value propositions that EMRs could deliver, identification of patients, study startup time reductions, but could you comment a little bit about what types of studies you see EMRs being applied to in the short term? Is it more retrospective, observational, database driven studies, or do you see it as contributing to prospective clinical trials as well?

Gregory Downing – Office of the Secretary, HHS – Program Director

Certainly the longer-term population based studies for safety assessment and outcomes research, but the knowledge won't be returned on the investment made today. There's no question about that, but we, much in the same context that we invest in education and other areas that those long-term gains are only going to come about by starting today.

To address your question in the short-term, we have a great deal of need now in terms of risk management and risk mitigation in the healthcare setting to utilize outcomes research to emphasize outcomes research and looking potentially at the new avenues paved by comparative effectiveness research. That within the two- to three-year time window that these opportunities are already being funded and established, that the infrastructure is a major component of comparative effectiveness research. This is just one area where short-term gains, I think, could be easily charted.

The three areas that we've highlighted, I think, that where the technology can best serve is in the identification of eligibility and recruitment parameters matching the clinicaltrials.gov, for example, in terms of eligibility using EHR standards that exist today. The ability to look and track authentication and access and uses of EHR systems for, are the appropriate people with the appropriate authorizations using that information. This is a privacy and security and confidentiality issue overall. And the third one, I think, is an adverse events reporting components in clinical trials. Those would be, I think, the short-term returns for that.

Charles Kennedy – WellPoint – VP for Health IT

One follow-up, if I could. Then in your written testimony, you also talked about a standard set of information from a patient's EHR. Are you kind of beginning to introduce the concept of a standard data model or just a standard extraction of data from existing EMRs?

Gregory Downing – Office of the Secretary, HHS – Program Director

Thank you for asking that question. On the standards components elements of that, there are a core set of data elements that are currently going through HITSP, and with the fine work of ANSI and others, we're contributing to the standards activities. This is work that is ready to go, shovel ready in your context, that can be employed now. In fact, is not an onerous imposition on existing technologies, and has been shown to be that way. If we could only emphasize the areas where the standards exist and capture core

data that could support a broad panoply of research needs that is feasible. I hope that answers your question.

Charles Kennedy – WellPoint – VP for Health IT

Yes. Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Paul Tang.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

...the panelists for a very interesting set of diverse perspectives. So this question is going to be to get really input from all of you. Speaking as a nurse backup provider, and I don't say that lightly, and I don't think Melinda meant it lightly. I think, as a profession, nurses are probably one of the closest to patients that there are.

Melinda did mention using patient entered data from a PHR. That has a lot of implications. We certainly called out a category of engaging the patients and their families, and we have a number of criteria in the current draft for meaningful use. But one way to interpret your comment is that we should work on it even more. Further expand on meaningful use criteria, we have to deal with the privacy implications of that, and the HIE implications, the health information exchange, as first class participants in this information exchange. There would be a lot of things that we could do. To this diverse panel, I'd be interested in your thoughts on, is this an important area to continue to spend our time on to make sure that patients have a direct benefit and a direct participation in HIT, as applied to healthcare?

Melinda Jenkins – Community Healthcare Net – Family Nurse Practitioner

I would say yes, especially because we're trying to change the health system, and the patients are the key to that. Giving patients more information, giving them control of what they know and what they do is just critical to that. We know already that people can use personal health records on their own, and people are starting to do that. However, we do know there are limitations in terms of the input of data that they do on their own.

I've read research, and I've had people tell me they're not sure that they would put the right diagnosis in, the right exact name of their med, so if we could get them started by uploading information through an EHR, and then they can enter other things they think are important, specific to maybe their behaviors, their daily life, their medications that I may not know about from seeing them at the community health center, but someone else gave them. The vitamins that they take, the herbals that they use, things like that are very important for the patients to track and share as they wish.

There are other implications in terms of the remote monitoring. If you have a machine doing the monitoring and automatically sending, that's fine. That's one way to do it. If there's no machine there, patients may be able to enter their own blood sugar that they take from their little standalone Glucometer, their own blood pressures, and how will that data be passed forward? I think, just to make a range of possibilities, that's a very important piece.

Andrew Steele – Denver Health – Internist

I would say, from Denver Health's perspective, clearly patient engagement is one of the most important things we try and do. Having them set their own goals, trying to clarify information in the medical record. Unfortunately, right now, what we need to do, we need to get the providers engaged, I think, first, and especially for our patient population. Thirty percent are non-English speaking. I already talked about the level of access to technology they don't have, but it is a changing landscape.

We finished a recent study actually about three weeks ago of nonrandomized sequential group of patients, only 60. And although only about a third of them had any access to the Internet, a good 70% to 80% of them had an interest in using technology to get information and communicate and correspond with their physician. Interestingly enough, much of that interest was not from the patient, but from a primary caregiver that came in with that patient, so often typically an offspring of an elderly person who were quite interested in that approach. But for now, trying to engage them to actually enter data into a system about their own status of health, I think would be jumping the gun for our patient population, but clearly a nice long-term goal.

Alan Zuckerman – Georgetown University – Pediatrician

I mention this issue a number of different places within my written testimony, the most important of which is family history, which we simply cannot start over again with, and which we cannot bring in. I also talked about some of these issues of consumer empowerment in the safety net system and how we need to avoid this digital divide, which is getting increasing documentation.

There's a strong tradition in pediatrics of sharing data with parents to enable them to move growth development, immunization data, and we have a policy statement on using PHR to improve quality, which I think we should consider. It also is one of the only ways we're ever going to really get outcomes and areas in between care into the record. Typically when I start to see a patient, I look first at the growth data and the immunizations. What I can't look at in EHRs today are the other providers people are seeing and the other events that are going on outside of the office, and this is where patient entered data about who else they've seen, when they've been to the emergency room is going to enter our system until we have more effective health information exchange.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Did you want to comment?

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

I think, from the dental perspective, I think it's very important. It could be very beneficial if the patient is given the opportunity to update their medical history, medication list, and also the preventive measures they're taking, like for example, now the dentists are playing an increasing role in tobacco cessation. So as a followup to the preventive measures that have been counseled in the dental practice, getting input from the patients and providing that opportunity so that way the continuity of care is maintained, so that way I see a big role for the patients to enter data.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Next, we have questions from Paul and David and Scott and Neil.

Paul Egerman – eScription – CEO

Thank you. Just to quickly follow up on the last discussion about the personal health record, I just had a question for you, Dr. Zuckerman, which is, in your comments about personal health record, are you speaking in terms of the family or the parents having access to the record or the child having access, electronic access to their record?

Alan Zuckerman – Georgetown University – Pediatrician

Again, that's that number five goal on security. Eventually, there is a point of transition where it's shared, and a few people have already started giving the child access themselves. I mentioned in the testimony at the NCAA wants to have college athletes aware that they've been screened for Sickle Cell trait, which we do in newborns. This is the kind of data that has value for people who know that they're okay. We

want to prevent some of the tragedies that are occurring from hot weather training, and this is a problem that spans a fair segment of our population. And so there is a point at which data such as many things on newborn screening need to eventually go directly to the child, and there's a critical area for children with special needs of transition into adult care, so we're talking both about parents and about children and about a period of transition, both between childhood and adolescence, and a period of transition into independent status as a young adult.

Paul Egerman – eScription – CEO

That's very helpful. I also have a question for Gregory Downing. In your written testimony, written documents, you talked about inconsistent data standards, which is, among other things, can you tell us more about inconsistent data standards, about what we ought to do about it?

Gregory Downing – Office of the Secretary, HHS – Program Director

Well, for the most part, the issue has been from the standpoint of harmonizing different ways of categorizing and capturing data from a variety of different settings. I think that the work is not insurmountable, but needs to be done in terms of addressing ways to recognize different ways of characterizing disease states and so forth that are going to be important enough to get to the granularity of and doing so without placing a burden on the clinicians. To be able to get to specific enough disease categorizations, for example, to be able to distinguish what stage of diabetes someone is in, for example.

