

**Meaningful Use Workgroup**  
**Draft Transcript**  
**October 5, 2011**

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Good morning everyone and welcome to the Meaningful Use Workgroup. This is a public hearing which will be taking place all day. A reminder to the Workgroup members to please identify yourselves when speaking because we are doing a transcript. There will be an opportunity at the close of the meeting for the public to make comments. We are going to go around the table and introduce the members and staff who are seated here and we'll begin on my left with Josh Seidman.

**Josh Seidman – Office of the National Coordinator**

Josh Seidman ONC.

**Allen Traylor – Office of the National Coordinator – Meaningful Use Policy Analyst**

Allen Traylor ONC.

**Eva Powell – National Partnership for Women & Families**

Eva Powell the National Partnership for Women & Families.

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

Deven McGraw the Center for Democracy & Technology

**Arthur Davidson – Denver Public Health Department**

Art Davidson Denver Public Health, Denver Health.

**Judy Murphy – Aurora Health Care – Vice President Applications**

Judy Murphy Aurora Health Care.

**Paul Tang – Palo Alto Medical Foundation**

Paul Tang Palo Alto Medical Foundation.

**George Hripcsak – Columbia University**

George Hripcsak Columbia University NYC.

**Marty Fattig – Nemaha County Hospital (NCHNET)**

Marty Fattig Nemaha County Hospital Auburn, Nebraska.

**Amy Zimmerman – Rhode Island Department of Health & Human Services**

Amy Zimmerman Office of Health & Human Services State of Rhode Island.

**Michael Barr – American College of Physicians**

Michael Barr American College of Physicians.

**Marc Overhage – Siemens Healthcare**

Marc Overhage Siemens Healthcare.

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

Pacific Business Group on Health.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Is that it? I forgot to introduce myself; this is Mary Jo Deering for ONC. Thank you I'll turn it over to you Paul.

**Paul Tang – Palo Alto Medical Foundation**

Thank you.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

I'm sorry, operator do we have any of the members on the line?

**Operator**

No members on line as of yet.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Thank you. I've just learned that Charles Kennedy on the first panel has just landed in Reagan Airport and is on his way.

**Paul Tang – Palo Alto Medical Foundation**

Wonderful. Thank you Mary Jo and thank you for stepping up to the plate to help us out in organizing the HIT Policy Committee. So welcome everyone to this hearing on Meaningful Use for Stage 3. This is the beginning of our activity to explore alternative options for Stage 3 and I will go into a little bit more detail in just a minute. So just for some of the folks here on the panel, to give a bit of a history of how we got here, in Stage 1 back in 2009 we really had only about 6 weeks to put together essentially the framework and our initial thoughts about Stage 1 objectives and criteria, and then passed that onto ONC and CMS and had a 6 month period for them to put out an NPRM, and then another 6 months before they put out the final rule. We began immediately after that to work on Stage 2 through a series of hearings and went through a similar kind of process, all of these I might add had a lot of public input through hearings and even we had a request for comments, in other words written public comments before we even put out our recommendations.

So after going through a sprint in a sense for Stage 1 and Stage 2 we thought, gosh, you know, it's, 2015 for Stage 3 is a bit more than 3 years away and is there a way we could give ourselves a little lead time and sort of get ahead of our game, and not do a sprint. So that's what we're undertaking right now. And the other thought is should it be an increment from Stage 2? Stage 2 essentially was an increment from Stage 1 and we had always envisioned for 2015 that we'd be in a position where we could be measuring outcomes and really working on that end of the spectrum, and so could we match the objectives and criteria more towards that goal rather than measuring processes. So that's why we're taking a pause and taking a step back, and even going through a strategic planning process as we look towards Stage 3. Our hope is also to give both the provider side and vendor side more lead time to develop systems and plan for Stage 3 qualification.

So this hearing is that first step and we are seeking inputs from many stakeholders. We're beginning with setting the goalpost and that's why we have in our first panel folks from CMS and the private sector payers to advise us on their upcoming, their ongoing initiatives in terms of the new health system and the new way of thinking about payment. We'll then progress onto the providers who are in the midst of transforming healthcare delivery systems, then onto the vendors who are supplying the tools for us all to transform the way we provide care and improve the health of populations in communities and conclude with a rather diverse set of perspective to shed additional light on some of the other ways of using data that are going to be in our EHRs and PHRs for different purposes.

So we have a very full agenda and the way we've structured the hearings is that we've had over 200 pages of written testimony and you can assume that of all the members have read those and I think, one I want to thank people for putting in the time because they were incredibly informative, very helpful. So the 5 minutes that you have on the panel is really to start highlighting some of the key points you wanted to

bring out and a big part, more than half of the panel will be a dialogue between the Workgroup and the panelists and we've always found that to be incredibly helpful.

So although we've asked some the questions, and I think your answers were wonderful, although we asked some of the questions relating back to Stage 1, some of the challenges, some of the things that were easy, our focus is on Stage 3 and the only reason we asked about Stage 1 is to say hey "what can we learn from the process of implementing and qualifying for Stage 1 that can be brought forward and contribute to our thoughts in Stage 3?" It's not to rehash Stage 1 over again. Okay with that introduction then, any further comments, George?

**George Hripcsak – Columbia University NYC**

Very good Paul, thank you.

**Paul Tang – Palo Alto Medical Foundation**

Or any comments from the Workgroup members as we begin the day? Then we'll turn the first panel over to David Lansky who's going to moderate it and as I said this is a panel from CMS and the states, and the private insurers to look at what are their goals for a reformed health system and how can the EHRs and HIT infrastructure support those taking advantage of the Meaningful Use Incentive Program. David?

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

All right. Thank you Paul. Good morning everyone. We have the opening panel as Paul said on the CMS and other payer perspectives on the value of Meaningful Use and the experience to date. You'll see in the materials we've sent out ahead of time a number of questions that we asked this panel to address. They're about 10 pages or so into the packet for today. The primary emphasis here is what did we learn from Meaningful Use experience so far both in terms of rates of adoption, the adoption, and reporting of quality measures. And as a result of that what CMS is beginning to think about in terms of new measure requirements going towards Stage 3. We'll also hear about the Medicaid program and how it's being implemented in the states, and about, from Charles Kennedy, what the private payer approach to some of the same tools seems to be so far. So to kick us off this morning, we have Rob Tagalicod from CMS who is in the Office of eHealth Standards & Services and thank you Rob for being here.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**

Thank you David.

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

Yes please.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**

Thanks. So, again, I would like to thank the HIT Policy Committee for this invitation to discuss, and I'd like to keep my comments relatively brief and I thank, goodness, my colleagues from CMS are here and I certainly wanted to say that our program is a large program. It is a roughly \$30 billion dollar program over multiple years and hence you have 3 of our folks, and some of our colleagues who are ready to talk with you and have a dialogue regarding this program, but heretofore, let's focus on, my comments are really largely on the data that we've seen as of September 30, 2011 and we will be focusing largely on what we see in terms of registration, attestation, and payment.

So I'd like to, again, focus right onto the PowerPoint presentation. You do have our written comments or rather our written testimony and I won't go through that, it's there for reading, and I think this presentation will touch on those, and then we can certainly have a dialogue. So, I'd like to go to next slide and great. So as you can see, in the month of September alone we had roughly 17,000 eligible professionals and 23 hospitals register for the Medicare EHR Medicare Incentive Program, that represents an increase of 70% over the last month, and in August we saw a 40% increase over July. So, I think it's heartening to see that kind of increase. Again, as a caveat most of my comments, it's still too early to tell what we can glean from that, but again, it's heartening to see that and we hope that it's a continued trend.

There are approximately 2400 hospitals, total, registered for the programs, which represent about half of the potentially eligible hospitals and critical access hospitals that can participate. And we now have, as you can see, roughly 88,000, a little over, registered for the Medicare Program, and for the first time last month we surpassed 100,000 providers registered for the EHR incentive programs for a total of 114 registered providers. So, in terms of the incentive payments as of, again, September 2011 and Meaningful Use, CMS has made about 25 million in incentive payments to over 1400 eligible professionals in September. And that's, again, an increase of 36% over the number of EPs who received payments in August. So we're continuing to see an increase in the number of providers over time who are actually coming to attest. Again, these would be the numbers in terms of registration versus payment.

In August we paid twice as many EPs as we paid in July. We made over 61 million incentive payments to 30 duly eligible hospitals, hospitals that can participate both in Medicare and Medicaid Programs. So, for the month of September we paid almost 90 million in incentive payments and over 357 million in the Medicare incentive payments since our first payment in May and I won't steal the thunder of my Medicaid colleagues, but we are looking at now almost \$1 billion dollars in total for both programs.

In terms of the next slide, I just wanted to touch very briefly in terms of the eligible professionals by specialty. I think many of you have seen this before and it's not very much different from last month, the percentage stayed about the same with internal medicine and family practice as being the top specialties as expected and the other categories are a catchall for a lot of otherwise smaller specialties like urology and gastroenterology and so that they would be too small to represent, so that is the catchall. And let me just go through a little bit, a few more of the highlights, and perhaps, again, we can have a discussion.

At this point CMS collected data over approximately 4000 providers who have successfully attested and there is little difference between EPs as its indicated here, and again relatively few exclusions, and the payment year ended for hospitals on September 30th, but again, there seems to be, to clarify any confusion, but hospitals have until November 30th to attest for 2011. Oops, pardon me 8000, my apologies. Okay, so at the time of the analysis we see how many folks have attested, again, different from what we see in terms of registration or payment, but again a number to look at, and we again need to see the correlation between all of those numbers, and 302 have attested, all successfully. Again, if you look at between successfully and unsuccessfully, again, we're looking positively here at the one, approximately 8000 successfully attested. And so I'd like to just go through these, and they are in your packets. I'd like to just highlight again the kind of performance that we're looking at, it looks very promising and maybe I will point out a few things, and Rob maybe you want to talk about the patient education research, this is my colleague, Rob Anthony.

#### **Robert Anthony – Centers for Medicare & Medicaid**

Sure, you know, overall we've seen that the performance, just like the last time that we presented this, is relatively high. Again, it's a pretty small audience so it's hard to draw any firm conclusions, plus these are all early adopters so in some ways you would expect the behavior to be particularly high. Because of that though when you look at some of these objectives like patient education resources that 48% number seems to stand out among the other numbers, but it's important to keep in mind that the benchmark for this actually the threshold is 10% so 48% is really kind of blowing that benchmark out of the water. And there are mitigating circumstances with education resources in that every patient may not receive an education resource so you would expect that to be a somewhat lower number, but otherwise we are seeing pretty high performance thresholds all the way across most of these objectives.

#### **Robert Tagalicod – Centers for Medicare & Medicaid Services**

Right and I know that we're out of time, but again, a lot of the performance metrics show that high level of performance and we can address some of the more specific pieces like patient education or the public health pieces, where again, and we're looking at also early attestors, so a little too soon to draw certain conclusions, but again, we're looking at those numbers and they look promising.

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

Thank you Rob.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**

Yes.

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

Let's see, Patrick Conway has joined us. Good morning Patrick.

**Patrick Conway – Centers for Medicare & Medicaid Services – Office of Clinical Standards & Quality**

Good morning.

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

I think you're up next. Patrick Conway is from the Office of, oh you'll tell me, eClinic Standards and Quality.

**Patrick Conway – Centers for Medicare & Medicaid Services – Office of Clinical Standards & Quality**

Office of Clinical Standards & Quality, yeah.

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

Oh good.

**Patrick Conway – Centers for Medicare & Medicaid Services – Office of Clinical Standards & Quality**

I'm, thanks for having me here. I'm Patrick Conway, Chief Medical Officer for CMS and Director of Office of Clinical Standards & Quality. I want to briefly talk about the clinical quality measures. So the reporting of clinical quality measures as a Meaningful Use core measure via attestation began in 2011 for eligible professionals and eligible hospitals. EPs and eligible hospitals can report on any continuous 90 day period within the first year of Stage 1. Currently, EPs must report a total of 6 CQMs, 3 core or up to 3 alternative core and 3 menu measures. This core concept we think is important. Eligible hospitals must report 15 CQMs. The submission period for attesting is not yet complete for either EPs or hospitals, but over 7500 EPs and over 300 hospitals has successfully reported their CQMs.

Some of the challenges we've identified so far include the relative immaturity of EHRs, as well as electronically specified CQMs, identifying CQMs that can be applied across the broad spectrum of specialties and practices, and keeping the measure e-specifications updated, and allocating enough time for vendors to code systems and providers to implement those systems.

From personal experience, I've implemented systems in delivery system and understand the challenges of doing that and successfully collecting and reporting quality measures. We understand that EHRs are completely new to some providers even those providers which previously implemented EHRs in their practices may not have included structured data and reporting capabilities such as those required to successfully submit CQMs. Likewise the measure developmental community is adjusting to electronically specifying measures to include structured data elements that previously weren't necessary with manual chart extraction data collection methods. In essence we're all learning together how to best incorporate EHR technologies in the most efficient and effective manner possible in order to collect useful data that will ultimately help improve care for individuals and the population at large and reduce healthcare costs through improvement.

We know that some specialties had no or few applicable CQMs in our current measure set. We've heard from specialties such as chiropractic, podiatry, and dermatology. We also acknowledge that some practices or providers by their own nature do not have patient populations that apply to all measured denominators. To this end we are working on e-specifying existing measures and developing new ones that apply to the specialties and practices that are underrepresented in our current measures sets. We'll consider the potential for increased burden and implementation challenges for providers and their EHR vendors when we select new measures and develop reporting requirements.

Since the Stage 1 final rule some code sets, including the original measure sets, need updating. Once those updates are made the updated code sets need to be programmed into EHRs and subsequently implemented by providers. We appreciate the amount of time, effort, and coordination this requires for

vendors to code updated specifications, and for providers to implement and update systems. We're working on improving how we incorporate these needs into Stage 2. We're also exploring with ONC and others options for more flexibility and adaptability so code sets and even measures can potentially be updated outside of the regulatory rulemaking cycle.

For Stage 2 CMS is considering measures based on several factors such as, and including, the CQMs readiness for implementation and alignment with the national quality strategy. However, final decisions will be made via the rulemaking process. We extremely value the health IT Policy Committee and Meaningful Use Workgroup's input into this process, especially when this input is provided with specificity. We concur with the measure concepts that were produced by the quality measures workgroup. In fact, we have entered into an interagency agreement with Office of the National Coordinator whereby they're developing the measure concepts into e-specified CQMs some of which we hope will be ready for implementation in Stage 2.

Subject to rulemaking we are also aligning the quality measure reporting among our various reporting and incentive programs such as the inpatient quality reporting system and the physician quality reporting system in the inpatient and outpatient setting respectively. We are working towards aligning CQM data submitted via certified EHRs by EPs and hospitals to apply to all quality reporting programs. A longer-term vision could be hospitals and clinicians reporting through a single aligned mechanism and receiving credit, if you will, for multiple CMS programs. This would lessen provider burden while also supporting our goal of programs, transforming our system to provide high-quality care, better health outcomes, and lower cost through improvement. We will continue to strive with you to align measure sets that drive this improvement to its maximum effect. Thank you for your time.

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

Thank you Dr. Conway. You gave a minute back...excuse me, Julie.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

Thank you. My name is Julie Boughn I'm the Deputy Director for the Center for Medicaid and CHIP Services at CMS. I'm actually really pleased to be here today to address you about the progress that we've made in the Medicaid program together with their colleagues in the states. And what I want to do is share some of the highlights of our experience so far with the program. Just to sort of make sure we set the stage, in Medicaid EHR incentive program the states implement the program voluntarily and they receive 90% administrative matching funds from the Federal Government and oversight from CMS when they do that.

So starting with the numbers, as of today, 33 states including some of the largest in the country, such as California, Florida, Illinois, and Texas have launched their incentive payment programs. Of these 21 are dispersing payments. We don't like to brag about this too much but we've actually paid out more than Medicare in incentive payments. The 21 states have paid \$502.7 million dollars in incentive payments to Medicaid providers. And to make that possible I mentioned the administrative matching funds, over \$417 million dollars has been provided to the states to implement their programs.

On the Medicaid side, and just because this is a Recovery Act Program, Medicaid alone has paid out almost \$1 billion dollars in the incentive payments plus the administrative federal financial participation. We expect all but four states and three US territories to launch by the end of December. This is despite major budgetary obstacles faced by nearly all the states. My written testimony provides some more detail about what has delayed their implementation and what actions we've been doing to try to keep them moving along. I can certainly tell you that we are encouraging them strongly.

Registration numbers for Medicaid have been high, but EPs, eligible professional, cannot register if their state has not implemented the program yet, so our registration numbers that Rob was pointing out to you for Medicaid are only for those 33 states. Payment numbers overall have been lower than we estimated, but some states, including some of the ones that I mentioned before, have actually exceeded their initial payment projections.

CMS has provided a lot of intensive technical assistance to the states around their programs. We've conducted national calls, conferences, provided materials, created communities of practice, added some contractual support, things like that. We even gave them an actual code that was used by our programmers on the Medicare side to implement the attestation modules. Whatever we've been able to do to try to make it easier for the states we've been doing that. Some of the states have told us that just getting that code has helped them, you know, jump start their program, so we're looking at ways we can leverage that in other Medicaid programs as well.

States will begin accepting Meaningful Use attestation for Medicaid, only hospitals, in January 2012 and for Medicaid eligible professionals in April 2012. This is a reminder the Medicaid first year is up adopt, implement and upgrade, it's not Meaningful Use. But in the second year of the provider's participation they have to have Meaningful Use.

A primary struggle for states, and actually for CMS in some ways, has been how to conduct proper oversight, auditing, and evaluation of the program, you know, many of the eligibility criteria, like Meaningful Use objectives rely on data that is not currently collected or readily accessible. So a key focus for CMS for Stage 2 Meaningful Use as a lesson learned, both at the state and the federal level, is to craft the objectives in a manner that's verifiable. So specificity plus verifiable is going to be a big issue for us. This is critical so that we know not just that we did not make improper payments but also to note providers actually have adopted Meaningful Use EHRs so that we can measure the impact on quality and cost of care.

Finally, Medicaid program last until 2021. So we were taking the long view with the program. States are not only engaged in implementing this program, but also they're doing their Medicaid eligibility expansion under the Affordable Care Act, ICD-10 is being implemented, many of them are doing major redesigns and upgrades to their Medicaid management information systems, insurance exchanges, etcetera. So to be effective and to best enable their success, we have tried to help shape those efforts collectively. We're focusing on reuse leveraging things that are already there and working with each state almost individually to help them along with all of that.

The states have done a great job, large states, small states, rural states, urban areas; because we all agree that Meaningful Use of EHRs is key to our shared goal of improved individual health, improved population health, and lower healthcare costs through improvement. Thank you very much for the opportunity to address you today. I'm available, as is my staff, the experts sitting right here, if you have questions.

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

Thank you very much. I think Dr. Kelley is next.

**David Kelley, MD – Pennsylvania State Medicaid Representative**

Good morning, thank you for the opportunity to provide testimony regarding Meaningful Use and the impact on Pennsylvania Medicaid. Like other states that have launched their electronic health record initiatives, Pennsylvania has already dispersed payments to eligible providers primarily for the adoption of certified electronic health records and not yet for meaningfully using the technology. To date, we have close to 900 eligible providers and we have been up and running now for almost exactly four months. We have 900 eligible providers and over 30 eligible hospitals have received payments totaling \$41 million dollars. And again, we'd like to thank our colleagues at CMS for working with us very closely. We actually are part of a, I believe 13 state multistate initiative, where we've developed an electronic mechanism to actually have providers come in and apply for the program, and that also includes a lot of up front audits and controls of the data that we're receiving from providers.

Again, the incentives to providers who care for high-volume medical assistance consumers provide a strong foundation for the eventual Meaningful Use of electronic health records. The phased approach to implementation of Meaningful Use will enable our Medicaid providers to render higher quality care while reducing unnecessary services. The department recognizes the need to measure and report quality while helping providers implement what I will call rapid time quality improvement through the reporting functions

of electronic health records. This incentive program, even though there is an IT component, in our minds it's all about quality improvement and enabling our consumers to get the best health care that they can possibly get.

The department would like Meaningful Use to focus on the following, CHIPRA pediatric core measure sets, the Medicaid proposed adult quality measure set, quality measures for obstetrical care, behavioral health measures, and consumer transition of care. I'd like to remind my colleagues that CMS has two "M's" in it in my mind, that Medicaid is essential. I believe we're close to, membership-wise, we're very close to Medicare or maybe a little bit more it depends on the statistics you look at, but we have to remember that our populations are very different. We deal with a lot of children and a lot of children and a lot of pregnant women and to ignore the quality measures associated with that I think we would be missing our point and our mission in Medicaid.

In 2010, the department actually received a CHIPRA grant to the tune of \$9.7 million. We're working collaboratively with our high-volume, high-quality pediatrics providers, large health systems in one of our grant categories to actually extract all of the pediatric core measures and reports on those measures. We're using Geisinger Health Systems and Children's Hospital of Philadelphia to initiate that. So far we have, I believe, 8 baseline measures where we actually are measuring the baseline, and again, we are actually extracting from the electronic health records of the systems and reporting, and our goal is to be able to do that with our other partners as part of this grant. Part of that process involves developing common flat file layouts and one of my hopes is that CMS and ONC consider standardizing the extraction and reporting of quality measures so that providers and vendors have a common flat file layout or a common way of extracting and reporting quality. We also want folks to stay focused on rapid time quality improvement. That means that providers in the clinical setting really need to have the ability to timely extract data and act upon that to improve the quality of care.

Another point that I'd like to make is that the HIT incentive initiative does not stand alone. It is just one part of what Medicaid is faced with and you heard about ICD-10 and upgrading our IT systems. However, you know, we like other Medicaid states have electronic prescribing programs going on. We are working with our Department of Health to look at our statewide immunization registry and electronic lab reporting. We also have a case performance program with our MCOs, and again, I would like those 14 measures that are part of that program to be included in future consideration for Meaningful Use, several of them already are part of Meaningful Use quality measures.

We also have a medical home project that we are working on and integral to the medical home or health home, whichever term you want to use, health information technology is central, it's vital to that, and again, we view this HIT program as enabling our providers to further develop along the continuum of becoming an excellent medical home. We also have obesity and weight management as well as smoking cessation programs, and again, using electronic health records and extracting that data allows us to actually assess how good those programs are.

In Pennsylvania we pay for 50,000 births each year, and again, I'm just going to reemphasize my point, that Meaningful Use really does need to focus on obstetrical care, and I think if you look at the pediatric core measure sets, as well as some of the proposed adult measure sets, there are several OB measures that are already sitting in there. And from a behavioral health standpoint, within Medicaid, we cover a very large number of individuals with serious mental illness, drug and alcohol addiction, and I think that we need to pay attention to those individuals, we need to improve the quality of care for those individuals, and again, there needs to be quality measures that help us to do that, and again, in some of the adult, proposed adult measures there are behavioral health measures that address some of those issues. And lastly, transition of care, we have several initiatives going on within Medicaid where we are trying to get our consumers out of the hospital back home to where they belong, but we need to do that safely, and again, focusing on things like the continuity of care record and continuity of care documents that allow for good transition of care to improve the quality of care and reduce the unnecessary cost of readmissions.

Again the department believes that continued alignment between our quality initiatives and Meaningful Use requirements is necessary to encourage provider participation and to reduce potential confusion and

redundancy between similar initiatives. Thank you again for this opportunity to address these important questions and we look forward to being an active partner in facilitating the Meaningful Use of electronic health records. Thank you very much.

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

Thank you Dr. Kelley. And finally, Dr. Kennedy, our colleague from the Policy Committee. Thank you for being here.

**Charles Kennedy, MD – CEO of Accountable Care Solutions - Aetna**

Good morning everyone. My name is Charles Kennedy. I am CEO of Accountable Care Solutions for Aetna and in that role I'm responsible for building accountable care organizations across the nation as well as developing other things like patient centered medical homes. Aetna currently has over 50 patient centered medical homes in operation, some are multi-payer, and we do have over 5 ACOs in operation with 1 ACO actually having a commercial product that individual members can actually buy in the open market.

I'm going to talk a little bit about what we're finding in the marketplace and the observations from that. In terms of the CMS model around health-care reform, there's been a fair amount of pushback around the rigidity of it, but one thing that's absolutely having an impact in the market is the minimum 3 year commitment for PCPs to declare to a single ACO and sustain that relationship. That's causing hospitals around the nation to really think about clinical integration strategies and makes them very concerned about their referral base potentially going somewhere else. So what we're finding is hospitals delivery systems are very interested in engaging regarding how an ACO can be built but in a much more flexible way.

Our approach has been to meet the physician community where they are, the delivery system community where they are, offer a wide variety of financial incentive and reimbursement models that allow them to go through more of a path in partnership with us than having to dive into a new way of doing business. This is also causing us to rethink how we do business. This is a slide from Michael Porter I like it talks about health plans creating zero sum competition and what that means is the health plans compete but costs have still gone up, quality has gone down. What ACOs are causing us to do is to rethink that business model and focus much more on collaboration rather than competition, and these types of collaborations are creating very different types of relationships. Relationships where the hospital, who traditionally might try and very aggressively negotiate for high rates, is now saying what information can you share with me health plan to help me figure out how to be more efficient? So we are finding those kinds of perspectives new, different, and quite frankly, exciting.

We are looking at the intersections of ACOs and HIT as an enabler of addressing the supply sensitive care issue. So what we're doing is using a population-based approach to identify an accountable population that physicians in our ACO models will be accountable for, but we're marrying that up with HIT solutions that allow each individual patient as they're being treated to have appropriate levels of clinical decision support applied to their particular care process. We think through this strategy we'll be able to both reduce costs and improve quality and we're finding delivery systems very receptive to health information technology which allows them to meet their ACO obligations and their ACO strategies rather than just health information technology in and of itself.

ACOs really require health information technology to be successful because we look at the business kind of from two perspectives. One is clinical value creation, meaning having the financial incentives, structural innovations, and most importantly health IT to allow high-value care to be delivered, and that includes both applications that are resident in the provider office, but most importantly, the data that is required to be able to analyze quality scores and efficiency scores. However, that, in and of itself, hasn't caused the kind of adoption that I think we would like to see. However, when you marry that up with a health plan and a suite of services that allow that delivery system to take advantage of all of the efficiencies which health information technology creates through very transparent processes, it's their name on their product being sold in their community, all of a sudden the linkage between HIT as an enabler of efficiency and quality, and direct financial reimbursement from an open marketplace becomes

completely transparent, and the dynamics between a health plan and a delivery system all of a sudden now are very well aligned around quality and cost.

The fundamental thing we see is, let me skip this in the interest of time; I'm going to close with just a couple of comments on how we're applying Health IT to the fundamental care delivery process. This slide is meant to represent a patient's course through a health care system starting with primary care, let's say the patient has some cancer symptoms, gets referred to a specialist, has some special investigations ordered, PET scan, MRI, etcetera. Our approach has been not to focus so much on the EMR but to focus on this specific process, the patient's process through the delivery system wherever that may be.

We own a company called Medicity which is the leading health information exchange vendor, which we're using as the connectivity between all of these points in the delivery system. But as we move to the future we're working on three, I think, very important components which will allow health information exchange to get to the next level of performance. The first one is Symantec normalization. So now that we have all of this data through Medicity it is many times documents and not data, and so we're working on data mining strategies that allow us to pull that information out of the free text, put in discrete data sets and use it with care algorithms, data warehousing for quality reporting, as well as applications that support care coordination.

Recommendations, moving forward for Meaningful Use support for health care reform. One of the most powerful lessons we've gotten was the need for flexibility and how different delivery systems will actively engage with HIT strategies, Meaningful Use requirements, but the variability and how they want to engage is significant, and so flexibility and how we create these requirements is important and we believe both the development of clinical ontologies specifically designed to support the care management process, as well as addressing the challenges noted in the PCAST Report regarding Symantec interoperability, are absolutely fundamental to making this new way of doing business successful.

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

All right Charles thank you very much. Well thank you all for coming and giving us that overview. There is a lot of depth here. I think I will start taking questions from our committee members and let me ask an opening one. You all touched on one way another on quality measures and one of the things I guess I'd ask you to do, you represent in today's program the payer community in large part, both public and private, and obviously quality measurement has largely been shaped and driven by the payer requirements for accountability and transparency and to stimulate improvement in the areas that are targeted by the measures that are visible to the payer. You have this opportunity to give us some advice, what would you like us to do in the next 3 years or so as we develop the next stages of Meaningful Use quality measure reporting requirements that is supportive of what you're trying to do as payers in your quality measurement programs?

What have you learned from the last year or so of experience and what would it tell us about what we can be doing to be helpful to support your objectives as payers going forward in quality measurement in particular? I'm thinking of that partly on Charles last comment about ACO enablement. I think that raised an interesting notion that whether ACOs are here to stay or are going to be powerful forces or not, from what I'm hearing, Charles, from your point of view, is that it would be helpful if Meaningful Use had a sort of portfolio of measures which stimulated that kind of development in the marketplace. I'm wondering if there are analogous thoughts by others of you in focusing on payment models. I'll start with Patrick.

#### **Patrick Conway – Centers for Medicare & Medicaid Services – Office of Clinical Standards & Quality**

I'll be interested in others' thoughts, but I'll give some brief opening thoughts. So one, I think helping us think through focusing on the highest priority measures for improving health, so I think the ACO model was mentioned. Obviously, we're in rulemaking so we can't go into specifics, but I think thinking about core sets of measures for ACOs that drive the health outcomes we need, and I think as a general rule the more often we can think about having those be, if not one to one, as close to one to one as other programs. So, if, you know, currently much of our measurement as you know is claims based, we have said publicly we want to move to electronic collection of quality measures. I think you can be incredibly

helpful on charting out that path of moving from claims-based measures to electronically specified measures, that's point one.

Point two, and this is both from my experience from actually implementing EHRs division by division in delivery systems, and just the timeline of the federal government, we can almost never go wrong by being more specific and being quicker than we think we need to be. So I think as we think about our rulemaking that applies, I also think on the delivery system side, you know, we often roll these out over years, now hopefully we can get faster than that, I'd like to think we can decrease that cycle time. But I think it is an incredibly complex environment so I think we need to think about being very specific in our recommendations and think about how we get people on a path and then scale them up.

I'll give you a tangible example. If I were on the delivery system right now, I actually would not be worried about the clinical quality measures. I'd be worried about some of the structural recommendations. So if you think about structural measures right now as people are thinking about Stage 2 of Meaningful Use, I think some of the structured elements are actually very difficult to achieve across an entire delivery system. So I think you want to think hard about what do you actually need people to do and to get people on that path, and then over time people can go above that bar, but I would think very carefully both on the quality measure side, and on the structural measure side to not set a bar that is so high that eligible professionals don't go for that bar. I said I'd be brief, I apologize.

The last thing I will say and I interact a lot with small practice primary care docs including in my own family, I think we underestimate the difficulty in a 1 to 4 doc practice, which is still a significant proportion of America, of you know, it needs to be reasonable, simple, and achievable to get them on that path, and if you don't, you get what, and I won't name this family member, but recently said to me of, you know, just ding me my x-percent because I cannot figure this out, and I'm just going to keep taking care patients. And so I think we often overestimate the ability of small practices and so I think we need to set it up in a way that they can achieve success.

#### **M**

I guess what I would add is when you make the, again I'm going to offer an ACO perspective, when you make the transition to accountability for a population of patients, I think that it would be helpful to have tight harmonization between the quality measures and the algorithms as they are being used at the point of care, you know, that link between here's how are going to judge you around quality for a defined population and here are the tools that help you meet those quality measures as you are practicing, I think is very important.

The second thing is we're still limited by data. We still find, you know, much of the clinical data is still free text or in a form that's not mineable. So, you know, my comments previously about being able to parse some of the free text I think is important and anything that the Policy Committee can do to encourage those kind of capabilities I think would be important.

And then finally, we are finding a fair number of delivery systems coming at, you know, accountable care, health care reform, by trying to solve the regulatory challenges first. So there's some FTC regulatory requirements and I think there is a fair amount of confusion around do you really have to have 250 quality measures in order to satisfy the FTC regulatory requirements. I don't know how many vendors there are who can meet that requirement. So working with the FTC around regulatory clarity I think would be also helpful.

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

Any other comments on the quality measure question? Dr. Kelley.

#### **David Kelley, MD – Pennsylvania State Medicaid Representative**

Again, I would stress the need to stay focused on the key aspects of the population that we serve and again looking at chronic disease, obstetrical care, mental health I did not mention dental care, especially for kids, and again I think we need to stay focused on, you know, the common denominators. When you really look at, you know, NCQA, their ACO criteria, Medicare's ACO criteria, the medical home criteria for

NCQA, there's a lot of very common elements. The CHIPRA measures, CHIPRA core measures, the proposed Medicaid adult measures, they are a lot of common denominators, and I would encourage that we look at what are those common quality measures. Many of them have been around for a long time and they are measurable, they're not perfect. But I would focus on those common denominators that affect the large portion of our population.

And again, I'll go back to reiterating the fact that this is not, in my mind this is not an IT project, this is about quality improvement, and I'll tell you what gets providers attention is when you talk about quality, you know, they're like well I don't understand all the formulas and the money that we get, that's great you're giving us money, but help me improve the quality of care, that's what gets doctors and other providers attention, help me improve the quality of care.

**M**

Thank you. I wanted to acknowledge both of you. I think we've heard you loud and clear and particularly through this committee and I think one of the words that we've been using in some of these committee meetings is alignment and in meeting with also industry, and I think that it is taking a look at the several programs that we are looking at, ACOs, patient centered medical homes, bundled payments, so forth, that is all about data but that's not the end. And so we recognize that HIT data is a means to that end and it is about coordination of care, it is getting the best care possible, and so I think we hear that.

I think from here on, I think we're going to be I think Dr. Berwick, Don Berwick, had said to all of us, sure there is the regulatory process in which we are listening and hearing, but there are other processes and I will make sure that ODC will keep me honest, but we certainly want to hear that ongoing. Because there a lot of things happening all at the same time. We recognize the burden and we recognize also the ambition that we want to achieve. So again, I have several doctors also in my family and I've heard the same thing. Well just ding me and I'll come back on a Friday or every other Friday and I will pay you whatever you want a terms of a penalty, and so we don't want to get there, we want to have Meaningful Use and getting the best care possible, so I think we hear that and I think that needs to be an ongoing conversation with folks around the table.

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

Thank you. I think we will start going around the committee and maybe we'll start with Judy.

#### **Judy Murphy – Aurora Health Care – Vice President Applications**

Yeah. Thank you Judy Murphy. So this last question actually picks up a bit on my theme, and there's been conversation about harmonizing the quality measures that we're expected to report from all the different programs and being a provider myself that is a burden as you just pointed out. Could I hear more specifics about going forward, how that harmonization of those programs are going to be, and then if we could have some more maybe specificity related to are we actually looking at common formats as well which was Dr. Kelley's comment?

**M**

So, yes we are looking at common formats. I'll let others take that in more detail and then let me give you an, and let me stress this would an example of alignment, so Mike...can tell me if I go astray. So on the hospital side and then I'll do outpatient. I mean you can imagine at some future time we have an inpatient quality reporting program, by the way, over 98% of hospitals participate, we've said we want to go to electronic collection of measures, you know, over time, and then we can debate when that year is, one could imagine that on the inpatient side it is literally the same set of measures. So I'm participating in inpatient quality reporting program, those same measures are Meaningful Use and when I mean same measures I mean same numerator, denominator, populations, you know, same measures. Those same measures are for hospital value based purchasing, some smaller subset potentially, but same measures. So I literally report in to CMS as a payer and then we can talk about the private sector if you want, but CMS is a payer, I report in, you know, I get my inpatient quality reporting credit. You use this reporting mechanism from my hospital based value purchasing and I get my Meaningful Use credit because I'm reporting them from a certified electronic health record. So, I think that would be a vision of alignment on the inpatient side.

On the outpatient side or the ACO world, if you will, maybe I should do ACO, that's probably a better example. I think in a similar vein, if we say there's a set of measures, some of them in the near-term honesty will still be claims based, but I think over time thinking about, you know, what are set of ACO measures that are electronically specified that would, you know, get you your credit for physician quality reporting system, for your ACO if you're a participant of an ACO, and so instead of doing what, I mean I was in charge of external reporting in Cincinnati, believe me, I know how it works now is, you know, everybody wants their set of whatever and so you do it, because that was my job.

I think, you know, in a better world would be I send CMS my information and CMS works to figure out parsing what we need for different programs, and I think over time, working with the private sector in ways that we can, without breaking any rules, thinking about how, you know, we also align with the private sector, and I think processes like the MAPP process through NQS and processes like these that have multi-stakeholders are a great way to think about that government and private payer alignment if that helps.

#### **Judy Murphy – Aurora Health Care – Vice President Applications**

Oh that helps a lot, I feel like applauding.

#### **M**

And I think there's also administrative alignment so that the devil will be in the details, but where you get information or you submit information, and at the end of the day you say you participated in one program or another, and at the end there is a plus or minus and that's what it is, and we're taking a look at the PCAST recommendations of December 2010 regarding Medidata and Cloud Computing and all those and so will that be a future in which data can be picked out, but not again so burdensome to providers in order to do that kind of reporting, but also easy on our side in order to take out the data in a way that both aligned through several programs, as well as easy and not so much as a burden. But there's a way to get there and I think we're also looking at engaging with you folks in terms of not just the HIT piece, but the health information exchange piece, and I don't mean just the organization, but also with the verb, what are the processes that make sense for all of us concerned.

#### **M**

The only thing I would add is, you know, you find these toolsets out in the marketplace that claim to be able to report many of the quality measures but when you dig into them so many of them still require you to manually abstract the information then enter it into the tool and then submit it. I would argue that's not an electronic process. So, I think, I think, you know, we really need to be conscientious of when we create these quality measures digging deep enough through to really understand are we really talking about an electronic process or is it really just, you know, kind of an electronic facade over what is still a very ugly manual and time-consuming process.

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

A lot of nodding for that. Julie do you have a comment?

#### **Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

I just wanted to say that another aspect of this alignment is not just that the measures and the data around them be aligned, but also to whom and how you report it needs to be aligned because yes there's CMS and yes there's a private sector, but there's also states engaged here in this as well, and so there's lots of potential avenues there and we want to look at that. And then another aspect of this that is critically important, we had a conversation inside CMS about this just yesterday, is are the measures patient level or population level? Right, and that's going to be sort of a big issue that we have to grapple with going forward.

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

Thanks. Eva?

#### **Eva Powell – National Partnership for Women & Families**

I actually have a couple of questions. One is it's clear that momentum is building and that's a great thing. One thing that concerns me though is that the care coordination areas of Meaningful Use are by far the most deferred areas and yet, that is the area, or one of the areas that's of most meaning to patients and consumers and it's the most closely linked cost reduction, and so it's clear that has to change. My question is what are you learning about why that is? I don't think that's a surprise, and I can certainly conjure up reasons why, but what specifically are we learning about why those things are being deferred and again, specifically what can this committee do to ensure that those numbers drop significantly? And then, so that's my first question.

My second question relates to something Dr. Kelley said and I love that you talk about this not only as a quality improvement project as opposed to, or quality improvement effort, as opposed to a technology effort, but I also loved what you said about that this really is very much a part of an overall reform particularly on the local, state and local level, and so my question that is related to the care coordination, is what can we do as a committee to support Meaningful Use as a part that's integrated into other local areas? And I suspect the answer to that may be part of the answer is to how do we address these abysmal care coordination numbers?

**Robert Anthony – Centers for Medicare & Medicaid**

Again, looking at this sort of early data pool, and this is the early attestors, one of the things that we're doing because we know that we can't really draw a direct conclusion from this specific group, is we've also been doing some surveying of participants and asking them sort of what are the hurdles to meeting this, and part of it is, we've discovered, and a lot of this is sort of anecdotal at this point in time, part of it may be simply finding somebody to exchange with in the way that they need to exchange, so some of this may be reaching a critical mass of having technology available. So as more people come online, more people will be able to do the type of exchanging that they need to do. The other thing, anecdotally, that we've heard is it's a workflow change for a lot of practices. Not necessarily exchanging of certain information, but exchanging of all of the information in this particular way, so bringing that online is a little bit more of a hurdle for them as well. But again, as we look at these early numbers and we're seeing some of that deferral, you know, we look particularly at an area like exchanging information, so electronic copy of a health information to patients or electronic copy of discharge instructions to patients, which again getting that information to patients that they can either take that to another care coordinator or so that they can have that for their own personal use, one of the things that we're sort of looking there is you have a lot of people looking at an exclusion because they're not being asked for that information. And again, I think as we approach more of a critical mass of that technology and a wider knowledge of the program in general we're going to find more patients who are aware of those things and who are asking for that information as well.

So some of this, I think numbers-wise what we're seeing really is the earliest of the early people out of the gate and they're not quite set up with the network that they need to be able to achieve at the highest level they want to.

**Eva Powell – National Partnership for Women & Families**

Can I ask just a quick clarification? So, and understandably this is a workflow issue because it's not just changing a workflow it's creating a new one where one didn't exist before in a lot of cases. But if I heard you right, then the expectation should be that this will come along as result of critical mass, but also if there's a way to provide space for providers to make these workflow changes, but with the clear expectation that those workflow changes will be made, that that might be something for us to explore.

The other thing I heard you say and I wanted to be sure that I heard you correctly, is that the requirement that the patient ask for this is a barrier, that because patients don't know that this is going on, and patients why would they ever ask for this, this is not ever the way our healthcare system has worked in the past. So if I'm understanding you correctly that that requirement has been a barrier and so that one way to remove that barrier is to require that it be provided as opposed to be asked for.

**Robert Anthony – Centers for Medicare & Medicaid**

It could be based on the numbers and where we are. I'm not sure that we can leap to that conclusion because I don't know if we're at a point where people aren't asking for it because they don't know it's available or people aren't asking for because they're not accustomed. So once the floodgates open will more people ask for that because they know they can get an electronic copy of their health information? I don't think we have a definitive answer and I don't think we can base it on the numbers that we have now. What we know, I think, now looking at it is that we have a small number of people who have kind of come online relative to the larger available population and how many of them being the earliest people who are online have patients standing in line asking for that information.

**Eva Powell – National Partnership for Women & Families**

Right. Right. So the requirement to ask though is clearly something that you're seeing as an issue to explore?

**Robert Anthony – Centers for Medicare & Medicaid**

Potentially, it could be. I don't know that that's the case yet. I think that, you know, if we get more people like I say online as it becomes more widely understood, is that a barrier anymore? I don't think we know that yet. Until we see some of the other providers coming online and we really understand overall physician behavior rather than the early attestors I don't think we're going to have a definite answer to the question.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

I would just add if you took this sample and lined it up against the total possible pool you would have nothing approaching significant statistical significance for any conclusion that you could draw. We have no Medicaid here so some of the patients with the highest morbidity levels, there is no Medicaid providers attesting to this. So to really understand any of these measures yet we need more time. This is only 4 months, as Rob mentioned, it's the early adopters, it's self-selected, it's not geographically well dispersed, and there's no Medicaid. So, I just want to caution everyone, you know, and if we were to put it through a statistical lens we wouldn't have anything that we could draw any definitive conclusions about, never mind what people's rationales were in terms of what they deferred and what they move forward with.

**Eva Powell – National Partnership for Women & Families**

All right. Thanks.

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

Your second question?

**Eva Powell – National Partnership for Women & Families**

The second question was about how do we as a committee work, help local, state and local providers implementers do this in a way that's integrated, such that it isn't just Health IT but that this is something that's actually necessary to achieve local goals?

**David Kelley, MD – Pennsylvania State Medicaid Representative**

I think the current programs that are in place, the incentives to our providers are great. The other component of that, that we're very focused on with our partners is the whole health information exchange idea and, you know, trying to, in Pennsylvania, you know, one of our challenges is we don't have, we have several start up regional health information exchanges with the exception of Geisinger Health Systems Exchange. We need to be able to connect those dots using direct and actually I think our strategy is going to be using those simpler technologies early on to really push the exchange again of CCDs, CCRs, being able to engage our consumers, and again, one point I do you want to make, when we talk to Geisinger Health Systems, and I don't know if any of them are here, but they've had a patient portal for, I don't know, several years, and one of the questions we asked was well do Medicaid consumers actually go on and use that, and resoundingly we were amazed, like I don't know the exact percentage, I can say the majority, the majority of our consumers, Medicaid consumers, were actually using Geisinger's electronic portal to either schedule appointments, look at health information, visit another one of our CHIPRA grant partners and they had just brought up an electronic messaging system, and they were asking their Medicaid patient's parents for their e-mails. And they said 85%, again these

are Medicaid parents, 85% of them had e-mails and were willing to accept messaging. So, again, from a Medicaid standpoint, that's a powerful message.

Our consumers are somehow linked in and to leave them out of this part of the equation I think is a mistake. And our strategy is to really empower them and we will look at incentives to get our consumers even more engaged in electronic use of their own healthcare information so they can understand, you know, their disease or their child's needs. So, again, I think it's very, very important that we keep our eye on again quality improvement, but I think it's from our standpoint we have to take the incentive program and we have to link the HIE component, health information exchange component, and it is a challenge for our providers, so please don't mandate that they have to give patients, you know, their health care information. I would rather, programmatically; I would rather develop some type of incentive program so my consumers would want that information. Providers feel stressed out and burdened with a lot of the programs that are happening and I think to put another mandate on their shoulders I think would not really serve our purpose well.

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

Thanks. Briefly, Charles.

**Charles Kennedy, MD – CEO of Accountable Care Solutions - Aetna**

You know we own Medicity, which is a leading health information exchange vendor and I would say early on the business was all in the area of state-level HIEs, now what we're seeing is most of the movement in hospital sponsored HIEs or medical group IPA sponsored HIEs because they're interested in clinical integration strategies in part to address your care coordination question, I think if we can take advantage of that trend as a committee and look at the hospital as an anchor point, someone in the community with the capital, the interest to form health information exchanges, and perhaps take advantage of that trend that might offer some paths forward.

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

Thanks. Marc?

**Marc Overhage – Siemens Healthcare**

...up first but.

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

Well I was going in a circle, I was.

**Marc Overhage – Siemens Healthcare**

Okay...Obviously a lot of things that might be interesting to ask about so I'll start with two and come back if we have time. The first is there was some discussion I'd like to put together and hear your comments about, about one of the challenges in the quality measures of having the right structured data to support the quality measures, and I think that's particularly true in the inpatient side where the measures are perhaps more evolved and involve some fairly sophisticated timing and other things that are sort of further down the road than we are with the outpatient measures. And then we had some discussion about the burden on providers and Charles, I loved your phrase about electronic façade, which I wrote down and I will use with attribution whenever I remember. But, you know, we ask providers then to enter this information; we heard some commentary about providers going, ah this maybe too much, too hard, too fast.

And so I'd be curious in the perspectives from the panel about how we balance the burden of capturing this data, some of which you would hope would be electronically captured because it's generated in the laboratory system, you shouldn't have to reenter it, and that's a process issue that we ought to be able to solve. There's another set of things though that when I have a dialogue with a patient and they tell me about a family history issue or maybe a social issue that impacts the quality measure, how much of that do we want to ask these very expensive, experienced people to spend time and energy recording these data in a structured way that can be used for the quality measure, you know, one part of me says "great want to do that" or my wife who is a practicing pediatrician says "no don't do that to me" versus the sort of

how detailed do you make the quality measure, one way out of that is make the quality measure less sort of detailed and granular and take out some of the exclusions and so on and instead of saying you've got to be 97%, say look 92% maybe great because we've taken out all these sort of exclusions and things. And in particular, looking at, we've heard another committee testimony from the NHS in Great Britain, for example, about how they, actually I think have a group that adjudicates the question of if we're going to ask a primary care physician to record another bit of structured data, that's a national level decision to decide whether that's appropriate or not. So, long-winded question. Then I have another one, David.

## **M**

Good question. I'm not sure, a couple of comments. So first, debating which part to take first. I mean on the core data I do think this issue, I also hadn't heard the term electronic façade, but I think it's an important one, and I think it's one we need to think about. I think on this core data element issue, I mean some of this, I think there's two possible approaches honestly and you sort of laid them out. So one is, and you may want to do both, I don't think they're mutually exclusive, so one is as you think about quality measures I think you want to think about being parsimonious in the selection and parsimonious in the data elements necessary to contribute, and you want to think about what data elements are currently electronically captured, you know, and obviously systems differ, but, you know, often, currently electronic captured and therefore you're not creating an entire new workflow. One related story on that, so another part of my job in the health system was we were tracking measures for 100 conditions. We let the providers actually pick, it was pretty interesting, and the providers wanted to actually track a ton more, we encouraged them not to, but they wanted to, we let them. Then they learned very soon that "holy cow that's a ton of data elements" so they narrowed down to a much smaller set. I actually think there's a lesson here for our broader thinking about quality measures that in fact focusing on a smaller set with data elements that are more easily capturable out of the workflow makes sense.

I think your other question is a good one. So, and we've had this discussion internally. Sometimes do we allow a measure to be imperfect meaning the exclusion criteria etcetera are imperfect because it's much simpler to collect and we can still drive improvement. So if you track that measure over time, to use your example, even though you're at 82 and you know you'll never get to 100 because there are some exclusions you're not capturing, you allow that and I think what is, as opposed to a private payer, we often have statutory limitations on what we and cannot do, I think the programs that allow us to do that the best our ones where we allowed statutorily to reward improvement. So I like to go back to principles. As another principle, I think as a general rule, like hospital value based purchasing and I think we should think about how we do this in the Meaningful Use framework, maybe some smart people can give us ideas. I think it is a terrific plan to reward either attainment or improvement. Because our risk adjustment is never perfect, it never will be, and so therefore I think your empowering people to reach certain levels of performance or improve over time. And you get around a lot of these issues that I worry about a lot around safety net providers, imperfect risk adjustment, but if your reward improvement you can still reward closing those disparity gaps. I know I took you maybe one step further than you wanted to go but I think those are sort of the issues to consider.

## **Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

I just want add a little bit to that. I mean, I come at this, I am not a healthcare provider, and I've spent my career in information technology and applying technology to create business process improvements and when I look at this whole effort here, that's really what this is about, is that we improvements in the overall process of providing health care right? And so time and time again, you know, we're doing that work of applying technology to try to create improvements, you can get stymied by trying to create perfect data, right, and being able to exactly measure things. And invariably you get what you measure. And so, you know, we could easily create a set of measures where a matrix, where we're getting, you know, 100% attainment, but we haven't actually achieved our objective. And so, I mean, it's sort of going to pile onto something that Patrick said, is that when you focus on the things that you really want, and you create things that are reasonably easy to get them, you can actually achieve some pretty substantial improvements, and I think that that's where we have to focus less on the perfect measures and perfect structured data and more on what are we really trying to get here.

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

I'll ask everyone to be brief; we have about 15 minutes left on this round and several more questions. Marc did you have one more short one.

**Marc Overhage – Siemens Healthcare**

Yeah, mine is, the second one is much briefer, which is we heard some data about attestation and so on. I'd be interested to hear any thoughts about how that's matching up with expectations, the high and low models, the GAO or others created, and perhaps also a word about when we might see, in the HHS transparency plan, the providers who are receiving payments are to be posted and made available and that happened in March, but I don't think it's happened since.

**Robert Anthony – Centers for Medicare & Medicaid**

Well I can probably answer some of this, especially on sort of the transparency issue. We had planned to I think post on an annual basis the number of providers who had received Medicare, there is a requirement for the posting of Medicare providers, eligible professionals, and eligible hospitals. There's not a similar requirement on the Medicaid site. But we have had the feedback from a number of providers that they'd like to see that data on more regular basis. So I think the thinking now is that we'll probably post that on a quarterly basis. We're currently going through the Meaningful Use attestation data and trying to get it into a publicly digestible format that we think we can deliver regularly and reliably. A lot of this is about data integrity and making sure that everything matches up in the way that it needs to match up. So that is sort of in the process. I would love to be able to give you a firm date on it, I would say sooner than later. But I don't have a, necessarily a timeline to deliver for it, but that is definitely sort of a driving force. There are entire committees within CMS and working with ONC where we are driving towards getting those figures out to folks.

**M**

In terms of attestation and registration, and payment I think, again the universe is a little bit too small in order to draw some conclusions. But as those conclusions, but what we can say, is that we're looking at how they're related. We're looking at, for example, as people begin to register, are they and through these surveys, are they deciding to wait in order to actually begin to attest, and therefore get paid. I think we can't draw those conclusions, but we're looking at those. I think the other thing is we're working with ONC to look at those numbers and whether it tells us something in terms of, for example, education, more education is better, than I think that's where we would go. But again, I don't want to hamstring ourselves or tie our hands in terms of what that strategy is because it's a little too early to tell. But we're looking at them at the same time.

**Marc Overhage – Siemens Healthcare**

So it's fair to say though that to date the attestation is below even our lowest projections although we've got a little bit of time left in the year.

**M**

That's correct.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

And we started late and...one of the things we underestimated is the number of hospitals that would come into Medicaid and do an AIU payment for 2011 because they're deferring Meaningful Use for 2012. So, when you're talking about attestations again you're asking about the Medicare only, but we would note that we've had a significant number of these duly eligible hospitals, in fact the majority of the duly eligible hospitals that have come in through Medicaid have done AIUs. So, they are eligible for both, but they're deliberately staging that and perhaps we'd underestimated that proportion when we were budgeting or planning for how many duly eligible hospitals would start in 2011.

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

Okay. Michael?

**Michael Barr – American College of Physicians**

Thanks, this is going to seem a little out of order because we were talking about small practices earlier and alignments. I have a statement and a quick question. The statement is I agree with all the comments about alignment, I'd just throw two others there, maintenance certification for physicians and maintenance of licensure, because I think that'll catch more of them and they'll see that value. The question is actually related to the nice data you showed in terms of number of specialties, presenting different specialties. But one of the questions I have is, are we able to, is CMS able to break down the size of practices, the socioeconomic demographics of the patients, or location of these practices, because we tend to look at large systems and say they're doing this and extrapolate to what the small practices and medium sized practices can or cannot do. I'm wondering if this is part of the data set that you collect as part of the registration, and if so can you line it up and kind of give us data about who is adopting or attesting to Meaningful Use based upon some of the practice demographics or characteristics?

**Robert Anthony – Centers for Medicare & Medicaid**

Actually, we do not have information on practice size. It's all about individual EP and when you register through PECOS, our provider enrollment, it's essentially where you put all of your information to get paid from Medicare, there's not a practice designation or a size of practice or anything like that. So, we don't necessarily have that data from our attestation and registration data, which is why we try to compliment what we do with some of these waive field surveys where we can really reach out to folks who have gone through the registration and attestation process and try to establish what their background is, whether they are a small, under 5 physician, or 5 provider practice, or a larger practice and see across that range what the experience is, what the barriers are, and what the hurdles are.

**Michael Barr – American College of Physicians**

I think it would be important if you could because of multi-specialties, talking about David's issues, about OB/GYN, and multi-specialty practice, etcetera. So, I mean maybe there's a way to capture the data going forward. I'm sorry I interrupted your response.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

I was going to say that on the Medicaid side we do collect that because the states have to collect patients, I'm sorry provider's location of service to verify their patient volume. So they are all collecting, not just their business addresses, which is what we collect for Medicare obviously it's where the check goes, but they collect all of their sites of service, and because they can often calculate patient volume at the group level they need to know exactly how many professionals there are working at that group level. So on the Medicaid side for adopt, implement and upgrade, and eventually for Meaningful Use they'll have that ability to produce that.

**Michael Barr – American College of Physicians**

When do you expect to have some of those data to share?

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

Well for adopt, implement and upgrade the states have it now. The question is how long have they been in process. Again, you know, what's the validity of one month worth of data, two months worth of data.

**Michael Barr – American College of Physicians**

Well, but to start seeing them because it would be nice to even just look at the trends without looking at conclusions.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

Right. Right. So, they're looking at it on an annual basis.

**Michael Barr – American College of Physicians**

Okay.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

But they're obviously; it's a rolling launch for them. And then once they have the adopt, implement and upgrade, I'm sorry the Meaningful Use going that'll be the same analysis, because they also have to show

that at least 50% of their encounters were at a location with certified EHR technology, and you can't audit that if you don't know where all of their encounters are. So they're absolutely crafting their systems to the point that David made, the multi-state collaborations, we're looking at all their systems and the data elements that they collect and that's in there.

**Michael Barr – American College of Physicians**

That's great. So we need Medicare to compliment the Medicaid data that would be awesome.

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

We're often in the forefront, just saying.

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

George?

**George Hripcsak – Columbia University NYC**

So...

**Robert Anthony – Centers for Medicare & Medicaid**

Trying to tie into with the REC data that we're getting as well. So, I think that's sort of where the Medicare is going to align is we're going to cross index with some of what we're collecting from the REC information which is collecting more of that practice level information.

**M**

We're in this committee but through our Regional Extension Center program we're collecting data on nearly 100,000 providers at this point. Those are, the majority of those are priority primary care providers, so it's obviously not a full sample data. But for those practices we have a huge set of data fields, including practice size, payer mix, all kinds of things. So, what we're doing now is we're beginning to take some of that data that we're collecting, build in some other data on their experience with Meaningful Use and then try to integrate the CMS data, and as we move forward through the fall and into the winter we'll begin to be able to do some of that analysis.

**M**

...data from practices that go directly and do that, compare and contrast and even provide another level of analysis that would be helpful to the committee.

**M**

...

**M**

Thank you for this wonderful panel. I have two questions related to going forward to Stage 3. One, on quality measurement, as we move forward, what is the goal on the HITECH side? Are we trying to, in your opinion create quality measures that are representative sample that prove you can use EHRs for quality measurement and then it's the goal of other programs to be comprehensive? Or are we trying to be comprehensive and of course if we're trying to be comprehensive we obviously have to be aligned. Either way we have to be aligned. But when we say we need to measure in this and that area, one reason is because we want every specialist to be able to participate to prove that their EHRs work, a different reason is because we want every specialist to be participating in quality measurement in a comprehensive way and improve their practice. So which one is our job to do?

**M**

You guys have good questions. So I think, in my opinion, the purpose, I want to take it slightly away from this committee, but I'll come back, our overall purpose should be more the latter. So how do we actually drive improvement in practices? The purpose of this committee I think should probably be the latter, you can tell me. And I think, and I will also say we internally struggle, we struggle with this for PQRS as an example as well, of how do you set up a system that, as close to everyone as possible can participate, which means you have to have measures in ways that, you know, special, the vast array of specialty

societies agree they can participate, but also have, and I think we have work to do here by the way in PQRS as well, core sets of measures that drive, you know, major components of health. So, hopefully this isn't too much of a punt.

For PQRS, and I don't know you may have already done this, we literally have gone, I mean I get really tired of issues, meetings, and like the decision that's due the next day, and so we are currently going through a system of saying we're at 27% now, what's our aim overall and break that down by primary care and specialty, and more importantly, like what are the health outcomes we're actually trying to improve. So we have a set of aims including participation rates that would probably scare you and I won't say publically, I can tell you they completely scared the PQRS team, but I think they're the right rates. And if I were, you know, the primary person responsible for the Meaningful Use program, or the committee advising them, I would breakdown the question in a similar way. What are the rates of participation we need to achieve, we think we need to achieve, I'd break it down by primary care, specialties, etcetera, and then on the quality measures, what are the measures we need in those groups to drive the outcomes we need. So, I think if you don't break the problem down into that level of specificity, I think you actually won't understand the aims you're aiming at and you may miss the overall goal.

**M**

So, very good. So the answer is if we're going to work on it we might as well work on it, and furthermore, but it brings up questions we might not have had to address, anyway sorry. For example, how many measures are too many measures for one person to do? We have to address that here in HITECH and not punt that and say well they can do the 3, you guys worry about whether they can do 100. Okay second question, some have already, in several hearings we've heard argue that the jewel of the HITECH program, and this is not just the patient engagement hearings, so you see where I'm going, is not the functional measures like structured vital signs, and not even the quality measures, because several groups are working that in parallel, but getting data into the hands of patients, because this is the one place where we have that lever, other than of course, you know, consumer demand is pushing that, but other than that, this is probably the one place we're really pushing that. Now, we don't know what the quality effect will be of that nor the efficiency effect, but it is fewer programs working in that regard, but I haven't heard a lot about that part. So what are your opinions of where we should go in Stage 3 on getting data into the hands of patients?

**Julie Boughn – Deputy Director Center for Medicaid & CHIP Services**

Well I totally have an opinion about that, and again because I'm not, probably because I'm not a healthcare provider I'm a consumer of health care, right more so than anything else and I spent a lot of time helping my grandmother get healthcare. And, you know, every time I have to sit down and fill out a clipboard at a doctor's office, right and I'm sitting with her and saying "when did you have that surgery" you know, it drives me nuts. And so, I mean, I think that this is a responsibility, you know, kind of if I talk about that general process improvement, because when we're talking about the application of IT to achieve process improvements in healthcare, there's a whole bunch of players in that, right, there's certainly CMS, and our programs. There's certainly health care providers, writ large in there, but there's also the vendor community that creates the tools right? And so an analogy that I've used is financial services. And, you know, it was the advent of tools like Microsoft Money and Quicken, right? And now of course, online banking that, you know, kind of really gets the consumer engaged more than once a month when I balance my checkbook, right? I can check all the time and make sure my credit card is not getting messed up right? And so, I think that, to the extent that we can encourage the vendor community to create those capabilities again this is going to be a demand-side thing from the consumers because you really can't incentivize providers. You can't say providers you have to give this data to the people that don't want it, but if you create something that I can use that can make my life easier as a health care consumer then I think that we're going to be pushing that. And I think that that's actually a big driver, this is again my opinion, that we're missing.

**M**

I would also agree. I think having come from, sharing with colleagues, having come from health 2.0 in San Francisco and looking at the vendor community and looking at some of the products that were put

out there, and again, there a lot of products out there, but it seems to be the advanced guard of what the future is going to look like in terms of that kind of patient engagement. And I think it's one of the discussions that we're having and so what's the appropriate role of government and the federal government in order to give that kind of information like blue button, and there were vendors there too that said we can take that data, it's machine-readable, and we can make it useful to you in ways that you can use it. And so there is the innovator community, the entrepreneurial community who met there and if that indicates to us what the future is going to look like then we have to be prepared. So, I think we would be remiss not to look at that demand side and how do we prepare whether it's through this committee, through CMS, or other agencies in order to be prepared for that future.

## M

...comment.

### **David Kelley, MD – Pennsylvania State Medicaid Representative**

One of the things I think we need to think about is how do you get patients engaged to actually participate in their health care and one of the things that I think we need to look at and think about, and we're actually doing this with one of our CHIPRA grants is getting consumers to actually fill out data elements, health care questioners, where again it's not the provider filling in garbage, it's actually, you know, standardized questionnaires, again we're looking at developmental delay, autism, maternal depression, teen depression, and suicide risk, consumers are actually coming in, they're doing these questionnaires either, basically in the office, we're developing capability for them to do it at home. So we're getting them engaged so that those results are automatically put into the electronic health record so that when you walk in to, the provider walks into the room, the patient's already answered the questions and the provider knows what to focus on. So, again that's an example of getting patients engaged electronically and capturing important quality data elements, in my mind, especially for the Medicaid program, and again, I think, Judy Hibbard is going to testify or offer testimony around, you know, again patient activation and patient engagement for consumers, and there are ways of measuring that, and for consumers to get engaged in their health care they have to, again, she's developed these scales where you can figure out who is most impactable or what areas they are impactable in. So, those are the types of strategies I think that by employing certain tools that are embedded in the electronic health record, but are also out there on patient portals that can be filled out prior to the visit in a secure fashion that engages, I think the patient population. And again, in our pilot that we're doing in our CHIPRA grant I think 90% of those consumers, these are Medicaid parents bringing their kids into the clinic they like the technology, they do it, and they've accepted it, they like it.

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

I know we've hit our time limit for this session. I but know Paul and Neil still had a question. Do you have a short question, Paul or?

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

I think so. So one, I just want to thank the panel for really a very informative discussion. It's nice to see quality improvement through competition and Medicaid, so that's very enlightening. And we touched on two new areas and the question I have is, one is this whole electronic façade and basically that means cutting back on the exclusion, that's where we get hurt, in terms of you do all this nice work for the primary data element and then you have to forage in the chart anyway, so that may be a direction that from a policy point of view it looks like you're sort of in agreement with that kind of push. And I think that would be a cultural change for the entire quality measurement community, but it looks like we're getting some of that.

The second piece wasn't addressed yet, is we've put through, David Lansky's committee, put through some new areas of "quality measures, functional status, delta measures, patient reported outcomes." They're pretty new. Another cultural change, new data sources. I be interested in your thoughts about that, because again, you've asked that this whole harmonization, which is just like a number one thing and I was really glad to hear Patrick's sort of emphasis on that. We've got to be in sync with you. Somehow we have to get in sync, public, private, and this group of the tools that enable the gathering and reporting on that data. Are we in the right direction in pushing in those new areas?

**M**

Yeah, I mean short comments, I'll start. So I worry a lot about this. I think I actually brought it up in one of our meetings yesterday. I think we've been talking quite some time about the need for more functional status, patient reported outcome measures, efficiency measures, I'll name another gap, I think and the functional status and patient reported outcomes, there's a reality that if we get some of those measures right and then we can think together on how to do that, the sort of litany of process measures around the margins no longer matter and you've got your measure, you know, did the person when they went through this setting was their health related quality of life better, is there functional status improved, done. I don't need to know about all the processes you did. If you achieved that result and the patient agrees we will all be in a better place. So, I think it's a huge gap. I think in the federal government we made some investments there, in my opinion they haven't completely borne fruit yet and I'd love to think how we leverage both policy vehicles to encourage these areas plus the private sector in these areas to think about, you know, how do we get to that next level of measurement that's truly around better population health and better care.

**M**

I worry a little bit about relaxing the inclusion, exclusion criteria too much because then you are reducing the validity of your measure. I think there are strategies associated with clinical ontologies that can enable us to understand the context of the patient for that particular measure that might also create some new paths forward.

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

Thanks. And Neil do you have a short last question?

**Neil Calman – The Institute for Family Health – President and Cofounder**

I guess maybe I'll close with a comment that'll shorten the time. I think there's some things that we sort of under discussed and maybe I'll just put them on the table for future lookout. One of them, which I'm always concerned about, is whether or not, and I know Mike, I've talked to Michael about this before, it's whether or not providers actually know how to improve quality. I mean we have this great assumption that you give people data, you put a few dollars in front of them and woops all of a sudden they become quality improvement experts. And I don't think it works that way. You know, I think for the most part people are doing the best job they know how to do today and that they have the resources to do today, and if we don't give them new resources, and we don't teach them how to do quality improvement we're going to spend an enormous amount of time and years figuring out how to tweak these measures and at the end of the day we're going to look across the country and go wow, you know, we still have the same rates of people out of control, and their hypertension, and diabetes, and we've put billions of dollars into technology and everything, and we'll measure it at a local level and it'll look like it's getting better, but at a national level our national data won't improve.

And the second, so the second part of that that worries me is that quality measurement, the way we're talking about it, only looks at the people who are already engaged in care. And the people that are costing us the money going to our emergency rooms at night, don't have primary care providers, ending up with unnecessary hospitalizations, you know, a lot of those people aren't engaged at all in care, and the more we focus on tweaking these measures of people who are in the commercial plans, in, you know, already well attached to primary care providers, you know, have their regular source of care and all this stuff, the more we focus on that, getting them to measure exactly the people who have been in two or more times in the last 12 months, the more we focus on those the less we focus people on trying to engage care of people in the community, and if we don't figure out a way to introduce population-based sort of measures and figure out how providers in the community have to start taking some responsibility for people who aren't engaged in care, and we don't measure the way that happens, you know, in big healthcare systems that are sitting, you know, in the middle of the Bronx or New York that talk about how they have fantastic integrated delivery systems, but you look at the community data in those places and it's horrible and it doesn't change from year to year.

We've got to, you know, we got to break through on those issues otherwise I think, you know, what we're going to look at as a nation is we've spent a lot of time trying to get everybody to do the same thing, measure the same thing, tweak all these measurements, and 10 years from now we're going to look at the country and see that we haven't really improved the quality of care or reduced cost because that same population of people are going to be out of care, and the providers are going to continue to do the best job that they can, but they're not going to have new resources necessarily or new knowledge to help them actually engage in improvement.

And so for me, I think, that the, you know, the highlight of this is that we should spend less time trying to tweak the measure so that everybody in the country, and I could talk at another time about why I think it's impossible to actually get to definitions of diabetes and heart failure, and angina, and other things that actually will look and measure the same thing exactly across systems, but as we start to tweak that stuff, you know, what we're not giving people an opportunity to do is to learn how to use the data internally, you know, however I measure a diabetic that's great, let me print out a page of who those people are, you know, that are still in need, look at the people who've have been lost to follow-up, figure out ways of, you know, getting some of them back engaged in care. That's where we're going to see the real improvements I think at a population level.

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

Thank you Neil and thank you very much to our panel for spending the time with us this morning.

**M**

Thank you.

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

Paul?

*Applause.*

**Paul Tang – Palo Alto Medical Foundation**

Okay we're going to quickly transition into our second panel, this is probably more seats than we have fitting around the table and George is going to pinch hit for David Bates who is not here today. This is a panel of providers who are in the trenches both doing Meaningful Use but much more importantly trying to transform the practices to deliver better health, better care. Because of a number of folks, I realize that we initially gave instructions about 5 minutes; every second that you save from the 5 minutes is well appreciated so we have more time for discussion. And this panel may go a little bit longer or a little past it's scheduled time and I think what we'll do is, since we have fewer vendors we'll shorten that time, that panel time.

**George Hripcsak – Columbia University NYC**

Okay, good morning and thank you all so much for coming, we'll jump right into it and since I'm pinch hitting I apologize if I mispronounce names since I haven't done my usual homework filling in for David. So let's start with Paul Kleeberg of REACH, Minnesota. Paul.

**Paul Kleeberg, MD – REACH – Minnesota**

Well good afternoon and thank you for the opportunity to participate on this panel. As mentioned my name is Dr. Paul Kleeberg and I'm the Clinical Director of the Regional Extension Assistance Center for HIT serving the states of Minnesota and North Dakota. My written testimony contains the details of topics I mentioned in a statement. The information for this testimony was collected from my Extension Center Staff, the HITRC Meaningful Use Community of Practice, and from the Staff at the Pennsylvania Extension Center.

Minnesota has seen a significant penetration of electronic health records and physician practices, both states have high adoption in large health systems, hospitals, and physician offices. Adoption in small and critical access hospitals has not been as extensive but is growing steadily. Though achieving Meaningful Use has been more difficult than expected for everyone, small hospitals and practices are having the

most difficult time. Criteria that are a challenge. There are two challenges in particular that I'd like to highlight. The first is exchange. This has been a challenge for many hospitals and professionals; many expected that their ONC certified EHR would be able to do this out of the box since they had purchased a complete product. But most require add-ons, expensive interfaces, and manual built to make the interfaces work. This is in sharp contrast to the plug-and-play features built into any personal computer bought today. Now computers are able to find a network, connect to the internet and configure everything the user needs to communicate with others. Health information exchange is not as friendly.

Some vendors only focus on exchange with clients using their product and not with other vendor's products. The capability for true exchange requires an interface which is a costly endeavor for small rural health care facilities. A bidirectional interface can cost a facility upwards to \$10,000 dollars. Often a small hospital ER will require multiple interfaces and for some small independent clinics whose labs are performed at a local hospital providers are being charged to interface with the hospital lab and there's a battle over who will pay. Many smaller hospitals are overwhelmed with requests and do not have the capability to interface.

The second criteria that I would like to highlight is reporting to clinical quality measures. Producing a report is not difficult, what is difficult is assuring that the reports reflect the care that was given. Many products require data entry in places that are different from where it was entered in older versions of the software some require new information to be collected in order to capture exclusions. This requires a change in workflow that in some instances seems contrived. Some require local build it configurations. Vendors in their rush to release certified versions to market had little time to refine their products for ease-of-use. Finally, there is the challenge to find measures that are applicable to one specialty or area of focus due to the limited number of certified measures in many of the complete ambulatory EHRs.

There are two other criteria that I would like to mention, the first is CPOE. It's been a challenge in some of the small hospitals, some have embraced it with physicians entering orders as intended, others use licensed healthcare professionals to get the orders in. In those facilities it's likely to remain a challenge until the paper chart is eliminated. The second criteria I'd like to mention is providing relevant patient information in the clinical summaries. Not all electronic health records format these in a way that makes sense to a patient nor in the language that the patient can understand either because the diagnostic codes are too cryptic or in some areas serving diverse populations it cannot be produced in a language the patient understands.

Looking forward to Stage 3. In order to achieve the goal of care coordination in accountable care organizations it will be necessary for each EHR user to have a robust two-way exchange mechanism. We agree with Dr. Mostashari's decision to push forward the exchange standards. This will lead to standards that cross vendor products and allow for greater granularity of information to be shared. Incorporation of these standards in EHRs would allow for the integration of data across multiple settings for quality measures. We also believe that developing a list of care team members would be useful internally for care coordination, being able to record context and caregivers outside the organizations such as a school nurse, caseworker, or home health nurse would aid in this coordination. Even more important would be the ability to share care plans across multiple sites.

Finally, we believe there needs to be a more formalized process for ensuring that certified products meet the vision of the measures and not just the testing script that is currently used to assess certification. The test needs to be more robust to assure that the product meets the required functionality in an integrated way. We recognize that standards are outside the purview of this workgroup, however, pushing the criteria forward too rapidly can distract from the creation of safer products that facilitate workflow and improve care. I thank you for your time and consideration and I look forward to the questions.

**George Hripcsak – Columbia University NYC**

Thank you for the perfect timing. Okay next we have Denni McColm of Citizens Memorial Health Care, Missouri.

**Denni McColm – CIO Citizens Memorial Health Care - Bolivar, Missouri**

Thank you I'm Denni McColm I'm the CIO for Citizens Memorial Health Care and I'll try to do just as good on the time. Thank you for inviting me to testify today and thank you for your work to promote the adoption and implementation of health information technology, it's important work that you're all doing here. CMH is a rural healthcare net we're located in Southwest Missouri. Our network includes a hospital, home care, hospice, long-term care, and physician practices. Our EHR system includes one longitudinal record for each patient and we have eliminated paper medical records across the continuum. Our organization has been recognized with the HIMSS Davies award as the most wired hospital and as a Stage 7 hospital in the EMR adoption model. So we're fairly advanced in our EHR utilization and even we've had challenges to meet the Meaningful Use requirements. So we recognize from our experience that the journey is difficult and that other rural hospitals in particular who are just beginning that journey still have a lot of work ahead of them. We also appreciate the opportunity to qualify for the Meaningful Use incentives and assuming that the progression through the stages to Meaningful Use 2 and 3 are kept at a pace that allows all hospitals and eligible providers to be successful we believe that the resulting transformation across the nation will be good for patients and for our whole country.

Going forward the challenge is going to be to achieve that potential by evolving through those stages to a model that is simple, clear, and administratively manageable for both providers and for CMS going forward. For our hospital we have already qualified for the Meaningful Use incentives and received payment from both Medicare and Medicaid. We also have 37 providers eligible for the Medicaid incentives. We've had some challenges with the registration through the Missouri program although the MO HealthNet staff have been working very diligently to help us with those.

So, as we were already advanced in our use of the EHR we have found most of the core measures to be relatively easy to accomplish once we got all the clarification, kind of the dust settled on the FAQs, but we have had challenges and those would fall into three buckets. One would be activities that we do every day and have done every day for many years where the Meaningful Use measures seem to just make those activities more difficult, sometimes we weren't even sure how the new requirements added value, some are clear and some are not so clear. Those would include the electronic copy, discharge instructions, the clinical summary, the summary for care transition, public health reporting, patient education, and electronic access. Perhaps there is a misconception that these are areas where hospitals are doing these activities now, we're doing these activities we're just being asked to change how we are doing those and I'd be glad to answer more questions about that in the Q&A.

Second some of the measures are confusing even after extensive clarification and the best example of that is the CPOE requirement for eligible providers which I detailed in my written testimony and I'd be glad to go into further it just doesn't apply to some of our specialties. But most importantly I think is the clinical quality measures, those have posed the greatest challenge and particularly those measures for the hospital for VTE and the stroke measures set, they don't seem like they maybe were ever piloted or tested, we don't know where to go for guidance on the implementation, according to our clinical staff they include errors, they used a model and code sets that are not in common use in the EHR, for example the measures use SNOMED codes for procedures, measure exclusions, and even the status of the problem being active, the active has a code associated to it, the intent of a provider has a, those are things that we definitely had to just manually build within our system and everybody across the nation is building those in a little different way.

In addition the use of that PQRI XML format, we can't quite match that up with how those measures were formulated, like they don't match, and they don't seem to have a measure steward. Without the measure steward we're trying to figure out who is going to do the validation and the field test, give guidance, correct errors, and update those measures as we know evidence will change, medications will change, and someone needs to be in charge of those measures. So, we would encourage you to consider as going forward with those quality measures to require that the measures you do are endorsed, follow a path that includes field testing, validation, and have measure stewards.

We'd also like to echo the vision articulated by the previous panel that in future stake the CQMs are all the same set of measures for CMS, for value based purchasing, for Meaningful Use, for ACOs, including both the measures and the reporting model for those measures. Looking forward to the quality measures

for Stages 2 and 3, they look very valuable on the surface, they're not items that we're commonly collecting in our systems today so we would just encourage that those be tested, validated, and assigned to someone before we are required to use them.

The CQMs we do believe are one of the most important parts of Meaningful Use and the fundamental way that we're going to show our lasting impact of these dollars that our nation is investing in health information technology. So thank you for the opportunity to be part of this testimony today 7-6-5-4-3-2-1.

**George Hripcsak – Columbia University NYC**

Thank you. Thanks Denni. Next we have Thomas Smith NorthShore University Health Systems, Illinois.

**Thomas W. Smith – CIO NorthShore University Health Systems, IL**

Yes, my name is Tom Smith and I'm the CIO of NorthShore University Health Systems. NorthShore is an integrated delivery network in the northern suburbs of Chicago. Thank you again for the opportunity to be here this morning. We've had some success with our EMR, we've been paperless across our hospitals and our employed offices since 2003. We have 800 doctors on our employed group and about 80 independents are active in the system. And we also have a patient portal which is used by about 150,000 patients which I want to talk about later. I'd like to speak about three points, some of them are going to be repeats, but I guess education tells us that repeating is not bad. So I'd like to talk about reporting, I'd like to talk about the use of the patient portal perhaps for release of information instead of handing people something out of the medical record department, and I would again like to repeat the previous concerns about harmonization of all the measures.

We do the work in the IT department but the quality team is the one that has to explain to me what to get and they're the ones that have raised the points mostly about harmonization issues. We actually spent a vast majority of our time getting ready for Stage 1 on doing the reporting. We did keep track of it and we spent 36,000 man-hours qualifying for Stage 1. I would estimate that at least 70% of that was doing the reports, not doing anything else to talk to doctors and so forth. Now some of that I think is that we were early on, we did attest the first day, we did have a lot of people involved, we had a lot of doctors to go through, but 70% of the effort shouldn't be the reporting part of it, and I would hope that there would be a way that we could somehow move some of these activities to something like a data warehouse. Most EMRs are not built for crunching big sets of numbers, that's not the purpose, it's not why they were built and if there was a way to somehow take the important data out of the certified EMR which I understand there's an important stance for that and move it into something that could crunch the numbers faster, better, easier, that would have helped us an awful lot and I assume other people in the future.

We have had a very active patient portal for a long time. We have about 150,000 of our patients that are on that and that represents about 45% of our active patients that see us on day in day out basis. And about 1/3 of those sign onto that system every month, perhaps because of that we get very few requests, there was a comment earlier about the patients don't know about it, well in many cases they just go home and look it up because they've got it and if they want it they sign up for the patient portal. We actually have had such a small in, in that category that that's the only one we worry about in terms of meeting Meaningful Use. We have months where we have no request and so if we ever get one or none in a month and we miss it, you know, we are obviously toast in this whole process okay. So we've actually talked about, you know, sort of advertising it to get a bigger end so we don't have this much risk, maybe that'll be part of Stage 2. But the idea that patients being able to go home and look it up on their own somehow seems to be able to be just as good and maybe should be counted in some way.

The overall last point is the idea of harmonization, obviously this has been said several times so I won't go into much detail on this, but our quality team has to struggle with 3 or 4 different versions of reports and they may even be the same looking outcome that is required but they're subtly different. And so then we have to write subtly different reports and that takes a lot more time. So there are some examples in the written testimony that my quality team helped with a lot more than I did to help explain some of the examples, but I would encourage more of the comments that were made earlier to help along this line.

We have certainly supported Meaningful Use. I think it's been a good focus overall in our environment to spread the focus of the idea of this. It was a large number of dollars that was built into our budget so everybody paid attention to us getting the dollars in. So it did work well in that sense. I think Stage 3, if it could be designed more with sort of a desired end in mind and maybe focus more on high-risk patients and so forth as opposed to everything we do. Certainly we ought to be worried about every patient, but certainly the high-risk patients are the ones that are most at risk and spend most of our dollars. So if there was some way that we could do that I think that would be helpful to do that. Again, by the harmonization we could take the time back for managing and doing the reporting process and put it back to quality of care. Thanks.

**George Hripcsak – Columbia University NYC**

Thank you. Next we have Jennifer Bolduc from Walla Walla Clinic, Washington. Sorry about that.

**Jennifer Bolduc, MD, FAAP – Chief Medical Informatics Officer - Walla Walla Clinic, Washington**

You did pretty well with the name. It's my husband's fault. So yes I'm Jen Bolduc, I'm a pediatrician and a CMIO at Walla Walla Clinic. It is such an honor to be here. Many of you who read my written testimony know that 4 years ago any computer that I touched I broke and here I am talking to you today. So, if I can do it anybody can do it. We are a physician owned multi-specialty group located primarily in the Southeastern corner of Washington. We also have one location in Oregon. There are 50 providers for over 4 clinic sites. There are many hot topics I could address such as rural health issues and connectivity between ourselves, to hospitals, to states, and remote tertiary care centers, but what I'd like to talk about is the usability of the proposed Stage 2 and 3 Meaningful Use measures.

I realized on the plane coming here that we've been so focused on meeting Stage 1 measures and interpreting Stage 2 and 3 measures that we've almost forgotten why we started to use an EHR in the first place. So, I sat in the plane and came up with my requirements for my ideal EHR. What would that look like to me as a pediatrician and how can we flex those requirements to meet the needs of providers and other specialties. I found that with the exception of printed clinical summaries my list agreed with the proposed Stage 2 and 3 measures in terms of what needs to happen.

The questions for me now are related more to the specifics of how this will look and I'll probably have to work with our vendor Allscripts about that, and who will do the documentation. My understanding is that the physician is expected to provide most of the documentation. I would argue that with the upcoming increased documentation requirements for reporting population health, ICD-10, that this is not sustainable for most providers, especially those still struggling with Stage 1 of Meaningful Use. I think that offering choices regarding who documents will enhance adoption of EHR use and will likely increase the quality of the data overall. Offering choices has been successful in our clinic and typically this takes the form of low, medium and high options in terms of cost to the physician.

A physician can type everything into the system themselves which is low cost to them, the cost of their time, they can dictate in paper transcription, or they can pursue our latest option that we have nicknamed the ATC. ATC stands for Air Traffic Control, basically I see the patient while a documentation specialist observes the visit remotely, they're responsible for capturing all the data during the visit. As they enter the data the patient and I can see it on the screen in the exam room. I verify all entered elements and authorize all orders. By the end of the visit all documentation is complete and transparent to the patient. The end results are an educated patient, a happy physician, and a control data entry process. I can't tell you what a relief it is to have the documentation load lifted from my shoulders because as a physician my primary interface is with my patient, not with my computer and I've beat the clock look at that. Gave a few more minutes back. Yeah.

**George Hripcsak – Columbia University NYC**

Thank you very much Jennifer. Next we have Carol Steltenkamp from the University of Kentucky Healthcare.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

Good morning and thank you. Thank you for your invitation to be here today and thank you for all of your work towards this important endeavor. I'm Dr. Carol Steltenkamp, I'm a practicing pediatrician, I'm the Chief Medical Information Officer for UK Healthcare and I also have the privilege of being the Director of the Kentucky Regional Extension Center. So I'm way past hip deep here. So, as I come to you I come from the front line. The University of Kentucky is a traditional academic medical center. We have over 1000 providers, 3 hospitals, yada, yada, yada. We were the first hospital in the country to get Medicaid dollars so I thank my partners at the state level in Kentucky, we we're very happy about that, but I think you might hear from Chantal, we like many other hospitals are waiting until 2012 for our Medicare attestation and I can go into that with questions later.

The Kentucky Regional Extension Center is strong and doing well and I want to share just a brief note from one of our implementation specialist, a couple of weeks ago, by the way she was a new job as part of these dollars, one of our implementation specialist said "you know, I'm almost nervous" about what, she's doing a great job, she said "because I'll never find another job this cool." She is so excited about being on the front line and so believing in what we're doing and wanted to share that with you.

One of, I guess my take home for you today is a bit repetitive, but my theme is alignment. Alignment in 3 things. Alignment for program requirements, you've heard that, alignment for clinician workflow, and thirdly, alignment for vendor's availability to meet the timeline that we're putting out there. So my comments will really come from both my front line experience as a clinician as well as the Regional Extension Center experience.

So, alignment number 1, the program requirements, it's an alphabet soup out there, I am fortunate that at the University of Kentucky we have staff to help me interpret and others interpret the alphabet soup, go back and build all those reports that Tom mentioned in order to get those out in a timely fashion and be able to meet the requirements. However, from the Regional Extension Center standpoint they don't have those sorts of staff. Those 18 and 20-year-old children of the physicians that are manning the front line for IT in the two-person practice really aren't quite sure what they're supposed to do here. So if we could align those that would be great.

At a granular level, the second level of alignment is the clinician workflow and I think you've heard that a bit. We're all comfortable now with the thought that dermatologist don't take blood pressures, okay. So when we're looking at these requirements, how can we get what we need by aligning the current workflow. Jen just mentioned aligning that workflow as we look at Stage 3 for physician documentation. How can we do that while still achieving our goals of Meaningful Use?

And thirdly, I want to point out vendor alignment with the timeline, they're trying. This is not to slam the vendors, I will say they're trying very hard to meet this because they also understand their livelihood is dependent upon meeting the requirements and helping their customers achieve it. But let me give you a little scenario. All right, you're a vendor, you're now, this is from the Regional Extension Center front lines, you're a vendor and you get to fly into Lexington, Kentucky and then drive 3 hours to the hills of Appalachia in Eastern Kentucky to help a two-person group achieve Meaningful Use with their EMR, not so much, that's just not happening out there. They're trying and I understand that but they also have a customer base to meet and those customers of small physician practices on the front line aren't there first in mind when it comes to customer service at this moment, when they have a limited timeline and limited resources.

So, looking forward to Stage 3, I applaud the concept of care coordination. I'm a primary care physician. I do believe it's important to recognize the care team members. I'm asking where are long-term care and behavioral health, didn't see those mentioned anywhere, but they're part of that circle of continuity of care. And thirdly also applies to patient engagement, so those 3 things. So I'm going to conclude by saying alignment is important, alignment of these programs, alignment of clinician workflow in meeting the programs, and thirdly alignment with vendor timelines and ability to meet it. So, I ask you to consider the differences between what we want and what we need to achieve Meaningful Use and improve the quality of care. Thank you for allowing me to address this group.

**George Hripcsak – Columbia University NYC**

Thank you Carol, very good. Okay, next we have Chantal Worzala from American Hospital Association.

**Chantal Worzala – American Hospital Association**

Good morning and thanks so much. We're doing a lot of talking at you, sorry about that but we'll have discussion later. Chantal Worzala, Director of Policy of American Hospital Association. The AHA does represent more than 5000 hospitals and health systems and nearly 40,000 individual members with actually a growing representation of physicians. So thank you so much for the opportunity to speak about the hospital fields experience in implementing Stage 1. You do have my written testimony and I'm happy to answer questions on anything in that testimony. I really wanted to emphasize 3 things here. What are the current trends in meeting Meaningful Use Stage 1? What are the needed changes to ensure that EHRs are actually producing accurate clinical quality measured data? And what are some of the considerations as you deliberate future stages?

So on current trends hospitals are universally committed to achieving Meaningful Use. The role of information technology is not questioned. Incentive programs have served to accelerate planned investment in health IT, they've also provided a common set of goals and the looming penalties will also clearly motivate sustained efforts to implement health IT. But progress to date in meeting Stage 1 is pretty limited. If I understood the tables from CMS correctly this morning we have 158 hospitals that have successfully attested to Meaningful Use and received their incentive payment, that's the entire number for fiscal 2011 which ended earlier this week, September the 30<sup>th</sup>. That is 3% of hospitals that are potentially eligible for the Medicare EHR incentive program. I really want to congratulate those hospitals tremendous effort on their part. I will note for your benefit many of them are in this room. So take advantage of the expertise you have in front of you.

I think these numbers really point out that Stage 1 set a very high bar given where things started and what we're seeing now is that those who were furthest along are sort of getting over the line. We also conceived, from the CMS numbers, that the federal investment to date is lower than the congressional intent. Again, if I heard the numbers correctly this morning we have about 850 million to hospitals and physicians through Medicare and Medicaid. When HITECH was passed the Congressional Budget Office was estimating 4.7 billion with a "B" for fiscal year 2011. So we're less than 1 billion when what congress was anticipating was 4.7 billion. So I think we're making progress but it's fair to say it's a slow start and I can tell you some of the reasons that I've have been hearing from our members about why that's the case.

So if you unpack Meaningful Use into its various objectives hospitals are well down the road on those objectives that really support clinical care, the medication management, the demographic information, the clinical information. But it's much more challenging to achieve the objectives that involve reporting data to others, whether that's the public health data, the quality measure data, the health information exchange measures, all of them, whether it's to patient or another care provider. And really a lot of these objectives including, especially public health and health information exchange are requiring hospitals and physicians to be ready to send data that others can't receive, and this really involves a lot of expense and work on the part of providers with little actual benefit to patient care and the public health. We may be positioning ourselves to do that in the future but when you look at being able to for example generate a CCD, there is nobody to send it to so you've purchased a product, you've, you know, implemented a workflow to make it happen, you've generated it, but it hasn't improved the care for your patient, which is really where hospitals and physicians want to prioritize their efforts.

Hospitals have also reported significant efforts to understand and operationalize the actual measures of Meaningful Use so the things that you all sort of debate pretty carefully, and they really, as was reported, they're more focused on the measures than on implementing the technology to benefit patients, and I know that's partly because it's new but it's not where we want to be.

We also have issues with vendor capacity, workforce shortages. I want to talk a little bit about the hospital measures, hospitals have great experience in quality reporting. I talked to a hospital CEO who they're reporting 458 measures to various folks. So this is not new territory for hospitals. But, this

electronic health record reporting is new and it was put in place without an infrastructure to really support the generation of accurate data. So if we look at what was an extraordinarily compressed timeline that lead to very quick policymaking it put in place a system that had e-specifications that were not actually even verified to be correct, there are known errors in the specifications including things like the word “not” missing in a logical statement where “not” is a very important word. We have e-specifications that were driven off of measures that NQS did endorse, the VT and stroke measures were endorsed by NQS, for manual abstraction. The e-specifications never went through the NQS process. Then we took those measures and we gave them to the vendors and said “good luck.” And then they did their best, no doubt, they spent a lot of time and energy to put those quality measures into their EHRs.

Then we had a certification process that very explicitly states we are not looking to see if the measure calculation is accurate, very explicit, and then there’s test script can you generate numerator denominator, not can you get it right. I’m running out of time. My point is we want automated quality measurement it a lot of benefits and if Stage 1 was about getting it started I’m really hoping that Stage 2 will be about getting it right. There’s a chart, a figure that we put together that’s in my testimony that sort of lays out the building blocks that we need to actually have a system to support automated quality measurement and actually comes from the system that currently supports the manual reporting of measures but without all those pieces in place we’re going to be investing a lot of time and quality measures without getting good data that we can use for policy. Thank you.

**George Hripcsak – Columbia University NYC**

Thank you Chantal. Next we have Kelley Bridges from East Alabama Medical Center.

**Kelley Bridges, RN – East Alabama Medical Center**

Thank you for the opportunity to testify on the present and future use of Meaningful Use. East Alabama Medical Center is a 352 bed regional referral center located in Opelika, Alabama. We have been recognized both state and the national level for quality performance. We began our journey to Meaningful Use several years before it was an incentive program. Our CIO, Tommy Chittom, has had a vision of patient lifetime healthcare management for over a decade. His visionary leadership led us to implement Cerner Millennium in 2005, advanced to electronic nursing documentation, and to push for integration across our system. East Alabama has a strong desire to actually have Meaningful Use of our data in our electronic record, not just to meet the requirements. East Alabama did attest to the Alabama Medicaid Agency on April 27<sup>th</sup> and to Medicare on July 11<sup>th</sup>. Strategic leadership has been vital to ensuring compliance with the criteria.

In 2009 our CIO dedicated time to reading the entire proposed rule and our CEO embraced the concept and took the initiative to understand the implications of Meaningful Use. Our senior leadership team divided the Meaningful Use measures each taken responsibility for meeting them. Once we had a, we also had one full-time employee dedicated to implementing the requirements, developing dashboards, and tracking progress. In addition we conducted progress to goals meetings monthly where senior leaders were responsible for reporting on their goals. Stage 1 Meaningful Use requirements were full of opportunities and challenges. Our biggest challenging was capturing the quality measures. For over a decade East Alabama has achieved and sustained high-performance and core measures by having a proactive dedicated staff to collect, report and improve the data. This data is reported to all level of the organization and to physicians with unblinded peer comparison.

Prior to Meaningful Use we were not submitting the data directly from our EHR. Our data submission process was in line with the National Hospital Quality Measures that were developed jointly by CMS and Joint Commission. These measure specifications have been refined over the years but they were developed before the mandate of electronic health records. The quality measures that are required by Meaningful Use were developed through the Healthcare Information Technology Standards Panel. We realize that moving from a paper environment to an electronic environment does require a change in measure development methodology. However, we believe the differences between the methodologies of the two groups has led to confusion among providers and the vendors. We recommend that the two groups work together to align to one standard before the release of Stage 2 and Stage 3 quality requirements.

Many providers have dedicated years to the improvement of core measures, specifically East Alabama submits data on acute myocardial infarction, congestive heart failure, pneumonia, stroke, and surgical improvement. In order to meet Meaningful Use we also had to start collecting that data on VTE and ED...this was an additional burden on the already taxed system. Prior to Meaningful Use we were submitting 42 measures with 123 abstraction points, now we're required to submit 50 measures with 156 abstraction points. We would like to leverage the already existing infrastructure for quality measures and align the requirements. We recommend that Stage 2 requirements expand the quality measures to include only the core measures as defined by CMS and Joint Commission. Additionally, we recommend that the HIT Policy Committee leave the quality community, by re-engineering the core measure specifications to support direct submission from the electronic medical record.

From our Stage 1 work two things have emerged as barriers to success. The first barrier identified early in our journey was the lack of definition with some of the functional measures. Specifically the CMS final rule does not align with the ONC final rule with regards to the exchange of clinical information among providers. We realize that the ONC final rule was expected to lay the groundwork for future stages of Meaningful Use. However, this misalignment lead to confusion again among the vendors and the providers. Further definition would help the providers meet many of the requirements in Stage 1, Stage 2 and Stage 3. We recommend that additional descriptions be added to Stage 2 and Stage 3 for exchange of clinical information, security risk analysis, clinical lab data, the summary of care record, and the public health measures.

The second barrier to our success was the lack of alignment between the hospital and the provider requirements. Hospital quality is very dependent on the participation of physicians. We spent countless hours encouraging, engaging, involving, and reporting to the physicians to improve the quality of care. With Meaningful Use CMS has the unique opportunity to align the incentive of hospitals and providers. For instance the provider is required to participate in ePrescribing in Stage 1. If the provider was required to participate in ePrescribing in both the hospital setting and the outpatient setting we could both benefit. The preliminary requirements of Stage 2 state that hospital labs will be required to submit electronic lab results to outpatient providers. We recommend that the designers of Stage 2 and 3 continue to look for opportunities to incentivize cooperation between providers and hospitals. Thank you for this opportunity to speak to you today. We hope that we will continue to see improvement in Meaningful Use requirements and the definitions. Thank you.

#### **George Hripcsak – Columbia University NYC**

Thank you Kelley. Next we have Eileen Fuller from Middlebury Family Health in Vermont.

#### **Eileen Fuller, MD - Vermont**

Thank you. Thank you for inviting me here this morning. I'm a physician, family physician in Middlebury, Vermont. I'm a physician manager for a 4 physician family practice. We undertook instituting our electronic medical record with a company by the name of Medent in January of this year, January of 2011, and in June and July we succeeded in attesting for Meaningful Use and Level 3 NCQA accreditation for medical home. There was a lot of planning that preceded the institution of our EMR in January. We went to state collaboratives held through the state of Vermont to help us get a clear understanding of what the criteria were for both NCQA and Meaningful Use and that was incredibly helpful. Our EMR vendor also had really, I think really understands Meaningful Use and implementing it and was incredibly helpful in setting up everything we needed to begin with.

So when we set up our EMR we started by instituting right at the start the reporting criteria that we may need not just for NCQA and medical home but tried to incorporate things that, you know, insurance companies may come and ask us about, immunization data or whatever. So we set that up right at the beginning with Medent. We also set up templates and care plans with as much discrete data elements as we could incorporate. So we tried to try to avoid dictations and whatnot that would not allow us in the future to gain the data we needed.

We've seen a lot of benefits with this already, over 90% of our patients receive a clinical visit summary at the time of discharge, by the time they're leaving our office, that includes patient medical lists, their medication list, their problem list, allergy list, and a brief summary of each problem that we addressed on that visit. So for some of our sicker patients there may be 6-7-8 things that you've addressed as far as congestive heart failure, diabetes, hypertension. That's been a tremendous value to our patients. So when you're talking about patient portals and various things, I mean I feel like our patients walk out of our office now with most of the data that they need to go to the any other office or share with their family. It also gives them an opportunity go home and look at their medication list, often times when we're in the office we list the medications and they shake their head "yeah, yeah I'm taking that, I'm taking that" they go home and they look at the list and they say "oh jeez I guess I ran out of that" or whatever. So I think it's a very useful tool for our patients.

It's also really streamlined our prescribing, all of our prescriptions, well over 90%, probably close to 99% of our prescriptions are ePrescribed with the exception of the medications that are restricted such as narcotics that we're not allowed to. We've also been able to implement outreach to our patient populations that, you know, I think, Mr. Calman, Dr. Calman had mentioned earlier, you know, reaching out to patients populations that basically weren't coming in. We have good data when we look at patients that we've been taking care of, but when you look at being able to pull up a report and say it's been over a year since this diabetic patient has even come in our office, so we now send out reminders every 6 months to our diabetics who haven't been in 6 months that they need to come in.

That brings up another point that was brought up earlier, when you look at data outcomes, bringing in that patient population we have great A1c data on our patients that were coming to the office every month, our compliant patients, but when we start bringing in our noncompliant patients then our numbers look worse. So when you're looking at pay-for-performance and patient outreach, I mean those are really important things to keep in mind.

We've had many challenges in instituting this and a lot of these have been alluded to already so I don't want to, you know, repeat all of those, but I'll give you some examples. We've had, you know, challenges in interfacing with other organizations particularly the state. In the State of Vermont it's Vermont Information Technology Leadership or VITL is the HIE hub that's supposed to have all the healthcare information funneled through that hub for the State of Vermont. So we set up our EMR initially to have everything funneled through there including our lab data. So instead of just going directly through our hospital, Porter Hospital, we went to Porter Hospital which is interfaced with VITL. Well 3 months into our program we got a called from VITL saying they're changing their vendor from GE to Medicity so we will have to go back to paper for our lab reporting, which enormously would increase our costs and really upset our whole Meaningful Use endeavor. So, after many phone calls we got them to continue to support us, but we really are dealing with reporting both syndromic surveillance, lab data, and just reporting to the central HIE hub. They're not ready to accept our data, you know, we put the money into developing that and purchasing on interfaces, yet they're not able to receive it.

I think, you know, an enormous issue is the cost, you know, we're a small private practice and, you know, we took out a loan for \$100,000 and we lost at least \$100,000 in lost productivity, and it's the biggest financial burden, you know, we've been in practice for over 20 years, it's the biggest financial burden that we've had to sustain ever, even when we started our practice. And we do want to keep moving forward with things like with Meaningful Use Stage 2 and 3, but when we look at things like encryption of data at rest requirements, we just purchased a server, none of the servers in the current EMRs meet that requirement. So we were talking about how we're still paying back our loans for our EMR we will have to take out another loan to get a new server. So, I think that I'm out of time too. So anyway, I hope that you really understand the financial burden for us. One of my partners mentioned to me this week "I don't think that we can sustain this. I don't think we'll be able to keep doing, meeting Meaningful Use because of the cost." So, I hope that we can. Thank you.

#### **George Hripcsak – Columbia University NYC**

Okay. Thank you. Thank you for the excellent presentations, repetition is good because it means there is a signal there that means something so it's a good thing. We'll go around and ask questions. I'll ask

people, because it's a large panel and we have shorter time to do one question and then we'll see what time it is and go around for any second questions from the same person. I guess since this side is already ready lets come around this way. So Eva?

**Eva Powell – National Partnership for Women & Families**

Thanks. Thank you all. Having worked in a hospital for 10 years it is not lost on me how difficult the job is that you all are facing. I do have some questions though about workflow. We heard workflow mentioned a number of times in a number of contexts and particularly related to patient engagement kinds of things. I know Dr. McColm had mentioned that often times, at least the things in Meaningful Use, are processes that are already in place and now we're asking those be done differently. I'd also like to draw your attention to the fact that patient has a workflow too and if we are expecting patients to be more engaged in their healthcare, not only do they need information to do that, but we who work in health care also have to recognize that they are not clamoring to interact with the healthcare system because they have real lives and they have to somehow integrate health and healthcare into those real lives, and therefore up to this point our health care system has expected patients to drop everything and somehow work with the crazy workflows which work really well sometimes for providers but not so well for patients. So I think that part of this is a balancing, certainly of provider workflows, because it's not helpful to anyone to impose things that don't make any sense in terms of the way things actually work in healthcare systems. However, there needs to be greater attention to the patient workflow if we are going to be realistic about actually engaging patients.

And so what I'd like to ask, relative to workflow, is for the whole panel just to respond to first of all how can some of the Meaningful Use criteria be tweaked to both achieve greater information for consumers and patients, and their families, greater transparency of information and how can we work with patients and families to help with the provider workflow? A great example from the previous panel, and one that I experienced last week myself was patient entry of information. I walked into a Minute Clinic, never been seen there before, I entered my own data and right there I'm engaged. And so how, and that helped, I would think with the provider workflow. So let us know what specific ways you can think of that we as a committee could build into Meaningful Use criteria items that can help with transparency and availability of information for patients and their families, as well as things that can really help providers with their workflow by engaging patients in their workflows?

**Paul Kleeberg, MD – REACH – Minnesota**

If I may respond first, Eva I think you actually answered the question yourself, it was also talked about earlier on and I think it's an important point, allowing patients to enter their information either at home or in some electronic way before they come in and also information about why they're there can greatly facilitate the workflow in the practice and also begin to get the patient involved. Then if we also have a way to be able to exchange that information so when you go to one place and to another place that information is there, patients will have that information that'll begin to flow. It can improve the practice workflow and it can also engage the patients. I think portals and the idea that they can see what's going on with their health can increase their engagement and will increase the demand so that we'll see Meaningful Use, not just Meaningful Use, but we'll see health information technology become more a part of medical care, and I think that's something that we should have been driving all along is patient involvement in pushing this forward.

**W**

Okay so this is a little more pragmatic. We're all about patient engagement and we have a personal health record, we have a patient portal, we even train our providers to share the screen and engage patients during clinical encounters, we're all about it. The pragmatic thing about, so say the clinical summary, the eligible providers are supposed to provide to the patient during their visit, they provide the summary, we already did that, it includes lab results, things that are going on, but the requirement included any lab test that is resulted within 24 hours is included. So we also have a process for every lab result whether it's resulted in 24 hours or not. So, now we have the, we provide you with this information and we have this other lab test, how are we going to report, how are we going to connect, was it resulted in 24 hours, was it 25 hours, was it 23 hours, and connect that for reporting purposes it's a pragmatic, it's

a structure of the measures that are making it difficult not the process of engaging patients. I think that's a disconnect maybe and that goes, I could go on and on, every measure...

**Eva Powell – National Partnership for Women & Families**

So it would be helpful if the committee provided clarity that, I think the intent was that the combination of criteria, could be, that you didn't have to have a specific process, individual process for each criterion. But that if you could kill 5 birds with 1 stone so to speak then.

**W**

That is 1 bird. The clinical summary measure is 1 bird, so to kill it we had to go, we would have to go multiple, multiple ways, and I think that's why a lot of people, to your question about why people didn't choose those out of the menu set, they didn't because there was a harder one to implement, not to, again we're med reconciliation, we're doing, we're sharing data with the next guy down the line when we transfer a patient. We do that all day long, but meeting the measures that were structured was complex and made it hard to do, hard to prove that we were doing it. So, I. Other comments?

**Chantal Worzala – American Hospital Association**

I just, having listened to your conversations over time I think this is a really important point that you need to value the functionality over the measurement. The providers are about using the technology to make things better not to do the minutia of the kinds of measurements. And there are all sorts of reasons that the measurements look the way they do, but going forward making sure that the measures are "A" very simple to generate and "B" are not getting in the way of actually implementing the technology to support the patient I think is very important.

And also, on the consumer engagement side I actually think we need more research on what it is that patient's want. Particularly, if you're talking about information about a hospital stay. There's so much data that is collected within a stay, particularly if it's a long stay most of which patients may not, you know, want. Do you want your streaming vital sign data from a 10 day ICU visit available to you through a portal? What I know from talking to folks is that the portals are helpful for, you know, making an appointment, finding a doctor, doing some of those things. What's maybe something we need to know more about is what medical information do you want visible via a portal because it is a lot of work particularly for smaller organizations to mount and maintain a portal and understanding what's wanted before you engage in that investment I think would be really helpful.

**George Hripcsak – Columbia University NYC**

David? Oh was there another comment?

**Kelley Bridges, RN – East Alabama Medical Center**

I was going to just add on, I believe that all these comments are very important to small hospitals too. One of the big struggles that we have with patient portals or release of information, summary care record handing to the patient is HIPPA. We find the summary of care records in the parking lot and that's a problem because we're still liable for it. So that's a huge issue that we've got to define and figure out how do we do what you're asking us to do without putting ourselves at risk? The other thing is the summary of care record and some of that, some of those requirements need more definition. From the hospital standpoint we didn't do the summary of care record for this measurement just understanding what you mean by transition of care, because transition of care as it reads right now would be every patient and every time we touch them.

**Paul Tang – Palo Alto Medical Foundation**

Can I just interject one comment on this clinical summary. The measure actually allows PHRs to satisfy, patient portals to satisfy that, so I just want to make sure that, because I was just looking at it here again.

**W**

We have some confusion about that, we got some confusing answers to that. If we just say you've got a PHR, a patient portal and this information is going to be on there, but you never signed up for that, does that count? It doesn't really seem like it's in the spirit of meeting the measure and so that would mean

50% of outpatients would have to sign up for the portal, which we don't have, even Tom doesn't have that number signed up for it.

**Paul Tang – Palo Alto Medical Foundation**

Well it was 50% of those who asked so your scenario that you asked.

**W**

The clinical summary is 50% of encounters I believe.

**M**

Yeah.

**M**

Yeah.

**W**

...

**M**

All visits.

**Paul Tang – Palo Alto Medical Foundation**

I'm sorry, yeah, yeah.

**W**

Yeah, so on that eCopy it's patients who ask. Yes and definitely we encourage portal or personal health records. We default to a CD so you get it electronic unless you ask for paper at our place.

**Eileen Fuller, MD - Vermont**

I would share the issue that clinic visit summary and the patient portal, right now our patients are getting most of their health data at every visit and for us to institute a patient portal, which we are considering we plan on having, running a survey this late fall, early winter, to address that question to our patients, but we have an older, a lot of our patients are older geriatric patients who in all likelihood are going to have very low interest in accessing their records through a patient portal but would much rather have a hard copy. So, I think that that's a very important issue to the cost of implementing that is enormous so if we don't have a majority of our patient's using it, it's going to, we're are going to have to pay a lot of money and still have all the postage charges and everything else, nothing to offset that, so, we really want to see that a significant number of patients will use it before we have the expense and the liability, that's an enormous issue, the whole HIPPA issue with patient portals.

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

I want to build on Tom's comment about the data warehouse, data export functionality. So we have a, sort of a policy charge and where you see the new quality measures headed are, as Patrick said in the last panel, talking about how do we use health outcomes as a better framework for measurement. How do we address care coordination, patient engagement and so on, which are not, we have a set of individual service providers right now, individually EPs or hospitals who are part of a continuum of care but don't represent all the services the patient receives to meet their needs obviously. So, we're trying to think of quality measures which encompass more of the continuum and address patient outcomes and care coordination. So the problem is going to become, do we expect every EHR and everyone of your organizations to capture all the data from the continuum of care, or do we somehow have a middle level of aggregation and computation of data to look at the coordination of care, multiple settings, the impact on the patient, patient outcomes, and so on. So I'm wondering if any of you have a perspective on, and again building on Tom's opening suggestion is should we be thinking about a quality measurement framework or model where each of you is contributing data to some intermediary, it's a registry, it's an HIE, it's some data calculation center, data warehouse, whatever it is. Would that be a better world for you to say I have a standard export of data to some intermediate player which then generates the quality

measures that are used by all the third party payers and licensing and MOC providers or do you think the long term is going to be that you need to acquire all the data for that patient's care that addresses care coordination and outcomes?

**Thomas W. Smith – CIO NorthShore University Health Systems, IL**

Well since I started this, I'm not sure that I intended that as an outcome.

**W**

Thanks Tom.

**Thomas W. Smith – CIO NorthShore University Health Systems, IL**

But there was a comment earlier about we should it all to CMS and then they should send it out to the various players, that perhaps could be your intermediary, you know, the success of HIEs across the country is pretty different that's put it that way. Chicago is, where I am, is not necessarily as far along as other parts, maybe we're like about last actually in some cases, and we would then be dependent on so many other people to be compliant with that it would perhaps be looked upon as a negative. I think the idea that everybody should be contributing and we look at a much longer period of time for the care of the patient and not just the particular episode that we've got in our encounter it's certainly worthwhile. In our individual case we probably capture about 70% of our care of our patients in one database because we have lots of our independent doctors and employed doctors on it, but that's not 100%, I realize that, and we don't have nursing home data on there. So there's still a gap in our situation. If there was some way to have submission to another agency which would then add other pieces together and do that, that'd be great, I'm not sure I would understand the technology behind that yet to make that happen well.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

I would say to you in my role that I'm torn because as a primary care provider yes, I would, as the center of the medical home for my patients, I would like to have all available data to me, have it available to me in provision of care for those patients. However, the technical side and the CMIO side says, how feasible is that? And from a healthcare organization to, I agree with Tom, I'm not quite sure how we would do that, but from a technical standpoint. I also am a little nervous in depending upon others to fulfill their roles for me to become whole as a healthcare organization and to meet these requirements. So, I appreciate the concept that there is some sort of intermediary to pull that together but am a little hesitant to fully endorse it based on how are we going to be graded in meeting that need.

**Paul Kleeberg, MD – REACH – Minnesota**

I think the answer depends a bit upon the practice, I could see a large organization wanting to be able to amass the information, especially if they were accountable care, and use their registry, their data warehouse, their larger system to be able to look at and submit that data. So they would be the group that would group that all together, which again depends upon good exchange of data. For the individual practice, let's say the smaller practice, they may not have the technicians or the capability to run those reports, they may wish to have that data extracted and then sent back to them so actually they're seeing how they're doing it. And we're thinking of exploring now with the University of Minnesota for some of our rural practices that they can give them the data and they can give them back how they're doing on things. So, I think having a central place to do it would be a very good idea, would serve value in some instances, but I also think the ability for an organization to be able to do it locally through their own warehouse would be valuable as well.

**Denni McColm – CIO Citizens Memorial Health Care - Bolivar, Missouri**

I just have one more comment. In Missouri we actually do something similar for statistical data that we are required to submit to the state and the state hospital association is the broker so they are a trusted party to gather that information and then we get back from that, as an industry, we get back things that we wouldn't get back if we just did a state submission. We get market share and things that we agree that we're sharing. It would be the same concept and I know Missouri Hospital Association, and I would be shocked if other state hospital associations aren't already considering something to be the trusted broker that would solve that purpose and we would encourage that.

**Chantal Worzala – American Hospital Association**

I just wanted to raise the related certification problem, which is the certification requirements are currently that the quality measures be generated directly from your certified EHR. So once you go to another model we really need to make sure that we are changing the certification requirements to match the market realities. And really it's very important, people are having to do lots of things right now that they would just take into their business intelligence solution for example to generate measures, and they're having to tweak their EHR to get the data out instead of doing what would've been perhaps more efficient for them due to the certification requirements. So just a little wrinkle there.

**George Hripcsak – Columbia University NYC**

Deven?

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

Yeah, I just have a couple of quick comments. And it actually goes more to us as both a Workgroup and then the Policy Committee writ large. I think it's, the Stage 2 recommendations that we put forth are just recommendations, right they're, but at the same time people are already beginning to act on them in anticipation and so to the extent that there's still a lot of misinformation out there and lack of clarity about things that we have said. I really think that we've got to have an ongoing process for trying to clarify that in the interim, because this is the second time that I have heard somebody say that we're putting forth a requirement for people to encrypt data at REST and we're not. We tried to bend over backwards to say that we weren't doing that, we're saying you have to address it, but if you ultimately decide not to encrypt your data server that's actually okay. So please don't buy another server. But this is the second time this has come up and that I've had to clarify that and I thought we were crystal clear, but apparently we weren't and I think we need an ongoing processes, this is not the only area where it's come up it's also come up with respect to exchange and what it means to be exchanging with an unaffiliated provider and who is an unaffiliated provider and who counts and who doesn't. So, I would imagine that you all would agree with us that providing some interim clarity, even while CMS might be deciding whether it's going to accept or reject any of it out of hand might be helpful.

Okay, then I think the other thing I'll say is when you give a patient data you're not responsible for what they do with it after the fact under HIPAA, you are absolutely not, having said that I recognize that if somebody picks up a piece of paper out of your parking lot they think that you did it so I don't know how you get around that stamp it with provided to patient, but at the end of the day it isn't the case that you're legally responsible for it and I imagine there might be some ways to get around the fact that some patients are careless with data.

**Kelley Bridges, RN – East Alabama Medical Center**

The unfortunate part is the way HIPPA works for us anyway is wait to see what the court says and then you have to adjust to the courts.

**M**

Yeah.

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

I'm almost inclined to tell your lawyer to call me. I don't like that. I don't like that answer. It's really overly conservative.

**George Hripcsak – Columbia University NYC**

Neil?

**Neil Calman – The Institute for Family Health – President and Cofounder**

So I'm interested in knowing what you all have been doing in the last year around quality improvement and whether or not the reports that you're generating for Meaningful Use are being used for improvement or whether you have other reports that you like better that are being used in your day to day activities lists and other things that are being used in what you think are the most important quality improvement activities that have gone on in your organization in the last year?

**Paul Kleeberg, MD – REACH – Minnesota**

I'll take the first crack at it again. I guess that also depends upon the practice. I think by and large Minnesota for example has been doing quality measurement for quite a period of time and actually the measures that have been required as a part of Meaningful Use aren't nearly as granular as the ones that have been required in Minnesota. And we have definitely been looking at, since we published our clinics out, we've been looking at improving their performance over time. For those clinics who have not used quality measures previously and are using just the Meaningful Use quality measures to see how they're doing, I think it's too early for them in the process to be able to tell to utilize them on improving care. Most of them, as I know right now, are trying to figure out why isn't this reflecting what I think that we're doing and they're trying to drill down into the information to see what's being missed within a collection of data so that the numbers aren't showing things correctly for them yet. So it's early when it comes to the Meaningful Use, but quality measures have been a common practice in our state.

**Neil Calman – The Institute for Family Health – President and Cofounder**

So just before everybody answers, what I'm really trying to get at is what you're doing, what you see people doing in quality improvement and then look back to say are they doing it with the measures that we're calling out for people to develop or are they doing it with other tools that they're developing locally. It's similar but it's a different question.

**Paul Kleeberg, MD – REACH – Minnesota**

I'm sorry.

**Neil Calman – The Institute for Family Health – President and Cofounder**

That's okay.

**Paul Kleeberg, MD – REACH – Minnesota**

I'll give a brief answer to that. It's their own tools that they've developed and they will display their results to their providers say on the different things of their performance and gradually improve that performance over time. They've been not using the Meaningful Use measures for that to date.

**Jennifer Bolduc, MD, FAAP – Chief Medical Informatics Officer - Walla Walla Clinic, Washington**

And to speak to that we have no other measures.

**Neil Calman – The Institute for Family Health – President and Cofounder**

You have what?

**Jennifer Bolduc, MD, FAAP – Chief Medical Informatics Officer - Walla Walla Clinic, Washington**

We have no other reporting capability whatsoever at the Walla Walla Clinic. So the Meaningful Use reporting is our first quality, that's our first crack at it, so we're exactly where Paul said we would be, we we're trying to figure out what it means, how do we look at it, what do we do with it? So no we're not using it at all to actually improve quality at this point.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

From an academic medical center standpoint I would tell you that these were more additive and there was some Venn diagram overlap there so there was some complimentary, but to back up what Dr. Bolduc said most of our, out in the Regional Extension Center, most of our primary care practices and our smaller practices have used this to inspire them, have used these Meaningful Use quality criteria to be the ones that they report against. So in that sense I have found it very helpful for them, it gives them a target to go after. Initially it may have been, you know, just to receive the dollars but now they're digging in and understanding what it means to their practice and the improvement of care.

**Eileen Fuller, MD - Vermont**

I would state since we've instituted this I do think it's helped our patient outcomes as far as having better understanding of your summary at the end of your visit. We had been participating in the past with PQRI

reporting so the reporting hasn't changed that much. I do think we are doing more outreach, which probably really comes under the umbrella more of the NCQA accreditation, but outreach to patients who are noncompliant patients trying to get them into the office and I think that's a tremendous value, but probably falls more under NCQA. I think addressing things like smoking cessation and obesity, which we've done all along, we're documenting it better with these requirements. We'll have to look at our data, I mean, it would be interesting if it changes our patient's weight or smoking cessation, but those are, as everybody knows, two areas that are really difficult to motivate patients for so we don't have enough history yet to determine that.

#### **W**

So we already had a lot of quality measures and a lot of quality improvement activities and we have other systems that do data extraction for quality purposes. So what we're doing on the eligible provider side is we're trying to harmonize internally with what we are choosing to report for PQRS with the Meaningful Use measures so that we're not creating even more work for ourselves, and it's nice to have the focus, even sometimes the orthopedic surgeon wonders why we're measuring the mammogram rate for his patients but it's important information. It's important to do and we're doing the same thing on the hospital side, but these did end up being more additive on the hospital side and we have a very low volume of patients that have VTE and stroke diagnosis.

#### **Kelley Bridges, RN – East Alabama Medical Center**

We actually, from a hospital perspective our hospital has a few providers that work for us but they're not electronic yet, most of our providers are, have the PM system, the practice measurement system installed but they do not have electronic medical records. So that's our next adventure, but in the hospital setting the measures that were required for Meaningful Use were an additive somewhat. The VTE measurements are for all patients. We've always concentrated on VTE measures for surgical patients and so we talked to our vendor and got a new tool through our EHR to implement VTE...and stroke through the EHR, but we already had a system out there of reading the chart, abstracting the information and submitting it our vendor, our premier vendor for quality measures. So we have dual processes going on right now which is a lot of manual work and now the tool that we've started on our EHR can be used for other core measures but we're scared to use them because the quality reports for the Meaningful Use measures aren't working. So we've put a lot of work into it with very little return at this point for the Meaningful Use measures.

#### **Chantal Worzala – American Hospital Association**

Yeah, I would encourage from the hospital side of the policy level conversation with the Joint Commission and the Hospital Quality Alliance which has been over the course of the last decade really focusing in on where are the priorities nationally for quality measurement and how do we get to sort of a single set of measures that are important in terms of addressing quality priorities? And I think it would be very helpful to engage that. They're focused mostly on the manually collected measures but I think if we can get these tracks closer together we'd be doing something important.

#### **George Hripcsak – Columbia University NYC**

Okay. Thank you.

#### **W**

Hi wrong name card on the...I'm...from HERSA and I actually have questions taking this the next step further which is assuming that the quality measures actually lead to quality improvement effort I'm trying to figure out what are the exact quality measures that would be most appropriate, especially for some of the topics we've brought up which are areas such as for example long-term care and coordination, behavioral health, and I'd like to put in for my friend for Medicaid oral health, thinking that they're, while dentist are eligible, hygienist are not, while psychiatrist are eligible psychologist and social workers are not, long-term care providers are not eligible, however that information is part of the patients, providing comprehensive care to the patient care coordination. So I'd be interesting in hearing from any of you that want to volunteer what measures you think are appropriate that could be collected that would help to provide better, from the physician to eligible physician, or the eligible hospital perspective that would help to better coordinate care and then also bring in the issue of rural hospitals because feeding off what

Chantal just said a lot of critical access hospitals enroll providers. A lot of those measures that we have proposed in Stage 1 don't really fit to the types of services they provide. So how do we reconcile and have a set of measures for eligible providers that meets comprehensive care and care coordination and for inpatient providers that encompasses all the types of services provided, especially those that are not providing surgical care.

#### **Eileen Fuller, MD - Vermont**

I can address it a little bit, anyway I would hope to see that we as primary care physicians start getting reports from outside providers, particularly in behavioral health there's a big gap and it's not necessarily that patients don't want to share that information. The behavioral health providers don't ask for release of information to send us information. We are somewhat affiliated with, most of our referrals go to a major hospital and University of Vermont, they've instituted a new EMR in the last year and we have to go looking for most of our reports we're not getting them, just on patient visits for standard care like cardiology, gastroenterology. So, I think it would be a very reasonable mandate to expect that specialty care is also required to send us the data on the patient care.

#### **Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

I'm not going to, Kentucky is the home of the headquarters of over 75% of long-term care facility management companies. I don't know why but it is. It's a lovely place to live, but. And I can tell you that in our work they're, that particular group is very put out and I'm certain this group has also heard that. Now I say that, I don't have any great solutions to you because the pot is empty from what I gather. So they would have liked to have been incented as the other providers are to be included in that loop. But, that said, they also recognize, they want a seat at the table. They do want to be part of what's going on and I think Dr. Fuller is right in saying that, you know, they want to be part of that give and take and share of information. I think when you look at the numbers they are one of the fastest growing groups adopting electronic medical records, the long-term care facilities are. And again, as a primary care provider they have a very important place like those behavioral health specialist in providing care. And I think that it's not unreasonable to start with the basics expecting them, whether they're behavioral health or long-term care, to be looking at that problem list, a diagnosis, and medications, medication allergies to be keeping that update. So, I think starting with the basics is not unreasonable to ask of those groups also.

#### **Denni McColm – CIO Citizens Memorial Health Care - Bolivar, Missouri**

Okay, so you might have heard me say that we have hospital home care, long-term care, hospice and physician practices all in one EMR, all in one database and so we are very interested obviously in quality of care measures across the continuum and what we have attempted to do and what we do, have done for the last two years is break it down by diagnosis, it's not sort of that there's one measure that applies to every diagnosis, so take a patient who falls and has a hip fracture and take that patient through the continuum from the time they come to the emergency room, the hospital, they go to the long-term care facility, they have home care, and then there are some tools called FOTO, Functional Outpatient Therapeutic Outcomes, that are sort of a precursor to what you mentioned earlier with regard to functional outcomes for patients where patients assess their outcomes and then at the end of their treatment they, it's only for outpatient, and we've sort of asked that database if they will even help us work with could we start the minute they show up in the ER and measure their functional outcomes. So, our experience so far is that it almost needs to be by diagnosis or by major diagnostic class, that it needs to be an episode of care from the perspective of the patient that those measures lay on. And we haven't come to good measures yet beyond did they get all the services they needed and start, but that's where we think the next level will be.

#### **Paul Kleeberg, MD – REACH – Minnesota**

You know, I can't answer your question specifically because I don't have the expertise to do that, but I think one thing they could do it, and how we work this out I am not sure, but I think more providers should be responsible for those particular measures including all the specialties. So like what Carol mentioned to have the psychologist or the psychiatrist look at the diagnosis and the medication list, if everybody is somewhat responsible, like I'm a, then potentially if I am a specialist and I see a patient for a specific thing but I see also from the record that I am shared that their diabetes is out of whack, I would say you may need to go see your primary physician. So the more we can, all of us take responsibly for the patient

I think that would improve the care, and it's not so much the specific of the measure, it's that we all a piece of that.

**George Hripcsak – Columbia University NYC**

Judy.

**Judy Murphy – Aurora Health Care – Vice President Applications**

First of all thank, you obviously all put a lot of time into your written comments and I think they're going to be unbelievably valuable going forward and your passion in delivering your verbal comments has been very helpful as well. So I'm going to continue the theme of the quality measures but within the context of a couple of other things that have been said today. Health IT is the means to an end not an end unto itself. The quality measure should be simplified. We should be focusing on outcome criteria, not process criteria. So within that context I'm interested if you guys were in charge of the Stage 3 quality measures, what would you identify as the things we should be focusing on? And just to get you started, I think Dr. Fuller threw out obesity, smoking. I heard Denni talk about maybe some functional outcomes, but that's the kind of thing, what would you focus on? I'm guessing it's not...

**Eileen Fuller, MD - Vermont**

I think the biggest failure in our system is bringing in the, focusing on patient populations, you know, when our patients come to our office and they're compliant and they take their medications it makes our jobs really easy but what we miss I think across the country is the patient population that utilizes the ER at the last minute, doesn't follow up for their primary care visit, you schedule the visit they no show, they don't take their medications. So, really to improve patient outcomes is through this or any other means I think we really have to focus on that patient population that's noncompliant. I don't have the best answers to do that, but I think part of, you know, part of what at least some of the NCQA requirements are, are to go out and really address patient population. Call those patients, send them letters, institute things, care in your office that you can give, through the NCQA we're now able to offer dietitian referrals free. Most insurances do not allow, do not cover any counseling for obesity. Almost, unless they carry a diagnosis of diabetes. So we're addressing this issue of obesity and we give them a little hand out and talk about it and they walk out the door and they go back to their usual care. Well if I can have them see a dietitian that they don't have to pay for, and they'll be compliant about seeing maybe, you know, that's going to be a lot more helpful. But the insurance companies don't pay for that. So, I think, you know, working with insurance companies and really working at outreach at those noncompliant patients is going to have the most effect on changing our nation's health.

**Kelley Bridges, RN – East Alabama Medical Center**

I don't know that my comments are built on the quality care patient. But if you had the chief quality officer here she would say something totally different. From a resource perspective though, if we don't align with what Joint Commission and other vendors are requiring, we have a lot of resources that are right now consumed by two different dual processes to meet this versus others. So just aligning that in itself would give us resources to do other quality of work so that we can continue to be on the front edge.

**Chantal Worzala – American Hospital Association**

Yeah I think this comes back to the needing to bring together what's happening with the Hospital Quality Alliance and the Joint Commission with Meaningful Use. And there's a lot that we need to think about in terms of is a measure something you even want to automate? Some of these incredibly rich clinical measures ought to be that way, but maybe they can't be automated because they require clinical judgment. A lot of the measurement is currently done by, you know, trained nurses who are exercising clinical judgment based on the record in front of them and it may be that not all measures can be automated. I think there's a lot of research and development and testing that needs to be done to verify what makes a measure something that can be automated. If a measure can't be automated it doesn't mean it isn't useful right?

But what I hear from hospital leadership is a clear cry to settle on a set of measures that is a priority for the country. I also hearken back to testimony or a comment really from Marc Probst in the Policy Committee where he said, you know, what we do at Intermountain, which is an organization known for

using its information systems to improve quality, is we think about what are the key problems facing our patients and focus our efforts there. And so it's not lots of quality measures, its important quality measures and that's tricky from a policy point of view because different organizations may have different priorities for their population. But that notion of here's what's a national set and here are some things that might, you might want to be, you know, for example, a requirement might be, you know, are there 3 automated clinical quality measures that you believe you have accurate data on and you're tracking on a monthly basis with your physician. I mean that might be the kind of requirement rather than saying it's these measures. So I think there's a lot of thinking we still need to do.

#### **W**

The other thing might be that it's both process and outcome, because someone encounters of care you only get the process, you don't get to see the outcome. But if you focus your efforts, as everybody's mentioned, around so you have the outcomes are going for and focus on the measures that are known to improve those outcomes, it may not be all the measures that are already out there now. Those are the ones that we believe we're doing with the core measures with CMS already and if those can put into data of here's the outcome, now what are the processes that feed into that that we do have evidence that show they matter and focus the effort on the few priorities.

#### **Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

And I'd like to add, you know, to Chantal's concept that thus far we've gone for breathe and we need to understand where different organizations or different patient populations could most benefit from increased depth in that. So, and when I look and Kentucky is number one in a lot of things, you know, college basketball, beautiful horses, and obesity. Not a particularly proud statistic, but I would look and say that's one thing that we could focus on within our organization. But we'd need to get credit, credit as that would be. We need to align those incentives. We need to align that patient, if I get him in there that the insurance company which, whether that is Medicaid, Medicare, private insurer, allows me to have and I'm reimbursed for hiring that dietitian to work with them, the patient is incented to lose that weight. So that you really to start to get all of these same groups moving and rowing in the same direction toward improvement to get that improved quality of care.

#### **M**

She asked my first question so I'll ask my second question. This may sound harsh but, because you're all early adopters, has the certification process been of value to you? The software certification process, has it been a value or a speed bump to you?

#### **Paul Kleeberg, MD – REACH – Minnesota**

I'll take that one first. I found it's somewhat of a value in that it supposedly gives me an EHR that meets the criteria that will allow me to achieve Meaningful Use. But I found and our folks have found over the years that the CCHIT criteria that were being used previously to say that an electronic health record was certified and maybe even certified under this particular location such as a specialty, was far more valuable because it was far more broad and it also tested it in the field, and not just if you press this button will this come out. So to that extent, I'd say no, and I'd like the ACCB certification process to mimic more of that where it's actually functionally tested and it's tested as a whole so that when I know I buy an ONC certified product I have something that just doesn't meet the letter of the law, but really will help me in my practice.

#### **Thomas W. Smith – CIO NorthShore University Health Systems, IL**

We didn't care that it was certified, we bought, you know, 5 years before that, so it didn't matter. But I think it is a good idea. You have to have some set of standards, there's unfortunately so many groups of users particularly small office practices that really are very unsophisticated in this area, that's not their expertise. I think having a standard like this is a good idea. So I would certainly encourage it. I don't know all the details of how you, which is the best types of certification, but you know, to be honest, the idea of, I've dealt with vendors for about 30 years, maybe 40 years, and the idea of certification is a good idea. It probably could've helped us, you know, 16 years ago in some of those systems I bought in cardiology or something but, no I think it's a good idea. It didn't help us, to be honest. Most of us

probably were already started before the certification process came along. But fortunately our vendor did become certified so we could qualify.

#### **W**

I would say harmonization is the word of the day. The one thing about the, and I think it probably was the short timeframe, but the difference between the definitions and the certification criteria was cause of more concern and ambiguity for those of us trying to meet measures and hopefully going forward they'll be more matching up of what the CMS definition is and what the certification criteria is. A lot of what happened, it was just so fast, vendors seemed to create some new process to create this new way to do electronic discharge instructions and threw it out there, got it certified. Hopefully, the time stretching out a little bit will help that going forward because it's valuable.

#### **W**

I'm going to take the question in a different direction that we haven't really talked about yet and that's more around your experience with the public health measures. I know you mentioned before, you know, challenges with immunization data going to VITL and it wasn't clear to me whether that was a challenge to VITL or then VITL to public health, but my question is, and in thinking about alignment are there other requirements in your states or in your experience where alignment with other public health requirements or measures would be helpful in terms of thinking of Stage 2 and 3 going forward? And to date have you gotten the direction that you need currently for Stage 1 on what that means especially if those, you know, are going to, some of those are going to move to core? So can you address your experiences and any recommendations or thoughts you may have?

#### **Eileen Fuller, MD - Vermont**

For us with VITL the interface has been a problem both with VITL directly in that they're not ready to accept data. They switched vendors from GE to Medicity so they're in the midst of changes. For the immunization registry we've been sending data for the immunization registry via fax I guess for years. So we're participating with that we did purchase the interface through our EMR to interface that electronically with the state but the state still is not ready to accept that. So that hurdle is really at the state level. As far as reporting goes, you know, I'm happy to report to one or the other, but right now the state is setting up a thing called DocSite where they'll be, I mean that's probably again NCQA, and I'm happy to report to that, but I'd prefer to report to one entity and not two, and have to, you know, glean many different reports financially. And I think if we're looking at new mandates down the road that do carry a big cost with them, that hopefully there would be more support financially coming from somewhere for practices to be able to institute them.

#### **Kelley Bridges, RN – East Alabama Medical Center**

From the State of Alabama we did perform our one test but that's as far as we got. They weren't really ready to accept all of our data yet and we're not up for that. Now, going back to his question, one of the hurdles that we had is we can do the one test in our current environment but our vendor required us to buy a separate module to meet the certification so we paid extra for a module that we never really needed. So it's good and bad.

#### **Jennifer Bolduc, MD, FAAP – Chief Medical Informatics Officer - Walla Walla Clinic, Washington**

I was going to say in our state in Washington the immunization registry there is very different from other states and so that's been one of our biggest problems. Our vendor has worked very hard to try to work with many states regarding immunization registries, but Washington requires something above and beyond. So we've been able to do our test, but we haven't been able to meaningfully transmit our immunization data. So it's been a disappointment because we've all been looking forward to that.

#### **Paul Kleeberg, MD – REACH – Minnesota**

We've had luck in Minnesota to be able to transmit data to our registries for immunizations and we've been fairly successful at doing that for a relatively extended period of time. Syndromic surveillance isn't available to us. I think other things that will improve it, if we were able to exchange somehow with public health some of the public health facilities have common EHRs some don't, but there aren't standards

there and that's a place where I think we could also begin to drive this forward if we were able to reach out and connect with public health.

**Denni McColm – CIO Citizens Memorial Health Care - Bolivar, Missouri**

So for syndromic surveillance for us we've been submitting syndromic surveillance in Missouri for like 4 or 5 years using a secure flat file, well of course that won't do at all, we had to purchase the module to do HL7 so that we could send that to the state and fail the test so that we could qualify for Meaningful Use.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

The State of Kentucky has an action oriented HIE. We are exchanging data. But similarly, we had to buy, and we had already been publicly reporting a flat file, but had to buy a separate module in order to report to our HIE and that is successful so that is working right now as is our immunization registry and just of note, on a positive side, we are also now using, we received a grant from the CDC, and are now also trying to use that same concept in building on these processes and procedures to submit to the Cancer Registry for the State of Kentucky. So really just to build on the same concept.

**M**

Sure, thanks. I realize I'm the last question before lunch so I will make it quick. So Carol, you said earlier, I liked your quote, well you mean to differentiate between what we want and what we need, and I heard and what you can get. And then Chantal said if Stage 1 was about getting it started, Stage 2 should be about getting it right. And I couldn't help but hear echoes of the Rolling Stones, you can't always get what you want but you try sometimes you get what you need. And sometimes, and all of you, some of you put some good comments in your testimony about trying so hard for some things in Meaningful Use and giving up things somewhere else. So I wanted to give you an opportunity to kind of share with us some of the key things that, you know, I'm not usually a glass empty kind of person and you've all given us really wonderful recommendations about what we can do better, but I am concerned about the opportunity cost and all the efforts that you put behind a lot of what you are doing. So here's an opportunity for you to kind of share with us some of the things you have to leave behind or put aside while you've been dedicating all your efforts to do the Meaningful Use.

**Chantal Worzala – American Hospital Association**

I'll share some examples that I've heard from AHA members. The quality measures that matter to them are something that they've had to put aside to prioritize the Meaningful Use measures. Getting connectivity for device data into their electronic health record which is a future leaning priority, just had to be put aside because they had to focus on Meaningful Use. Using your IT systems to improve general efficiency. All hospitals are trying very hard to lower cost overall and you are taking IT resources from that to put into Meaningful Use. And readiness for 5010 and ICD-10 5010 starts January 1, 2012. ICD-10 October 1, 2013, huge change over. We're getting feedback that it will be sort of bigger than Meaningful Use and really understanding phasing and staging, and recognizing that this is all change management. And you can only manage so much change for so long before you need to get back to a steady state.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

I would reiterate around the individual practices and back to our current Meaningful Use requirements really have a great breath, and the individual providers are looking for some depth. So where they were working to meet those requirements they may have passed on some of the other things. So whether it meant I'll get back to you, it's a popular, but I think it's very useful, the obese patient. And so now I'm working towards this, I'll get everyone's blood pressure, I'll get all of that, but I'm not going to spend my time doing this because that's not in line with where we're headed right now. So, I do think it is a great start, now we need to help folks channel that energy for them to feel and continue to feel engaged in taking better care of their patients.

**Thomas W. Smith – CIO NorthShore University Health Systems, IL**

One of the things that even in a place like ours that has been in place since 2003 spent a lot of time doing is trying to optimize the use of an EMR or its newest release for particular types of clinicians. And we were also trying to rollout our system to more independent doctors. Those two activities took quite a hit

during this time period because, again we focused on trying to get the other criteria in instead of going to work with that orthopedic practice to optimize their workflow, you know, and that still can be picked up eventually, but those two things were delayed.

**Eileen Fuller, MD - Vermont**

One thing for our office, and I'm not sure this really answers your question, but a big negative impact it had was patient wait time. So, you know, when you're instituting and EMR you cannot see the same number of patients so they might have to wait another month for their well exam. In the office wait time, you know, if I keep somebody more than 15 minutes waiting, I don't like that. But with the new EMR I could be up to 45 minutes wait. So, our goal now is to hopefully really get back to being on time with our patients getting caught up with the delay and well exams. And that definitely suffered during the implementation.

**Paul Kleeberg, MD – REACH – Minnesota**

I think in general, you know, that it's an expense; the reimbursement comes later for this. So whether you're implementing an EHR and you take a hit in productivity or you're spending the money to invest in an EHR or you have an EHR and now you have to redo all of your workflows, every system has a certain capacity and it just takes it away from many things. I mean I can't name all the potential places but it's just a reality. So I think that underlines why we really need to pay attention to we're getting what we need and doing it in a way that provides at least disruption to processes that have, many are working pretty well.

**Denni McColm – CIO Citizens Memorial Health Care - Bolivar, Missouri**

I would agree with Tom that optimization was the big hit for the IT side using the system better. We just didn't have time to devote to that like we would have during that time period but also since we're a small hospital resource-wise our capital budget has taken a hit to the extent that we haven't updated patient beds or nurse call systems, or fetal monitoring systems, and I'm happy to say that now we've got our first installment of Meaningful Use money we're going to spend it on those things.

**Kelley Bridges, RN – East Alabama Medical Center**

I would like to comment too; on our strategic planning we didn't really change our focus because we were already on a path to paperless is what we called it. And so on that journey Meaningful Use actually fit into that pretty much. We're not on the journey to get paperless anymore, but use Meaningful Use with our data. However, one of the comments that Deven made was about making judgment calls in Stage 2 and Stage 3 when there're not final yet. Small hospitals have to do that. We don't have the capital availability to do that, to not look for...pharmacy, that's going to be huge for our hospital and there's so much money that we have to invest to get that right before you require it.

**Paul Kleeberg, MD – REACH – Minnesota**

There's also the wait factor. I still on the vendors list to have it installed.

**Kelley Bridges, RN – East Alabama Medical Center**

The other additional thing that we've seen at our hospital is because Meaningful Use is so big, and the vendors are ramping up, they're stealing our staff. We've lost 3 to 4 in the last six months, maybe even more than that specifically to going to work for the vendors, consultants, both, both. And because of that they're stealing our aged staff too. So we have new staff that now has to learn just our basic routines to get up to us being able to meet Meaningful Use. It's totally...

**George Hripcsak – Columbia University NYC**

Okay. So let's have one last question, Paul.

**Paul Tang – