Office of National Coordination – December 15, 2010

>> Moderator: I think we are going to get started, so if people could take your seats and we will get this underway. Thank you very much. This is session on promoting patient‑centered care delivery by empowering consumers and engaging the public.

I'm just going to kick ‑‑ I'm Joshua Seidman, Director of Meaningful Use at ONC. I'm just going to kick things off with a brief intro, actually tell a personal story of my own and then we'll have a series of five brief presentations and then really hopefully get into some good discussion about this topic.

Let me just introduce the panelists first. Christine Bechtel is the Vice President for the National Partnership for Women and Families. She also ‑‑ the National Partnership is the organizing group for the consumer partnership for E‑Health, which has been a really critical resource in trying to think about this very area. She also sits on the California Health IT Policy Committee, Federal advisory committee which advises HHS on health IT policy. Silas Buchanan (inaudible) serves at Cave Institute, which is non‑profit located in Bethesda, Maryland. I will note, Siles Buchanan actually comes to us from Cleveland and made heroic efforts to get here identity of the lake effect snow encircling that region. We are grateful for him to be here. He focuses on educating underserved communities and communities of color about the benefits of adopting and utilizing health IT.

Tom Sellers, although he is President and Chief Executive Officer of the National Coalition for Cancer Survivorship he likes to note and he starts off in his own bio, his most important role is 11‑year cancer survivor whose life mission is to ensure the best possible quality of life for all cancer survivors, which started after his mother's death from lung cancer in 1980. He spent the last 30 years focusing on that.

Then we have Ginger Vera, who has lived with type one diabetes and celiac disease for 12 years. She is cognitive health coach, personal trainer and diabetes advocate and she also holds 15 records in drug tested powerlifting. I don't know if she'll be demonstrating that for us today, but I think important thing to note. The last thing before we get started, I was inspired by Doug Fritsmith haiku this morning, so to lead off this session, I made one up a couple minutes ago, information key, and new meaning for patients, listen to consumers. And with that, we will get started.

So this is actually going to start off with a little bit of a personal story. When we talk about consumers, never have quite the right word, we're soliciting input on that at our blog right now. When we talk about patients, we're talking about patients and families and sometimes it's just a semantic issue, other times it's very important because when we talk about who needs access to data, some people say on the in‑patient side, patients don't really need access during the visit because patients in the hospital are not necessarily going to be leveraging the information, but their caregivers might. This is a little bit of a brief personal story of something that happened to me two months ago.

My Dad lives in Boston. He was admitted completely out of the blue to the ICU there and urgently needed some help. And so this is a little bit of that experience of that. I asked him for a picture and he gave me HIPAA, he said this was fine to blog about and talk about. When I asked for a picture, he said, I want a picture of me with ‑‑ this is with my mom because at the time he would not have made it through the ER if it were not for her.

So this is what I got. I was 500 miles away. I could access all his lab data and see all his medications, both the active and the ones being phased out, inactive medications. I got the radiology reports, the ECGs themselves, as blood cultures made it through the system, I found out about them. Upon discharge I got a continuity of care document, something I now have and can look at if I have questions or need to go back and something that he could bring to his doctor.

What it mostly allowed me to do was to keep up with what was going on. This was critically important to me to be able to know what was going on, to be able to know what questions to ask his clinicians, the ICU docs, nurses, his primary care doc. It was important to make sure that nothing was missed and perhaps as important as anything, you know, today when people get discharged, there is still often in needing a lot of support and so there is a way to plan for that discharge.

Now, there was room for improvement and I think that, you know, there is a challenge because I'd much rather have access to all the data, but it can be overwhelming. And if you don't have context for that data, there can be challenges to interpreting it. There were no access to the actual progress notes.

Now Beth Israel Beaconist where my father was hospitalized is involved in the Open Notes Project, Robert W. Johnson supported project that is looking at making most available. They are starting on the out‑patient side and weren't yet available. There is some pieces of data that they do not make available immediately and I think that is something that each system needs to think about specifically. But the rational was, we need to give clinicians time to talk to the families about that.

But the clinicians weren't talking to my mom about that or to me about that, so there were unanswered questions. So if they're going to be lags in the data that exists, there needs to be actual communication to fill in those gaps. And then they (Inaudible) beaconist has secured messaging, clinician dependent and the clinicians in the ICU are not using that, I had to have this telephone tag going on.

Then, as I said, I blogged about this and a lot of great comments, much more insightful than what I put out there. Some things that came up were, this is really important for reducing medical errors. There is a lot of incomplete data, there are things the clinicians might have not gotten right in the record or might not have known about my dad, so this is really important that be put together.

There is a need, as I mentioned before, contextualizing data and people talk about specific standards that can be used like HL 7 info button standard. (Inaudible) Connect makes it available opens software that allows you to take Snow med and ICD codes and connects that to Data Med Line Plus. I think one other thing that came up, being able to have this access to data can potentially reduce unnecessary utilization.

So just sort of to tie this back to Meaningful Use. The stage 1 final rule has several things that actually are now available. So as we talk about what needs to happen in the future, I think it's important to mark the progress that has already been made, the foundation that has been laid for the Meaningful Use of health IT that will get meaningful information to patients and their families, discharge instructions, clinical summaries after each visit, electronic copies of records, EHR enabled patient specific resources for educational purposes and patient reminders for both preventative and follow‑up care.

So I'm actually going to stop here, I'm going to just let people know that we're now accepting comment, this is actually the second round of comment on our Federal Health IT strategic plan, there are several objectives. One of the key objectives is around consumer empowerment. Here it is, empower consumers with health IT to improve their health and the healthcare system. And so one of the things that four panelists are going to talk about is what about these four, how do these four objectives help us to get there, how four objectives help us to get to our goal and invite all of you to think about this and weigh in. We have gotten several dozen comments that have led us to changing these objectives, but they are engaging consumers with health IT.

Accelerating access to electronic health information in a format that they can use and reuse, encourage innovation in the capture and usefulness of consumer health information and integrate consumer health information and consumer health IT with clinical applications to support consumer‑centered care.

So with that, I will turn it over to Christine.

>> Christine Bechtel: Thanks, Josh. So good morning. Josh asked us to think about three questions. First, looking at how HITECH actually and the implementation of HITECH sports engaging consumers in their care, effective strategies for engaging consumers and the public in Meaningful Use and in other HITECH investment programs and activities that are underway by consumer organizations that can be leveraged by a number of U.S. guarantees.

I'm actually going to try to talk first two and hope the third comes up in Q&A because there is a lot of interesting work happening and I think we can find some good synergies, but I wanted to start with the sense of how the HITECH act actually sports and calls for consumer engagement and I'll say that, if you think about Meaningful Use at its core concept and the notion that Meaningful Use is actually meaningful, right? It has to be meaningful not to just physicians and clinicians and healthcare providers or even payers, it's got to be meaningful to patients, after all, we're talking about taxpayer dollars and a lot of them.

So there are a lot of Meaningful Use criteria, Josh just gave a snapshot of what phase 1, that really has potential for delivering real tangible benefits of this investment for consumers, things they can really notice as being different in their care like Josh talked about.

Now the catch and I'll talk about this, is that a lot of them are optional. I'll come back to that. But when HITECH established state grant program for ONC to support many of you and the work you are doing in the field, section 3013 of the HITECH Act actually requires that any program that receives grant money from ONC in the states actually engages patients and consumer organizations and considers their recommendations as you carry out your grant activities.

You all know of course that OCR and ONC are working on a consumer education campaign that was created under the HITECH program and it's got a particular emphasis on private and security because as we think about moving more and more information to the health digitally, consumers need to understand the benefits, but also the risks and rights and how to ask the right questions of the right people so that we are really sure in the end that they are getting these benefits from information technology, but that is happening in a private and secure way. And then of course, there are the privacy provisions in the HITECH Act that really created and many people think that it is most significant piece of privacy legislation since HIPAA and really tried to address a number of the gaps we currently see in HIPAA as we move into electronic environment.

So there in my view anyway, clear congressional intent that billions of dollars that we are putting into the health IT agenda has to benefit consumers and so the question I think is what happens, you know, next? There is a lot riding on this investment in my view. First of all, it is a platform, as we think about information technology, we should think about and I think we all do, as platform for health reform and as we move toward a different kind of delivery system and as you all know the ACA, Affordable Care Act created a number of new models of care that will begin to be rolled out in the next couple of years and all of these models share some commonalities, so things like more emphasis on care coordination and communication, not only with the patient and family across the care team, more and more non‑institutionally based healthcare, more data collection, clinical data needed for quality improvement, public reporting and for payment.

So these are things you can't do without information technology, so we really view this investment as a critical infrastructure for health reform and ensuring the delivery system changes called for in the legislation really succeed. But if we step back, you know, even further, we need to make sure consumers are embracing the outcome of these investments. If they don't see the benefit, or at worse if they start to see harm in these investments and we're going to be in big trouble and there will be lots of political ramifications and we'll end up with status quo, a major waste of taxpayer dollars.

So I'll wrap up by talking briefly about some of the most effective strategies that we see for consumer engagement in the Federal health programs that HITECH created.

And I would say that my comments probably fall into three categories and that is ensuring consumers understand what's happen nothing and are engaged in shaping it secondly and third ensuring that they benefit from HITECH investment.

So as we think in the context of the Meaningful Use program I mention to you about half of the six bullets that Josh had on his slide are actually optional for healthcare providers to do. RECs have enormous ability to influence what clinicians choose to do first, in which menu items they select. So it is my hope those of you in the audience who are RECs will help clinicians prioritize things that provide tangible benefit to patients and families for all the reasons I just talked about, patient education resources, summary care records at transition, information access, reminders, all of the things are optional and we need to make sure that they are really beginning to happen.

When we think about health information exchange grantees, prioritizing consumer access to information as a first order task, would be another way to do that. And then of course in the Beacon community we start thinking about outcomes, ensuring that outcomes are really ones the patients care about and that they can tangibly benefit from and that most importantly, improve the experience of care that they have in the healthcare system. So certainly the second dimension that I would raise is engaging the public in dialogue about information technology, about information exchange, the benefits, the risks and you'll note that I'm using the word engage and not educate, it cannot be just a one way -- let me tell you what is good and bad here, it has to be two‑way biodirectional exchange.

And then third and in my view, probably most importantly ensuring consumer participation in the governance of activities like information exchange and the beacon programs and each RECs, I think would benefit from this.

So there are three benefits of ensuring consumer really robust consumer participation in governance that I will mention before I turn over to Siles .

One is if you engage consumers in governance of your work then it really helps to increase your odds that the outcome of your work will really be patient‑centered. So a lot of you are work nothing a multi‑stakeholder environment and everybody's got differing and competing agendas and so you've got to make sure you have got proportionate representation so that you can end up with patient‑centered objectives.

Second is that consumer organizations can become if they're brought in and feel like they are part of shaping these initiatives, they can become great allies that can interface with the public, do outreach publicly sports the project going on on and get constituents behind it. I think that is a really important role. And then finally, we often have seen particularly in public policy circles, consumers play Thanksgiving great role as game changers. So in multi‑stakeholder environment when an agenda gets stalled because you have folks at logger head, consumers with the right kind of support can in fact build relationships, new kinds of relationships with stakeholders that are premised on their view of what matters to patients and their families and those relationship consist often play a really key role in moving the stalled agenda forward and we've seen that as the national level, at the local level, we've seen that a lot and it's a very strategic and penitentiary task. So all this is I'll wrap up by saying that it's critical as we think about rebuilding a healthcare system and reorganizing it, the question comes to mind if you build it, will they come?

I think there is no guarantee unless you engage in governance, engage them in dialogue and unless you make sure that they're really seeing tangible benefits that they will come. Now I posed this question a couple weeks ago in remarks I made and somebody came to me afterward and said I have a better question or statement for you which I really like and that is: If you build it with them, they will already be there. So...

>> Siles Buchanan: All right. Yeah. Well said. And I'm going to piggyback on some of that to be sure. As Josh mentioned, the Cave Institute is a 501 3C based in Bethesda. Our mission is pretty straightforward, we work with public and private stakeholders to help communities of color, particularly in underserved become meaningful users of HIT. So my targets are up on the screen. I'll start by sharing a story with you guys of my experiences at the Health 2.0 conference in San Francisco, maybe eight weeks or so ago.

I was very excited about the conference, I had never been to San Francisco. You hear a lot about the food and the people and the culture and the music and I was excited to go. My wife thought that was the only reason I was going, when actually I was going for this conference and you know this is really kind of a pretty significant industry meet‑up over the course of three days. And as advertised, the food was great and the people were awesome, you know, Giants won the series, the election was going on while I was there, I had an opportunity to go there. It was a great experience.

I left the conference a little bit disappointed for a variety of reasons and encouraged for a variety of reasons. Most disappointing was that there were 12 to 1500 people or so at Health 2.0 and over the course of three days I think I counted maybe five or six people of color. And you know I was surprised by it, it was totally unexpected to be frank. But that was the reality. Immediately saw people of color importantly organizations that represent people of color are not engaged in the process to the extent that we need to be.

What was also a bit of a stunner for me is they had a patient panel in the course of two days and this panel discussed all manner of things related to being a patient, some of the folks were super connected Health 2.0 folks and some were not, but they were all patients and or caregivers dealing with real‑world health concerns and the panel, they were actually very good, men and women of all ages. But again there was nobody on the panel that was of color.

So again that was a little disappointing and so I moved on to the vendors and I began to have conversations with vendors over the course of three days because actually they are for the Cave Institute our targets, you know to a large degree. We're looking to partner with a myriad of folks and vendors being primary among them.

So I began to seek some of those vendors out and not one company there was focused on developing technology to address disparities or thinking about ways to engage underserved communities or communities of color. And as I began to probe deeper and ask questions about why that is, the number one response was they hadn't thought about it. So it was just not on the radar at all.

It was a novel idea actually as I began to chat them up about it, they began to say that, is a pretty good idea, let's talk some more. The number two reason was they were really focused frankly on people with money and they were very honest with me about that. They're looking for folks who have the ability to pay. But none of this was wholly surprising when the patient panel presented to this group of innovators, you know, by the organizers of the conference, was absent anyone of color. So there's no structure at all, it's not in the consciousness of the vendors or the organizers of a lot of conferences, this is not an unusual event, not to Health 2.0, this is fairly typical fare for conferences that I attend.

So at the end of the day, I learned quite a bit, primarily we have a ton of work to do. There are, I am encouraged, I'll say that, because I feel that we are at the preface of possibly doing really, really wonderful, if not great things.

There is an opportunity right now to innovate tools and one of Josh's points here, there is an opportunity to innovate tools and trackers and applications specifically for our targeted individuals, so because some things are just burgeoning, the opportunity to innovate for this targeted group with input from this targeted group and then directly promote usage to this targeted group is here. It's here today. You know, kind of like the Windows 7, Microsoft Windows 7 ad, I am a PC and Windows 7 was my idea. I'm a diet application and having tasty low‑fat recipes that account for the fact that I live in a food desert was my idea. I'm a cell‑phone enabled grocery tracker and having the ability to identify grocery stores that sell fresh fruits and vegetables and also take Wic coupons is my idea. I'm an EMR, and having fields that account for social determinants of health are my idea. By the way, those are all my ideas, okay.

So those are just some things I would love to kind of begin up conversation around. It is also critical every stakeholder deeply understands the health disparities could be exacerbated if we don't find a way to pull targeted individuals closer to HIT adoption and utilization. You know, for us at the Cave Institute it is about getting patients involved and engaged. I think as Christine said, empowered there, is no empowerment without engagement.

So the more tasks we actually can delegate to practically free resources, which us as patient consumers and individuals, the lower the cost of care will be. The question becomes how do you do it? How do you get people of color those underserved to better understand the transformative impact HIT can have on their lives.

Also, obviously to reach the targets Josh has here. At the Cave we challenge ourselves to think through that, not just define and redefine it, but actually begin to frame out and build educational base web platform designed to raise literacy, increase the engagement, increase activation, motivation and foster empowerment around HIT and what we are currently developing is E‑Healthme.com. It's not up yet, we have fantastic partners around that and being developed for targeted individuals to understand literacy around what are EMRs and EHRs, what is e‑prescribing, what are web‑based application, what is Google Health, what Is Ad Health and telehealth. There are a lot of people who don't have a basic understanding of what these things are and how they can improve their health outcomes.

This is designed as place where the vendor community like the Health 2.0 vendor community are invited actually to partner with us and create and share culturally and linguistically appropriate interactive learning modules and tutorials about products and tools, their application and devices. Then we begin to think about how do we scale this? How do we push it out across the country in a more personal or city‑scientific way? How do you get that done? An example of that would be Ehealthandme.com/Cleveland, and it would be inclusive of everything I chatted about, in Cleveland we are working with the Cleveland clinic foundation to create tutorial around the My Chart patient face portal of the epic EMR.

We can talk about access, Josh, perhaps we can get to that down the road. We're also developing learning interactive learning modules to improve understanding of how and why it is beneficial for Connect Health, as example to send data via phone line to physicians and EMRs. In Chicago, E‑Health.com/Chicago and I might have a different focus, Lake Forest Hospital uses clinical works which has own patient face portal. More important, their community members might benefit from working with us in a similar way and likewise, same with E‑Health.com/Atlanta or Boston or Seattle, or wherever it may be.

I should also mention that in Cleveland we are working closely with community college, which happens to be here today, as well, Tri C as we call them, tri C is ONC and lead the community college consortium I think 14 or 15 community colleges happy and proud of that. Case western reserve university in Cleveland is working to ensure educational models actually our consumer engagement strategy is strong and any solution is informing our delivery system.

I'm going to close now basically letting you folks know we are interested in collecting data and sharing data and success metrics around this. It is important we build a social network around this, it is important that ONC, as well as folks in the audience hear directly from the community, that we allow them to JRNL, we allow them to blog, that we capture their ideas and their imagination and thank you very much.

>> Tom Sellers: Thank you. Thank you, Josh. We are already doing better than the Health 2.0 patient panel in terms of having some diversity on the panel. And I thank ONC for being focused like that.

As Josh mentioned, I'm an 11‑year, my cancer‑versary, close to being 12 year prostate cancer survivor and I experienced complexity of cancer survivorship from both the patient and the caregiver perspective. I lost my mom to lung cancer when she was 51 years old back in 1980 and there were no opportunities for caring in the way that we can do now.

And I lost my dad in 2004 to an inoperable brain cancer and I'm an only child, I was responsible for his care long distance between Boston and Southern New Jersey and none of the tools that you have in 2010, Josh at BI were available to me to manage care, my dad's care in 2004.

So we actually have made some progress along the way, but we still have a great deal of work, a lot of work to do and I think that one of the key issues that we need to focus on in addition to meaningful use and EMRs is how does that work also with complex and special diseases like cancer and I kind of feel like cancer being one of the more complex diseases is real laboratory for figuring out how do you integrate EMRs with specialty care, which provides a really slightly more difficult range of issues to deal, hard enough to get adoption with primary care providers, but then to think about getting adoption with specialty provider when is they think the adoption rate of EMRs among oncologists is about 5%. So it is a difficult problem, but it is also the focus of how we can begin to develop quality care and patient‑centered care for cancer patients, which fundamentally is the mission of the National Coalition for Cancer Survivorship. Our mission is to advocate for quality cancer care for all people affected by cancer and we define cancer survivors as having being from point of diagnosis through the balance of life and we also define survivorship as living with, through and beyond cancer.

In order to do that, in order to be a survivor, in order to be able to have the opportunity to live through the entire trajectory of the disease and receive high quality patient‑centered care, means that we really need to focus on the transitions, the transition from the primary care doc who is more than likely to be the first one to start you down the road in diagnosing the disease, the transition from primary care into the complex cancer care community, the communications within the cancer treatment, which involves generally multi‑disciplinary group of folks from oncologists, radiologists to surgeons, pathologies and a whole manner of different docs who may or may not be talking to each other and aware of all the things going on on.

I can tell you, having gone through the process as prostate cancer survivor that it seemed like every single doctor that I saw had to do an exam and had to redo all the things that I had done with the three previous doctors and I was actually in a fairly integrated healthcare system, which is the largest healthcare system in Boston.

So getting the doctors who are caring for you to communicate is one challenge and then making a transition from active treatment back to post‑treatment survivorship and up to and including the hand‑off to your primary care doc, is all an important part of what happens and if we don't find ways to have health exchanges and health information technology and electronic health records facilitate those transitions and have the information flow throughout the entire trajectory of your treatment and post‑treatment, then we will have lost a tremendous opportunity in this significant investment of taxpayer dollars and this significant investment that patients can benefit from.

But it's not just patients having access to their medical records or patients having access to care plans that will help with the coordination of care, it's also getting the patient a voice into the treatment process and having patients be able to communicate back to their medical teams about the type of care they're receiving and reporting on the quality of pain, the quality of side effects, the quality of symptoms that they are dealing with on a day‑to‑day basis and we know from recent studies that the patients tend to know better about how they're feeling, how we're feeling, than the doctors do, not that there is anything against the doctors, but the doctors underreport pain and other complications and symptoms compared to when the patients report it themselves.

So we need access to our information, we need to feed information back to the medical team and we ‑‑ I think you would find that patients are much more interested and cancer patients in particular because we did a survey, much more interested in contributing their information to research studies that could potentially benefit us as patients in the types of treatments that we receive.

So in some cases patient applicant groups are in at logger heads with consumer privacy groups because patients may be more willing to share information for research purposes than consumer privacy groups might be willing to share based on a sense that there might be, there might be there, is potential of privacy interruption whereas if you're a patient in the middle of it all, I want them to have as much information as possible to figure out, I want them to be able to figure out how to tell difference between aggressive prostate cancer and nonaggressive prostate cancer and I will do whatever I can, take my information and use it to try to help support that kind of research process.

So there is a slightly different set of considerations that we might as patients take on as compared to consumer groups in general and that's also why I always talk about patients and not consumers. I will tell you that survivors and caregivers do feel that they want their information shared with other primary care docs, they want their information shared with the other docs who are treating them and are comfortable performing health‑related activities online and the survey we did with something like 1100 survivors and about 300 health professionals, in fact, we found over 90% of the people who responded to the survey were very comfortable with performing health related activities online and more than 90% of cancer survivors searched for health related information online and more than half of cancer survivors used the internet to find healthcare providers in their area.

So, you know, we've ‑‑ I think you asked the right question, if it we build it, will they come? That is true, I think we will come as patients to the table, but it was even more important what Christine said, that you need to involve and engage patients in the governance, in the planning, in the development of the systems in order to ensure that when you build it, we'll already be there and I look forward to being there as one of those patient advocates.

>> Joshua Seidman: Ginger.

>> Ginger: Well, I agree with the difference between consumer and patient. I am not just a consumer, when I say I'm a patient that implies that I'm putting my hands and my life in the hands of the medical community, in the hands of a physician and I've had several situations over the past 12 years as a person with type one diabetes where, if my health history was available online, I would have been safer and I wouldn't have had to argue for my own life when I was ‑‑ I'll give you a couple examples.

When I was 15, my insulin pump malfunctioned while I was sleeping. I woke up, spent the next day vomiting and finally made it to the ER. And the two medical students who were taking care of me insisted they should give me 10 units of insulin per hour on top of the 15‑unit bullet they had just given me. I'm 15, female, young, I knew from my body that was way too much insulin. But because I don't have a medical degree, because they didn't have any connection with my actual endocrinologist, they didn't trust when I was trying to argue. I'm at death's door at this point, barely conscious and I'm saying, no, no, please don't give me that much insulin, I know I will go crashing within the next two hours if that is what you do.

I'm a good arguer. I was able to argue them down by a couple units, but that wasn't enough and I knew it wasn't going to be enough. Sure enough, two hours later, putting IV in me and giving me sugar to counteract all the insulin they just gave me. As most 15 year olds in that situation would not be able to advocate for themselves like that and would not be able to speak up like that and that's a very frustrating situation to be in.

Another similar situation was when I was 19, I had reconstructive jaw surgery and I woke up around 10 p.m. off the anesthesia, my head the size of a watermelon, swollen, my whole jaw had been chopped up, sewn together and my teeth were wired shut. I knew it was 10:00 and I had not taken my Lantis injection and Lantis is an injection I need 24 hours a day. I take it once a day and it last all day, as nondiabetic, your pancreas drips out little drops of insulin all day long, instead I take that shot. I absolutely need it. My surgeon had never heart of Lantis insulin and said, I don't want her taking that. He's not even in the room or the hospital, he's at home resting his feet because he just did a great surgery. He said, I don't want her taking that, I've never heart of it.

I'm again vomiting and my head this big and I'm saying, please, you've got to let me take that insulin, I'm going to be extremely sick by morning, you will have a whole different set of problems on your hands if I don't take the injection. It's in the bag next to my bed, it's not a big deal, I do it everyday. After enough thorough yelling through my wired shut mouth I was able to take the injection and the next morning he didn't apologize, didn't say anything, just kind of shrugged it off.

So what I find, if I had that health history online, he would have gone on there and seen yes, she takes Lantis insulin every single day, he also would have seen one of my doctors in the past would have written, this girl is on top of her health, like she cares about her diabetes. A lot of people with diabetes have stigma attached neglectful, don't care about their diet and exercise, those are kind of stereotypes and I don't fit that stereotype and I want to be respected for not fitting that stereotype. I want to be seen as Ginger, the person with diabetes, not the person with diabetes, who happens to be named Ginger.

And it would be incredible if there was actually a more cohesive teamwork between the patient and the physician instead of this is what I know because I'm trained and this is what I know, I think because I'm a patient and I've live this disease for 12 years, please trust me. There should be team work and I think EMRs would provide some of that.

>> Joshua Seidman: Thank you. Well, we are going to open it up, so people do have questions, feel free to come to the mic. And also, I think through the webcast, are there other questions that might be coming in? That happened yesterday, you can let me know.

But I guess I would ask first, fellows, let me just ask, you were talking about the kind of application, sort of the different acts you came up with. One of the things we hear a lot is that providers in certain settings that have patients that previously talked about it at digital divide that exists. In reality, it actually may be more of as (inaudible) from the project said, more of thermometer than an on/off switch because there is variation in the types of device use by different groups.

Can you tell me, what kinds of ways should we be thinking about reaching out to the communities that you're talking about and what ways should we be making sure that future electronic health records have mobile applications that can be built to that to help support that?

>> Siles Buchanan: All right, Josh. Well, I think that just mobile apps themselves have the distinct possibility of being one of the great equalizer around health disparities. We know and I wish Susanna was here, as well, she is versed on this stuff. In the minority community, the use of mobile phones amongst African Americans in Hispanic communities are growing at rates that are significantly disproportionate to the white community. We are significant early adopters of mobile‑based applications.

I want to say that when it comes to health‑based mobile apps, we are early first and most prevalent adopters of that particular technology. I would like to just kind of touch on access generally speaking, just real briefly, as well, because the FCC through the national broadband plan and inclusion tenants of that plan are doing some pretty interesting things. Likewise, the NTA and the program, which is the broadband technology opportunity program are spending hundreds of millions of dollars to raise the general technology literacy of underserved communities across the country by investing in technology, community‑based technology centers that exist in churches, libraries, community centers, that sort of thing.

One of the things that we've looked at the Cave Institute is the program Connect the Community program, CYC, what are people actually being taught as they go through that program? And typically tutorials around Excel or Word, how to Google, how to send an e‑mail. We think it would be much more interesting to actually have cultural appropriate applications that focus on one's health and actually are tied back to the healthcare systems in those given communities improving patient provider communication. So there is a lot of things from an access standpoint that is going on on. The dots are not connected and I think that's part of the problem.

>> Joshua Seidman: Yeah. Yes? You can just identify yourself.

>> My name is John Wild. I work with the Puerto Rico rec. One area of this that I think is intrigued me for a while and which we see in Puerto Rico and elsewhere, actually, is the problem of low literacy or low health literacy among populations and so one aspect of the engagement is not just access to the information, which of course is important and seen that going on in many ways, but it's also once they get access, communicating information in way that the vast majority of those populations can truly assimilate it and make it actionable for them. I mean, I think that getting them there is getting easier with the dissemination of PDAs and things like that, but then what? Then they turn on and they look at and see complex medical information that's just unfathomable and away they go. What about the problem of trying to work on presenting complex medical information in a way that can be assimilated by a broader segment of the population?

>> Christine Bechtel: I'll take a shot at that. I think there are a lot of ways to go about and address that. I'll mention three, and I'm sure there is one to add to that. Thank you, sorry.

So, I would say we're absolutely not there yet, as you know, as you have observed. The first steps strategically in my view really unlocking the data itself. Once you unlock the data in a way that is portable, it opens up a potential market for vendors who (inaudible) right there and we'll join you in that, Silas, to be able to use and incorporate that data in a way that does contextualize it, that does present it in multiple primary languages that, does put it more in context and we are not there yet and I think Silas' work is important in that respect. And then the, I think unlock the data to get the applications going, but also making sure that there remains that important link back to the clinician. It can't just be, hey, consumer, here is your data, go, see you later. There needs to be more partnership between the healthcare provider and the patient or the family member so there can continue to be that two‑way exchange around what does this mean for me and what is the best course of action, what do I do next, etcetera.

>> In the medical home scenario, that would help address that problem. What I'm concerned about is that if we do it sequentially, then you get people there first before the content has been adjusted, that to turn off that might occur then would be hard to recover from. In other words, it now creates the problem of trying to get them back so they can say to themselves, yes, it's worth it because I learned something that I need to know about me or my significant other or child or whatever. And I'm concerned that the one can't get too far in front of the other, that we really do need to press on how and what we present so that they don't turn away from that information once they get there.

>> Not just what you present, but also who is presenting it.

>> Uh‑huh.

>> Siles Buchanan: You were going to say something, I know for sure. I will make a very brief point who, is presenting it, as well. We are actively working with upon Faith community on another project, okay, and, you know, when you begin to do things through the trusted purview of the African American church and you empower health ministers, perhaps you now have a way to reach people and desensitize them and begin to collect data maybe up front about how ready they are for some interventions, but because you are going through the trusted source and resource, you have an opportunity to reaching out and get them any time you want.

Likewise, there are some other folks that are embedded in the community that have a similar mission as ONC around HIT adoption utilization, but they also are embedded in the community, the American Heart Association with Heart 360 program which is tied back to the Microsoft ecosystem, all right. But they have programs specifically designed to reach African Americans and Hispanics in churches. So there are those links that exist, you know, throughout the community.

>> Actually, I was going to, along the same lines, I think that's an important role the patient advocacy community can play in developing those types of mobile apps and distributing them from the patient community, not necessarily from the clinical community, but I agree 100% with Christine, you need the feedback loop so that you are engaging the clinicians, in the conversation, that it is not just a one‑way direct conversation.

>> That is essential.

>> Let me just, yeah, let me just ‑‑

>> Can you press the blue button.

>> Let me say this and go to the blue button. So I think that we need to deploy both technological and human resources to this issue. And so you talked about the ministers, there are other strategies, too. One example is a project in California called Mavia, it's a PHR for migrant farm workers and it has actually gotten good use and one reason why, they promotors on those helping migrant farm workers to use the technology and it's a very low‑cost way to engage them and have that trust source working with them. In many cases that is a more trusted source than the clinicians themselves.

But there are also technological solutions, I quickly reference something the National Library of Medicine has developed called MedLine Plus Connect. What it does, uses information triggers, diagnosis codes, procedure codes to link to specific consumer content written for consumers that can help them to put that data into context and therefore link every lab test, every diagnosis and so forth to that. Blue button and next.

>> Yeah, I know we want the next question. I don't think the time lag you are worried about will be that great. The VA unlocked personal healthcare data so if the patient want to pour it out to any kind of app, they could. And what happened was funded the challenge to innovators to say, what can you do with this data? Flat asci text file. It was phenomenal and they did it like that, I am not worried about lag.

>> Joshua Seidman: Okay, next question.

>> Good morning. My name is Dr. Nicky (inaudible), I am the Chief Medical Officer of San Diego County, one of the beacon communities, but at this moment, I want to speak as patient and ask a question as such. I survived metastatic testicular cancer. After being ignited through my cancer, I lost 270 pounds without surgery. And I tell people I'm half the man I used to be in more ways than one.

But the question that I have and the thought that I want to put for consideration, access to information is one thing, for me a big part of the journey was inspiration. I got a lot of help, but I needed a lot of hope to survive what I did. I'm just curious as to the role of the social networking component, the CEO of Facebook was just a few minutes ago named Man of the Year by Time Magazine.

And I'm just curious in the focus on access and information being mindful of privacy considerations and so forth, what can we do to facilitate that peer‑to‑peer social networking? I'm wondering for those who testified to your own journeys, was that peer support important to you?

>> Joshua Seidman: Ginger.

>> I would love to speak on that. I am a loud voice in the online diabetes communication, the DOC, diabetes online community because there are so much of us that everyday talk to each other about living with diabetes, so many parents talk about raising children who live with diabetes. It is I get more support there and give more support there than I've ever found in a hospital. And doctors often are very skeptical of recommending their patients go into social networking and get advice from diabetes websites because it's not medically credible, but that is not what they're for. We're not giving out, here is the amount of insulin to take for this. Sometimes that happens, but what it is, knowing there are other people out in the world who are living with the same day to day challenges you are and I don't see those people everyday face‑to‑face in my life, but there are thousands of them, I'm friend with probably 2000 diabetics on Facebook. People I never met in real life, but I follow their lives and know them pretty well. I think it is a crucial part of healthcare and I wish physicians were more on board with it.

>> Joshua Seidman: After that, what she said. This side.

>> Jacob Ryder, a family doctor, happen to be an EHR vendor, CIO of All Scripts. Here representing the vendor association, although I'm going to comment with my family doc hat on. Ginger, I was struck by your comments about what I heard are real disconnects between what is in the heads of providers and what is in the heads of patients.

I volunteer my time teaching medical students and if your students were under me, I would have kicked them in the shins pretty hard. We think about knowledge, skills and attitude when working with healthcare providers, both what my vendor hat on and medical school teacher hat on, I think about the knowledge, skills and attitude of healthcare providers and I wonder, I'll just invite the panel that maybe first Ginger, talk about how you view grantees since this is the context of our conversation here, helping with the attitude part, right, in fact in my life, that's the hardest piece and what I heard you talk about were the attitudes of the providers, not necessarily their knowledge, although your surgeon certainly had a knowledge deficit, right?

>> Right.

>> Medical students had knowledge deficits and the issue here is you weren't the knowledge source that they trusted.

>> Right.

>> Right? So your wish was that some how information technology made available additional knowledge that potentially was more credible. Right? So if you could carry that knowledge and say, oh, look, there is knowledge that you guys might want to know about, and do that in a nonconfrontational way and I'm just, maybe I'm leading the witness too much, but I have the sense that attitude is really a big piece and how can information technology, how Recs and beacons and Sharps, assist us, you know, medical schools, vendors, whatever, in helping to shift the attitudes of healthcare providers. I'll shut up now.

>> I think that is an awesome topic. I mean, the main thing that I would love to, even if I'm just going into, I recently moved to this area, so I have a set up with a new endocrinologist, I hate the idea of it because I know I'm going to go in there and explain I am not neglectful, lazy person. And it always feels like this head butting kind of like I have to prove myself to every doctor because they just sit down with you and talk to you like you are a little robot sometimes. Many great physicians in the world, but often the situation I feel like I'm in, to give you an example of that. When I first started with adult endocrinologist in Vermont, where I moved from, head of Vermont diabetes research center and I sat down with my first appointment and I said, I'm type one diabetic and looking into powerlifting, 2‑1/2 years ago, I just started thinking about going into training for powerlifting and he rolled his eyes at me and carried on the conversation like I had never said it, just as soon as that was some kind of silly dream that no lazy, neglectful diabetic would be successful. A year later I set seven records in powerlifting and what would have helped somewhere on my EMR, it said, this is what this person is like as a human being and as a patient, the one sitting in front of you, she's not every other patient you saw yesterday.

If there was just a little box for like four sentences somewhere in that screen on your computer, I think that would really provide something for the patient where they feel like they are being supported instead of attacked.

>> This is my view. Where did you go? There you are.

This is the number one take away out of this session and when Ginger told her story, which is compelling and absolutely heart breaking we've ended up in a healthcare system that can behave this way, with that culture, the number one sort of context is around whole person care and so if we begin to use technology as a way to facilitate whole person care, it's not going to change the entire healthcare system and fix everything overnight, but enormously powerful tool when used the right way.

If we think about the role particularly for RECs in helping clinicians, number one with the change management and leadership and infusing some reorientation of our cultural approach to a more partnered driven approach patients that's got to be number one. I worked with some of you, actually, in the docket project back in the day, and it really wasn't about ever technology, right? It was about leadership and culture change and how the RECs can support prioritizing these dimensions and really looking at how HIEs can back that up through information exchange that God forbid might allow the patient to upload some own healthcare information so the picture presented to the clinician is a whole person so you know ginger the powerlifter and I play golf. This is my family situation and how do we leverage technology in a way that connects me, the community resources, that connects me to social networks, that connect my care team to social networks, right, let's start thinking about that.

So I think that the number one thing that is really focus on the ways that technology, simple things like consumer access to their own health information can be the beginning of changing the dynamic and I want to put one more plug in particularly for the beacon community, got to focus on patient experience of care, measuring what is happening in my experience so that every time ginger leaves the hospital and I hope you never show up there again, or a doctor's office, we get asked about our insurance of care and did we understand what the doctor said and did they treat me with dignity and he respect and did they display information in a way that I understood and did they make treatment recommendations that made sense for me?

It is such a simple concept and yet so powerfully transformative to think about what my experience was and how technology can change that, it's completely different. We've got to prioritize really looking at patient experience. I'll get off my soap box now.

>> Yes, we're mindful of time. I want to point out one thing that is also going on in evolution of Meaningful Use is looking more at outcomes and one of the areas the health IT committee identified as key area is patient and family engagement measure and there is a whole tiger team that is working on that, Christine chaired that and there is a request for comment right now on a series of measured concepts on the health IT HHC.gov/log/faca, Federal advisory committee blog.

Request for comment includes series of measured concepts, including several related to patient and family engagement and I also hope one message they'll take back to the EHR vendor association is that this idea of whole person care needs to be built into future EHRs.

>> Hi, my name is Fran Speilberg and I'm a family medicine physician and health IT developer and health IT researcher with RTI. I wanted to make a comment and ask a question and this is back to the topic of how we can use health IT to improve health literacy among low literacy populations and to decrease health disparities. And the research world that I've lived in, there is a huge body of literature now showing how audio assisted interview, cassy technology, can be used among low literacy populations and it takes a simple health IT program and provides audio so you don't actually have to be able to read the screen and guides a patient through questions and then provides feedback and education in a way they can understand.

And there has been lots of research showing that this technology will result in more risk disclosure for sensitive health behavior and sensitive health conditions, and can increase for example, HIV counseling and testing rates, we've used it a lot for that. And then there is interactive risk reduction counseling for variety of health topics that have been proven effective in research. But there is not yet a connection between these technologies and patient portals in the vendor community and there is not a connection between these technologies and the electronic health record.

So I guess what I would like to see and wonder if it would be possible in the future, when we're looking at sort of certification requirements and when we're looking at Meaningful Use, to add some specifications around the use of interactive health assessments and education and counseling to address health lit ras and he improve access to care and improve health behaviors among those that suffer disparities.

>> Yeah. Go ahead.

>> Can I speak up ‑‑

>> Yes, we'll try to move through the next few, we have a few more minutes and want to get the last three questions.

>> Very, very briefly then. You know, I can't over state the role that community organizers (inaudible), health ministers, the role of the community colleges can play, in kind of bridging this gap. I also need to point out, we don't have time for this conversation at all, the trust factors that exist or don't exist among patient and providers. You know, my grandfather would tell you, I just don't trust a white man in a white coat. There are just some embedded, you know, issues that go along with certain segments of our population of our community that is going to kind of take a little time to get over. It really is a long conversation that needs to be had from my perspective.

>> Two seconds, one different approach to actually allow patients not only to look at their data, but to download their data and they could actually upload it into the technologies so it becomes patient specific and that is something that the policy committee for stage two of Meaningful Use is potentially recommending and something I hope everybody will rally the troops and support.

>> We've got to get them to the technology, that is the thing, got to get them to the technology.

>> Great.

>> Thank you.

>> Hi, I'm Amy Landry with health information exchange and regional center in the state of Maine. I just wanted to make a comment about governance, you spoke about that and how important that is to have consumers involved. And we've had a consumer advisory committee that helped build our health information exchange and that committee has been active about 2‑1/2 years now and I just wanted to say that for the benefit of the other HIEs starting fresh right now, that has really helped us make sure we are connected to those communities. We have alliance at the table, main civil liberty at the table, mental health association at the table and we have a number of just general consumer advocates and patients at the table, as well, that has really helped us make sure HIE has been successful.

>> Thank you. I think the important point and I think you guys are consumers on actual HIE board, that is the key. Consumers can't be in separate advisory counsel, they have to be in decision‑making roles and they are and Maine has done a great job of that. Thank you.

>> That is a great advertisement for session 206 today, which is patient involvement in governance, strategies for engaging consumers and setting programs and policy goals.

>> Nice sedway, John. It is in congressional a 2:00. I'm sure you will want to raise that point there. Yes, please.

>> Hi, good morning. My name is ‑‑ Hare. I'm the principal medical officer for Vanta and also a practicing rheumatologist in the at George Washington. My question to you is, as subspecialist I constantly deal with patients data that I have to rely on from other specialists and primary care providers. What I've done as health IT consultant, actually changed the way I practice.

The last few minutes of every visit now when I'm with a patient, I actually spend 10 or 15 minutes talking about personal health records, talking about their data, talking about when they travel, what do they do with their medication list, what do they do if something happens to them and someone else in their family or a stranger has to take over and jump in. And it's just really interesting to me that it's really made quite an impact on a lot of patients I have.

I have a woman I've seen for three years with multiple sclerosis who used to come into my office with a binder of 50 specialists and the changes they made in her care. One day I said to her, you could lose this folder on the metro, you could ‑‑ you have a neurodegenerative disease, you will not be able to carry this everywhere you go. Have you heard of personal healthcare record? How about we talk about Microsoft or Google, not that I'm endorsing one product over the other.

But she looked at me like she was in awe, so she was surprised and happy we discussed it. She really changed the way that she managed her data after that conversation.

I have to say that I would not, I didn't practice this way five years ago. It's only because now I'm a provider who works in health IT consulting that I realize these tools are powerful and that I also realize having a provider endorse a tool of some kind whatever that might be for whatever patient is really important and having that dialogue is not reimbursable that, is not something I can reimburse for, not something that goes into my Soap notes. As we look at stage 2 and stage 3 of Meaningful Use, you know how do we kind of, we talked about the communities helping to endorse tools how do we get providers to help endorse some of the tools?

>> Yeah.

>> We hold them accountable for getting 20% of their patients to actually use the portal or EHR and that is in criteria right now.

>> Yeah, I think to that point, one of the discussions the policy committee had, we know that clinicians have reported to us in the exact same practice, the exact same patient population that one clinician will have 10% of their patients using a portal and one will have 70%. And that is based on the degree to which the clinician is engaged as a team member working with their patients and using those technologies. We have time for one last question.

>> Thank you for making time. My name is Dan Fredrick, with South Dakota Regional Center. One thing I see we are not talking about much when we talk about consumer engagement is the role k‑12 education can play in that. From the very beginning of having discussions with Kindergarten if they had to get shots to come to school, do they have a family history of things? There are ways to present that and we have a huge infrastructure in this country designed around teaching kids and if we acknowledge the fact that this is a long‑term process and we begin educating them early, I think that that's going to be very beneficial 10, 12, 15 years from now.

So my question then becomes, what are your organizations doing to address some of those systemic K‑12 kinds of things?

>> So I think that is a great question and I've had some conversations with some parents. In fact, single moms, who may have two or three different kids and they have no transportation and it's time to register kids for school and they have got immunization records they have to run around and get and it becomes a real hassle. So to the point that the woman made earlier just before you, just simple steps that provide instant benefit almost, also becomes a way to get folks, I think more deeply engaged in this entire process.

If you have conversations with people in the Gulf Coast who saw their medical records floating down the Ponchatrain River, getting them to do a medication list, it becomes very easy to do that from the gentlemen from Puerto Rico's question earlier, how do we slow walk this perhaps and get peep toll enter things and pull them back or if they have to be pulled back, get them to do more? It's meeting people where they live. And giving them interventions that can stop the worsening of certain consequence fist they do not do it and then it being explained by people they know, love and trust.

>> Well, I want to make a couple quick reminders. One, please fill out your evaluation on the portal. That information is incredibly valuable to us. The second is please do weigh in on this set of consumer empowerment objectives. We have actually already made a number of changes to them based on the input we have gotten from the public and we encourage you to continue to weigh in, that will be important to us as we tie up that process and then the last thing is that the other blog, which is the same, except instead of ONC, it's FACA, where the quality measures work group request for comment on quality measures is, which includes a whole range of domains, but including patient family engagement. With that, I want to thank you for your great questions and want to thank our four wonderful panelists.

(applause) ‑‑

>> All right. If you could go ahead and come on in, we'll go ahead and get started. The sooner we start, the sooner you get to lunch. We have a lot of good information you want to digest before you go to lunch.

So welcome, everybody. This is the second of the sessions on rural healthcare. My name is Liz Hanley, part of the Office of the National Coordinator in HHS and what you heard yesterday if you were here for part of this session was my colleague Farzad Mostashari telling you, you know what, in the office Office of the National Coordinator and with our colleagues, some of whom are at this table, we've been very focused on designing and building the programs created by the Recovery Act.

Now like Farzad said yesterday, we're at the place where the hard work has begun in earnest and you are involved in rowing hard and involved in the hard work. And in fact, I'm going to switch met fors because it is like we planted the crops, but got to assure that they're fertilized, that we collectively weed them and there's enough water for them, as well as a market for them when we bring them out of the field.

So like Farzad said yesterday, implementation is in a lot of ways harder than design and I think that metaphor is a good one for rural health information technology issues. It is hard to do rural health information technology. For me, rural health is a personal issue, I was going to show you a picture of my grandfather's farm, which is located in a small town in Illinois, with a population, near a small town in Illinois with a population of 463 people. And I helped my dad navigate the healthcare system around that town when he was suffering from lung cancer and having been really rooted in the cadence and the values of rural healthcare of rural America, I can tell you that I know from a personal perspective that things are really different and I appreciate the differences with all puns intended, in rural America.

So rural America is different and HITECH is time limited, that is the intersection of why we're here today. Lacking the connectivity and the resources that are available in urban and suburban areas, rural communities and their healthcare providers face significant challenges in qualifying for (inaudible) payments. Many of you know this, you know that through 2014, we're in good shape for qualifying for payment. After 2014, there is possibility of disincentive, our Secretary, the Secretary of Health and Man services, Kathleen Sebelius is former governor of the state of Kansas and know well as former governor what the issues are and in fact, even before we published our Meaningful Use regulations earlier this year, she said that she wanted to do something within HHS, she wanted to direct the agencies to have an HHS rural task force to focus attention on what the issues are and what we're trying to do is make sure rural providers have the same access and the same ability to qualify for Meaningful Use incentive payments as their urban and suburban counterparts.

So she recognized that other Federal agencies work closely with rural providers, as well, it's not just us in HHS, there are lots of other resources focused on rural providers. And so she convened her colleagues at the Federal Communication Commission, U.S. Department of Agriculture, the VA and the department of Commerce back in August. Secretary Kathleen Sebelius has really been a leader in asking her colleagues how can we marshall our very substantial resources together and in a way that will address these needs and really that is very much a conversation that is in process and taking place now and in fact these people at the table here have been some very active partners and new friends that we've made as a part of this conversation since the Secretary said this is the priority and we need to do something about this.

So today's panel is an opportunity to hear from some of the key partners from those agencies I've just mentioned about resources that are being aligned to help meet the challenges we've identified. We understand the scope of the challenge and actually understand and embrace the value of dialogue and responsiveness. And so what we want to do is make sure today that what we have time is for you to hear after the last panel that focused on what's happening at a local level and what are local solutions, today you'll hear from what's happening at a Federal level and what are some Federal solutions for rural healthcare providers.

We're very fortunate to have a terrific group of panelists who have come here to share their experience with you and we're going to start with Kerry McDermott, Director of Healthcare at the FCC. A brief synopsis about what each of the people brings to the table if you didn't have a chance to look at the bios on on the portal. Kerry is unique in terms of being somebody that is at the Federal Communication Commission that has the responsibility for dealing with broadband issues and the rural healthcare program, which many of you are familiar with. Unique in the sense that she has been in the healthcare insurance business, as well as being in the broadband business. I think that gives her a unique perspective.

We're then going to go to Susan Woolward, a loan specialist at the USDA, who spent a lot of her professional career in the field working with diverse groups, including rural farmers, all the way through the other kinds of providers and organizations that are served by USDA's community facilities program.

Then, Jacky Garner, we're very fortunate to have the Centers for Medicare and Medicaid Services regional administrator in region 5, which is the Chicago region, for the midwest part of the country, Jacky is really the regional administrator who is responsible for the Medicaid division that are in the field and she's really devoted her career to Medicaid, including serving as the Medicaid State Director in the State of Illinois.

Then finally, we're going to turn to my friend and our colleague from HRSA, health resources and services administration, he's a unique blend of person in that there are people in HHS sometimes who know rural and some people who know health information technology and Mike has the two skill sets blended together and also works with some of you in the midwestern part of the country. We have a great lineup.

What we're going to do is have pretty rapid fire 10‑minute presentations and then the rest of the time will be at the end and we hope what you will do then is have the opportunity to ask questions of this great group of people we've assembled today. So thank you and let's start with Kerry.

>> Thank you, Liz. Good morning, everyone. Before I begin I would like to take a minute to introduce Jamie Suskin, an attorney working closely on the rural healthcare program and actually has recently been asked to assume responsibility for the pilot program. So I will take your easy questions and Jamie will take your hard questions.

So when we think about the FCC's role in healthcare, we care passionately about broadband. Broadband is more than having big, fast pipes, it's about building infrastructure that has the power to transform society. So just like railroads and electricity and the interstate highway connected people and improved quality of life, so, too, we hope will broadband. And the FCC's rural health program can play a small, but important role in this transformation.

Our job is to help our broadband unaffordable or unavailable. The ability to use health IT solutions such as electronic health record, diagnostic image transfer, video consultation should not depend where you live. It is our job to make sure all healthcare providers have the underlying infrastructure necessary to support these eight health IT solutions, as well as achieve the goal of Meaningful Use.

We are in the process of modernizing the program to better meet provider's needs and improve program called U.S. Health Connect is being designed to make sure we target support efficiently, make resources available to more entities and remove excessive burden on applicants. The timing of this work is set to be the first quarter of next year, hopefully by late first quarter we'll have a new program to reveal. And just by show of hands, how many folks are familiar with the fact the FCC has a program? How many folks are participating in the program? Okay.

How many folks are happy with the program? Just checking. Good, good, good. So for those who are less aware, the FCC authorized to spend up to $400 million a year to provide support to rural, public and nonprofit healthcare providers. Sounds like a lot of money and it is until you start putting lots of constraints on on it.

Also, I want to make sure folks are aware unfortunately we don't have a bank account with $400 million just sitting in to cut a check. We actually have to go out and collect the money from carriers and then disburse it. That is part of the reason why the program has historically never hit its cap. We know we can do a better job with this program and we've been working our Federal partners to help us better understand the provider needs with associations and with the folks in this room. I'm sure a lot of you have commented on kind of documents we have out there saying, hey, here are our ideas, let us know what you think. We appreciate that and need that. Frankly, we can't get things changed unless we have that.

So let me tell you about at high level what we're planning to do. The pilot program was infrastructure program. We would like to make this permanent. We know there is ongoing need for providers to get infrastructure done in place and the dollars are hard to come by. I think in theme of the past two day when is we think about problems and challenges, first thing I hear is capital, second I heard was capital, the third was capital and the fourth was probably work place. We would like to help with the capital part of the equation.

Part of that infrastructure fund involves a 15% match. We've heard and we understand that is difficult for folks to come up with. If you're trying to raise $10 million, you probably don't have 1.5, we get that and looking at things that might be considered for end time types of matches to help you take advantage of these dollars and a lot of input come from folks in the room and our partners, HHS, has been helpful and especially through the coordinating parties of Liz and the rest of ONC and Michael and I'm not just saying that to kiss up to the moderator, I promise, it is legitimate praise.

Also our application process, we get it is onerous, I think one of the real challenges with the pilot program is that in the rush to make sure we got dollars out the door for infrastructure we found ourselves building the car while we were driving at the same time. We've done a couple laps. We're learning and look at specific items to streamline, highlight a couple things. We know letters of agency are problem and are taking serious look at that, to say, you know what, maybe you don't have to get everybody to sign on the dotted line before you start. Let me caveat talking about these things. Nothing I say can be taken as concrete yet. Again the order won't come out until next year, I want you to have a sense of what we're thinking about, what we've heard from you as far as problems are concerned and what we're trying to fix.

The second major thing we want to do is set up broadband services fund. The idea here is we want to increase the support you get on ongoing basis, ongoing monthly basis to get broadband and internet access. Now the number that we've thrown out for the level of 50%. We know that more is better, we get that. But we have to make sure we're not breaking the bank and we also have a real challenge in that there is a lack of empirical data about what the right level should be. So we are trying to demonstrate flexibility and what we'd like to do is start out with some marks, see how progress works and evaluate it.

Another thing we want to do is make these funds available to more eligible entities. You told us that administrative offices and data centers are important, we agree with you and like to BRIENG them into the program F. We're going to start thinking about the digital healthcare economy, we have to collect, aggregate and exchange data, I think the data center is important and should probably hook that up, too. We get that.

Then another thing we are really focused on, how do we define success. Put the money out there, how do we know we are using it in the best way? We are working with yourselves, Federal partners and some of the rural state offices of rural health to think about the performance measures, what are metrics that make sense? Anyone in the pilot program, we recognize that we actually ask a couple questions that don't make sense and we know you don't know how to very that application when you are telling us how you are doing and we don't always know what we're doing with that information. We are taking a close look and saying, are we asking the right question and what are the policy decisions we are trying to implement by doing those? Those are three basic things about the program. One, make infrastructure permanent; two, give higher support for broadband services, three, make it available to more entities and I will add the general caveat we're trying to make the application process go more smoothly.

Then, a couple things more broadly, we understand that awareness of the program is also a challenge. It is great folks in the room have heard about it a bit. We need to do a better job of communicating out there to the entities that can benefit, hey, there is potential pool of money over here to help you address your challenges. We've started kicking off communication plans in place with our colleague at HRSA to outreach to the membership. We are doing a better job of getting to the associations and promote it and tell your friends. And I want to mention a mapping exercise.

So February 17th, a magic date at the FCC, when the national broadband map will become available. This is based on data from the state telling us kind of where the infrastructure is, so we will hopefully get a better picture of the snapshot of what kind of connectivity is available across the country.

This matters for healthcare, especially as we think about Meaningful Use. If there are only areas of the country as many rural areas tend to be served by wireless providers, there is some technological limitations to what you can achieve with health IT solutions. We need to understand where the infrastructure is, quality of infrastructure and how to fill the gaps and that is something we really focus on a lot at a Federal level. I have the privilege of serve nothing advisory capacity on a White House task force, one thing we grapple with, how do we make the beacon and regional centers successful and how do we make sure they have the infrastructure in place and identifying those infrastructure gaps is a key challenge and we're going to need everybody's help to move forward with that.

Two other points I'll make. Key agenda for FCC for 2011 are universal reform and U.S. is the mechanism, look on your phone bill, you will see line for U.S. tap, these are dollars we collect to offset disparate cost found in rural areas. We understand that program is a bit outdated and needs to be modified for the technologies of today and do a better job at effectively targeting resources and big, big portion of that is to serve rural areas.

So look in the coming months for Connect America fund, proposals around that we would welcome your input. Then, number two is spectrum policy. You know, we are in a spectrum crunch, spectrum are airwaves, it is what we think of as invisible infrastructure and again in rural communities, wireless is oftentimes a big part of the solution and we need to ensure in this country we have smart spectrum policy to help drive advances in all parts of the economy, I'd say healthcare chief among them. I won't take up your time. Thank you for being gracious listeners and Jamie and I are happy to answer questions when we are done. Thank you.

(applause)

>> (Inaudible) ‑‑ (audio difficulty) ‑‑ thank you. Susan Woolard is going to be the next panelist from the U.S. Department of Agriculture. Befroe she starts, I wanted to point out with Kerry McDermott, at the FCC, when I mention what we are doing within HHS, one tangible thing we have done as far as dialogue at the cabinet level, we prepared comment on notice of proposed rule making the FCC had about its rural health program and provided comments from within HHS based on the experiences that we've heard about from you all and from the Indian health service and from all the different partners. So everybody in HHS had the opportunity.

And what was behind our comments was really the concept of how can we make a little Venn diagram of eligible providers eligible for the rural healthcare program and our eligible providers for meaningful use incentive payment to make sure there is connectivity for people who need it to qualify for incentive. Part of what Kerry referred to, the fact we have been trying to align the Federal resources in tangible ways already. We have a good head start and met last week with U.S. Department of Agriculture because they're also another large resource and one that you all need to know more about because that is an opportunity to help with your infrastructure. We hear about finance, finance, finance and broadband and U.S.DA can help with the capital issue. Here is Susan Woolard.

>> Thank you. Okay. Technology is not my thing, obviously. Okay. Like Kerry, I brought my hard answer person with me also.

This is Aaron Morris specialist from national office in DC. If you get nothing else out of my presentation, the first thing you need to hear and the thing you need to remember, contact your local rural development office, your portal into the system, those are people you will talk to, the people you submit your applications to. I'm the face and voice today, but I'm not the person you're going to be working with on daily basis on on your project if you feel you have a project.

Area Office, addresses, phone numbers can be found on rural development website and I'm saying rural, not world. I have kind of a mixed up accent that comes across strange on telephones and technology things. It is available on our website and if your area has white pages, we are in the white pages under U.S. Government agriculture and there will be a rural development listing there and you are looking for the area office, probably the most important thing to remember about what I say in the next few minutes.

My favorite thing is I'm going to put a plug in for another agency within rural development, would be the Rural Utility Service. They have several programs available that deal with technology in addition to broadband services. They also have a distance learning and telemedicine program. It is done under a Nofa, published typically after the first of the year, the calendar year. Last year's was published in March. They anticipate that it would be published again about the same timeframe this year. That program will allow you to interconnect your hospital through telemedicine program. If you are looking at electronic medical records and that sort of thing, if you make it fit within the parameters, those are eligible type project.

It is at this point a grant program and it is, there is a 15% match required with that. And let's see, I'm reading very quickly notes that I made. Minimum grant request is 50,000, maximum grant is 500,000. Those may change because they put out percentages for the Nofa program. But again that, area office that I mentioned, those folks would be able to help you or get the phone number and get you to the person potentially in the State office or the general field representative that would handle that program.

But it is available and so that was my pitch for the folks in Rural Utility Service. If anybody talked to them, I talked about you. Program I'm most familiar with and was invited here to speak about, community facility program. We've been around for 40‑plus years. We are currently in the very early stages of rewriting our regulations because we're talking about broadband and wireless and our regulations still refer to antenna television systems. We are a little behind and so we are in the process of trying to update, modernize our regulations and don't anticipate huge changes to the regulations.

We anticipate healthcare being priority as it has been for the last 25, 30 years. And your infrastructure projects under that program still be eligible. We can do basically soup to nuts on a healthcare project. We will not pay general operating expenses that, is not something we can do, but pay to modernize your building. We can build you a brand‑new building. We can do your medical records. We can do CT Scans, we can buy ambulances and helicopters and landing pads and basically anything that you need within your facility to make it operational and fit the needs of your community or communities.

We are rural program so you are limited to community with a population of 20,000 or less. We have three programs, three funding programs available, we'll start with one that nobody wants to hear about, the guarantee program. That is the one I work in primarily, that is as it sounds, you and a lender negotiate. You come up with rates, terms and fine print and pages and pages worth of requirements, rural development guarantees to the lender if for some reason that particular loan fails we will make the lender hold to a certain percentage. Guarantees will not exceed 90% and they can ‑‑ lender can participate those loans up to, they have to maintain 5% in the portfolio.

Next one in line of desirability is direct loan program. Rural development acts as bank. That is our bread and butter program since the community facility program was formed. As I said, rural development acts as bank, they are fixed rate loans and can be for useful terms or useful life of the facility. 40 years or up to state statute. Again, if you are buying computers we're not making a 40‑year loan on your computer system or medical record system. We need to ‑‑ useful life of the facility and the facility is the project we're financing, not necessarily a physical building. It can be the service that project provides.

Then the one everybody wants to hear about, the grant program, and that is as it says, rural development administers that. It is a grant, no matching requirements. We are limited to 75% of a total project cost and that would be eligible project costs and in rural development there is very little that is not eligible. Again, general operating costs are not the type of things that we are financing. Potentially be financed through the business and industry program, little bit different program, different income requirements. Again that, area office I mentioned, they'll be able to help with all the programs.

I said, grant program, limited to 75%, that is a maximum and based on the income and population of the service area. So the smaller and the poorer you are, the larger the grant you are eligible for.

I think that covers all the programs that we have currently. Again, we are in the process of regulation rewrite. We anticipate an 18‑month process on that, so within the next 18 months or so we hope to have something brand‑new that doesn't mention antenna televisions any longer and I thank you for your time and Aaron and I will be around to answer questions for a while yet. Thank you.

(applause) ‑‑

>> So when we talk about coordinating with USDA, I think one thing you should know, when we met with USDA last week, we said when rewriting the regulation, just the way we are working with FCC, we want to work with USDA, to help represent your interest in the way their regulation is revised. And in fact, they were happy to have us and they mentioned that currently in their grant program in the community facilities program, I don't know how many people know this, but about 40% of funds are directed toward healthcare providers, that isn't a cap, that is about how much currently goes to healthcare providers. Our motive is really to make sure that is the percentage that reflects what your needs are. We'll continue to work with them.

We have a lot of terrific things going on on within HHS and somebody very well qualified to talk to you about Medicaid, which is definitely a big source of capital financing within the rural communities, Jacky Garner is going to address us next.

>> Thank you, Liz. And as Liz mentioned, I oversee the 10 regional Medicaid divisions that are housed in each of HHS and CMS's regional offices and that provided me with an opportunity over the last several years to gain a far deeper and richer understanding of management information systems at the state levels and all the work that has been underway to help states really enter this next phase I think of meaningful use.

As I was thinking about things and really important issues, I was struck as I sat through the session, before we came in here, I really heard four or five key themes and while that session focused on local issues, I was ‑‑ I realized during the break that those are in so many ways the same issues that we are dealing with at the Federal level and I want to take just a moment to highlight them because I really do think they speak to the issue of collaboration.

First of all, we heard one of the speakers earlier talk about culture Trumps strategy. I so love that expression and always found that to be true. And in our work in Medicaid on the state, with the states and all of the stakeholders, whether vendors or patients or partners, we understand that each state Medicaid health plan is unique in its own way because their culture is unique. No matter what our strategy is at the Federal government, it's really important that we take the time to understand those specific state issues, have dialogue with state. Let me just ask, how many of you here are from states? I know yesterday there was a very large group.

Okay. It looks like ‑‑ whatever that role is, whether you are from State government or you're a partner or you have some role, you understand that cultural issue so well. The second thing was really there is no one solution, every locality is a little different. Same thing is true for states. While we try to have some economies of scale and some efficiencies, we do understand there are little nuances that what works in state of Washington may not work in South Carolina. So we work really hard. I heard a theme of it taking time and I thought, oh, yes, because even in working with states, we found that when it came time to talk about health IT plans and HIE, and Meaningful Use, those states who had been involved in some of our transformation grants a few years ago, they seem to be in a little bit of a better place in terms of readiness.

So really appreciated that comment about these, you can't turn these ships on a dime, they do take some time. And then I was really so struck by the work force issue and believe it or not, we have the same issues at the Federal government. I love the term HITECH rednecks, I will never forget that, if you weren't in the session, ask some of us later what that meant. But my own experience in hiring, we've had postings out for HITECH experts and I am finding that some of the real entrepreneurs and very, very talented and best and brightest really don't want to leave Montana to come to Chicago or San Francisco or Baltimore or DC, that may be shocking to some of us bureaucrats, but my frustration and I think some of the things in addition to the technology that we will have to have in place is all about realigning personnel systems and making sure that we can reach out to that talent pool that wants to stay in rural America. So I just wanted to mention those things.

I also wanted to do one little check and see who from CMS is in this room, I think this is why we come to these things. There is a table and there is Cecile is over here. We often, I know workshops are rich, but the beauty of conferences like this is actually meeting people face‑to‑face, so I hope you will take time to meet with some of us from CMS. We really aren't all that scary.

Let me talk about the progress and I'm going to focus mostly on Medicaid. I can speak to a little bit of Medicare, but Medicaid is my focus. Let me talk about some key activities that are underway and where we are as we enter this next phase called implementation come early January.

All states are well into planning, all 50 states in DC have submitted their initial planning documents and we've talked about things taking time and we heard this morning from the panel about the importance of that planning time. Those came in and by the way, I sign all of these with a lot of consultation and a lot of referral steps. So these state planning documents and state Medicaid health IT plans are something I take very, very, very seriously because my name is on that bottom line even though a lot of subject matter experts have had input into them.

But you will hear me and you will hear my theme be that the state health IT plan really is such an opportunity to collaborate and to bring all of the players to the table. CMS is very much about collaboration in this entire process. We certainly have a role to play, but it is really a unified effort thanks to efforts such as this, this one focusing on rural issues and rural America.

And I have that problem with that word "rural," too, so people say, are you saying rule, or rural. It comes from out of where I grew up, which I don't think Liz will mind my sharing this, is the same place she grew up. How ironic, I know where her father's farm is and she knows where my uncle's farm is. And I think that's part of the passion that you're hopefully hearing from me about why this effort is so important and when I say rural and at CMS we also include tribal communities, and I know of no one who is a better expert at that than Cecile, sitting at the table here.

Many tribal clinics are not part of the IHS system that in our work with them it's very, very important when we talk to states that we make sure that the state plan is addressing how they're going to work with tribal communities. So I was so glad to hear from South Carolina this morning that they are part of the planning process and that the tribal nation in South Carolina sits on the big planning committee. That is very important and it happens to be a requirement under the law.

There is a new thing called tribal consultation policy and it is something that we expect and we look for when plans come into us. So we have everyone has turned in their planning document and now we have approximately depending upon the day, 20 states, Medicaid health IT plans in. And we have about 15 to 20 states who have been what we call Tier 1 states who have been through a testing process with the national registry that we will begin using in early January. So we think we have the data to support that we're in pretty good shape as we head into ‑‑ as we head into 2011.

States have worked very, very hard, we have worked hard to support them through a number of measures. One of them being outreach and education with all of our partners, our partners can the HRSA, have been ‑‑ we're sort of joined at the hip in all of this activity. We also have and I don't think any of them are here, but you may not know that one of the resources that CMS brings to the table clearly are staff and we have subject matter experts in our ‑‑ on the Medicare side of the house in Fee for Service, who are available to, they will be taking questions. They're available to answer complex questions. We also have a group of 10 phenomenal Chief Medical Officers, one in each regional office and I don't think any of them are here. Raise your hand if you are, please, but otherwise floating around this conference and they are if you have not met them, they are just exceptional contacts.

We have of course Medicaid staff who have worked on state management and information systems for many years and have developed their own expertise that really has, they have been the people carrying the water on working with states and standing up, the state Medicaid Hit plan, sorry for the acronym. We have tribal experts in each regional office. We have Native American contacts who work closely with the tribes and can be a very good resource to you.

I just can't emphasize enough that for CMS in Medicaid that it is that state plan, that state Medicaid Medicaid Hit plan where we have such opportunity to impact rural America. It is there that we are asking and we expect to see just exactly how are you going to address the needs in communities that we've heard a lot about this morning, where the need is so great.

Another reason why that really matters to us and other than the fact that meaningful use will improve people's health and it's the right thing to do, it's also about access. We need to make this a success because at CMS we're accountable and we're not the only one. Many of my Federal partners up here are, about ensuring access to providers, access to healthcare and we all know that is often a challenge in parts of rural areas. And with state budgets being what they are in this era, it even becomes more difficult. Often we get to a place unfortunately where access is decided by a court or an internal appeals judge, but we want to make sure that meaningful use and EHRs that the entire program, that there aren't any unintended consequences and we don't lose access to providers.

So we're deeply invested in making sure that providers get resources, technical assistance, information and that we make this as Farzad said yesterday during his opening and then at lunch, I think he drove home the point that we have to simplify, simplify, simplify and do not make this complex for people to bring them into this program. And there are many reasons why that's very important for us at CMS.

So I'm going to stop there, I actually have a little stop watch going here and I've gone over for three minutes. I'll be around for questions and anybody a technical expert from CMS, please stay.

(applause) ‑‑

>> Thank you, Jacky. Okay. We have Mike McNeeley next and Mike is with HRSA Office of Rural Health Policy, an office that serves the whole department and happens to be housed in HRSA. There is HHS rural HIT task force. Jacky is a member of that. Mike has been helping to staff that along with Lala Sammy, who will start fielding your questions after Mike has spoken. We have a number of great folks helping us to make the environment easier by pooling our collective HHS resources, so want to acknowledge their help and leadership. Next, Mike McNeeley.

>> Hello. How are we doing today? Hopefully not too bad. Since everyone seems to be establishing their rural cred, I figure I should establish mine. I'm actually from Kentucky. I drive by farms, I do not live on one, but ‑‑ or my family does not live on one, and so I know rural pretty well in general from the far western and far eastern Kentucky, spent a lot of time lost. It happens.

Just quick question, how many people actually knows what HRSA does or knows of HRSA? Know of, what does was the one that caught people.

All right. So just brief overview, HRSA, has about six bureaus and a number of offices. And basically they're responsible for healthcare safety net. With that being said, if you know FQHC, you know an HRSA grantee. They are pretty much funded out of our bureau primary healthcare. We have a program under the bureau called health center control networks. This is a project that has been around for quite a while that we're trying to push forward to help with rural activities.

Since they are going to get money through ACA, to expand their services, we are figuring we can provide technical assistance through our grantees. So that is an idea we're going to try to float forward. We have established FQHC, it is a different model, but there are other forms of PA.

Another part of our agency is OHIQ, office health information technology and quality. They actually are brand‑new, they are in their third iteration, I believe. They just reformed this year because we basically went through a complete reorganize again.

It seems like it happens every couple years.

But they're responsible for quality improvement, as well as the workforce population. All right, they are looking at HIT said workforce and ways to alleviate the issues in rural and urban. But as we go along, there is more rural identification, so they are actually coming to our side, actually. It's quite nice.

And then there's our office, Office of rural health policy. The Office is just over 20 years old. We've been around, if there is a critical access hospital, we're the ones that have helped get those implemented. Through BBA, 1997, there was grant program that came about, reflects Medicare flexibility grant that is run through the Office of rural policy. We have four divisions and one of those divisions, the hospital state division and initially that grant program designed for them to convert to critical access hospitals.

Right now, about 1316 of them that we still provide support through the flex grant program. Most conversions have pretty much ended, there are a few going on in California, but in general, we moved the program along to quality improvement, HIT initiatives and E.M.S. initiatives. Those programs are basically, they're basically how we're helping the states because we award these to 45 state offices of rural health even though there is 50 of them, only 45 flex states because those states actually have with critical access program. State Office of rural health is another grant program that we run and usually they work in conjunction with the flex there.

But what I want to talk about is some opportunities and some TA we actually provide currently. Starting, well, in January we expect to release a guidance for a network HIT grant program. The idea is to award 40 grants at $300,000 a piece to assist in vertical integration networks. That can be, there are some limitations on these networks in that two‑thirds of the members can't have a complete EHR and we definitely put in the guidance the words "complete EHR," that way anyone that had a financial system wouldn't be ruled ineligible so when they had a module, wouldn't be ruled ineligible.

So the idea is to get them going. We're not really looking at the horizontal at the moment. This is kind of based on previous program that we ran out of our office, the flex critical action health information grant program. So a lot of what went on in that program, which funded 16 states at 1.6 million a piece to integrate critical access hospitals and local providers. We have evaluation of that coming out next month. There's a member in the audience that has been harassing me for about six months for this to come out, but it's officially been cleared. So I can actually release it soon. So I'm quite happy about this.

Within that program, there are several models that we are planning on putting out there so that other networks can actually utilize them as a way to work through HIT adoption, implementation and ideally meaningful use, but back to the HIT network grants.

What these grants are going to be, since they are based on the previous program, total of 12 million for the first year, so 300,000 a piece and then that would be renewable for two years afterwards. So total investment of about 900,000 if you are actually to get the network grants.

Then again this is all contingent upon having a budget. Within the Federal government I understand that you work with continuing resolutions a lot of time. Depending on what happens, I believe this week, we'll know if we'll have continuing resolution until then the fiscal year, at least that is what the rumor is.

So that is one source. To go along with that, we're going to provide TA. We have a group called technical assistance and support center that we also fund through cooperative agreement through the Office of rural health policy. They are going to provide boots on the ground support, as well as registered assessments, just and phone support. That group actually has a CIO on staff, basically an hour assessment to a number of hospitals. They just brought this person on, we're still trying to figure out how that's working.

On the other side of our office within the hospital state division that cooperative agreement is housed, there is separate HIT technical assistance supplement that we've given the task to help with the state flex offices to support HIT initiatives, be it strategic planning, be it just needs assessments, just to get them at least in line to where they need to be.

I mentioned that we have OHIQU. We partner with HIQU, on significant number of webinars in general and the last year they have done many urban rural mix webinars. The idea is to provide as much information as the regulations change as Meaningful Use came out, as the new feeling of ex QACs having to work, clarification that QACs have to work a little more because of the way the guidance is set up. So there was technical assistant call for that. We have rural health clinic technical assistant call OHIQU have webinars on monthly basis and posted on our website after each call occurs, so it can be downloaded afterwards.

And then last, but not least, I want to mention rural assistance center. If there is one group kind of tied into knowing where all the dollars are right now, it's probably RAC. And just if you don't know RAC, or RAConline.org. They have a list of every HIT dollar that's currently available, actually on it this morning, use act was on there, the USDA community facility was on there, RUS was on there, and there are a couple grant programs on there and I'm sure there will be more coming along.

In the Office of (inaudible) we are committed to advancing HIT and we do that by paying attention to the policy by working with our partners, by trying to make, by commenting on MPR and then ideally just making life better for rural and I have to admit HITECH rednecks, I like that myself, because my accent does come out on occasion, way too much. But I will be unlike the other panelists, I don't have someone to throw under the bus, so I am he who will have to answer the questions. So feel free to send them my way.

>> Thank you, Mike.

(applause) ‑‑

>> Well, I don't think we need to throw anybody under the bus, but I do think we need to now spend some time doing questions and answers. You have heard a lot about Federal resources, maybe you knew about these, maybe some were new to you. If you have questions, please you can come to the mic here and direct them to a member of the panel or Lala you want to, either way.

>> Hi. I'm Rachel Muter with Missouri HITS assistant center. The rac and telenetwork, and we are a FCC, RHC PP awardee, so I'm familiar with the program. I have a couple questions for different people on the panel.

First of all, I appreciate knowing a little, I would like to know more about F2HC requirement with other safety net providers N. Telemedicine, the F2HCs cannot allow patients into clinics that are not their own patients for telemedicine because of some of the FTCA liability issues so they can't really be a community resource for telemedicine. So I'd like to know a little bit more about that.

Also, with the FCC rural healthcare, I wanted to know your opinion of the middle mile and last mile awards that went out for the states in terms of do you have an idea whether that will bring any of the broadband pricing down? In Missouri, we think that it might make things more expensive, which is disconcerting. So ‑‑ then also if the new rules are coming out the end of next quarter, are they going to be enacted for the next fiscal year, July 1?

>> Okay, real quick on that one, the goal is to have things in place for the next funding year, yes.

>> Okay. Okay. So mmm, I think that's all.

>> Okay.

>> Sure. So as far as the grants, middle mile, last mile, we know those are still a challenge and I think I'm not going to venture a personal opinion on that because I don't want to get the commission boxed into anything. But it will be wait and see. We know what the hope for consequences and we'll have to watch carefully the unintended consequences and we'll address the gap after we get our maps and look to see what needs to be done. We're keeping close eye on competition.

>> Okay. In reference to the F2HC question, basically what happens bureau of primary healthcare released a pal letter basically. It's a program assistance letter. Under the public health act, F2HC are required to work with other safety net providers, RHCs and (inaudible) specifically. So they are encouraged to create contracts with those facilities to actually compete with their services.

So this letter actually went out to every CHC and FQHC and there was a technical assistance call on this last week, specifically for that. That will be posted online in about a week and a half, as well as a transcript. It is something that we have to have close captioned basically before we can put it up on online. But actually may be something on our website at hrsa.gov/ruralhealth. We have a tendency to put things up with just unedited transcript and the slides. So ‑‑

>> Todd from Nebraska. I apologize if you covered some of this, I wasn't in the first part. In rural Nebraska, we have significant number of RHCs, who are actually led by PAs, but they see almost zero Medicaid. As a result there is significant portion who will not qualify for meaningful use as result and yet one of the struggles the rural health centers are experiencing is the fact contracting attending doctors or letting them know if they don't implement electronic medical record, they will not renew the contract.

So it becomes more difficult for the RHCs to find the funding for this and based on the funding rule development funding initiatives, would these RHCs be eligible for any of those for HIT implementation? You talk about the cause, but a lot are also independently owned and not related at all.

>> I can say at least with the network grants HRHCs are ‑‑

>> Doesn't matter who it is, the clinic itself?

>> The clinic itself would be eligible, at least to participate in the funding. They won't pay for a lot, like 60% of any HR system for the entire network. Is that ‑‑ that is the amount of funding that can go toward it, but the key here is the vertical integration and making sure that certain parts that you meet the other requirement, like nonadoption and that you have a partner that is either critical access hospital or tertiary center, RHC can't be ‑‑ I wouldn't think it would be top tier of the actual network itself because we are encouraging them to link with pharmacies and collaboration, more about collaboration, but the key here is making sure they have at least some sort of working relationship prior to coming in. They can't be or this money just became available, let's now work together.

>> Right.

>> More you have to have been working in the community.

>> Most of them are, the problem is they are not aware that they keep looking at it in Meaningful Use targeted toward providers, so the clinics are trying to struggle and finding how they qualify for additional grant when is their attendings are part of huge health systems and health systems are doing their own thing. Again in Nebraska that is significant number of rural health clinics, we're trying to lineup those as regional extension center. Thank you.

>> One other answer I heard to that, or one other thought I had that maybe Susan wants to jump in on, it seems if you think about other resources the U.S. Department of Agriculture, the facility program might be a place for rural health clinics to apply for funds and part of the plug for get to know the state rural development people in agriculture is that the grant funding takes place 90% of it at the state level, not at a Federal level. So developing those relationships, echoing back to what Jacky said from the last panel, collaborate, collaborate and collaborate some more. Filling together the different organizations, those state rural utility services or development administration folks could be helpful in getting money in way you haven't thought about before.

>> (Inaudible) ‑‑ (away from mic) ‑‑

>> For community facility funds, the program is limited to assisting nonprofit organizations, municipal organizations or tribal entities. If clinic is nonprofit clinic it is for the funding.

>> I wanted to add something else to HIT one. I forget to mention that with the network grants and most grants in our office, especially on our community‑based division side, tribal organizations are encouraged to apply and they are eligible, so just to let you know, we are advancing our work with the tribes themselves, just it is more of HRSA initiative across the board right now and going past it. Yeah.

>> Hi, my name is Ross Line from Hawaii State AIG and Pacific Regional Extension Center. My question focused on CMS and state readiness plans for even though they have done their PAPD, how do we know they are administratively handle of handling (inaudible) disbursement what assurance can we give our providers in our community? We don't have an answer at that point.

>> Well, number one, if their state plan not just their planning grant, but state plan has been approved, then we have signed off after very full review. Number two, all states are going through a testing process with the National Registry to make sure as I mentioned earlier, the tier 1 states have completed that successfully and the remaining states are coming in the second tier and third tier. They have to go through that testing before they can begin and number three, just as reminder, CMS will have a help desk beginning January 3rd.

We're actually testing that right now where providers can call in if they have a question or if they have encountered some problem or something that they just need some assistance and on top of the help desk our object matter experts in the central office and regional offices will also be on standby to respond to questions.

>> (Inaudible) ‑‑ by June or July of 2011, all states will be (inaudible) or testing sessions will not be (inaudible) ‑‑

>> I don't think I said that. Did I say that?

>> (Inaudible ‑‑ away from mic) ‑‑

>> Yeah, I can't see you and I can't hear you.

>> I'm sorry, what I meant was so it's my understanding from CMS documents and web information so forth that CMS should be prepared to begin disbursing (inaudible) payments in June or July of 2011?

>> That is correct, if not sooner.

>> So based upon, if these states are, some in the planning or testing stages, so my question, based upon that then, not all states would be ready to disburse payments in July of 2011?

>> It will depend upon whether or not we approved and signed off.

>> How do we find out in Hawaii if our state plan has been approved?

>> You can contact me, you can contact your regional office, you can contact the State of Hawaii. If you want to see me after, I will be happy to give you that information.

>> That will be fine. Thank you.

>> Okay.

>> Bob Roswald from the State of Oklahoma. For the gentleman from HRSA, could you clarify the eligibility for application for the HIT network grants? Could an REC or state designated under the cooperative agreement program apply for those grant moneys on behalf of geographically defined area where the funds would be deployed to enhance the network structure?

>> That is actually a pretty good question on for eligibility. To be honest, I don't know if that has actually been addressed within the guidance itself. It's being reviewed at the moment and that is something I can say will be addressed for sure, but I believe it has to be linked under the network legislation to an actual nonprofit. So it's just REC may fit it, but there will have to be some clarification.

>> Lynnette seems to be answering questions back there.

>> Are there any more questions? This is your opportunity. But I also recognize we're standing between you and lunch, so if there are no more questions, then great big thanks to our panelists. Thank you for sharing this information. And thank you for your questions and attention.

(Applause) –

Afternoon

[Music]

>> Hi. Good afternoon. We have the distinct pleasure now of hearing from our luncheon keynote speaker, Dr. Tom Frieden. Hi, guys. So I got to know Tom Frieden back in 2002, when he was coming from having saved a million lives in India and counted them, to New York City where he was becoming Commissioner of Health of the city. And over the next seven years I had the distinct pleasure of working with Commissioner Frieden, with Tom Frieden, then Commissioner Frieden, and I gotta tell you, there's nobody who is more focused on saving lives, who is more dedicated to the mission and the promise of government as a force for improving the lives of the population, and who is more insistent on excellence in all things when it comes to being a trusted steward of taxpayer dollars.

And it was a marvelous experience working with him. And one thing I gotta tell you is that he is probably one of the people that I've ever met who understands ‑‑ understood immediately the potential for health information technology.

I'll tell you a story about four years ago now I was running a bureau, providing epidemiologic support for the city's policies around smoke free air act and variety of chronic disease interventions. And we were looking at the statistics and lamenting how far we were from where we wanted to be. I think still the seminal paper from Beth Mcglin that came out found that only half the time is healthcare doing preventive activities around chronic disease management, only about half the time doing the right thing. Tom said, "This is the most important paper of the year." And I didn't quite get it at first, as often happens. And then we started to drill down into what's actually happening in each of the neighborhoods and what was the data showing. And it was startling how much healthcare was leaving on the table. And I said to Tom, well, I think health IT and electronic health records, I think there's a role there for this. And he said, "Well, it takes six months to figure it out." And so five years later here I am, thanks, Tom, and throughout the beginning of the Primary Care Information Project and through all the challenges and successes that we had, Tom was absolutely a stalwart in his support for the work that we were doing, which I think has had national implications. But also in holding us to focus on what really matters. And so it's with distinct pleasure that I introduce Tom Frieden, director of the Centers for Disease Control and Prevention.

[Applause].

>> Thomas Frieden: Thanks so much. It's wonderful to be here. And Farzad is very modest in those stories, but really was essential to helping us determine what to do, how to do it and how to get it done. I'll talk a little bit about the experience from New York City, but I want to give you first my conception of how a community improves health. First come the socioeconomic factors, because socioeconomic factors have the maximum impact on health status.

One level above that are the traditional public health interventions that save lives, fluoridation of water or more modern interventions like eliminating trans fat, so that people's default decision is a healthy decision. And it's hard to do the unhealthy thing.

One level above that are long‑lasting protective interventions, things that require the health system to have only a light touch on individuals. One level above that are things that require clinical care on an ongoing basis, like treatment of high blood pressure and cholesterol or diabetes. And at the highest level, counseling, education, advice, to eat healthy, be physically active, and in general the largest impact will be at the bottom of this pyramid, the smallest impact at the top of the pyramid. But an effective program will work at many, if not every, level of this approach.

At the Centers for Disease Control, we identified six key areas where there's going to be substantial improvements in the health status of Americans. Tobacco control, food. Healthcare‑associated infections, motor vehicle injuries, teen pregnancy prevention and HIV prevention. To focus on each of them our progress in tobacco control has stalled. After 40 years of progress, for the last five years there's been no further decrease in adult smoking and teen smoking rates have stalled in their decline. But tobacco remains the single leading preventible cause of death. And most who have ever smoked in this country have already quit. And most people who continue to smoke want to quit. Obesity has tripled in the past generation, our genes didn't change, our environment did.

And to reverse obesity, we're going to have to change that environment again. Healthcare‑associated infections kill at least 100,000 people a year and cost at least $30 billion a year in healthcare expenditures alone, and yet at least a third of them are preventible.

Motor vehicle injuries are the leading cause of death among young Americans age five to 34. In fact, nearly a quarter of all deaths among young people are from motor vehicle injuries, far more than any other single cause.

And our death rates, although they've declined, are twice that of other countries that drive just as fast and drink just as much. So more progress can be made.

Teen pregnancy perpetuates a cycle of poverty. And birth rates among 15 to 19‑year‑olds in the U.S. are five to 10 times higher than many other countries, again, that have similar levels of sexual activity in youth and our rates, not only are they higher, but they're decreasing more gradually than the decreases of rates in other countries. So that difference, which started out large a few decades ago, has become enormous now.

HIV continues to spread even though it is preventible. So in each of these six areas, progress can be made and in each of these six areas, healthcare providers, doctors, nurses, nurse practitioners, pharmacists and others, have a major role to play in reducing avoidable illness and death, whether it's advising patients to quit or screening for diabetes or reducing healthcare‑associated infections or advising on seatbelt use or brief intervention to reduce alcohol or providing long‑acting reversible contraception or implementing routine HIV testing and advising people who are positive to reduce risky behavior.

Now public health interventions can make a big difference. Tobacco control can be one example from New York City where 10 years there had been no decrease in adult smoking rates. Farzad, I started in New York City at the end of January of 2002 and I was struck by the fact that we lacked critical information. We didn't know what proportion of New Yorkers smoked. We didn't know key information and I said Farzad we're going to do a community health survey like VSRA does. How quickly can you get it in the field and Farzad being who he is in May we were in the field IRB approved with a 10,000 respondent random digit dial, 43 community specific survey, which served as our rudder for the following years. In the following year we found that by raising the taxes there had been a substantial reduction in tobacco use. The following year, after making virtually all indoor workplaces smoke‑free there had been another substantial reduction. I figured we were done. We had done everything we needed to do.

But Farzad kept sending that data. And it showed that not only were we not done, but there had been a stall and possibly an increase, and so we looked to the CDC. We said what else can we do as a jurisdiction? We can run hard‑hitting ads. I won't show any of them over lunch but I will tell you they're very hard hitting. When we did that, we saw continued substantial reduction in smoking such that adult smoking went down by 25% and teen smoking by 52% in six year 350,000 fewer smokers at least 100,000 lives saved. So public health interventions can make a huge difference.

Heart disease and stroke, even with these interventions, will kill most people worldwide. Cardiovascular disease is the leading cause of death in the U.S. 80 million people, about a third of adults have cardiovascular disease. It kills almost a million Americans a year. A third of all deaths. 150,000 cardiovascular disease deaths among people under the age of 65. It's the leading cause of death for men and women. Nearly 800,000 people have their first heart attack each year and another half a million have a recurrent heart attack each year. So nearly 1.3 million heart attacks per year in the U.S. And cardiovascular disease is a leading, if not the leading cause, of inequalities in health status in America. African‑Americans are twice as likely to die at a young age from heart disease. And if that's not enough for you, cardiovascular disease costs our economy nearly half a trillion dollars a year, including more than $300 billion in healthcare costs. Coronary heart disease, stroke, hypertensive disease, heart failure and other causes are major drivers of the unaffordable healthcare inflation that we are living through. What can we do about it? Well, Farzad asked a very simple question. He was worrying up doctors to improve clinical care. He said how can we save the most lives? We said that's an easy question. Let's go see what the medical literature shows. How can you save the most lives in healthcare? Well, it turns out that you really can't find the answer to that question in the medical literature, though you'd think it was one of those simple questions that you'd be able to. So we developed with Tom Farley, my successor in New York City, and another person, a model that looked at how much health improvement could we get for each different improvement in health status. And what we saw was that what we call the ABCs, aspirin, blood pressure control, cholesterol control and smoking cessation, those four interventions could save about 100,000 lives a year and that number is far more than any other clinical intervention.

Well, how are we doing on the ABCS in America today? People at increased risk for cardiovascular disease, we're not talking about primary prevention, we're talking about people who clearly should be on an aspirin, only a third are.

How about hypertension? The single leading cause of death. Less than half of Americans with high blood pressure have it controlled. How about cholesterol. Only 29% of Americans with high cholesterol have it adequately controlled. And only 20% of smokers who try to quit get help to quit that's despite spending one out of $6 on healthcare on the ABCSs I would say that the U.S.A. gets an F. And our main way to confront that is going to be through systems changes, including health information technologies.

ABCS have the greatest potential to save lives and reduce health inequalities. They need to be promoted by systems, clinicians and the public. They can ‑‑ EHRs can be key in decision support, simply reminding people what to do and when. The VA has been a forerunner in this, with high blood pressure anyone who is not in control should be on a diuretic. Diuretic use is far too low in this country. It's no secret why. They're all generic. But you can't get out of the VA with your blood pressure out of control if you're not on a diuretic. The EHR basically requires you to put the person on a diuretic or do things that are so cumbersome that the doctor would rather put someone on a diuretic.

[Laughter] EHRs can establish monitoring and feedback. Facilitate panel‑based management. Go to any doctor in America and ask a few simple questions: How many patients are in your practice? That's a really basic question. And yet outside of the HMO world, most doctors don't know.

What proportion of them have high blood pressure? Simple question. Most doctors don't know. Of those on high blood pressure, what proportion are under control? Again, don't know. Of those not under control, what proportion are on a diuretic, again don't know. But if you got an EHR with registered functions which all of the registered EHRs will, you'll get the answers to those four questions with four clicks or less. Then you can do follow‑up, on a panel wide basis we're not going to case manage 25% of the adults with high blood pressure. We can panel manage the doctors who are caring for them. Go into a single doctor's practice, 2,000 patients on average, 500 of them with high blood pressure. 250 out of control. How do you get 250 patients in control, not too hard, write them all letters, send them text messages, call them. Within a month you could probably get half of them in control. Another month, maybe another half of what's left. You're never going to get them all. But you can do much better than what we're doing. The highest performing health systems around the country have shown dramatic improvements.

Improve information transfer, including pharmacy data. Well, fundamentally I'm a tuberculosis control doctor. And in tuberculosis control, we have a very simple model. If we see you take your medicine, we believe you took it. If we didn't see you take it, you probably didn't take it.

And this is very important, because we know a third of patients don't fill their prescriptions. Doctors love to think: Well I'm going to tell them to take these pills three times a day do this and do the other and doctors are very happy when the patient smiles sweetly and look like they're going to be very compliant, but if you actually look, a third of prescriptions don't get filled. Of those that get filled about a third don't get used right. Provide accurate information for evaluation and improvement. How do we do on blood pressure? Again, awareness, okay. But control, less than half. We made a little progress between 2005 and 2008 from 44 to 48%. But not nearly enough to make a big difference. There are ways to improve control through innovative models of control, work site programs. Teen‑based care. Web‑based care. Home blood pressure monitoring. Giving refills for three or six months at a time. If we want someone to do things, we shouldn't make it harder. We should make it easier. This is an easy concept, but it's not how we structure our healthcare system, because in general we don't yet structure our healthcare system to maximize health. We structure it for all other kinds of reasons, but not to maximize health. If we want people to do something we need to make it easier not harder. Addressing the deductibles and co‑pays, coming up with innovative care models. Kaiser Permanente started out at only about 36% blood pressure control. They improved it now to over 80%, but it took time and effort and focus. It's possible to do this. And one of the things I find so exciting about this slide is that the data improves fast enough so you can see it quarter to quarter.

And as you look at information systems in the healthcare system, improving blood pressure management on a quarter‑to‑quarter basis is possible and needs to be done. Well, how about hyperlipidemia? Among everyone with high LDL, only about 29% are controlled. That's because among those who are treated with a statin, almost 80% are controlled, but only 36% of those who have high LDL are actually on treatment. I'm not schilling for the pharmaceutical industry here, and they go generic, too, largely, but really we do undertreat people at high risk and as a result we have many preventible heart attacks.

Tobacco control, also definitely possible to make a big difference. Evaluate tobacco use at every visit. Provide brief personalized counseling. Three to five minutes of counseling doubles quit rates among patients. Offer tobacco cessation services. Virtually every patient, every smoker who wants to quit should be offered medications to help them quit. It drastically improves their likelihood of succeeding. Having free online health and quit lines, using EHRs for decision support, registry functions and quality management.

A little bit of counseling, you get about a 9% quit rate, add a quit line bump it up to 13%. Add medications and you get that to 25 to 30%.

Ultimately we need health information systems that are oriented towards prevention. That's going to allow us to implement prevention that, payment systems that reward disease prevention and effective chronic disease management. That's going to depend on care management so practice work flows, support prevention and patient empowerment, so that patients understand what's really important for their health. And if we can do all of these things, which are closely interrelated, we can actually have a healthcare system that maximizes health.

To do that, data is key. Essential information to improve all of our activities, efficiency, performance, what can be measured can be managed. Looking at existing data and new data to maximize prevention.

Information from New York City, using electronic health records in the most underserved neighborhoods. South Bronx, Harlem and Bedford Stuyvesant where half are using standard EHR that has prevention baked in.

More than 2500 doctors, 1.5 million New Yorkers, Farzad did a fantastic job initiating and running this program. And as we went out to doctors' offices I learned for the nth time how difficult it is. Because what seems like it should be so very, very easy, why can't we have an EHR that says easy as Amazon.com or drugstore.com?

What I realized was to get to where we in public health want to be, management of blood pressure, reminders for smoking cessation, to get there, it's only about a 200‑yard trip but it's a 200‑yard trip at the end of a 25‑mile march. Because you've got to get the paper dispensed with. You've got to get all of the information there. You've got to get the doctors learning how to get music from the piano of the EHR. You've got to get doctors ready to use it. We had a situation where we put EHRs in at the jail system, Richers island doctors had been there for a long time started in the adolescent unit. The adolescence incarcerated would start with the doctors doc when you get to the end of the mouse pad you have to pick it up and move it back to the beginning. So very, very difficult to get doctors truly paperless.

And the extent to which intensive support is needed, and that support needs to be real. What are doctors actually doing? Oh, I figured out this easy shortcut, if I click here it adds, no, to all the review of systems. No, that's not exactly the kind of shortcut we want them to be using.

Understanding really how doctors are using electronic health records and how they can be used to improve prevention is critically important.

This is data from New York City. Aspirin to reduce heart disease. Sorry about that graphic here. Very interesting basic concept here. Both of the bars, blue and yellow, are with electronic health records. The yellow bar is after clinical alerts were started, just clinical alerts. A little bit more time with the record but fundamentally clinical alerts. Big increase in cholesterol control and blood pressure control and tiny increase in advising smokers to quit and a little bit of increase in aspirin use.

Meaningful use. Core, very important, three key in phase one immunization registries, electronic laboratory reporting and syndromic surveillance.

Now for a moment about registries. Registries are very important. Again I'm basically a tuberculosis control doctor. The TB registry is a fantastic tool. It contains every single patient diagnosed with TB and how they did. It's been used to monitor the care of 35 million TB patients in 180 countries. It's standardized. It's very easy to use. Someone who is barely literate can do it. It's very easy to identify cheating, someone with a little bit of training can do that.

And I hope that for the billions of dollars we spend on healthcare we'll be able to get registry approaches to high blood pressure and smoking and high cholesterol and diabetes that will provide that kind of functionality.

It can allow a facility to improve their care, geographic area, to identify whether in neighborhoods or facilities that are problems that the state or national level to ensure high quality treatment and at the global level to evaluate performance. Immunization information systems enhance interoperability. They enhance clinical decision support. They're well established in most states. A lot of work has gone into them. A lot of thought has gone into them. I'm happy to say they're becoming more streamlined in terms of the number of products out there, which will make it easier to interact with them, and we hope to continue to get more value with two‑way communication so that the information can come into the registry and the doctor can get that information to make clinical decisions, to know where else vaccinations have been given. And parents can get that information as well to see what their kids are due for. Electronic laboratory reporting. Enormously important. And enormously difficult. You'd think it would be easy. Kind of like the EHR project in New York City. We thought electronic laboratory reporting is simple. Lab tests, standardized, yes, no, susceptible resistant present or absent turns out to be enormously complex and difficult but crucial. There are systems functional in many states, notification less spread of disease better case as ser containment less work for the reporter and the department. Trying to increase this with the National Healthcare Surveillance System standard and reusable solutions for hospital labs submission of reportable lab results to public health and interoperability are all key.

In the area of STDs we've seen increased completeness, more automated reporting, timier reporting. More people reach for follow‑up. That's very important. More likely to remember who their partners were and how to identify them and they're more likely to get treated before they infect other people. And improving the way STD programs do business.

Electronic lab reporting can increase completeness. Health department, passive reporting can be much smaller in numbers and can also make things faster.

10 days faster in this example for chlamydia, two to five days faster for hepatitis and four days faster for syphilis. Syndromic wellness, early warning of rises in asthma and diarrheal disease and flu would be very useful in a terrorist event and Farzad was central to establishing this in New York City and else wear. When we had plague cases in New York City, everything in public health happens on Friday afternoons. So Friday afternoon I have to call over to city hall to say we have cases of bubonic plague in the city. They said you're kidding, I said no, I'm not kidding for the first few hours we didn't know if it was a terrorist event. Turned out to be naturally acquired from part of the country where plague is endemic. But one of the great utilities of syndromic surveillance was to know we didn't have a city wide increase in febrile illness. That can be very important as well.

In H1N1 it was extremely important in tracking the trends of the virus as it passed through our country.

Meaningful use will go on from stage one, which we're confident we'll be successful if we work together well to even more meaningful uses. And at CDC we're committed to ensuring that meaningful use alliance with public health needs to harmonizing CDC standards with the national network and managing legacy systems. Don't underestimate the challenge of this for your partners at state and local health departments. They're underfunded. They're now getting huge budget cuts. They were bootstrapping many of the programs that were established. They have systems that work and now they're being asked to change them. That's not an insoluble problem but not an easy one either. We're committed at CDC to working closely with the IT community, with the national coordinator's office and state and local governments to help build those bridges so we can really communicate efficiently and effectively. Bidirectional communication is going to be extremely important. There are potential cost savings and performance enhancements through electronic reporting. We also want to be able to provide information back to the community. What's going on, what are the diarrheal diseases prevalent what are the flu or asthma and other situations you should be looking at if we've got an outbreak of mumps, how can we pull out the people who need to be treated or a recall of a medication. How can we make sure that the patients are promptly reached? This is all possible, and how can we reach with emergency alerts. The next step, I think, is to ensure that all of you know and work with public health entities in your jurisdictions. Sometimes they're a great interaction. Sometimes they're not. If there are things that we at CDC can do, we're happy to try to foster a better relationship. Seth Foley is here, director of public health infomatics for CDC. By all means, if you've got problems talk to Seth about it and let us know, let your local jurisdiction know ‑‑ and we're committed to working together to improve all of our performance. To road to a long and healthy life is our goal that people would live longer healthier more productive lives where every pregnancy is intended, where children are breast fed, where every child has the opportunity to learn in a healthy environment and learn life long behaviors of active living. We also want to ensure that the safety is there, that our food, our roads are such that if you just go with the flow, you will not end up overweight or obese or hypertensive or with high cholesterol. That's not the situation today. But that's a possibility. We want a world where quitting smoking is easy and starting is far from the norm, where people practice safer sex to avoid HIV and other STDs, where hospitalization is rare and safe, where our per capita healthcare costs are falling and our life expectancy is rising, where aging is a healthy and engaging process where people are disability‑free for as long as possible.

This is all within our reach and working together we can travel that road. Thank you very much.

[Applause].

I think we have about 10 minutes for questions. If there are any or suggestions or complaints or advice. Of course we don't have any microphones. Actually, they're right there in the middle.

>> Good afternoon, I have a comment I'm from the community college we're going tobacco free December 23rd. It's a big deal because we have a lot of students who smoke, we have a lot of employees who smoke, and we have a health insurance provider for the college that does not pay for any assistance with smoking cessation. So it's just a comment. I totally support the goals you've put before us, but it would sure help if our insurance would reimburse folks.

>> Thomas Frieden: We've got help on the way for that actually with the Affordable Care Act preventive services category A or B of the preventive task force will be covered with no co‑pay. That includes counseling and nicotine replacement therapy for smoking cessation. So it's this irony we spend a lot of money encouraging people to do healthy things then we discourage them by charging them for it or making them go back every month or jump through a lot of hoops. That's one of the things that the Affordable Care Act can reverse.

>> [Inaudible].

>> Thomas Frieden: I don't ‑‑

>> [Inaudible].

>> Thomas Frieden: I should know and I don't. I'll find out. January. Well, there is a complexity there, because it will go into effect for new plans and the existing plans will be grand fathered but as existing plans change over the coming years they'll have to come in compliance as well.

>> Dr. Frieden, on behalf of the RC from Puerto Rico and Virgin Islands which I represent and I'm sure all of the other RCs here we want to thank you for a very inspiring presentation. And I'm wondering whether this type of format that Dr. Frieden has offered us could inspire us to further think about a way that we could move forward in evaluating the performance and capturing the data in terms of the impact on public health in terms of the implementation programs we're doing at each of our communities. I think the protocols for doing this type of research have already been developed, as witnessed by the studies you have presented here, Dr. Frieden, and I'd like to present to our community of RICs, the idea that we should form a committee, community of practice, to organize a system wide, nationwide study on the impact of the work that ONC's doing and CMS in implementing electronic health record across the communities that are represented here under the ONC leadership.

>> Thomas Frieden: Thank you. I think looking especially at the ABCSs, aspirin blood pressure, cholesterol, smoking, I fear sometimes that in clinical medicine what gets prioritized is whatever the subspecialty of the chair is. And I'd like to try to use as the driving logic here how can we save the most lives?

>> My name is Wooshoo from the Utah public health thank you for your presentation. Really good overview. I come here and a lot of the people are ONC information health exchange grantees, you talked a lot about the EHRs. I don't think I heard HIE. In Utah public health try to connect EHRs through HIEs. Could you tell us whether you approach this support or not?

>> Thomas Frieden: Absolutely. HIEs are extremely important. Public health can be essential to being a hub for HIEs or a node. I think, again, starting with something like electronic laboratory reporting as one very concrete area, there's so much debate about sharing of medical information. And yet what we found around the country is often a doctor cannot receive the results of the test that she ordered on her patients from the lab that she sent it to. And I think we better start with Health Information Exchange in the most basic ways and move from there. It's very important in all of our efforts that we're very clear on what is the use case of what we're doing. And saving lives, saving money, saving time, all of these are going to be very important. Thank you for that. And HIEs can be a big part of the process.

>> I want to make one comment. We see HIEs as a hub. Public health is a user participant in the hub.

>> Thomas Frieden: Absolutely. Well, there are different places do it different ways. So there's some in which it's done by public health and some done by another entity.

>> Larry Wolf here today as a policy committee member. And I'd like to tell you how striking it is to actually see some success on improving the ABCS, that there's a general perception of can't move the numbers. And that as we look towards outcomes‑based measures as part of meaningful use, that we actually have some existence proofs that say here are examples where a community over time has been able to make a population‑wide improvement in care. And these slides and other studies like this, I think would be very helpful in moving the policy decision forward and actually putting in place some quality improvement measures that people could go it can be done. And I think breaking through that perception of you can't budge 'em, we shouldn't even seriously try, is a really important thing to turn around. Thank you.

>> Thomas Frieden: Thank you. In fact, in Ontario, where they really focused on blood pressure control, and if you look at what happened, they increased the average medications prescribed per patient. Fundamentally that was the intervention. And they got to 66% community control of blood pressure. So we're at 48% in the U.S. That's a huge difference. If we could get to 68%, and you know the medications are once a day. They're cheap. Monitoring is virtually free. So this is something that can be done and done relatively inexpensively and have a very major health impact. Thank you. Last question.

>> Bob Brunner this isn't a health IT question but related to obesity on your slide about ‑‑

>> Thomas Frieden: Much more likely to be able to answer it then.

>> Your slide about personal education being unfortunately not the most effective but a lot of our programs like SNAP, for example, only want to focus on education, don't want to focus on incentives for vegetables or disincentives for not paying for pop and things like that. Can you comment on that?

>> Thomas Frieden: To say that counseling is less effective than structural or clinical intervention, other clinical interventions is sometimes controversial. But it's not to say that they're not valuable. The diabetes prevention program, for example, can reduce likelihood of progressing from prediabetes to diabetes by 58%. Counseling intervention that results in modest decreases in weight and modest increases in physical activity. So it can be quite important. And the Child Nutrition Act, which was signed into law Monday now broadens what can be done with SNAP education funds. So that's very positive. And I think looking at what can we do at a community level to make healthy food, fruit and vegetables and water more accessible, less expensive, and to remove foods that are making people sick from at least the public venues, hospitals, schools, government buildings, I think, is certainly a place we can start.

Thank you all very much. It's a pleasure to be here. Thank you for the work that you do.

[Applause].

>> Farzad Mostashari: Thank you, Director Frieden. I hope you enjoyed the luncheon program. And we go now back to the track sessions. We'll be back here for plenary session after that. Thank you.

[Break] .

>> Folks, we're going to start in about one minute. So if you can find your seat. Please stand by for realtime text. Please stand by for realtime text. Please stand by for realtime text.

>> Good afternoon, everybody. We're going to get started here. Come right in. Thank you for joining this late‑breaking panel that was just organized this morning, or yesterday. So we are up here actually trying to decide what we want to call the session. We can't remember what it's officially titled. So we'll go with something like Aligning the Community Around Quality and Cost Improvement. Any better ideas.

>> Quality safety and effectiveness.

>> We'll discuss all those important interrelated things. It's my pleasure to kick us off. My name is Aaron McKeithian I'm the director of the Beacon Communities Program at the Office of the National Coordinator for health IT. It is my distinct honor to have to my left some real all stars in this work that I'll introduce in just a moment. First, I'd like to offer some general remarks about the work that we're all doing together. Not just in the Beacon Community Program, but all of us here together in this conference. Because this is work that hasn't just started with funding from the Office of the National Coordinator. We're here because of HITECH and the programs that we're all involved in. But the work started long ago. So I want to paint a little bit of the picture of that. We're going to use each of the panelists' unique perspectives to think about what it really takes to get a whole community rallied around a set of important improvement aims. How do we ensure that we have a more affordable health system. How do we ensure that we can find ways of identifying quality improvements and spreading them. How do we find ways of improving patient safety. The problem typically isn't because we don't have the idea. We haven't found a place to do it, it's because of issues around governance and working together as a community and alignment around goals and aims. So we'll get to that today. And we hope this is a discussion‑oriented session, and we'll invite questions and discussion with all of you. So first my opening remark, then I'll introduce the colleagues here. As I said, a lot of the work around healthcare improvement, health system improvement, deriving better value from the healthcare system, has been going or for as long as a doctor and a patient have been talking, a long time ago. Back when hip cot trees first said do no harm. Improving the system make it work better. It didn't start recently although it feels that way given all the major legislation and all the implementation activities happening. But I want to take a step back with you for just a moment and make ‑‑ hypothesize with you that there have been four distinct groups ‑‑ this is a stylized hypothesis. It could be five or six groups, but I want to suggest that there have been four different kinds of people that, while they agree about the need for fundamentally higher performance health system, they've been thinking about the problem and interpreting the problems of health system performance slightly differently and the tools and ideas for advancing improvement in health and healthcare has been likewise slightly different. And the first group is ‑‑ the first group, what I call the tribes ‑‑ the first tribe of health system improvers ‑‑ this goes back borrowing insights from anthropologists who have been thinking about the way that systems work together and groups coalesce around a particular idea, dating back a long time ago, the first tribe, the first herd, the first group is the quality improvers. And we know lots of them. Many of you are in that camp. These are folks who have rightly observed that other industries, besides healthcare, have found ways of applying continuous quality improvement techniques and ideas, performance measurement and feedback and lean manufacturing processes to deliver fundamentally better quality and better productivity. You see it in financial services, and virtually every other industry, except healthcare.

And so apply it to healthcare, folks like Don Berwick have long led efforts to apply those principles and tools to healthcare and derive better value. So we see dramatic improvements in things like infection rates in a hospital. And so on.

The quality improvement tribe tends to attend its own conferences. There was one last week in Orlando. Some of you may have attended. They read their own periodicals, their own journals they submit. They talk to each other in the tribe. And they're right, that we need to apply those principles and those tools to healthcare. Second, there's the payment reform tribe. Folks who have rightly observed that as long as our system continues to pay for volume, and intensity of services, it's really hard to make any long‑lasting performance improvement. Of course we have healthcare inflation that exceeds 0 inflation when we're buying widgets and not buying health. So the payment reform tribe, they go to the beach and they vacation, reading things like Med Pack reports and updates about market basket composition of market basket for a hospital, and they talk to each other within that payment reform tribe. And they go to conferences and talk about it. And they're right, that we have a payment system that really isn't aligned with the kind of things we all want. Thirdly, we have a group of folks who have rightly pointed out that even if we had the most efficient health system, even if we had the most coordinated care, we still have to, most of healthcare ‑‑ we just heard this in the previous session ‑‑ most of healthcare outcomes are attributable to patients and their lifestyles and choices and circumstances in which they live so tools finding opportunities to improve patient's education about their conditions and their own health, giving them tools to navigate this health system, make choices based on quality and cost is part of that tribe, that consumer engagement or activation tribe. And finally we have the health IT tribe. And many of us are in the health IT tribe. Doug fritsma is the honorary chairman of the health IT folks. These folks talk about acronyms, these folks have all kinds of acronyms long been making the case how do you really achieve anything related to improvement if we have a paper‑based system, how do you measure anything? How do you know that you're getting anything better? How do you coordinate anything trees tribes on all right and correct, they all have tools and strategies important parts of how we improve health and healthcare in this country. But really they haven't been united. They've been attending their own conferences and they give sort of acknowledgment to each other I think what's different about the healthcare climate we're in now is that those tribes are starting to come together. Even at this conference, if you notice. We've got quality improvement crusaders. We've got payment reformers, thinking about how we set up accountable care systems, for example. We've got folks who really are passionate and they're right about making sure all this work is patient‑centered with tools and strategies for engaging patients in what they want and need in healthcare. And finally we have plenty of folks talking about standards and certification to make it all work, to make this system happen. And so my hypothesis to you is that those tribes, as long as they continue to go their own way, are going to continue to get incremental results. One example and I'll turn to the panel. In the quality improvement tribe, organizations with great credibility like Intermountain have found ways to apply management techniques, quality improvement techniques, that have been used elsewhere into healthcare and have demonstrated extremely impressive results. Things like Intermountain recently implemented a system to standardize lung care for premature babies. This was done quite easily, but it took a lot of scientific rigor to think about what are the elements of the right care for premature babies. They figured out ways to fundamentally reduce the number of kids, the percentage of kids who are premature on ventilators, great outcome. Great quality outcome. A great overall cost outcome. But because we have a payment system that we do they lost lots of money in the process. An example of the quality improvement tribe and the payment tribe have to come together. And those two have to come together with the IT tribe. They can't continue to operate in silos. So what's exciting about this conference and what's exciting, I think, about the moment we're in in healthcare, we actually do have some opportunities to unite those tribes and bring together people who have been thinking about the problem and been passionate about finding ways to improve it but doing so separately. We're going to give you an example of that now in the beacon community program. Just one example. This isn't intended to be an illustrative case of these steps to unite the tribes and think about these problems jointly and the interdependency between these tribes. I first want to ask Craig Grammar my partner in crime at the beacon communities what does that mean, sounds good but what does it mean for the program structured and then we'll have three of our leading beaconologists here. Laura Adams chief executive officer from the Rhode Island Quality Institute, a beacon, regional extension center and a health information exchange program. David Kendrick principal investigator greater than Tulsa community and Keith Mandel who is a leader Children's Hospital, is an intellectual leader as well and contributed a lot to literature on how to do this work and is a leader in our greater Cincinnati beacon community. So we'll then open it up and have lots of good discussion. So Craig, tell us what all this means.

>> Craig: So the beacon program, in particular, is a little unique at ONC. Most of the HITECH act programs are sort of spread across the country like peanut butter. REC covering every inch of the country state HIE program everywhere, policy standards, et cetera. Beacon was the unique opportunity to find the early adopters. Those markets that are stand‑out that have higher than expected adoption rates, that have a trajectory, a history of working together of sort of this multi‑tribalism coming together and designing regional strategies. Doesn't mean that it's not like you go to one of the beacon to Tulsa and it's set for the jettison ises or anything they're super HITECH and way out there, rather they're just a step ahead and have, we're able to come together. We had over 130 communities actually compete for these 17 slots. And as we have to say, we care a lot. Our job is to care a lot about the 17, but we also are very interested in No. 18 through 100. Turns out there were a lot of very compelling proposals, communities doing terrific work that aren't represented in the beacon program. So a lot of our interest is over time beginning to engage those communities where other terrific work is underway.

Aaron talked about this, the anthropologists that have studied these issues of tribes and one in particular in the 40s was a British anthropologist, went to northern Africa coined the term segmentary lineage the notion that at certain points in history these different tribes in northern Africa would come together and form one big team when they had a common enemy. So it's the segmentary lineage is the technical term for the enemy of my enemy is my friend notion. So beacon communities are communities where leaders have stood up and said we're tired of the status quo. We understand our residents and employees and family members aren't satisfied with the value they're receiving for their healthcare investment and that we could do better. So these folks come together.

So it's exciting to see. And we have a tremendous privilege of visiting these communities, working hand in glove with these guys. The complexity that they face, though, is enormous, and that you all face is enormous, particularly in this point in history where there are so many federal programs, local programs, state programs. So it's not like there's just a beacon program to run in Tulsa. There's 20 programs that David has to keep track of what we're seeing is communities are coming together and writing their own meta narrative. They're taking these disparate programs meaningful use and incentives and other programs that have already been in place in their community, perhaps, and drawing that larger story: What do we as a community want to accomplish and how do we leverage each of these opportunities, these investments independently. At the end of the day we don't really care that beacon is branded and a big deal in Tulsa as much as we just care that it's an accelerant to the work that leaders in Tulsa already had underway. So we want to encourage them, support them, move them further faster.

>> Thanks, Craig, let's hear from the three beaconistas. Laura Adams, tell us what's going on in Rhode Island.

>> Rhode Island beacon program when we originally heard about this program and we knew the objective and goal was to move clinical metrics we knew we'd have to partner align. That there wasn't any way we could do it through information technology alone. We all understood that. It's not something we're living under illusions about. So our program, we partnered with our all‑payer patient‑centered medical home program. And we were delighted a couple of weeks ago when it was announced eight more states in which Medicare will join the all payer patient centered medical home initiative. Rhode Island was one of those. We have an all payer. We partnered to improve diabetes, cholesterol, blood pressure, the screening for depression, smoking cessation counseling and certainly the big one that we're all after and that's reduction of hospital admissions and reductions of unnecessary ER visits.

And we're excited about this because it allows us to bring some of the best technologies that we've been using and building in Rhode Island for a while things like our health information exchange and the work that we've been doing with EHR adoption, now coupling it through our efforts through our regional extension center and then being able to do very targeted efforts to get at moving those metrics. And this for us in the Quality Institute allowed us to come full circle. We never started out to be the IT organization. We wanted to make a dramatic improvement in the delivery system in Rhode Island. And I think through the beacon that we can do that.

Did you want me to explain any of the initiatives or just a general overview. I'll give you a general sense of some of the initiatives. For example, we don't even know how many times our patients are readmitted in Rhode Island because our Department of Health has the capability of counting your readmission, if you're readmitted to the same hospital. If you're readmitted to a different one we lose you. Can you imagine how many readmissions we're losing all payers claim database we're putting in. Rhode Island had a law putting that about when beacon came along we said we know the Department of Health doesn't have any funding for this we need to get this up and running because we need it for about 20 of the things that we're doing here. So if all payer claims database, we're going to make tremendous use of Direct. We're very excited about Direct, because while we have an HIE for that longitudinal record for looking at the health of the community, for understanding quality improvement and best practice opportunities that you can look at through a centralized aggregated record we really also wanted the capability of how in the world are we ever going to get data out of all these disparate EHRs and we're going to do one‑off interfaces to all these different? No, that's not going to happen. So the idea of a set of standards and policies at national level, which would then prompt vendors to want to put that in place, it wasn't a unique Rhode Island request please do this for us we know you're in 700 places across the country but please do this special thing for us. We didn't want to manage all these different interfaces it's expensive and unnecessary. We're really excited about the role of Direct in giving us the capability of getting information out of our EHRs. Certainly the point‑to‑point will be valuable. But we'll have a way to consent patients in our beacon practices for the system to go there you and crawl that system and anytime there's a change made in the consented patient's care, that information automatically uploads to our HIE. So direct is really a really exciting thing for us. We certainly want electronic immediate provider notification that your patient is in the ED right now or your patient is in the hospital. We find that from the Medicare data you know how many patients get readmitted and how many providers don't even know that they've been there. So we wanted to be sure. We're also with our partnering with our patient‑centered medical homemaking sure there's somebody standing on the other end and redesigning the care process so somebody acts on the notification. It's one thing to get notified. If there's nobody there that you have no system for building up these openings in your schedule so that those patients can automatically get in without battling for three weeks to get their medications straightened out. We have transitions of care. That's the Coleman model. We're really excited about putting that in place and electronically enabling those transition coaches through all of this. There's a lot more things, but my colleagues have some really exciting things to tell you, too.

>> Great. Already evident that to get there it's taken uniting these tribes, it's getting the HIE folks thinking about what is it we're trying to produce which is so exciting to see them all come together. David, tell us what's happening in Tulsa.

>> You've already violated my one rule which is I never want to follow Laura.

>> That's why I said something in between.

>> Thank you. My name is David Kendrick, physician practicing in Tulsa. And our beacon community is focused on improving three things: We're looking for cost reductions, improved quality in public health and cost reductions we're tackling the usual reduced hospitalizations for congestive heart failure, COPD, asthma as well as emergency room visits. But also we're really trying to tackle reduction in duplicate tests and imaging and doing some unique, if not novel, metrics around that to try and get at what are duplicate tests and alert folks about that. Then another sort of unique thing I think about our metrics and our quality improvement effort is to reduce unnecessary specialty referrals. We've done some research recently showed as many as 35% of referrals to specialty care were unnecessary as adjudicated by the specialists themselves. So we're really going to try to leverage the systems we've used to make that effect across our community. And then around quality improvement, of course, we want to decrease use of inappropriate meds in the elderly and diabetes management is a major focus for us because it is a complex disease management process across multiple specialties and we consider that a core competency of our beacon community effort to coordinate care across various locations and then from a public health perspective increasing immunizations in the young and the old, to make sure that those rates are going up and then to increase cancer screening by a significant percentage. We have unfortunately low rates of screening and lower rates of success when we do catch it, because it's late in the game. One thing that really struck me when both Aaron and Craig were talking about the tribes and this concept of having really what I think of as multi‑specialty or multi‑disciplinary work going on, was that it's very true at the community level as well. My board of 19 greater Tulsa health access network represents the broadest span of community health services and governmental agencies and nonprofit organizations that I think has ever been around the table together in one place in Tulsa. And that organization is obviously not made up of medical info mat tises and people thinking about technology or any other particular specific field. And it took the negotiation and debate around our quality metrics, around the things that we wanted to be judged on three years from now that unified everyone behind the common purpose. So those folks who are real public health wonks but maybe not so technology interested have given ground to say, you know, we've got to have a tool to do this. We realize this is the metric we want to hit. The technologists give us a tool and the same has been true from the perspective of the hospitals and the payers and others who all have very different interests but by aligning ourselves around a common set of metrics and that we've made a major improvement, and I think those ‑‑ some of the organizations in our community that are pursuing CEOs owe patient centered homes or any number of funding programs and opportunities are leveraging this same set of metrics. They can take it off‑the‑shelf and use it. So in that way it's becoming sort of hard wired into the fabric of our community that this is what we're we're pursuing for the next few years and it makes a difference briefly I'll tell you the interventions that we're using to tackle the metrics. The first is advanced health information exchange. Of course you've got to have the wires connecting one place to another. We've chosen a platform that allows us to basically plug in applications when we choose innovation single sign on and context to keep the clinician's work flow simple. But also establish it such that we can put it in the hands of school nurses, dentist offices, many other places where patients appear for care or opportunities for care to be delivered. The second is to expand the use of a care coordination system. The one I alluded to that showed the 35 percent of specialty care might indeed be redundant or unnecessary. We're going to expand the use of that tool across the community currently it touches 1100 providers in 55,000 referrals in the last year. So we're going to be growing from there. And then the third is to implement a community wide decision support platform and I know everybody's electronic medical record probably has decision support of some sort built into it. But anybody who has one of those realizes what it means to have to manage those rules, to have to manage the alerts that fire. What we're talking about is doing this at a community‑wide level so our community metrics, every time someone accesses the health information exchange, it's shown very clearly for each specific patient what their cardiovascular risk is, what their diabetes risk is, what their asthma risk is in various cancers in addition we'll be showing them exactly in order of importance their effectiveness or the most important interventions to take for that patient and the idea is we don't want to miss any opportunities for improving health no matter where the patient appears for care. And the final is to build a fairly robust analytics program I think as anyone in quality improvement knows you can't improve what you can't measure so we're really adamant about being able to look in all the corners of our data and make sure we find the pockets that we can make improvements in.

>> Keith, you have led and also researched major quality improvement efforts performance improvement efforts on behalf of institutions and now the community level. Tell us about what's going on in Cincinnati and how that work spans from an individual institution to a whole community.

>> Sure. Well, thanks Aaron and thanks Craig. I am VP medical affairs for the PHO at Cincinnati Children's. I've been part of that larger quality journey for the last 11 years or so so it was a natural fit for me to be kind of our representative at the table with the rest of the community partners to accelerate not only the work at Cincinnati's Children but to try to accelerate the broader agenda across the community for kids that don't touch our system and partnering with other entities. What Aaron said earlier and Craig reemphasized about the QII partnership is key. The entities leading our beacon community are a combination of those two camps. We have Health Grid, which is our HIE and the lead entity or beacon, lead applicant. We have a community‑wide improvement collaborative entity brings the improvement expertise, our Hospital Council umbrella group for area hospitals and University of Cincinnati and Cincinnati Children's brings to bear the QI piece. It's a symbiotic space. I'm not a techie by any means but I love the notion that IT people sitting at the table with QI people. We both have accountability for the symbiotic loop to be working effectively at the QI side we're responsible for addressing the changes and interventions but having the IT people at the table to effectively translate and they can effectively translate the work is very, very important. And then they obviously have to deliver on time. Like measurement data. Connectivity, information flow. Otherwise the interventions get delayed, which then makes it hard to commit to robust goal setting because it's all interconnected.

So we have two tracks of improvement work. One is a peds track where it's focused on asthma and adult track is focused on diabetes. I would say we're very much looking to beacon the real value for beacon in our community was to accelerate a lot of the existing work already in place because we recognized for a lot of years we've been struggling for a lot of the issues that beacon is set up to help us deliver and we wouldn't get to the next level without it in terms of moving the population‑based process and outcome measures. All of our interventions clearly map to HIT and HIE, our key driver diagram, this is what we do to keep ourselves focused. There's very clear alignment on that. And one thing I wanted to say about the interventions is I think measurement alone a powerful intervention. Once you get the pipes connected and have a powerful rich centralized warehouse, without the measurement piece you're sunk on many levels. So, for example, beacon is all about holding a higher level of accountability for regional population‑based outcomes. Well, that's totally predicated on having data in front of our leadership and governance groups that people are confident about, that they trust, and that we can engage in a really robust goal setting process versus throwing data up in a meeting and then three months later saying that data we showed you three months ago we just got the redo and the grind shifted all over the place how do you own a goal own a financial goal in your organization without knowing it's robust data. Would you individually hold yourselves account believe under a financial incentive plan within your organization or whatever if you didn't trust and have confidence in that data. I think interventions through beacon, the connectivity the centralized warehouse will get us to a much better place which you can imagine will have powerful effects on accelerating our work. From a QI standpoint, measurement is extremely powerful almost all our measures involve comparing the cohort to the comparison group. You have to be able to know where to bucket segment the data into which group does fit fall. The physician attribution, the attribution methodologies. We did an analysis where we looked at data as it exists today in the referring physician field and a lot of our administrative data sets is not reliably completed at the point of care at the registration point T how do you back into that? Do you look at lab results the patient had two months prior, what practice was it linked to, do you back into it in some way while addressing the reliability issue at the registration level. That's the power of the measurement data for tracking improvement versus comparison group. If we want to go transparent with the data, obviously that has implications for accuracy, and a pet peeve of mine and Aaron and Craig know this, because I've spoken lots about this before is if we really want to commit to regional level of improvement and we want to possibly tie financial incentives to the regional dial, you can best believe that all the parties at the table are going to appropriately question the veracity of your measurement data to know that they're committing to that level of incentive based on an accurate way of assessing performance. So measurement as an intervention was one of my messages.

The other interventions is more pragmatically we have some areas of quick wins. The reason I say quick wins is because we're building on existing work and existing platforms. Real time automated notifications right now we can do it at Cincinnati children's as the kids hit the ED and patient setting what we're missing if the kid hits a different possible we have no way to feed that into the real time automated notification. And especially for ED visits, that's a big issue. We have a summary record that practices use at the point of care. One‑page summary process outcome measures all the best available data we have available to put in one page to manage the care the problem is does it have medication history in there. Doesn't have all the other pieces of data that we can stream it from payers, from pharma. It would be a much richer decision‑making process the point of care. Another big segmentation the population. We do it the best we can today think about it if we had a rich data warehouse we'd be able segment by complexity and severity because the interventions are not one‑size‑fits‑all. There's a bucket of interventions appropriate for each segment. Not everybody needs the same thing, but until we know how we can segment large populations, how are we really going to move a population‑based style unless we can do that effectively. Areas of upcoming focus hopefully will get the pharmacy data. Keep our fingers crossed because we have to be able to measure things like actual versus expected fill rates and those kinds of things. Linking our evidence‑based decision support tools, electronically to our systems is another upcoming area of focus. Another one is what we call a shared care plan. So that everybody is working off the same cheat sheet. Game plan. No matter where the kid's hitting the system people can tap into a centralized repository to view that document, including the patients and families. The whole patient portal issue, we've tellsed that model at Cincinnati children's. Wouldn't that be wonderful for if we really committed to self‑management to provide a portal for the families and patients to be able to access their information, and then we have the transitions in care and information flow across the settings. So we've clearly defined our interventions. I hope you get the flavor they've all got a huge IT component and this is a symbiotic relationship. The QI work can only move as fast as the IT work the IT work can only move as fast as QI work, and we're in it together and we have mutual accountability.

>> Thanks to all of you. That's fantastic. I'm going to do a real quick lightning round of questions up here before we open it up. I want to do it by start making the observation that so much of the work that I've observed in the beacon communities over the last six months, seven months, is not really about wrestling with the technology problems and there are obviously lots of technology problems, but it's really about the biggest ‑‑ no one has come to us saying we want to do this but we don't have the technology‑‑ it's about aligning the community around a quantitative set of goals. Anecdotally, this might resonate with your work, my observation it's the personal involvement of personal leaders who have some personal stake in this that drive this really complicated work forward typically that in fact that is the means by which the tribes are united. Let's get every possible person that's involved in quality improvement in our community together and sometimes that comes forward why an organization forms and why people in particular get involved. I want to turn to you and ask you to talk about what got you into this, what got you into this personally and how that drives the kind of vision and mission of your organization.

>> Aaron asked me that question because he knows me and knows that very early on in my career I gave a catastrophic overdose of very dangerous drug to a young child preop. I was working in a really small hospital in Colorado. Very small. 35 beds if you counted the couches in the lobby and so forth. It's a very small hospital and they depended upon us heavily. And I was getting ready to leave my night shift. There were 37 patients in the hospital that night. Two in the hallway with screens. I had a young LPN working with me that night. And every clinician hopes you'll never get the phone call that says that you've made a medical error. And mine came so early in my career it was really startling. But I was ready to leave and I heard the intercom come on and Dr. Lee said is Laura still here because we can't get this child to breathe. We need to find out what it is that she gave this child. So I felt like I was going to vomit or pass out or die or something, I couldn't believe it I was so shocked. I went to the medication area and realized I had given this girl ten times overdose of the drug colamine, if you're physicians you know overdoes is seizures coma and death we were frantically trying to figure out how to save this child's life she survived but it got me thinking how in the world was this happened because I was cut out to do this work cut out to do it even as a little girl I knew what I wanted to do was work in healthcare how is it that I nearly took the life of a small child in the course of that care? And I realized that just in studying kind of how medications orders were given to nurses in my organization, that they were hand transcribed six times before the order was actually given to me to give to the patient that night. And I'm thinking: My God when it can be death by decimal point we're hand transcribing something six times who designed this and if we didn't design it why do we keep it this way. So some of you know me and I have been told that I talk 100 miles an hour with gusts up to 120, and I think that's true. But it's from this deep sense of personal urgency that I owe that little girl and every other patient that came after her just all the life moments that I have to try to fix a system that almost took her life and almost took mine, too. So it's that kind of passion that I bring to the organization day after day. And I want to focus on the notion of saving lives. I was so delighted with our lunchtime speaker talking about the fact how do we focus this on when what we're really trying to do here because I can tell you that will motivate people far more than any number I have found. I can tell this story or the story of one of our patients who's had a brain bleed and landed in the ICU for 11 dailies because we couldn't give them an EKG that would have prevented a clot Buster drug being given you only have to tell that story once I can bring up the data and I really believe in data but it's those kinds of stories that I think we have to share, and as you can tell, it's enormously hard for me to share that story. And I can hardly get through it every time but the story has to be told because these things are happening in reality. And that just happened somewhere in the United States today. Only that child didn't survive.

>> Thank you, Laura. It's tremendous to watch how that passion translates into all the work going on in Rhode Island. Not that we're thankful for it, of course, but it is way more important than any of the technology and the wires that we put together. Another observation about community level work is that at least in the beacon communities ‑‑ I hope none of the panelists take offense to this ‑‑ but none of us are really inventing anything. In many ways we're reinventing things. We're testing things. We're refining them. But it's really more about diffusion, taking something that we know will work in a place and spreading it across the entire community. Keith, maybe I'll call on you to give us some examples from your own work, pre‑beacon work about stuff that you've tried that you finagled to work and the task is how do you get it done in a community with millions of people.

>> Well, Aaron had given me a heads up on that question. So I had a little time to think about it. But I think the main point I want to emphasize and I'll make a few comments is you've all seen the diffusion curve. Some people have seen it during this meeting. All of our audiences can be a rate along that curve. If we do not explicitly make decisions to focus on spreading interventions that meet criteria for appropriate, they're ready to be spread across those curves, and we're explicit about that, and because we gotta get through that curve to move population‑based outcomes. It's never going to be enough to just focus on the early adopters and pray and cross our fingers that it spreads across that curve. There's a reason why people organizations how you want to define the audience is sitting on the curve. It's not trying to shift their position on the curve it's to accept where they are. They're there for a reason, and have we learned enough in the design and the testing of our interventions so that we leading this work have high confidence at least amongst ourselves, that it can effectively spread across that curve no matter where that person or organization is sitting. And I've had a fair amount of experience over the last six, seven years working on a large scale asthma improvement project where we were faced with a situation of looking at our diffusion curve. We had 40 community practices. And out the starting gate we tried to engage them on interventions. And that we thought would hopefully be able to diffuse across that curve, because we knew we had to move population‑based styles sooner than later, like beacon, the clock is ticking. So have you developed criteria for understanding when you move from innovation work with a small scale set of sites or units to feeling a high degree of belief that you've learned what you need to learn so that you can tell a leader in a community we got it, these three, they're ready to role. Flip the switch and let's diffuse it across the curve. What are those criteria. How do you know you've shifted from small scale innovation to be ready for large scale spread, did you think you were going to be successful did you test the innovation in the early adopter and the late adopter portion of the curve? That's what we did early on that we found very powerful. So in answer to your question this is getting more granular. Sure.

THE WITNESS: We all jump to the early adopter part of the curve it's easier to engage if problem is you're not learning enough about the contextual factors that you're going to make it more difficult for the people sitting in other points of the curve to accept that innovation. So it worked great in five sites partly because the contextual factors were lined up with it. When you go to spread and scale it up if you didn't also test and learn what the factors were that that setting it's on the curve if you don't move through the whole thing, sooner or later. No matter how hard early adopters, successful sites work, is the big dot won't move. It's a law of mathematics that it won't move. You have to know the audience and the intervention across multiple points in the curve and another thing we found particularly helpful leverage the environmental trends don't fight them. Creatively figure out how do you get them to help you. So what we did, I don't mean to overharp on the regional incentive if you want to leverage environmental trends to get through the curves faster what do people turn to. P for P out there. Let's not just use the typical P for P model, we built a P for P model, one of the levels to be incented where you want to go rewarded as an individual site we had to deliver to the regional dial so everybody was now connected at the hip. It caused the latter portion of the curve to pay more attention to what was going on in the earlier part of the curve and it caused the earlier part of the curve to have vested interest to share what works with the other people at the end of the curve unless everybody moved then everybody lost so you were all tied together. There was a vested interest in the cross and the shared learning through environmental trend.

Another one, maintenance of certification. A lot of physicians are focused on that across specialty sites. Don't fight it. What we did we went to the American board of pediatrics let us develop our own innovative model for this. We said before an individual practice can get sign of for MOC the practice level dial within their site has to achieve a certain target. So we don't just look at how you did, we look at how your practice did, because that's the level of change that we're trying to see happen. Again, appeal to the highest level of analysis that you can by leveraging environmental trends. The other thing is leadership. What we did was we charged ‑‑ took a lot of time to develop it. But we have a primary care leadership group. They set expectations for each other. We get 20 of the leading people in the community, thought leaders, respected leaders in the community, independent practices, setting measurable targets for what it means to be meaningfully executing the improvement work. Now, in a PHO context it has a little bit more bite because that could have implications for being members of the organization. But I believe you can do this in a more virtual setting as well. And I think it's a very powerful accountability when you can get sector‑specific leadership groups to take each other on and challenge each other, rather than expecting the beacon leadership groups who are multi‑stakeholder group which has sometimes a loose connection from a governance standpoint with these independent sectors, to drive change. So leadership and environmental trends, understand your audience, test your interventions in multiple settings and know when it's ready, be explicit about which interventions you think are more scaleable and develop your own criteria for when you move from innovation to moving across the curve. Is that helpful?

>> That's great. Thank you very much. I wanted to ‑‑ we've talked about the need to bring together multiple perspectives and disciplines to community level activities and there's really nothing that makes that easier than giving out large awards. I'll tell you that I hope Dave doesn't mind me telling the story when we announced on May 4th the beacon awards the official e‑mail goes out to awardees says you won, congratulations but it's a lot of government gobbledy gook. You have to read it carefully to see what it says did you just get audited or a big beacon award I immediately because it would be fun Craig started picking up the phone calling the beacon winners and congratulating them. We called David but he hadn't received that gobbledy gook e‑mail yet. He was on a cell phone. I don't know what he was thinking but I could tell you what he said instinctively is are you serious and the second thing is this is what we needed to bring this community together. And so that's easy to do when you have just won an award. And my question for David now, after having gone through this for six months, when the going starts to get tough, when the initial honeymoon starts to wear off having just completed, having just won the award and the work is beginning and the tensions are rising and there's questions about who is going to get a portion of that money and who is going to get to do the work, the question is how do you keep that group together, David? How is it going so far?

>> Well, that's actually the absolute right question for this point in time.

>> Can't give you more money so.

>> Well, darn. I would just say maybe a second about how I came to be in the situation I'm in, is that I trained in engineering before medicine. And of course while in medicine I had many emotional experiences related to specific patients and the commission, omission, every kind of error that occurs occurs in a training process whether you watch it or you do it yourself. And I was in charity hospital in training, I was in Oklahoma City in county hospital in training I've seen it in a number of settings. The thing that makes me passionate about healthcare is closing gaps and than figuring out who is not getting the care they really need, because that's what makes metrics for is not those who are getting care and just getting inadequate care it's in my part of the world the people who have no care at all. And so that drives my passion. And three years ago I was living in California and working very happily in a company doing some very innovative things around healthcare, but I'm a native Oklahomian and the opportunity came up to come home and join what I would call an academic start‑up company called the School of Community Medicine at the University of Oklahoma an effort that's basically taken its entire measure of success the health of the community around it and what it can do to affect the health of that community. So there are really no boundaries about how we deliver care. So we have many free clinics in the community but we also have lots of programs we partnered with FHQ. Cs and moved from place to place and my piece of that is to do something what we call community medical infomatics thinking about how technology can be leveraged not just within an organization that has four walls and has an EHR, but how technology can be leveraged above the organization and can span and so that's how we get to this need to begin to get organizations to work together, because it's difficult enough to get a CIO to buy into something that he's going to control entirely within his organization. But to get them to buy into something that they're only going to have a piece of the control over is an order of magnitude more difficult. And so the work really, I had some experience in college working in political campaigns I can characterize it most like being in a political campaign to put together this process. We began eight months before we ever had our first official public meeting doing ground work and meeting with folks in the community, building a network, getting them aware of what we wanted to do, talking with them about what health information exchange was. This was all pre‑stimulus and pre‑meaningful use so we didn't have that lever but we had some of the work from CITL and other groups showing the value of interoperability and we had a community‑specific report built to show that value. And then we did that pre‑work and we built sort of this grassroots effort put together a steering committee and had the mayor host a meeting. The mayor hosted a meeting on which we made public some of the health metrics we uncovered about the Tulsa area and Oklahoma and what we showed first was our commonwealth rankings and our united health fund rankings and I won't say where we are, but thank goodness for Mississippi. And so we have had some shock value there. And then we showed the fact that Oklahoma is the only state where the age adjusted death rate for the last 15 years has been getting worse. And the message there is our children are not expected to live as long as we will. And that really got a roomful of CIOs, CEOs, CFOs from highly profit motivated organizations to begin to think about how they can work together. So that's the first sort of step was to say, look, we've got a problem. And it's larger than any one of us, and it's nobody's fault in this room but we've got a problem, and we got those folks to commit then to go through 100‑day planning process. And I have to say they put in thousands of hours in aggregate doing this planning process. And they really, six hours a day for 10, 12, 15 days of meetings, with a large group of C level folks, executives from these organizations. They were really committed. The mayor hosted them in the boardroom. The city boardroom. And out of that I would say the most important thing to emerge was a culture. And that was really the game changer. And when I first realized that we had changed the culture, fast forward eight months, in the meantime we purchased a strategic plan and an RFP for health information exchange for the community and then the beacon program was announced. We said well we've done the planning, let's try it and see if it has any play at this other level, expecting really nothing. Tulsa was sort of new to the game not Harvard, Hopkins, not Stanford. Not Ricky. And so we put in what we thought was something fairly innovative and we were picked. But the thing that told me that we had actually changed the culture was when we had a press release, press conference the day after we received the beacon award, and 15 people were just sort of randomly, emailed everybody and said who would like to speak. We'd like one from each kind of stakeholder. We did about 30 seconds of preparation before the press conference, and said who is going to speak for patients, who is speaking on behalf of hospitals so each stakeholder could say from their group's perspective what does this mean to them. And everybody got up and gave a two‑minute, just beautiful, it was as if we couldn't have written it better, the message they gave. And then one type of organization had a new person, the held of the hospital council came in instead and said I'd like to take this one, and he spent most of his time introducing people from his own hospital. And it was really obvious. And everybody was uncomfortable about it by the end. So then quickly we put the next person on to speak. But it drove home to me we had built a culture. So we really leveraged that to keep everybody at the table. And I won't say that it's all feel good. Because even as late as last night at 9:00 p.m. I was on a conference call with my board meeting and they were giving me hard facts about sustainability and how are we getting there and for us to sign off on this you've got to deliver this.

But keeping them at the table has been about agreeing to the metrics and understanding where we are as a community, data is where it's at.

>> Eyes on the prize, boots on the ground, Bramer, you've been silent down there. Let me ask Craig to say more about the community. By the way, we love our Mississippi beacon community.

>> Yes we do.

>> Just in case they're here. Craig, we care a lot about the 17 beacons and including the three here, but what are we doing for and how do we support of, how do we share some of the ideas and learn from communities that didn't receive beacon awards but are just as motivated as the three sitting here?

>> Demming said it's not enough to do your best but you have to know what to do and do your best. I used to have that quote in front of me at my desk. It made me so insecure I finally took it down. Do I really know what I'm doing here? So learning is such a critical piece of this thing, but yet you're just getting so much thrown at you. All of us in the room how do we keep up? How do we make learning efficient. How do we lean out the process so you can all take home lessons that you can readily apply that have been tested, et cetera. We don't now to do it, obviously, but by evidence of the panel there's tremendous knowledge by our program but across all the folks that ONC works with, our team is pretty small at ONC actually. There's only seven of us on the beacon team. There's 100 or folks at ONC. And we all feel this I think intense right now sense of stewardship for all that we have the privilege of learning from all of you. And what do we do about that, essentially, how do we not be the center, the most efficient networks is the one without a hub. How do we not make ONC be the clearinghouse for all of these great lessons?

So we're working on that. The answer to your question, as you know, is not quite firmed up yet. But it includes things like working closely with other stakeholders that are focused on other like AHRQ and IHI and other national entities also learning from new communities and how do we get aligned with those folks, and including the CMS, innovation center and some of their earlier thinking about their learning networks. How do we make sure that these aren't, that this coordinated efforts.

We have technical assistance contract, which includes really smart people like folks from Booz Allen Hamilton and the Brookings team and Institute For Healthcare Improvement and others. So part of their job is to actually begin to try to in a digestible way to document these expertises from people like these not in academic papers or evaluation reports that are written up by some beltway bandit and come out five years after this program is over but rather in really quick digestible ways to learn.

And are learning some on line things, might have run into Jesse Dillon, he's Bob Dylan's son and is a real thinker in social networking and how do we leverage one another's expertise. So more to come on that front T but we're really excited for looking at ideas how to build out this open network. So it's not like this closed beacon club of 17 communities but how do we really open this network up.

>> Super. Thank you. Let me open it up for questions from all of you, and I'll ask, since we have ‑‑ we're on a webcast, if you don't mind coming to the microphone and identifying yourself there and ask your question.

>> Mark Levine with CMS in the Denver office do your communities appreciate what you do, how do you know that and do they help to correct or improve or change your course through the course of your work?

>> I'll take a stab at that question. I'll say the answer to your first question do they see the value. I think we're early on in the beacon journey, but based on the existing work we've done to date, the stories are out there. They're telling them themselves around the impact that we've had to date when people have had better information at the point of care, they know who their patients are, that they never realize this patient didn't quite understand the medications they were using until they were probing that in a more reliable fashion at every encounter. The feedback of data. We hear the stories not only from the providers but I can tell you I've been in community wide events where there was one evening a woman was sitting next to me and you bring up casual conversation. I always ask because I'm in pediatrics, where does your child get pediatric care because I usually know the practice. Then she tells me the kid has asthma. Now I have a huge opportunity to get her perspective on what's really going on. And she said it's really weird this year. It's the first time that I got like five calls to bring my kid in for a flu shot. So I just gave you that as another example of where there are ahas going on at the patient family level with this work that we've actually heard and we try to tell those stories and the providers come up with stories after story. I never knew I had the problem with the kid that I followed for five years until I used the decision support tool. Then I ask the next question what's the next issue they know the registry population the dots start getting connected in people's minds in ways that didn't exist before. But you asked two questions. One was do they perceive the value and what was the other part?

>> Do they help you correct or change your course.

>> Oh, those are wild discussions. That's like the wild west sometimes. We bring ‑‑ we have an overfocus on bringing the front line to the table with the core team. We call ourselves like the core QI team. Instead of us just sitting in a room coming up with great ideas, we bring the front line to the table, figureses, nurses, administrators, and those are tough conversations, and honestly, honestlily it happens once a month Friday from nine to 11 in the morning when people have administrative days in the practice. They come to the table talk about design issues it can be tension filled because the QI team wants to march off in a certain direction ready to roll. Then next thing somebody brings something up, tension in the room. Front line says this is never going to work. So they bash the QI approach that we came up with spent hours with. After it's over I get calls from the camps, from the front line you've got to work with your staff they've got to be open we're trying to present a better idea for a better solution, then QI people telling us you have to tell them how to behave because we spent five hours and presented it and he was supposed to sit there and support it next thing I know we were on a different track but at the end of the day that conversation is very important because people have to get more comfortable with it on both sides and you really do come up with better solutions, but you've got to be ready willing and able to bring a constant presence of the front line as you're designing, testing and rolling out work. It's invaluable.

>> I understand that. The in‑group, the HIT people, the quality improvement people, the providers, those are easy to get feedback from. I'm talking about the community that you serve. And how do you get their input to know that you're doing, meeting their needs and are listening and changing course or taking into account what it is they want.

>> Right. Well, I think it's similar to other beacon communities and I'll open it up for other comments but on our governance group we have the public presence, the consumer representative presence. We have the advocacy groups at the table T we have groups that are representing those social determinants of health or the public health aspect. So it's not just a medical centric model. This isn't all perfect. I can't sit here and tell you but I think you need to bring it in at the leadership governance level. You need to bring it in on the improvement team side. It has to have a presence perm eighting those different levels. So that it's constantly there. So it's not just something that you're reaching out through a survey, but it's a constant presence. I can't say we figured out how to do it really well but we have some experience with it in terms of having parents, for example, as a core part of our improvement teams. We have focus groups with the families. They're part of the design work. They are represented on the governance both within our hospitals and the broader regional level F I think we've got to do a lot better at it but if you we don't bring that in then the likelihood of having the type we're looking for is diminished.

>> Let me open it up to others.

>> I expect the doctor asked the question because it's a challenge in his organization, and certainly in Tulsa we're pretty noon to the game and thinking about population health and thinking about it from the perspective of systems and how we might engineer systems to improve it. But I will tell you that one of the interventions we've been working on that's been in sort of the field for since 2007 required that we put in what I call a do no harm arm to all the interventions, and that assessment can be as simple as a short form quality of life assessment.

But it told us a lot about the interventions we were putting into place and it was really important to do. But getting rich from the populations we serve is much more difficult. We've actually embarked, this is not a greater Tulsa access network but a school of community medicine effort we've embarked on a program where in the summers we have something we call the interinstitute and we bring all the incoming trainees, medical, social work. Pharmacy, nursing everybody who is going to deliver healthcare as well as some interesting especially like urban design organizational development, those kinds of specialties. Those incoming trainees, along with a faculty who have not been yet through a summer institute, as well as some leadership from around the community, and they spend a week in the community. We call it the anatomy class for the community. They spend that week going out and meeting with the community service organizations who deliver care to the under and uninsured and meeting with actual patients who have complex issues they need to work through, and that summer institute has produced something that has just been incredible from the perspective of changing the way the trainee begins the process. A journey of a healthcare trainee is a complex one and fraught with lots of emotion as well as blind panic to learn every possible fact they can. And so setting the bar or setting their mood to be thinking about the end they're shooting for at the beginning. The end product needs to fix what we just showed you in this community has made some difference. What we're seeing now is the people who were incoming first year medical students when I arrived went through the first summer institute T at the end of the week they have to propose a community intervention, each team does, present a community intervention that they thing will work. They have to actually implement it in the first two years of nursing or medical school, whatever. Incredible to see them they go back to Oklahoma City for their basic years and then come to Tulsa for their clinical years. When they arrive back in Tulsa, they're so excited to be back in the place where they sort of gained their first perspective on what it meant to be a clinician, but they also are seeing the projects that have been launched and they're getting to actually use those systems now. So this greater than project was actually one of the student proposed efforts the very first year of the summer institute. Now that we're bringing in executives from around various companies and the country it's probably once a day that we actually have somebody break down in tears around the table saying I never knew this part of my community existed. I've lived here my entire life and I never knew that north Tulsa existed this way. So I don't think it's something, a story you can just tell with numbers. So we've taken the effort to ‑‑ we have walls in our school covered with the photo stories that are generated from that effort.

>> If I can just briefly ‑‑ were you going to say something?

>> Just tell you from sort of our perspective of how communities are doing this. I think your point is the people who are paying for healthcare, the Americans, did they understand this and value it. We see a lot of communities where they have a strong balance across what I would call a supply demand side. Of course you have the CIOs in the provider community involved in governance, but thinking Keith's hometown, Jeff Hemelt, the CEO for the whole world, Cincinnati is their largest footprint of employees in America. He wrote a personal letter of support for the beacon application as well as contributed a million dollars in in‑kind support and cash. So they have an executive as part of that now. So there's a lot of ‑‑ Cincinnati in particular, has a large employer presence, but I remember before beacon, about a year and a half or two years ago meeting like this for community leaders just a status report. Here's what we've been doing and here's what we accomplished. We thought you should know. And I think they set the room for 300 people or something like that. And completely sold out. Imagine this room wall to wall people standing around. These are CEOs of people in companies in all the healthcare glitter audience just cheering on the team T but we're seeing that in lots of communities where leaders across the community not just the health sector are involved in decision making not just rooting people on but engaging.

>> We've done this well in some areas and poorly others. Privacy and security we spent 18 months with our community and that's when we were in the community and Deb Debear the head of the coalition against domestic violence, I think your people are well meaning but frankly you don't get it. You don't get it. You've got your list of sensitive information, HIV, mental health, but if a woman's got an abuser broken her ribs did night before she goes in to get treatment when the Brucer finds she's at risk. What do you do to protect her. We put Deb on the committee right away. We kept drawing those people in. Some know that ACLU was immediately on us after our very first grant saying you've got to be kidding you're reality not going to put people's information on the Internet. We put them right on the committee. We have to do a better job reaching out and I'm contemplating an idea that I want to steal from somewhere around Kalamazoo, Michigan and what they're doing is they're building a set of nodes around people in the Hispanic community, people in the faith‑based communities and they want nodes that if we've got a question in the HIE, what do people think about how would it resonate with them. We're trying to think about how to model our consent model for adolescents that aren't under protection of the law to keep their information private from parents and the covenant of trust we want the put out a questionnaire to these folks that says please ask 25 of your patients of the people you interact and people that come to your church this week and tell us about that so when we get responses back in a week from them we have something like 500 responses from the community and instant network for accessing. One situation was when they couldn't figure out why the African‑American visiting nurse, it was the way they framed the question. They DA's Prattly wanted the visiting nurse there. The way the question was framed was asking the African‑American population to shut down and say no to it but then they sent that query out there they got it back and solved their problem in about five days TI want to be able to build more sort of networks like that to get information back. Not everybody can be on a committee.

>> Good afternoon. My name is Rick Ruben. I'm with one Health Port in Washington State. And among other things, I have the privilege of serving as a steering committee member on the beacon program out there. And one of the things that's happening in our market, of course, like a lot of markets is people are coupling up. Everybody wants to be taken to the dance. And we've got some pretty high performing health systems out there. I'm curious how you see yourselves relating to the market activity call them ACOs or whatever you want to call them but there are agencies interested in performing performance who bring leadership, who bring resources who apply IT and information and they in many cases feel they're sort of the ones who are going to do this. And they have the answers. So I'm curious, when you think about how you relate to that competitive market that you live in, do you see yourselves eventually being one of them? Do you see yourselves trying to provide sort of neutral infrastructure for all of them in which case how does that play with the infrastructure they have in place? Do you see yourselves as a think tank maybe identifying best practices and better ways of doing things? Any thoughts on how you see the beacons playing in today's world and then also being sustainable going forward once the grants run out in this emerging marketplace?

>> I think that because the Rhode Island Quality institute was comprised on everybody with their hands on the levers, the CEOs of the major healthcare systems, it's the insurance commissioner, it's the high ranking leader from CDS. It's community consumer, we have these people with their hands on the lever who are responsible for the outcomes in this, and we've really made that in stark relief. If we don't like the performance of Rhode Island's healthcare system who do we think is going to change it? I don't think the federal government is going to sweep in and solve our problems. We have a lot of work to do here. We framed it as a community responsibility and I think the more that we can do that, I frankly you clearly have not been in one of my other panels. So for those of you that have been, I'll take one moment to reiterate, I am a little concerned about the advent of the unintended consequences of ACOs. I do think that the thing that startled and disappointed me recently was to see something come across the wire about someone saying we're forming our own HIE, thanks very much we're not going to do need the community HIE because we're just going to share within our ACO. And, first of all, I think we'll find it very difficult to succeed in an ACO if you don't have all the information. One of the things about this, this is under Medicare, patients have choice. They will not necessarily stay within [Inaudible] and you force them to stay within your ACO and accidents conveniently located in your ACO catchment area. So I think we have to think about the unintended consequences and how we implement the design of these things so they don't destroy literally years of work of community‑based work. I think the other thing I was so impressed with San Diego beacon. When they want to talk about and raise the issue and perhaps propose a community‑wide ACO, not an organization wide, because their sense of community wide ACO goes all the way down to accountable care organization, accountable care community, all the way down to the patient level. So that the patient themselves has accountability for improving their diet and everybody is focused on that. I'm intrigued and excited and you bet we're going to try to learn from San Diego on this because I think it's really exciting way to approach it. Otherwise I'm afraid we'll hard wire fragmentation to the future. If we start having ACOs say they're not going to share data across boundaries, then I'm deeply concerned, because now we're back to being dangerous.

>> I would echo Laura's concerns in a way the situation she mentioned is where we started with large health systems saying we've always done our own thing and our data seems to be sufficient at this point. But it is a whole new perspective to take when they begin to think about taking on risk for a patient population that would be attributed to them and then not as Laura indicated being able to guarantee that they get all of their care within their existing ACO. So we've really been approached by our groups who are planning to form ACOs with a message we need you guys because we have to have a community wide perspective on this. We're in this game to the end because of what this community wide effort can bring that we can't otherwise get. We're still going to have an emergency room where uninsured patients show up. We're still going to have the need to admit a percentage of those uninsured patients and we're still going to have leakage of our ACO patients out to outside systems. So in order to run our business effectively and understand our risk, we believe we need this community wide effort and access to the analytics from it.

>> I didn't speak to sustainability you mentioned how will we sustain these beacon things beyond. Obviously we're working with patient‑centered medical home, those payment designs but we decided to set out a separate effort we consulted with Boston consulting group to come in do a business case for us we asked them to be a really conservative business case, don't talk about improvements from quality, this is just point‑to‑point better care coordination. No research capability. Don't use the 2006 dollars and inflate them to 2009. Just keep it really, really believable. And it was still $108 million annually on a $6 million spend. To sustain the thing. And that was just a component of our HIE. Not everything else we're doing with beacon. So we're talking to our community now about we have a much richer investment to protect. So we asked Boston consulting to come back in again help us with a sustainability model and we came up with one that's .13 percent assessment on claims and this pierces the ERISA protections as well so it's not just the privately insured, because when we got our pie diagram back of who gets that 108 million, it was really colorful, which was my first indication that we have trouble here in trying to make the private payers pay for this thing when nobody's piece of the pie was any bigger than 26%. So that's when we thought we had to spread it as far as we could possibly spread it. It spread so far if we succeed with our legislation that it costs each person and employer about $9 and 97 cents per per year. The duplicate test in Rhode Island is $22 if you prevent one duplicate test per person per year you put two people in the HIE for a year so we wanted to look at a separate sustainability besides just deciding we were going to be part of payment for ‑‑ there's just too much here in the center to sustain. But if we do sustain it in the center it's really economical for the whole state. Besides this hospital trying to build their own repository, that hospital trying to build theirs, the analytics capability here and Lord knows those small practices don't have a prayer of developing that kind of analytical capability we can provide in a cheap, efficient central location.

>> Thank you very much for the answer.

>> Thank you all very much. We've talked about everything from the need to start by uniting the tribes, getting the folks around the community who have interests in improving performance long term together, deriving both their technical and personal experiences and vision in doing that. We've talked about the need not just for single interventions that might have an incremental effect on the achieving that vision, but a range of things that could be done together and scaled across the entire community and tying back to what Craig said, our hope is that this program is as a resource for the country not just for 17 communities. We look for you to help us realize that vision and aim by helping us figure out how to open up and encourage other communities, even in lieu of large financial awards, how they can take similar steps going forward and achieving the dream much broader than these 17. Thank you all very much.

[Applause].

[Break] .

[Music] .

>> Good afternoon, everyone. All right.

>> Are you ready?

>> I'm ready.

>> Are you ready? I'm Chuck Friedman the chief scientific officer from ONC and it's my pleasure to introduce two chief technology officers who will be addressing you in a moment. I'll introduce them in more detail. The chief technology officer of the nation and the chief technology officer of the Department of Health and Human Services. Speaking from my vantage point as ONC's chief scientific officer and a bit of a geek in my own right I'd like to make a few remarks to put some context on this session addressing innovation. It is vital in my view as we advance health IT in advance of better health, that we not view technology as a stagnant commodity. We must recognize and act in the recognition that technology will change and will change for the better. Research and innovation will make things that are difficult or even impossible today easier and possible in the future.

One of the beauties of information technology, and one of the reasons I'm so attracted to it personally, is its innovative ability. Innovativability. I tried to create a new word there and couldn't pronounce it. Innovativability. If I say it three times I might get it right. Software by its very nature is moldable, shapeable, reconstructible and improvable. Health IT innovators, in addition to building novel applications, also build new tools that make it easier to build even more novel applications. So in this way innovation perpetuates itself and we can expect innovation in our field to grow exponentially. For these reasons, as the national health IT agenda rolls forward, we all need to support, embrace and as best we can anticipate innovation. Innovation challenges implementers and policymakers, and I realize there are many implementers and policymakers in the room here today, to approach their work with a certain special state of mind. One that allows them to make something work today while preparing it to work somewhat differently and better in the future. This is hard. I am completely confident that the technology that supports stage three meaningful use in 2015 will be very different from the technology supporting meaningful use stage one in 2011 and we may get an inkling of that from the presentations we will hear today. Our two speakers today personify that special state of mind I was talking about. As you listen to Aneesh Chopra and Todd Park speak about innovation, I encourage you to listen for two things. Listen to their renditions of the many exciting projects that are underway in the department and across the nation, but also pay close attention to how their words reflect a forward‑looking state of mind, that special state of mind I was talking about, that this nation must have to be successful in our collaborative and vital endeavor. So now let me introduce Aneesh and Todd before they begin their remarks. I'll introduce Aneesh first, then I'll introduce both of them now because they'll be tag teaming their presentation.

Aneesh Chopra chief technology officer for the nation and in that role serves as an assistant to the president and associate director for technology within the Office of Science and Technology Policy works to advance the president's technology agenda by fostering new ideas and encourage governmentwide coordination to help the country meet its goals from job creation to reducing healthcare costs, to protecting the Homeland. Aneesh was sworn in on May 22nd, 2009. Prior to his appointment he served as the fourth secretary of technology for the commonwealth of Virginia from January to 2009, prior his appointment under governor Cane he served as managing director of a publicly traded think tank. Chopra was named to government magazines top 25 in doers dreamers and drivers issue in 2008. Todd Park joined the Department of Health and Human Services as chief technology officer in August of 2009. In this role he is responsible for helping HHS leadership harness the power of data, technology and innovation, to improve the health and welfare of the nation. Mr. Park co‑founded Athena Health in 1997 and co‑led its development over the following decade into one of the most innovative socially oriented and successful health information technology companies in the industry. Prior to Athena Health he served as management consultant with Boos Allen Hamilton focusing on technology and operations. So thank you very much for being here. Let me turn the podium over to you.

>> Thank you, Chuck. Whoohoo.

[Applause].

This is an exciting day on the topic of healthcare and innovation. But it's also an exciting day for me personally I just came from the session, our President led with 20 some odd of the nation's leading CEOs where a great deal of the discussion focused on the topic of innovation and entrepreneurship so I had some frame of reference going into the conversation today. Now I'm slightly more elevated and enthusiastic about that frame of reference. So I want to share with you a first observation before we get into the meat and potatoes of the remarks, and that is simply this: Every single one of you in whatever program you find yourself affiliated with, whether it be in developing course work, engaging in information exchange, supporting the adoption of healthcare IT under the meaningful use framework and anything in between, every single one of you has the opportunity to not only invent a concept that's new to the ecosystem, but hopefully, given the success you've had in your respective communities, to see how we can scale that which works. And that will be a big theme that I hope myself, Todd and Farzad will communicate throughout our remarks. So I want to begin with a bit of a national observation, cross‑industry view, and then get closer into healthcare and then hand the baton to Todd. It was September of last year, 2009, the president chose to visit a community college in Upstate New York. It was a community college. And it was that venue he chose to release a strategy for American innovation. In fact, I had the chance to tour with the president throughout the community college classes before we went to the main gymnasium, and we saw basically two activities of emphasis in that particular program. One was on the clean energy economy. And the second was in thinking about the healthcare system of the future and the President outlined a vision borne on three fundamental pillars that we hope will form as the foundation for long‑term economic job growth. Number one, America's at its best when it invests in the building blocks of innovation. The President's been committed to research and development investments with some key investments in our basic science arena, but also in areas that have more mission application. My man Chuck over here has done a phenomenal job engaging in research and development activities to support our health IT agenda. Second, how do we ensure we have a workforce that can meet the needs of the 21st century? We heard testimony even earlier today with the CEOs who said even in this difficult economy, there are many, many jobs not filled because we haven't trained that workforce for the jobs of the future. Third and certainly not least relevant for the health IT discussion we must have sufficient digital infrastructure, broadband, wireless communications and so we can enable all the work that you guys are doing to improve quality and lower cost. We're very focused on entrepreneurship. Key driving partnership of innovation. The President is focused on a number of areas but I'm focused on how our government can unlock more on entrepreneurship. More on that in a minute and second but not least he had a few areas that we all need a hands on deck approach. All hands on deck approach to catalyze breakthroughs and spirit of remarks in New York focuses on clean economy and breakthroughs in healthcare IT. Healthcare powered by IT. Our ability to translate that president's vision from a technology standpoint rests on three fundamental principles. One, that we can work well together, collaborating and precompetitive research and development activities. We can release more government data and inspire an ecosystem of entrepreneurship and innovation and come together in consensus‑driven strategies for standards that will unlock opportunities for economic and quality improvement. Combining our policies or these principles I outlined with a more structured program for public participation, frankly that's not us speaking to a roomful of folks. That's sort of one way‑ish, if we had more thoughtful approaches to public participation, you will see a combination of these activities leading to what we call a results‑driven ecosystem one parenthetical note we have an active notice right now specifically on the subject of public participation called Expert Net. We've been building these platforms at the White House data.gov and challenge.gov you'll hear some of that but I want to highlight this last piece that speaks to the graphic go to whitehouse.gov/Open, you can participate in an online forum between now and January 7th, help us design a platform that is frictionless imposing difficult questions to you and simplifying the method by which feedback can translate into policy. Tap into the expertise of the American people for the big challenges in front of us and we've got to use 21st century tools to do that. Let me go through a couple of these policy levers at hand at the time. One, we are very bullish about the opportunities to deliver break‑throughs through research and development collaboration. We have four funded research partners under the Sharp program that Chuck's been so instrumental in designing. I want to highlight one of those programs to give you an example of how we are looking at this form of collaboration, and that is the group over at Harvard who is working on the substitutable medical applications framework. Anyone here from the smart team, what's up, brothers? My people. Todd and I had the pleasure of being there in the fall of 2009 and a number of the private stakeholders came in and said look if there were platforms that would allow us to build new and innovative products and services on top of this growing volume of healthcare data, the sky's the limit in what we can do to drive down costs and improve quality. So true to the word, the team at Harvard came up with a program that one year to the day ‑‑ we're going to hold you to it ‑‑ no pressure ‑‑ in March of 2011 ‑‑ well, let's say spring ‑‑ the team at Harvard's going to publish an API borne on top of their new framework that would unlock all of the potential on top of legacy systems that heretofore have been disparate and disconnected. In fact they've announced a $5,000 reward to the best app built on that open API. Part of our larger vision for challenges and prizes and competition. I mentioned challenge.gov a moment ago.

There's also an engineering design constraint, open data is a key philosophy. You'll hear Todd talk specifically about healthcare. So I chose to go outside of healthcare to say it's important for us to think about how open data combined with new and emerging technologies can lead to breakthroughs. Here I want to highlight a program called open 311. An initiative borne out of the very successful work in New York City that would allow every member of the public to call in and 70,000 do a month saying there's a pothole on 61st and Lex fix it. In an open way the people of New York City tell you when it will be fixed you can hold them accountable for their performance and service response times. But it's not cheap. It costs $45 million a year to do what New York City does. So the challenge in policy land is how do I scale an expensive solution for citizen engagement that works in New York City but may not hit Rose Hill, Virginia? Well, this is a design constraint. For smart engineers willing to take the challenge and focus on an innovative approach to the problem. Rather than asking policymakers to subsidize the $45 million annual program so that everybody can benefit from this wonderful tool, which is a traditional policy intervention, what we saw in the communities at large, it was a new approach, an innovative approach where the people in Manor Texas said 6500 people live in our town we want the same features. The CIO is also the trash collector who also takes the minutes at the county board meeting. And if you don't have the staff support to make this happen, how do you do it? It's a design constraint for an entrepreneur and innovator in Maynard Texas they deployed a tool whopping $38 a month that allows you to call in, use the Web or the cell phone to report the same problem around the lack of the pothole needing fixing and maybe there it wouldn't be ‑‑ maybe it's not the corner maybe 61st and Main or something. Third collaborating in the areas of standards, voluntary industry led activities. I'm so pleased to celebrate in less than a year's time. I have to go back in history. It was back in 2009 a physician testified at our implementation standards committee meeting. Primary care physician meeting in Virginia wasn't written testimony it was in the back and forth. He said anecdotally, one of my patients is moving Arizona moved to Arizona we can't figure out how to get an electronic copy of the notes sent even though the new doctor and I have the same platform he described the P fact that he basically exported the record attached it to public Internet e‑mail, sent it. Opened it in Arizona, imported the record. It actually technically worked. But he freaked out the privacy and security crowd in the room. Essential message is when are you guys going to solve this? I know we want Nirvana but how can I do safe secure emailing of my patient's medical record? After some dialoguing with our brothers and sisters and under the powerful leadership of my my man Dr. David Blumenthal, we kicked off the NHIN Direct Project, Now known as Direct project. And we brought onboard a rock star, a hero in Arryan Malak under the leadership of Doug Fridsma. Come on, give some love.

[Applause].

.Aryan took shots from all corners I want it to be rust, soap, I want it that way. He got them together come together on the SMTP protocol not only got them to agree but began engaging in the software development for representation 25,000 lines of code later our friends at sure script said we'll be the first to commercialize the spec and many more followed. We got dozens of companies announcing they're going to engage in this by this time next year wouldn't it be fun to watch how many transactions have taken place borne out of an idea that a physician randomly mentioned in a hearing. That's love, that's entrepreneurship. Two more statements and then we're on to Todd. We're about entrepreneurship from top to bottom, the President when he signed the Small Business Bill in December of 2010 made specific reference to the fact that our nation's prosperity rests on our ability to bring new ideas to market. And he specifically challenged all hands on deck. Businesses. Leaders in universities and everyone else to promote entrepreneurship across this country. He said that. And in the spirit of open government, the Alfred Brothers took him up on the cause. Starting out with an idea. How many of you know how much money you spend on your 401(k) plans for management fees? When I heard this story, I got ticked off. I didn't know I paid management fees on my 401(k). It's not written. The Alfred brothers figured out that the Labor Department collects statistics on every corporate sponsored 401(k) plan. Those statistics report what you pay as a fee. And wouldn't you know it, if you work for a small business with less than $5 million in assets under management, you're screwed. The fees can be as high as 10% of the assets under management. They estimate that's $4 billion in money that goes to the financial services management companies and not to the individuals who are in search of their retirement plan. Big companies, you're cool. You're basically commodity at 1%. By bringing transparency to the labor department data which basically sat in a file cabinet. When these guys got started it was five cents to print a page of a single company's filing and each company might have like a thousand or however many pages. So he couldn't get the data now because the president said I'm about openness we give it to them in electronic format now you can get 90% of all corporate assets under management in just the last year and a half are now under this sort of public transparency program. So the Alfred brothers can demonstrate this value and encourage folks to shop around for better fees. Hot off the presses in the spirit of entrepreneurship my last comment to you we mean it. We don't mean it just by encouraging it we don't mean fit by seeing all hands on deck we're demonstrating results from possible. Anybody from the VA my brothers from the VA I want to celebrate the veterans administration in parallel with the ONC adoption, the VA announced the $100 million VAI 2 initiative. The innovative initiative with particular emphasis on healthcare and healthcare transformation powered by information technology. They opened it up and said we're going to simplify the procurement process. You don't have to have a Ph.D. in lobbying in physics to know how to apply for a grant so your great ideas can come to market. And the first two awardees they've announced today I'm pleased to announce are early stage companies who have got new and creative ideas to tackle the challenges, Med Read looking at how to share novel ideas for brain injury and NVISM Blackberry access to card logical data these are the beginnings of start‑ups to take advantage of the best ideas forward and demonstrating them in the VA. This is the spirit of innovation and entrepreneurship we're looking to nurture. Now on to the information and innovation revolution. Please give it up for Todd park.

[Applause].

>> Thank you brother Chopra a blast to hang with you brother Farzad and others. I know it's been a long and productive day. Thank you so much for hanging with us, but what I wanted to actually talk about is just what I feel is an amazing moment in the history of healthcare. Capitalizing on so much of what Aneesh was talking about and so much of what was going on in the healthcare world at large. I submit to you there's never been a better time than this moment right here right now being an innovator in healthcare. And I know that there are days where it feels like you've been through eight different writteners and every bone in your body has been snapped in two because I've been there too that's because anything worth while in this world is freakin' hard and I submit to you there's no more meaningful work being done in America right now than the work that you are doing. And there's never been a better time to do it. So give it up for you, first of all.

[Applause].

The reason why there's never been a better time for doing what you're doing to innovate healthcare than this moment right now in American history is because there are two massive mega trends that are very real that a lot of us have been dreaming about as small children's that are accelerating that are creating unprecedented conditions to facilitate innovation. Those mega trends are new incentives and information liberation. And the combination of new incentives and information liberation equals an unprecedented supply of rocket fuel for innovating healthcare. We'd like to talk about those two trends incentives and information liberation. New incentives part one, I don't need to talk to any of you about in this room you've done incredibly well you've seen the chart eight zillion times you know the waterfall and progression but it's important. I was at a conference recently with the Mexican and Canadian government IT leadership. They thought it was incredibly interesting that we had decided to do our health IT investment not by subsidizing the acquisition of technology but by paying incentive payments for the meaningful use of technology. That's a revolutionary idea. We all take it for granted but that has profound implications and really drives innovation in technology, drives technology to deliver actual results in a way that subsidizing software has not. It's a new incentives part one. New incentives part two. It's the Affordable Care Act and payment reform. I think all of us know in this room, the ultimate transformation of our healthcare system depends fundamentally on changing how we pay for care. You get what you pay for. In this country, historically, this is not news to anyone in this room, we pay for piecework, we pay for volume of services, we pay for office visits, for surgeries and hospital stays, what do we get? We get a lot of visits a lot of surgeries and hospital stays. The Danish health minister once famously said, they announced they would pay for Christmas trees. The doctors would head out into wilderness of Denmark, Netherlands, Denmark, right, cut down Christmas trees and send them to the Danish health ministry. You get what you pay for. Affordable Care Act something not well understood hasn't been covered in the media at all, right, contains the most important seeds and drivers of payment reform the country's ever seen it contains if you read it carefully and understand it very important powerful drivers that will shift this country over the next several years from pay for volume to pay for health and value which will actually seed drive support and scale all kinds of innovations that support value creation and health, which includes basically everything that you all are doing. These provisions actually ‑‑ if you don't know them cold, I would highly encourage you to go get to know them cold. Understand the accountable care organization program that's going live in 2012. Understand the bundled case rate program and understand the growing proportion of hospital payment that's performance based based on things like hospital readmissions and hospital acquired conditions and also understand this very interesting new center called the centers for Medicare and Medicaid innovation center. So how many are actually familiar with this innovation center? Okay. Good. Fantastic because a lot of people actually aren't and it's something that's actually I think the jewel in the crown, quoting Don Berwick, in the health reform law and is the single most exciting place to be in the federal government we recently announced the creation of the center, and it's an important new effort that will fund the development, identification and testing of new payment and care delivery models that improve the quality and affordability of care. And while the center will be focused on Medicare and Medicaid the combined purchasing power of Medicare and Medicaid is such that it will help drive improvement in the overall healthcare system at the same time. And we're also making sure that these efforts align with those of the states and private payers. The affordable care act provides $10 billion in funds for the innovation center. And an important detail these funds are already appropriated and available to the investors to carry out the important work over the decade if they're proven to be more effective in improving quality while lowering cost or remaining cost neutral, the secretary has the authority to scale those models nationally for CMS. Something which has never been true before. This is a game changer. This is actually going to drive on top of the accountable care organization provisions and provisions a significant shift toward pay for value in American healthcare. So if you think about what that means, if you look at concepts like patient centered medical homes and ACOs and bundled payments and performance‑based payment what does that mean for care delivery? What it means is that providers are going to have to get a whole lot better at, which they'll be delighted to get better at, coordinating care, tracking patient population health, and executing extremely well on doing the stitch and time that saves nine. And what do you think they need to do that? You. They can't do it without you. Without you, payment reform and care limit innovation ain't going to work it just ain't. With you it's going to rock and roll. You are in the pole position to actually drive a fundamental change over the next decade in American healthcare. Your country needs you. And they're going to rise to meet that challenge. So that's actually changing incentives. This is incredibly exciting. I've literally been dreaming about this since I was a small child. I'm sure all of you have as well. It's finally coming true I'm pinching myself are we really doing this? Yeah, we are, it's pretty amazing. Now let's talk about information liberation. There's three parts, information, let's say you've got the right incentive in place one rewards you for creating value. Now you've got to know what the hell is going on, right? You actually have to have information to make the right decisions and actually create value. So three really important things are happening. One, thanks to you rising health data liquidity. This is a really, really big deal. The fantastic work that's been happening with N direct or whatever we're supposed to call it now. N direct. N exchange and connect. And Blue Button. Have you heard about Blue Button initiative that VA and Medicare did where they basically said look all the data we've got about vets and medical provisions it's not our data. It's the people's data. So if you're a beneficiary of that, you can walk up to my Medicare.got healthy vet and hit a button download a copy of your own data, which is really big deal and actually took us like four seconds. And something that's now being copied by more and more people. And I'll tell you what, we haven't really promoted this yet like Aneesh and I went to a conference of like mostly technology people and said: It's here. Couple months ago. 130,000 people have already downloaded a copy of their own data which is ridiculous, and spreading and spreading across more and more sources of data. A second actual zone of data liberation across this is transparency. We're stepping outside the zone of health IT defined but it has implications for transformation and innovation and leveraging technology and information. So have you guys heard of healthcare.gov. This is a site that Aneesh wrote me into leading the building of. Never forget I was in Europe on vacation with my family. I get a call saying you have 90 days to stand up the ‑‑

>> 60.

>> That's right. I'm suppressing it it's so painful. 60 days to stand up the first website in America that has every single private insurance plan, every single public insurance option live July 1st. Thank you, brother. Anyway, not because of me, but because of the team of amazing Feds that volunteered for this job we actually put up a site that not only met the requirements but rocks and rolls it's amazing. People eventually said this doesn't look like a government site or what team did you fly in. We didn't have time to contract with it. It's a bunch of Feds who built this thing. And it's interesting, in review of health implementation by Kaiser Family Foundation they said one of the highlights of the implementation thus far is this consumer website that rivals the best silicon could build it's built by a bunch of United States federal government employees. But the thing that's really important about healthcare.gov isn't the super cool site it's the data. It contains unprecedented data on insurance plans and their products and their pricing and their benefits and pricing behavior. So it's the first source of information for the public that actually tells you not just what the price is that you're quoted as a standard sticker price for a given policy that Aetna will sell you in California, but what percentage of the time they actually tell you no. They give you the hand and don't give you the policy at all. And what percentage of the time they actually charge you more than the sticker price because the underwriting process they found something they didn't like. So what this is doing beyond just providing a really useful service for consumers is bringing unprecedented transparency to the insurance marketplace, transparency which drives innovation better value for consumers information being liberated and put at the hands of consumers to help them hold accountable. The affordable care act calls for more information to be published enhanced based on providers as well so consumers can make better choices and get the best possible care. Zone number three is something that actually we're calling the community health data initiative. So this is actually based on an idea derived from the weather. And it's actually the idea of my boss, Deputy Secretary Bill Core. The whole idea is this. Everyone here know NOA, the national oceanic atmospheric foundation. It supplies all weather data in the United States. Not like your local newscast ter goes out and measures it and reports it. It's not like the local channel has this. It's all collected by NOA. NOA takes this massive amount of weather data and publishes it online, downloadable in machine readable format for free. Without intellectual property constraint and a whole panoply of innovators outside of the government turn it into the weather channel, weather.com. IPhone weather apps the sheet in your hotel that's going to say it's going to rain tomorrow all kinds of innovations that actually provide useful benefit for the American public. All of that government funding choreography, direction. So we said, well, hell, why don't we do that. Because if you think about HHS, HHS is Medicare, Medicaid, the CDC. The NIH. The FDA. The AOA. The ACF and about 25 other names, right? You think about the data that those dudes are sitting on, it's pretty freakin' colossal. They've got billions of dollars of data used for narrow purposes right now the whole idea behind the initiative is to take the data and filter it obviously for privacy, confidentiality, trade secrets, and then publish everything it can on line, just like NOA, downloadable, in machine readable format and have a whole host of innovators outside of government and take that data and turn it into super cool stuff. So we actually announced this vision as an idea to a small group of innovators convened by the institute of medicine, March 11th, 2010 I week later published an initial set of data focusing on rates hospital compared and really defined and download to use if you're developers less than 90 days later at a big June 2nd lala pa loose sa, they demonstrated 20 new apps leveraging the data we published less than 90 days ago that did incredible cool things to help consumers, providers, employers, mayors, et cetera, make better decisions and improve health. Community health dashboards, super awesome analytical tools on line games, health dated integrated in the search. If you had couple of spare hours search for community health initiative you'll see the session seven cool apps got demonstrated along with the secretary and Aneesh talking and so forth and it's inspiring. What happened we're so excited about this we're going all in expanding the data publishing to more than just community health data and provider quality data, but we're actually going to take all the data in healthcare.gov the insurance data and expose that via API. We're actually APIs on expanding medical scientific data if you don't know about the LLMAPI portal you guys in particular would love this, they've published in a single portal APIs to everything that they have actually published an API for including new ones they've actually launched recently APIs for organic storm and clinical.com and stuff that's incredibly useful. Medicare claims data. So on and so forth. Everything we think that's useful we want to make accessible and available for free downloadable, intellectual property. Filtered through the privacy and confidentiality and trade secrets considerations and there's a growing ecosystem of innovators taking the data and turning it into incredibly cool stuff. So as you're thinking about what you're doing, maybe think outside of the box of EHRs, EHR exchange and health IT. Think more broadly about health data how it can be leveraged to produce good and check out our data and see if it can help you and let me know what you think T actually to make it easier to find this stuff because we're publishing it in random places there's a new super site going live in January called healthdata.gov, which will have a central catalog of every federal health set they're making available and downloadable free you can have a expo looking at the apps, using the data. Online forum to complain about the data ask questions about the data request new data talk to other people about what they're doing with the data, et cetera. Another catalog that has nonfederal data sets also available for free and downloadable. And we actually are doing a whole bunch of events and workshops which if anyone is interested in I can tell you more about scrubbing on the health data and turning it into tons of social value. Actually, I'm so passionate about this that actually it means like this I do give out my e‑mail address and people e‑mail me I respond to every single one. My email address is Todd.park, todd.park@HHS.gov. If you want to talk about any of this I would love to chat to you about it. If you want to get involved get involved. This is an important moment. These are mega trends that are theoretical at best in the past but are real now and are accelerating are in the process of happening. Changing incentives and information liberation. This creates conditions that are ripe for innovators everywhere to engineer unprecedented improvement in the healthcare system. Supported by these new incentives that reward value and liberate information that helps you create value. It is literally without hyperbole the opportunity of a lifetime to change healthcare for the better. And it's an opportunity that we know you're going to seize and help lead all of us to a better healthcare system for the United States because at the end of the day the government ain't going to do this. The government ain't going to lead this. All we can do is help create the conditions and enable you to kick butt, take names and drive change. And we're very excited that you're going to do it. You're already doing it. Keep doing it. I know it's hard but the promise is coming, you're driving us there. I have enormous faith in you. God bless you, God bless America and may the force be with you.

[Applause].

>> And to close it all out, our brother in arms, our fearless leader, one of my favorite people, actually my favorite person in the entire world.

>> Oh come on.

>> And my wife and my son and my upcoming daughter. The great Farzad Mostashari.

>> Yeah, bring it.

[Applause].

>> Farzad Mostashari: So I'm going to be the subdued one.

[Laughter] I went around a little bit and I asked a few people: So, what should the closing be? What would you like to hear in the closing? And someone said, you know, well talk about what a great conference it was and the other person said talk about what we learned. Another person said no cheer leading. I said I'm sorry, I can't do that. So this was a great conference.

[Laughter] we had over a thousand people here. Over 10,000 people on line. Whoa.

[Applause].

That's pretty crazy. [Waving] .

I think we met our goals that we set out in the beginning of the conference. We articulated what the vision was for health IT, what our strategies were, what our principles are. I think we understand better the roles of the grantees in the big picture and the challenges and the opportunities. Most importantly, I think we came together as a community in a sense for the first time of the folks within every community, a community of communities. A network of networks. Of the people who are making this change, who are making this happen. Plus all of you people out there, the 10,000, who are interested enough to go find this and click on it and to listen and watch from your homes, your offices. We shared information. We shared insights. We shared enthusiasm. I saw light bulbs going off all over the place where people said: You know, oh, yeah, we should do that, or, yeah, yeah, I'll call you or we're going to do this. And I think taking what the advice that Laura Adams gave us earlier, about writing down the 10 things through ‑‑ writing down the 10 things, when you leave here before ‑‑ maybe before you get home, write down kind of the 10 things that you may do differently. You may want to do right when you get home. And then swap that. I love this part, swap it with someone else on your team, and hold each other accountable to that and check with each other. Hey, did you do that? Hey, did I do this. Here's six things I found. So just quickly. And the they roughly correspond, I'm being sneaky to our 5 plus 1 principles. The open democratic processes. One thing I take away from here is in some ways in the community projects, governance is everything. And having the ability for everyone to contribute, for everyone to feel heard, engaging, going back and engaging maybe people you haven't engaged yet, the employers, your public health officials, I saw a lot of those recognitions, bulbs going off. The eye on the prize, the point about it's about the outcomes, that this is not about technology. Even our chief technology officers tell you it's not about the technology. The presentations by Don Berwick, the Secretary, and Thomas Frieden at our luncheon today. Wow, that was inspirational. That sense of this is the foundation, what we're doing is the foundation for delivery reform, for payment reform, for improving public health surveillance and saving people's lives. And that we should be talking about that. We should be demonstrating that, and I believe that we will be able to demonstrate that and talk about that, and we need to start writing down those stories and we need to start showing what we're doing.

I also took away the importance of decision support and how we can't neglect that critical, that killer app, as it were, for what we're doing, that links us across, whether it's the HIEs, workforce program RECs, in particular, meaningful use and the Sharp of course, that is so critical to us fulfilling the promise of better information for better health and technology and service of that. On the HIEs, I think there were a lot of light bulbs going off that we can't make it simple enough to start with. Start simple. And build from there. Add value. Put one foot in front of the other. One foot in front of the other, and before we know it, we'll be there. The fourth one around innovation, well, I think we covered that pretty well. But also the recognition of how important it is for us to work with the technology innovators and the vendors in this, that we do need to collaborate, not only between our programs, within our programs, but also with our key external stakeholders and the technology vendors are part of the solution.

And finally, put the patient, the public, in the center. How important it is for us to communicate better. Communicate better with the public about what we're doing and the value that we're adding. So it's going to be hard. We've heard that multiple times. You don't need to be told that. We know how hard it is to get there. And I think it's all the more important for us to share information. There isn't enough time for us to discover all the things that each one of us know individually, to share at our innovations and inventions, and also to share our sorrows, maybe to share some of our indignations, except when it comes to ONC. No need to share those.

[Laughter] and share the enthusiasms, because when the going gets tough, we're going to need some comrades in arms. And we will prevail, and a year from now, when we come back together, Mark my words, we'll be able to show progress across the country in every community in this country there will be progress. We have the wind at our backs. We have the right strategy. We have the right people, which is the most important thing of all. Thank you. This has been a marvelous opportunity. And the best part of it is we get to work together going forward. Thank you.

[Applause].

As we close I want to thank all the people who helped make this conference a reality. I want to thank the track chairs, including the tracks that we didn't get to hear the report out from, with the public health track, with Marissa and my colleague and other counter party deputy national coordinator and I also want to in particular thank Janet Marchbrota who brought it all together and took it across the finish line. Thanks everybody. God bless. Safe travels. [End of webcast]