So there's, I think, some additional work that needs to be done, particularly in the disease categories, as well as other clinical measures to enhance the utility of the information that's currently being captured. And the EHR is a perfect place to be able to do that. So there's, I think, right now, a fair amount of momentum in this area of being able to harmonize standards, both here nationally, as well as internationally in laboratory records, other forms of physiologic measures. The disease categorization and nomenclature area is still one in which there still needs to be a fair amount of work done.

In many care areas, we've been working in the newborn screening areas, for example, and the measures for outcome parameters are not mutually agreed upon as to what parameters one would use in terms of developmental outcome and assessment. So it's in those areas where parameters to measure disease and outcomes, I think, most people would agree that there needs to be more work done in those areas.

Paul Egerman – eScription – CEO

Yes. I guess, in my experience, even if you have an agreement on what is the correct nomenclature, there's a lot of what I would call local variation about how things are coded. And so one question I have for you is should the extension centers or the HIEs play some role in trying to make that more uniform in terms of what's actually done?

Gregory Downing – Office of the Secretary, HHS – Program Director

Yes. I think, particularly with the extension centers, that there is a training component and educational component overall. This is not a huge component of what training in the electronic world means, but familiarizing new trainees and people who are adopting EHR systems to be comfortable with uniform measures of reporting, for example, in outcomes measures. I think, if our quality work is going to continue to grow off from the EHR utilization, that should be, I believe, a component of the extension center programs, and enhancing and understanding research models and data collection.

Paul Egerman – eScription – CEO

I think that's very helpful. I also just want to make a comment to you, Dr. Steele, which is, your oral and written testimony was very impressive what you've accomplished at Denver Health, so I just wanted to thank you for that. Thanks.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

David?

David Lansky – Pacific Business Group on Health – President & CEO

Thanks. I think the theme that's come out of this session has been really helpful to me, and it's challenging. You may have heard yesterday, Dr. Blumenthal said we will be working on a strategic plan and some broad principles. And I think, all of your testimony challenges us at a strategic level to think about whether there is a longitudinal patient record, and if so, or is it a virtual construct, and if so, where does it live? Because of meaningful use, we've been very focused on EHRs as sort of the atoms of this network.

But I wanted to ask, particularly Dr. Downing and Dr. Zuckerman, to react to this question of where does the longitudinal patient record live, if it lives at all, or is it a virtual construct, and particularly from the point of view of both architecture and policy? So we have somewhere in our portfolio of things this committee can look at are some of the issues around HIE, and some of that we can imbed in the meaningful use requirements, but some of it really sits outside of that tool that we have. So I'm interested in whether, Dr. Downing, particularly as you look at the work that's going on in grids and federated networks and so on, and the opportunity to create a real research driven learning environment in the healthcare system rather than a bunch of atoms that are loosely connected by transactions, how do you see? What should we be doing as a committee in our strategic thinking to enable there to be a network of linked data resources for continuous learning by practitioners? Is there something either in meaningful use or in the way we support HIE that would help us get there?

The second question, Dr. Zuckerman, in particular, a long time ago we contemplated the idea of a personal health record from birth, in which essentially the hospital instantiated the record and then handed off the maintenance, if you like, of that record to other caregivers and the family as a way to really, as you suggested sort of jokingly, from ARRA, from birth begins this opportunity to have a lifelong record. Is that something we should be contemplating as a strategic objective in a sense, or is that just a virtual thing that may emerge naturally by virtue of people trying to do the right thing? Or should we be intentional about that? Let me put those two on the table.

Gregory Downing – Office of the Secretary, HHS – Program Director

That's a complicated question. I think, fundamentally, and I have to say, I can't speak for all of the colleagues to whom I represent here, but I don't think we know the answer, and I would view that the strategy of this committee is to not necessarily define what's the means by which we gather information and utilize it in the future, and not limit the possibilities. The answer may be in the clouds literally, and yet, for more specific data, it's more likely that we'll have to have more detailed data imbedded in other kinds of frameworks: registries, repositories.

I think the key thing is trying to find the ways to unlock that, allow more innovative approaches to enable databases to work together and to be enabled to be linked in some fashion to answer complicated questions. I think we see this in many other types of our business settings, and it's not as well developed in healthcare. I don't think anyone argues about that, whether it's the national intelligence or environments and weather, or in the business communities and investments that the ability to utilize information from a variety of different sets and integrate those provides a great deal of power, and we don't have that in healthcare.

I think I just want to emphasize from the testimony that the enablement of people to participate and use their information needs some incentive, and from the standpoint of whether it's through the uses of the

technology or whether for the purposes of a PHR and finding some ways to incent the applications of one's particular information and an electronic framework to participate in a network like patients like me or something like that, that we do, and others have written in the federal space in recent months about the importance of the contribution to the public good that people have to start to consider in terms of their willingness to contribute information for the understanding of what health is about. We haven't had that dialog yet, and perhaps the community here can be a spark towards that broader conversation about how health information, about you is used in that broader community. The technology will find its own way, but the policy, I think, is the big piece right now, and you're in a perfect position to help lead some of the dialogs that are needed in that, particularly with the patient communities.

Alan Zuckerman – Georgetown University – Pediatrician

Thank you. Again, I think, without getting into any of the privacy or the technical issues of these virtual records, we have to be extremely cautious about relying too much on that approach because of the tremendous difference in the time value of information and the dangers of information overload. Practicing here in D.C., I've had the opportunity to work with paper records kept by patients in other countries that represent an integrated, somewhat standardized child record that carries things over time, and I really think we should make an ... approach to define the kind of data, both for children, and for adults, that are going to make a difference in the future.

We need to recognize that while we're focusing on this adoption transition from paper to electronic today, we are going to have the benefit of electronic records hopefully for most of our patients over the next several decades. And, as part of that, we need to distill out a very intentional, core set of data that moves forward and its value may change. Knowing how many ear infections a child had under age two has a lot of meaning at one point in their life. When they're 18 years old and preparing to go off to college, you're not as concerned. When I have special care needs children that I care for, for 21 years, it's a big difference in what I'm going to want to put forward in the virtual record that I built, both on paper, now electronically. I'm going to hold some of that back from their adult providers.

I think being selective about how information moves forward, both in terms of privacy controls so that things aren't revealed that shouldn't be, but also in terms of information overload is something we have to make part of our strategy. Again, I keep getting back to the immunization registry story, which is a perfect example of things that matter over a long period of time. Let's get something that works right. When I go to our immunization registry, I've got to print the Web page, start typing things in. I don't have ways to clean it up and go forward. As we build these exchange systems, we have to have enough control to make corrections and to make it available when and where it's needed, and to use that data within the different electronic systems the patients will see over their lifetime.

Melinda Jenkins – Community Healthcare Net – Family Nurse Practitioner

Can I briefly speak to that? I just want to briefly speak, and say the time to start with that personal health record may be during pregnancy because there's a real incentive that the woman has to improve her health, take care of her health. She's getting frequent visits, and then that can feed into the child's record afterward.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Scott and then Neil.

Scott White – 1199 SEIU – Assistant Director & Technology Project Director

This question is for Dr. Steele. I am the healthcare workers representative on the committee, and I want to recognize that in your written testimony, you're one of the few people to recognize training for the healthcare workforce, so I thank you. It gives me a great segue to preach.

It's a two-part question. One is, what were some of the challenges you found in the training that you guys did? It seems like you had a wonderful installation. You seemed to be, as Paul said, doing well. And the second part of the question is what recommendations would you give to myself and the committee on designing or recommending training programs for the greater good?

Adam Clark – Lance Armstrong Foundation – Director for Health Policy

I'll talk a personal bias first and then actually what happened. My personal bias is that as we implement the technology, if we do a good enough job at understanding how it will integrate into the workflow, training would become less of an issue. But we aren't there yet. And so, yes, it's been a long road, 15 years and lots of money for a CPOE installation. It's a five-year project. We estimated it would be about 2.5 years at the beginning, and we learned a lot of lessons through that.

I think that, to start off with, you need the classical. You need the vision from the top and the commitment from the top. We had that, and we got that done. Then you need to have a culture, and a culture of change. And we had a culture of change in the beginning, but it wasn't nearly as strong as it is now. And I've seen the benefits of not just creating nice, Web based training programs, of having the end user say, I can do this. I can take this on. I can get engaged, and I can make it work. That really, I think, is a critical factor you have to get.

If you're trying to push them into this, it is not going to work. In fact, now what's happened is that now they've become so comfortable with the technology, they're basically coming back to us with ... demands for improvements and enhancements that we don't have the resources to meet. So I think that so long as you can get that cultural mindset to adopt along the same lines that they want to use the technology, the training becomes a pretty easy factor actually. But I do agree, it is an important issue to sort of figure out how are you going to do that in conjunction with your healthcare workers there.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Neil?

Neil Calman - Institute for Family Health - President & Cofounder

Also thank you to the panelists. This was an amazing group. I want to focus on dental for a minute. Part of the written testimony that you provided around dental was pretty scathing. I mean, there's a comment in here, "EHR certification standards are likely to delay and eliminate EHR incentives to dentists." I mean, those are some pretty strong statements in some of this stuff, and I'm concerned about that because the dental system seem to be very disintegrated with the rest of what we're doing in electronic health records.

People that I know who have implemented systems end up with two completely separate systems. They don't even talk to each other within the same facilities oftentimes, and it's a tragedy. One of the goals that we set forward was reducing administrative burden, and if there's any place in our own systems where that administrative burden is not reduced, it's in the lack of integration within our systems because people get registered twice and there's no crossover of family information, health information, allergy information. All that stuff you have to build interfaces between these systems.

I guess what I'm curious is, what's a more positive approach that we could take in terms of really facilitating integration at some level? And are you aware of examples where systems have been integrated like that where information crosses freely between the dental systems? I guess more than just crossing freely as interfaced, but really where they exist as sort of one system within one provider organization?

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

I agree with you. Thank you again for highlighting the problems in dentistry. We are far behind when compared to the medical counterparts.

Regarding your question on whether there are any places where they're integrating information across different providers, there are certain nonprofit health organizations where they have the luxury of having only one system, which has been homegrown. In those instances, they're able to exchange patient information to some extent and if they are using one system, even in institutions where they have just one system in place. However, we are still lagging far behind in exchanging patient information between different systems.

I think a positive direction to take would be having certain specified targets and specified time periods so that I don't think we will be able to facilitate information exchange overnight or in the near future, but maybe having certain milestones to realize to that.

Neil Calman - Institute for Family Health - President & Cofounder

To me, there's a parallel between this discussion and the one we had about mental health.

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

Yes.

Neil Calman - Institute for Family Health - President & Cofounder

We're trying to really integrate care. Every year, more and more data comes out showing the relationship between oral health and other kinds of physical health problems, you know, from learning problems to cardiovascular disease. You can go across the whole spectrum, and yet we've still – here's another area where I think technology really needs to play a role in helping us integrate our delivery. Dr. Zuckerman, did you want to--?

Alan Zuckerman – Georgetown University – Pediatrician

Yes. I just want to thank you for bringing this up, and I regret not having brought it into my testimony. At the American Academy of Pediatrics, oral health is a very big priority, but it's a very big gap in our HIT standards and strategy. I've now received some training in oral health. I have a lot of kids at different levels, but we want to make oral health part of the medical care, and we want to integrate data from our dental providers so that we're able to share with them, and it's extremely important.

We had a death of a child nearby here on the Medicaid program for a dental problem that has really shaken up our understanding of this importance of integration, but I just don't see it moving into HIT yet. We may not be ready to put it into meaningful use soon, but it's the kind of thing that should be there. As a pediatrician, I should know what's going on with my children's oral health, and I should be able to share appropriate medical data with dentists more easily. And many of them do bother to ask.

Andrew Steele – Denver Health – Internist

I'd like to echo the importance of the dental integration. We are fortunate that all the dental primary care is under the same organization as our primary care, so I have access to all those records. They have access to our records. And although I can't really read their records, sort of next to ophthalmology, one of the hardest notes to understand. But I do know that they really appreciate having a complete, accurate medication list, complete and accurate allergies. And I like to know that I can at least understand the burden of their dental care, and I'm, as part of an integrated system, just a phone call away from getting any kind of clarification. So anything you can do to bring those together, I would think it would be very important.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Dr. Jenkins had a comment.

Melinda Jenkins – Community Healthcare Net – Family Nurse Practitioner

There is a system in New York, Neil, that is making due. The dentists are making due with an EHR and putting their data in there. They have made templates for the initial and the followup visits. And so, if one of my patients has been to the dentist, I could see it right there on the visit list, and they also could see the med list and everything from primary care, so that may be something that we could ask the vendors to create, a combined kind of system, especially in community health centers where you have the multidisciplinary providers right there.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

We have Marc and Judy.

Marc Probst – Intermountain Healthcare – CIO

I've been listening for the last couple days to a lot of these panels, and they've been terrific, as you guys have been terrific. And I'm not sure if this is as much a question as a comment. But we've been talking a lot, and as we talk strategically about creating a plan, as a committee, we've been talking a lot about getting standards, getting data, extracting that data so that we could use it for research or other purposes. And it seems to me, one of the real values of these systems and, Andrew, you kind of brought it up a little bit in your testimony and, Greg, I think you talked a little bit about knowledge sharing and that type of thing.

We have this great sucking sound of pulling information out and using it for research and those purposes, but we need to talk about best practice care and how do we get that information back out to be used, whether it's for underserved populations or whoever it might be because there's real knowledge being gained. And those best practice activities can be greatly facilitated by this technology, and I think that's where a lot of the value of these EHRs are. And so just somewhere, as we start talking about our strategy, we need to build some of those concepts in.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Judy?

Judy Faulkner – Epic Systems – Founder

As an HIT vendor, I was wondering—

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Wait. We have a comment.

Judy Faulkner – Epic Systems – Founder

Sure.

Gregory Downing – Office of the Secretary, HHS – Program Director

I think this is, although perhaps a little bit off the market to the discussions around meaningful use, but a lot of the efforts around decision support aspects and how one represents knowledge at the appropriate time. There's a tremendous amount of research and development that's needed in here in understanding how people can use knowledge represented to them during a patient encounter, for example. I think there's probably not sufficient. I know Paul and many others in the room here have been engaged in a lot

of those discussions, but there's, I think, growing a bit of momentum here, and perhaps some hope that additional resources and efforts can be made in that area. Thank you.

Judy Faulkner – Epic Systems – Founder

My husband is a pediatrician in an FQHC, and I hear about the dental needs a lot. Yet, as an HIT vendor, I don't hear as much pressure from our customers for the dental, and I think the reason is that makes dental different from mental health is typically mental health is under the same umbrella, and dental is separated out for most of our customers in separate organizations that are separately run and aren't under the same umbrella. And so, they buy their own systems, and then we, as the HIT vendor, the best we can do with those situations is to interface to all the myriad of different dental systems out there. I'm wondering, is that really the underlying reason that there is that problem because they're separate organizations?

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

Can you repeat the question? Are you asking whether is it a problem?

Judy Faulkner – Epic Systems – Founder

Yes, because if the HIT vendor is going to sell to a healthcare organization of medium or large size, because the smaller ones are probably assigned to individual – either way, even if it's to a small one, the dental groups are separate corporations, and they would buy their own systems, whereas the mental health are more often within the organization. I'm wondering if that's the underlying reason that there's this difference.

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

Yes. I think that's one part of the reason because 65% of the dental practitioners, they are in solo practices or in small group practices, and they're in their own world. And they are actually, they are not connected to the mainstream dental providers.

Judy Faulkner – Epic Systems – Founder

Right.

Thankam Thyvalikakath – University of Pittsburgh – Assistant Professor

I think that's also one of the main reasons why we don't have a lot of dental practitioners who are providing, offering care for Medicaid patients because they're also left out of the loop. And I know lately American Dental Association, they have been devoting a lot of, they have been making a lot of effort in educating dental practitioners regarding the need to connect with the remaining healthcare providers. Keeping in mind now we have a lot of increasing reports of increase impact of chronic disease patients on dental disease and vice versa. Yes, there has been, what should I say, an information barrier, and I don't think the dental community at large was aware of it, but lately there has been increasing awareness about it.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Gayle?

Gayle Harrell – Florida – Former State Legislator

Thank you very much, and I'd like to go back to some very practical things and where we're going with the cost of the implementation and how is the best way to handle things. I'd really like to get Andrew's perspective on this because you seem to have an absolutely incredible system that is working very, very well in Denver. My daughter lives there. I'm familiar with what you're doing.

I think, for other states, and you have a lot of state money that's gone into that. You have local money, whatever. What is your recommendation for other areas that perhaps, what are your best practices, and what are your recommendations to deal with how, in addition to the money that's coming out of ARRA, which is limited, how else can areas, especially serving the underserved populations, deal with the costs of implementation, the costs of equipment, and also integration of the systems so that we do have a best practice model out there in our public health arenas because most states do not have the kind of resources to do this?

Andrew Steele – Denver Health – Internist

In my testimony, I talked about how much money we're putting into this, and we're about 4.5% of our gross net revenue, which actually is close to the average now, but the difference is we've been doing that for 14 years, and most other hospitals were at 2% back then. What drove us actually in the beginning was the Y2K. We were the public hospital. We were scared. We thought, if everything crashed, we were going to be the last care resort, and so we put a lot of money up during Y2K to improve our information systems.

That was a model of the information services department driving the change in care, and it didn't work real well. We got through it. We got it done, but I think that the model has to be back to, if you can start turning over the desire to improve care to the end departments, to the clinicians, to the quality improvement offices, then the implementation costs start to go down.

We have used a very specific strategy of using this lean technology. We didn't hire any new bodies for that. We took a lot of the quality improvement bodies and sort of moved them around, gave them training, and by having that formal structure in place, we think we've been able to drive down the costs of implementation of these major systems by about 35%. So I think part of it is trying to learn from best practices. We're one way to do it. We're not the only way. Some people say to do 1,000 EHR implementations. You've seen 1,000. I don't think so. I think there are some overriding lessons to be learned, but it still needs to be examined in further detail.

There's very little research out there, as many of the recent papers have shown, and most of it has come from, well, many people actually on this panel here, and not from people that are in community hospitals, critical access hospitals implementing vendor-based solutions. And so, I think that we still need to learn a lot more and make sure that some of the current, publicized best practices can be replicated in other places.

Now, specifically, how can we get that done? I think the extension centers are going to bear a lot of burden of this. They're going to have to provide the technical guidance to the local hospitals as to how to best implement these systems. It takes a combination of types of people. We use industrial engineers. We use very highly certified project managers. We use people that are experts in the quality improvement efforts as part of that team.

Just recently, in our most recent success was to go live with online nursing documentation. We turned that project over to nursing, and they put, for our hospital, over 7,000 hours of their time without any new net positions. What they did was they again said okay; we're in the business of improving care, so we're now going to use the technology and do that, and took their current resources, nurse educators, the quality improvement nurses, to change their jobs to help implement the project. So I think you have to take a little bit of a mindset change to who is really in charge of the project and engage that workforce to get it done.

Gayle Harrell – Florida – Former State Legislator

Do you see the role of the regional extension centers and perhaps an umbrella organization of regional extension centers to drive these things down to the local level so that we do establish best practices? We have a lot of money being spent right now out in the regional extension centers. The grants are being issued as we speak. So do you see an overall umbrella of perhaps some guidance coming down to that, as this money is spent, and as the implementation goes out into the areas?

Andrew Steele – Denver Health – Internist

Clearly we're going to need some quick guidance for the next set of early adopters. Now let's assume there are 5,000 hospitals, and I don't know how many private practitioners out there that are going to try and decide to make this transition. Let's say we have about 20% of people who have already bought off on this idea. So we need to quickly learn, I think, from them to get some lessons learned out there. But just as important, we're not going to reach, I think, 80% of implementation by the year 2015. We should be able to put into place some evaluation methods over the next two years to really categorize how do we get this job done for the next 3,000 hospitals, hundreds of thousands of physicians.

I think we have ideas out there, but we have an opportune time now where a lot of people, a lot of institutions are going to be embarking upon this. And if we don't take the time and energy to do some formal research evaluation, I think it's a lost opportunity to get sort of the last 50% of the healthcare providers on track, and they're the ones, I think, that are going to need the most guidance. And so it makes sense upfront to really get a better understanding of it. We have our ideas, but I think we need to be more formal in the assessment of what really works.

Gayle Harrell – Florida – Former State Legislator

Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Thank you very much, panel. I'm afraid our time is up, but we need to check on the phone. If Tony is there, do you have a question before we sign off?

Tony Trenkle – CMS – Director of OESS

No, I don't.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Not before we sign off, but before our panel ends.

Tony Trenkle – CMS – Director of OESS

No, I don't. Thank you.

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

Okay. Panelists, thank you so much for coming and agreeing to do this. Back to Paul.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thanks so much. In the final half-hour of our meeting, we wanted to open it up for some insights to be shared amongst the committee members. This process of hearing from the public has been incredibly valuable, and I think I've heard from everybody that said thanks to the meaningful use workgroup for sort of shaping this, but special thanks to Judy and Suniti for making it happen. That's where the rubber meets the road. The knowledge, the experience, the perspectives from these folks really bring so much to inform how we go forward with our strategic planning and the meaningful use criteria.

A word about sort of deliberations because I know we're anxious to be talking in more deliberations. I know certainly that'll happen within the workgroup and this particular panel, the meaningful use workgroup will definitely using and incorporating these ideas into the process. But we're also ... I mean, I've got to give a tribute to David Blumenthal and the Office of the National Coordinator for just trying to keep up with an incredible amount of activities that are spawn off by a law that was passed just in February. And while a lot of us might think it's an easy job to give away money, there's a lot of process that goes behind that, and to put so many initiatives on the ground and really on time is just incredible. It's really great, so thank you so much to the Office and to David Blumenthal.

As a consequence, of course, we've been drinking out of a fire hose, a very worthwhile fire hose, a lot of good water in terms of trying to hear from the public, and that's been such a great part of this process. I think we also want to schedule sometime in the upcoming meetings to have time to talk among ourselves and deliberate on how this impacts. And clearly one of the special areas is the formulation or development of the strategic plan. I think part of the time that's allocated for January is to follow up on that discussion, as well as creating a workgroup to do that.

In the next 20 minutes or so, I wanted to give people an opportunity to maybe share some new insights that they've gleaned in the past day, day and half of hearings, just to put more thoughts on the table, just for people to continue to think about. I know we're all going to be thinking about what's going to be happening and how we incorporate that into our various workgroups and work products, but wanted to give time to just have people's insights. I don't think we'll have time to discuss or deliberate at this time, but I think sharing insights of what we've learned may be helpful.

Maybe I'll lead off and say, you know, as we work on the policies and, in particular, meaningful use criteria, one of the things I think we need to be careful or mindful about is not to reinforce, let alone encourage, the silos of care that we currently find ourselves in. Whether it's specialists versus primary care, or specialists and specialists, or mental health and physical medicine, we wouldn't want it to widen the disparities of care, you know, not only racial and ethnic, but also the disparities of care on how people receive care in various parts of the country. I think we need to focus a lot on coordinating care in the way we craft our meaningful use criteria so that we encourage the use of HIT to bring care together and integrate it, regardless of whether they're physically together, but we just really don't want to risk widening the disparities. Let me open it....

George Hripcsak - Dept. of Biomedical Informatics Columbia University – Chair

One of the things I think we're going to have to think a lot about is this recurring theme, especially from the panels we've heard the last two days of small providers and disproportionate share providers. As other issues come up as far as complexity with compliance to the proposed meaningful use criteria, that this theme of, well, maybe it costs too much. I can't afford to do it out of pocket, and maybe I'll just opt out. If for whatever reason we get a substantial portion of the providers who decide to opt out, then we will have failed.

And so, the question I think we need to go back in our workgroups and study is, is it because of the cost upfront and maybe this loan program that we talked about earlier is a way to look at that? Is it the burden of ongoing administration and that the incentive that we provide is not enough? Is it a perception? These are just questions we need to ask ourselves that the benefits, although we've heard many, and these testimonies, I think, were very well done. We've heard a lot of people talk about the actual benefit they saw that actually justified the cost, if they could just overcome it.

But I also ... some who said maybe the benefit wasn't worth the effort. And I just think, as a QA methodology and as kind of to take pause and rethink what we've done, we ought to go back and ask

ourselves some of these questions, as we go forward, and give them a test. And then talk about also if there are other creative ways we might overcome those objections.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Gayle?

Gayle Harrell – Florida – Former State Legislator

Thank you, Paul. I think we also need to be looking, as we look at costs, and that is a real concern for me as to how we're going to be able to do things and take into consideration what is the best method to make things happen appropriately. I'm very concerned about people opting out. That is a tremendous concern for me. I think we're all committed to making sure that we have electronic health records across the board.

We also need to look at how distinct different states are, and the different levels at which states come into this. Yes, we may have seen some very good success stories, but in reality, when you look across the landscape, and you look from state-to-state, Medicaid is very different. The amount of money out there in the systems is very different. Most small, critical access hospitals or small, community hospitals don't have nest eggs. They don't have the money to do this, so we need to really be attune to what the costs are and what the differences are. We want everyone to have the same opportunity to have an electronic health record, so let's be aware of that, as we move forward, especially as we move into strategic planning.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Adam?

Adam Clark – Lance Armstrong Foundation – Director for Health Policy

If I can go back a second to the earlier comment regarding the physician adoption, one thing clearly that's going to be a vested interest of me and a couple others, there are three patient advocates or consumer advocates here on the panel. And I know that the committee was – we were all given a very tough timeline. Dr. Blumenthal really did a fantastic job of moving us along. But I think, I would encourage the committee and others at ONC to start looking to the patients and the consumers for what they want.

Clearly, legislatively, we can only deal with reimbursement incentive for mechanisms or the incentives down the road. But if the patients and the consumers are coming in demanding a service, the physicians, the communities will adopt it. And I think it's engaging with that community, educating them on really how this is going to benefit them, and looking for what they're going to want to see. They can move the mission forward, I think, for the ONC.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Neil?

Neil Calman - Institute for Family Health - President & Cofounder

I have a list of just a couple things that I think I come away with this. One is, I think, our need to continually rearticulate that vision of where we're trying to get, and I see some sort of a need for maybe you'd call it – I don't know whether you want to call it direct to consumer advertising or some social marketing campaign would probably be a more PC kind of term, but I think we need to get out to the community to sort of sell people in the country about why this is a really important thing, and do a better job of that because it's ultimately the demand. As Adam said, in a sense, it's going to be driven. We're pushing things from the top, but ultimately the demand, I think, also has to be driven from the consumer point of view where people have an expectation that when they go into a provider's office that they just

shouldn't have to give their family medical history all over again and do all of this. If that becomes the expectation on the ground, I think we have a very important, powerful push from sort of the other end.

The other thing I got specifically out of the last two days was how disintegrated our system still is and how much work we need to do in all these areas. I mean, just think about the people that we've heard from and all these different walks, and all of them coming in some way, shape, or form are saying there's a piece missing. There's a piece that we have to connect better. And I think that whole issue of integration of all of these pieces is going to be critical in order for us to sort of achieve our goal and to think about that.

The third point would be that in the committee here, I think we need to spend more time looking at the other parts of the HITECH stuff. We need to start thinking about what the regional extension centers are going to do and what kind of policy we want to see put in place that's going to sort of govern that process a little bit more. Some of the other, you know, that we heard Jodi brought up the loan program. We haven't really talked about what the potential of that is. There are a lot of other resources within HITECH that have sort of been outside of our purview, but I think, in order to accomplish some of the things that the people who gave testimony have talked about, we're going to need all of those resources to bear. And so, some survey of what those resources are and some discussion of them within the committee, I think, would be really valuable for all of us.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Good points, and I'll remind you that one of the things in our docket is the ONC will update us on all the activities that they're going through, and I think that'll feed right into that and feed into the strategic plan. Next I had Marc.

Marc Probst – Intermountain Healthcare – CIO

I couldn't agree any more, Neil. I think communication, when Mr. Fattig was talking, I just kept thinking, if they're opting out, I mean, are they opting out because of money or because they really don't understand the upside.

But the biggest issue I'm hearing, as I'm out there, is really one around pace. Money is an issue. No doubt about it, but I think ARRA does address money and how we can start getting some funds out. But the pace is scaring people away that we simply can't get there that fast, so maybe I just won't start.

And so that brings up the next point, I think, as we talk about our strategy, and that's, again, priority. What are we trying to really accomplish? Are we trying to get electronic systems in place and then extract that data or what? And I know that's built into the meaningful use criteria right now, but we might want to address it a little more because, again, I think the real fear I'm hearing is just pace. And we don't even have the rules out yet, and we're not likely to see them until early next year.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

All good points. Mike?

Mike Klag – Johns Hopkins Bloomberg School of Public Health – Dean

I really applaud the committee for taking this sort of pause to think about what we've seen and to build into the future process more ability to digest and to think strategically. I agree with everything that's been said. One of the things that struck me over the last day and a half was the testimony from the American College of Obstetrics and Gynecology where it seemed, at least to me, that there was no perceived incentive to go ahead and participate in ARRA and in electronic health records. I would like to know whether that – and we only heard from a small sampling of medical specialties. How many other

specialties feel that way? We have to, I think, get some data on how prevalent that feeling is and what the perceived barriers are, and whether it's pace or it's money or it's whatever, because if we have people in the medical profession who don't see any benefit, either through ARRA or for other reasons, that's a big problem.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

David?

David Lansky – Pacific Business Group on Health – President & CEO

Two thoughts, both around this integration siloization issue that you raised. One is, I heard, starting back in the registries discussion, and certainly today that, maybe it's by virtue of the statute, we're focusing on these EHRs as one particular element where the money goes. But a lot of the need is around integration and flow of information across different tools and platforms and professions and settings. I don't know that we yet have a mechanism here to think that through. Is there a longitudinal health record? Is it a virtual record? Is it an on demand record? And how do we, in the micro level decisions we're making, permit there to be a longitudinal, comprehensive record that includes dental and other services? That's one theme.

The second is the alignment of payer incentives side of ARRA. We heard it this morning about HRSA, about dental payers, about all these other components. I know, even in the commercial setting, what the commercial payers may be doing for IT incentives may be totally unaligned with what we're doing in meaningful use. I think we need some forum by which we take Medicaid, Medicare, meaningful use, commercial payers, dental payers, PBMs, I don't know all the components, and at least think through. Is there anything we can do as a policy matter to have convergence incentives that will give people the resources to build the tools that'll achieve these larger goals?

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Charles?

Charles Kennedy – WellPoint – VP for Health IT

The things that are in my head the past couple of days, I think the first word that comes to mind is focus. I'm really impressed by the scale and variability of issues that have been presented over the past two days, be they quality measurement, clinical research, specialties, etc. Although they're all valid, I think, to show value, you know, in 2015 when people look back and ask us what did we achieve, I think it's going to be critically important to focus on some tangible things, I would say, probably around chronic disease management that we get done. And, perhaps in our strategic review process, that'll be a part of those discussions.

I think the second thing I'm impressed with is the notion of data management. I think, when I think about the implications of producing quality measures, the notion of using this infrastructure for clinical research, data management is going to be the currency that makes this either successful or not. I don't think, to date, we've had enough of a focus on that. I think about an HIE connecting, let's say, seven different electronic health records. You're going to have seven different representations of the patient. That's a data management problem, and so I think we need to think that through.

Then, finally, I was very much impressed by Bonnie's testimony this morning about local innovation, and how do we – you know, we talked a lot about avoiding micro management, but I think we also have to figure out how do we empower individuals and organizations to do more of what Bonnie described in a systematic way. And I think, somehow, we've got to promote local innovation, yet still respect the needs for this to be a coherent system.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Excellent. Paul?

Paul Egerman – eScription – CEO

Yes. Well, I agree with most all the comments that Neil made about consumers. I think if you really look at technological change in this country in the last 10 or 20 years, it's almost always been driven by consumers. And so, in knowing that, anything we can do to create and help create consumer demand is very helpful, especially as it relates to what was talked a lot about today and yesterday, the personal health record. As patients get involved, have access to their data, that can help create demand for these systems.

I also very much agree with Charles' most recent comment about focus, which is really the importance of this strategic plan to have that because there are a lot of issues here, and we need to be very clear what it is we're trying to accomplish. These dates will come real fast: 2011, 2013, 2015. And we need to know really soon what it is that we will consider success in terms of what we're trying to do.

And I know this has all been a very high level discussion, but the results of something that was mentioned today that was also sort of very tactical, we heard similarly in the interface discussions, which is apparently this limit of ten physicians on the extension centers. That certainly doesn't apply to the federally qualified centers, and so what I'm hopeful is that information gets taken back to ONC that we figure out a way to do the appropriate exception for that. It could be a very small, but important tactical thing we could do right away.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Judy?

Judy Faulkner – Epic Systems – Founder

Two things: On the opt out, I'd also be careful of the academics because there are some large academics that are saying they're going to opt out because the academics aren't covered. Whether they are or aren't is questionable, I think, but they believe they're not, so they're not moving forward. Secondly, I was really impressed with Dr. Pinkus' talk yesterday about privacy and about don't divide the mind from the body, but keep the two together. The third thing I wanted to say was, we can't keep forgetting that the technical side, whatever we do here, we have to figure out is it technically doable by the vendors, including the smaller vendors, because if we authorize things that aren't doable, we have wasted time, gone the wrong way, and it's not going to help.

I thought the discussion about who was the primary care physicians and what does that person do, it was fascinating, and I think that we have to look again perhaps at what to require from the systems and the use of those systems. And if a system isn't producing what it needs, then it shouldn't be certified. And how do we make sure that if it doesn't get there, it isn't certified? Can we do that by saying things like it has to be able to do CPOE? You have to not just be able to. You have to use the alerts and reminders.

Then I have one – and that led off into another discussion, which is, is that too late? That's the interesting question for me. Some clarity of what we're still here for. What is too late, and what is still on the table? What's past that we no longer should deal with, and what is future, and we can deal with? And then, how does it work? How does it get from here to wherever it's going?

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thanks. Christine?

Christine Bechtel - National Partnership for Women & Families – VP

This is really a good two days. I think, you know, on the meaningful use workgroup, we have some hard work ahead of us to think about the various needs for the different provider types, different sizes have. I think some of my key takeaways, Paul, to your point about not reinforcing silos are really about driving care coordination at the most basic level of information sharing.

But I want to come back to the consumer demand concept that we'd been talking about. I think it's the right concept. Absolutely. And, Adam, you characterized it well. I want to be careful how far we take it because, first of all, we can't put patients in the seat of being the one force of change that's finally going to get providers to do what we've been asking them to do. It won't work. The healthcare economic forces don't operate in the same way that has allowed consumers in other industries to be that demand force. And consumers have been demanding for years things like care coordination and better access, and we're not delivering still on a consistent basis.

They are not going to walk into an office, I don't believe, and we'll see if I'm right, but they are not going to walk into an office and demand an electronic health record. They're going to walk in, and they're going to say, wait a second. You don't have the ability to share a visit summary with me? You don't have the ability to share my information today from my visit at my OB/GYN to the cardiologist? Okay. Thanks, but no thanks.

And I think, to the point, those physicians who choose to opt out because it's too hard, because they don't believe it's a cost of doing business today, because they don't recognize the value that patients will get from it, then I think they are going to be left behind, and there is probably a segment of that marketplace. I get the failure. I get the risk. But there's probably a segment that I'm okay with that.

We have to get to a place where the conversation is different, and the conversation about costs today was, in my view, the same conversation we've been having for years. And yet, there is money on the table, and this isn't a right. This is a privilege to get this kind of federal support to do something that I think is a cost of doing business and a cost of providing care today in a way that is patient centered.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

It's hard to avoid not leaving that as the last comment, but any other...?

Tony Trenkle – CMS – Director of OESS

Paul, I had a comment as well. This is Tony.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

...final comments?

Tony Trenkle – CMS – Director of OESS

Paul?

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Yes, Deven.

Deven McGraw - Center for Democracy & Technology – Director

I think, going back to the start of this two days of meetings, we have a lot to do. I think we all recognize that. In fact, I'm getting a little nervous about how much we have to do. Even if we were to be very

focused and do only those things that are within our power to fix, we have a lot of issues that were presented to us that I would argue, no matter what we do, we're not going to fix them.

Having said that, so this would be a plea to Dr. Blumenthal in California and ONC. The meaningful use workgroup clearly have some tasks to do, and seems maybe to be the only one with a sort of clear set of marching orders going forward. There sounds like there's some more juggling going on with respect to the others, and I think the sooner that we get some clarity around this sort of new structure and get started on the framework piece and the strategic plan, I think we'll all be better off because we've got a lot of work to do.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

I want to close by acknowledge – well, not quite close. We haven't had public comment yet, but by acknowledging the thousands of hours that this group and all the folks that we coordinate with and draw upon the volunteer effort – okay. Tony, you had a comment? We may have lost him for a moment, but if he comes back, we'll entertain his comment. But really thousands of hours of folks' time to put into this effort, and I know everybody has got their heart in exactly the right place, meaning we're really just trying to do the right thing for the country.

We'll make a little lemonade out of the fact that we did not have time to do the strategic plan while we were fighting all these other fires on the way because I think these two days have been very thought provoking, and I suspect our strategic plan is going to look a little different than it would have if we started before these past two days. It's just been that provocative and that informative. So we are going to do that strategic planning process. We are going to start these new workgroups. We are going to get on it right away, and we have all this work to do, but I think we're doing the right thing at the right moment of history.

Now let me see if Tony has joined again for his comments.

Tony Trenkle – CMS – Director of OESS

Yes, Paul. I'm back on again. Just a couple of comments to add to what was said, I thought these were excellent presentations, and they pointed out a lot of the concerns that the small providers and others have.

I think one thing that should be pointed out that we probably should have pointed out to them when they gave their testimony was that they have an opportunity to comment when the regulation goes out in the next couple of months, and really they should take that opportunity to insure that their concerns do get heard and they do become part of the comment process because that will help influence how we look at the final reg. But this also brings up a need to really make sure that before we update for 2013 that we really take into account what is going on in 2011 and what some of the feedback we get from the extension centers are because I think that's critical.

The third point I wanted to make is, I really agree with what David Lansky said about the alignment of the payment incentives. That's a critical need that we need to be looking at, and I think the committee could do a lot of work in that area as well.

The fourth point I wanted to make was the input we received from the groups also points out the need for ONC to be very clear on the certification program. And if they do move ahead with modular certification, that needs to be made very clear to small and rural providers who, as we heard, are overwhelmed by a lot of the objectives and meaningful use criteria as it is. And if they have real concern about the certification criteria, that could make their disincentive to join even larger. Those are my comments.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thank you very much, Tony, for a lot of those additions and clarifications. I think that just called upon to reinforce a comment about how much effort the federal government, ONC, HHS, CMS is spending in trying to move this agenda. It's just been so gratifying. I think that's what motivates a lot of us to spend time here, but it's just been really a lot of super effort to try to go in the right direction.

At this point, I want to open it up for public comment, additional public comment. And while anybody is getting up to do that, the process of involving the public, I think, has been also tremendous. Not only did we have sort of an unusual step of the FACA committee opening up for public comments, its draft, but this whole process and, as Tony just mentioned, in December everyone, including this group, will have an opportunity to comment on the NPRM that comes out in December. Speaking of public comments, I think we do have a line, so let's ... I'll just remind everybody that there's a two-minute timer just to try to give everybody fair time.

Byron Sogie-Thomas – NMA – Director of Health Policy

Good afternoon. My name is Byron. I'm with the National Medical Association, and my comment was inspired by something Dr. Steele was describing in his experience, and that is the need to bring others into the fold. He described a situation where he needed engineers, and he needed nurses to take over, and get involved in the process. One thing I would encourage the committee is to look outside the echo chamber of healthcare. If we need to deal with information flow problems, perhaps we should be speaking to some engineers, or if we need to deal with the consumer demand issue, maybe we should be speaking to advertising or messaging people. I think it would serve a monumental purpose if we were to go outside healthcare and say we have this problem. How did you deal with it in this industry? Perhaps that's something for your strategic ... process.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thank you.

Willarda Edwards – National Medical Association – President

Hello. Willarda Edwards again with the National Medical Association and a private practicing physician. I just wanted to leave the committee with two points. That is that the NMA has very much recognized the need to have everyone integrated into the system with respect to nurse practitioners, PAs, other healthcare professionals, and we have actually opened our membership up to them as well because we know that we can't address health disparities by ourselves, and we really need everyone. And we've always emphasized medical home.

On the issue of opting out, we recognize that we don't want doctors to opt out, especially our private practicing physicians, and so we want it to be, when you look at outcomes measures and meaningful use, not penalize it. Be more incentivizing as opposed to creating a penalty against the doctors. We know that all physicians will see the benefit of using EMRs or HIT, and our main concern is, as you've already heard over and over again, the startup costs and then maintenance costs, so we really appreciate you recognizing that, but know that we want to do quality care, and we think that HIT and EMRs will definitely help us do that. Thank you.

Andrea Harangozo – Central Jersey HIE Project – Codirector

Hello. Andrea Harangozo from Central Jersey Health Information Exchange Project. I spoke yesterday, and basically I wanted to comment on the fact that physicians are thinking about opting out. The issue is when you have a group of physicians who truly want to do the right thing and look at the EHRs that are out there, coordinate the care, the issue that we're running into right now is we're looking at the vendors.

The prices go from \$1,000 to \$50,000. The upkeep costs are \$300 to \$800 a month. That can come out to \$80,000 for our practice of, well, a practice of 10 people.

When you look at that in addition to the amount of money that you have to put in, the price becomes an issue, and the problems that we deal with is when you are dealing with the higher end product, they do have the guidance. They do have the warnings that we want to have included. The lower end products do not do that. And, again, the interoperability is the biggest issue. And having people listen to us is the other part of the problem. Thank you.

Kate Finkelstein – NAUH – Legislative Director

Hello. I'm Kate Finkelstein. I represent the National Association of Urban Hospitals. There are about 450 private, safety net, nonprofit hospitals across the country. These are private dish hospitals that do not have the support of their local or state funding that our public hospital counterparts do. We do the same work that public hospitals do, but we are often in areas where there are no public hospitals, so these mission driven private hospitals have stepped up to fill in the gap where no one else is taking care of these underserved patients.

We have two concerns that we hope you will address going forward. One is, as you look at any recommendations or any exceptions that you might make to these other safety net providers in meeting meaningful use, such as whether or not we might be able to allow for patient access to their information, please remember that the private safety net hospitals are in the same boat. That we are treating the same kinds of patients with socioeconomic barriers to care, chronic diseases, language barriers to care, as the other public safety net hospitals are treating.

The other issue that we ask you to remember is that if there is a way to come up with some upfront funding for safety net providers, private safety net providers, the private dish hospitals need to also be eligible for those funds. Thank you.

Tom Stephenson – Healthcare Management Systems – CEO

Hello. My name is Tom Stephenson. I'm the CEO of Healthcare Management Systems. Compared to Epic, I'm one of those smaller HIT vendors that Judy talked about. I basically just want to echo some of the comments that Mr. Fattig from Nemaha mentioned, and also some of the comments you made in your last session there.

We service about 650 community and specialty hospitals around the country, about 400 of those being community hospitals, and about 100 of them being critical access hospitals. The issues that you've raised around cost is a real issue. The upfront cost that they have to have to implement an EHR is a real problem for them, and that is something that needs to be considered.

The pace that you mentioned is also an issue. You've heard testimony from Mr. Fattig, I think, that they started their implementation of an EHR around 2002, 2003. Dr. Steele mentioned the five-year implementation of CPOE. Many of these smaller hospitals are not very far along in the implementation of clinical systems, period, much less a CPOE product. So the gap from where they are to where they have to be is rather large. And the pace to get there is scaring them.

Then the pace, as it relates to vendors like us, is also an issue. We will spend four to five times the amount of development to meet the meaningful use criteria that we spent to achieve certification with CCHIT in 2007. That's a significant investment from our part in a very short amount of time when the criteria still is not finalized. So I think the pace of it is an issue as well, and I would appreciate your consideration on those two parts, on the part of my customers. Thank you.

Rod Piechowski – AMA – Senior Associate Director for Policy

Hello. Rod Piechowski, American Hospital Association. I'd just like to make a few points today. A comment was made during the discussion today that there was only a requirement to report quality measures, and that the values themselves were somewhat immaterial. In fact, as early as 2013, the

meaningful use quality reporting requires a 10% reduction in the 30-day readmission rate, and that's just in one year. And as we've pointed out in previous comments, hospitals are already engaged in significant quality reporting to Medicare and other organizations and do not seek to have any of that duplicated here. Furthermore, connecting these measures to incentive payments and penalties for use of EHRs forms the basis of a value based purchasing program, which, if instituted, should be managed as a separate and distinct program, and that is, in fact, part of the discussion of the current health reform discussions.

The intent of the HITECH components of ARRA is to increase the adoption of HIT as a valued tool that can help improve safety, patient involvement, and efficiency. As the committee has heard today and yesterday, the structure of the incentive payments still leaves many hospitals and professions in the difficult position of finding the funds required to implement health information technology or face future penalties. In the early years, we should focus on getting EHRs and other supported HIT systems in place before we require improvements in quality measures that may or may not be directly attributable to the use of this technology. Meaningful use should measure initially whether or not systems are in place, in use, and are becoming part of a hospital's culture. Finally, many hospitals will need additional help to accomplish these goals, and the regional extension centers, as currently described, will be primarily focused on eligible professionals, not the needs of hospitals. Thank you.

Kathleen Reynolds – NCCMH - Program Specialist, Integrated Healthcare

Good afternoon. I'm Kathleen Reynolds. I'm the Program Specialist for Integrated Healthcare at the National Council for Community Mental Health, and we represent over 1,700 mental health and substance abuse programs across the country. You've already talked about the fact that we were not included in the legislation, but nevertheless, we're very interested in the committee. We're very interested in the definition of meaningful use and helping in any way we can with the integration of that. To that end, I have three points I'd like to make.

One, the definition of meaningful use should underscore the need of health IT to help reduce and ultimately eliminate the disparity in treatment and outcomes for people with serious and persistent mental illness, including individuals with chronic substance abuse. And we cannot let the 25-year loss of life continue because it's from preventable chronic illnesses that we can do something about.

Second, the concept of meaningful use of certified EHRs should include treatment planning for mental health and substance use disorders. Healthcare IT reform cannot overlook the critical linkage between behavioral health interventions and health outcomes. Then, finally, IT systems meeting meaningful use requirements in a behavioral health setting should be able to track standard clinical information on mental health and substance abuse.

And then, to the point of involving consumers, we gave a consumer portal in the agency that I worked with before I came to the National Council. Our first panel of consumers, the very first consumer was meeting with the IT staff to provide us input, and she looked at her med chart and said, is this the place where I should tell you which of those medications I'm actually taking? So the role of the consumer is critical to health behavior and health outcomes.

Michelle Freed – McKesson Corporation – VP

Good morning, Michelle Freed with McKesson Corporation. I have a very brief comment to echo what Charles Kennedy indicated this morning in terms of data management. We heard a lot about the data that exists all through the different settings of care, and the critical piece that I would really want to enforce with the committee is the importance of an accurate and consistent patient identification. We can connect all the EHRs. We can connect all the HIEs. We can share all the data that we want, but if we can't identify the patient consistently and accurately, the data means nothing. So in order to achieve our goals and objectives associated with meaningful use, I would really ask the committee to relook at and reexamine the use of the patient identification so that we can be successful in this endeavor. Thank you.

Frank Kyle – American Dental Association – Dentist

I'm Frank Kyle. I'm a dentist. I work for the American Dental Association. Again, I'd like to offer the ADA's support and assistance to this committee in any fashion that we might. I know that the ADA was mentioned prominently a couple of times during the testimony in the last panel.

Just so that you know, electronic health records is not something that the ADA is blind to. We've had a working group on electronic health records for some time. We're in the process of trying to address some of the very issues that you've raised here about interoperability and connectivity and exchange of information and so on. I think we would be pleased to help the committee understand where we are and where the gaps are.

As was mentioned, most dentists practice in solo practices. In fact, over 90% of all dentists practice in practices with less than four dentists in the practice. So we don't have the large practices that even in medical practice that you will see.

There was a question about are there systems out there that currently integrate medical and dental record keeping. There probably are. The two that I know something about is you might look at the Department of Defense Alta system. You might also look at the Department of Veterans Affairs Vista systems. Both of those have integrated programs. I don't know how well they work because I'm not an expert in the actual nuts and bolts of how those systems work, but at least there's been an effort, both within the VA and the DoD to provide an integrated system. Again, offer the ADA's assistance in any way we can.

Al Bartosic – Standing Stone, Inc. – CEO

Good morning. I'm Al Bartosic. I'm the CEO of Standing Stone, Inc. We are a ten-year-old subspecialty clinical disease management application developer currently in use by over 500 hospitals throughout the U.S. We provide subspecialty clinical decision support in anticoagulation, hyperlipidemia, diabetes, and heart failure. And we believe it's important that subspecialty clinical decision support systems be included explicitly in meaningful use in the certification standard so that they continue to help healthcare professionals improve outcomes and reduce costs.

Specifically, we think there should be a framework considered for the separate certification of a clinical decision support disease management application, and these subspecialty modules already are interoperable with general EHRs and registries, provide valuable data granularity, and can continue to help HCPs to improve outcomes and cut costs. So we think that they can be a valuable part of the solution in allowing healthcare professionals to meet meaningful use measures in these subspecialty clinical areas and deserve separate consideration and support. Thank you.

Lindsay Hoggle – American Dietetic Association – Independent Consultant

Good afternoon. My name is Lindsay Hoggle, and I am an independent consultant. I'm speaking today on behalf of the American Dietetic Association, another ADA. The ADA is the largest organization of food and nutrition professionals in the world with over 70,000 members. ADA appreciates the work of the ONC policy committee in establishing a strong definition of meaningful use, as directed by ARRA, and for moving forward on the adoption of EHRs. We are encouraged by the potential for health IT to improve both the quality of care, acquire aggregate data for population health outcomes, and serve as a vehicle for preventative care.

In yesterday's meeting, we heard from numerous specialist groups who presented many diverse situations of care. As would be expected, the meaningful use definition has focused on providers, as they are the primary designees of HITECH EHR adoption incentives. We hope that the policy committee will consider beginning with the end in mind, if you will, for meaningful use. That is, to utilize it as a tool for quality health improvement. In doing so, we encourage that meaningful use have an overlay based upon patient consumer conditions, which we think may facilitate greater collaboration of patient care.

The ADA believes that nutrition care should be a consistent component of EHRs. Nutrition is known to be associated with seven of the ten leading causes of death in the United States. In addition, the U.S. is facing an epidemic of childhood obesity, which poses a unique barrier to the healthcare system,

population health, and chronic disease management. The discussion this morning concerning telehealth to embrace behavioral health and support patient success is inspiring. Consumers and patients often want to change, but lack the understanding, the resources, and the support to do so.

As our health system adapts to an ever-aging population, the nutritional care of the elderly remains a concern, and one that can be impacted by nutritional outcomes. This is particularly compelling given the identification of high-risk medication of elderly. The Institute of Medicine report the role of nutrition in maintaining health in the nation's elderly articulates the magnitude of poor nutrition of elderly. I quote, "Poor nutrition is a major problem in older Americans. Inadequate intake ... affects approximately 37% to 40% of community dwelling individuals over 65 years of age."

The ADA has been working with other organizations to insure that a nutrition data set is included in research databases, EHRs, quality measures, and languages such as SNOMED CT. In addition, we have developed an EHR toolkit to better assist dieticians in integrating nutrition care in EHR adoption. We thank you today for allowing comments in this area. Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thank you. We have our final comment on the phone.

Operator

Our question comes from Michelle Klagos from WI Medical Society.

Michelle Klagos – Wisconsin Medical Society – Quality & Efficiency Analyst

Thank you. This is Michelle Klagos. I'm with the Wisconsin Medical Society, and I wanted to comment to thank Mr. Lardiere for bringing up the issue of the federal tax ID limitation to ten providers for the regional extension payment. We are applying with a collaboration of others to be the state regional extension center, and we first heard about the REC payment being attached to the tax ID on the tech assistant call October 15th, and we were really very surprised. We have spent numerous discussions over how to help providers that need the most help with our hands tied with the ten-provider tax ID issue.

In addition to the FQHCs having this issue, in our state, we have healthcare systems that might have one tax ID, where smaller clinics are under that mother ship tax ID, but not getting IT or EHR assistance from them, which causes a barrier for us to help them. We will not pull out our application. We are a state that believes electronic health will improve patient care. Thank you for passing that information on so that we can continue our adoption of EHRs to all physicians who will need it. Thank you.

Paul Tang - Palo Alto Medical Foundation - Internist, VP & CMIO

Thank you. That concludes the public comment. I want to thank you again, everyone, on the committee and the workgroups and the public, on behalf of David Blumenthal and myself, for all of the effort put into this. In recognition that even the committee should give thanks with their family, we're not going to have a November meeting. The next meeting, I believe, is December 15th. Still the same place, same location. Well, I don't know where the place is, but in Washington, D.C. Any final comments? If not, we'll adjourn. Thank you very much.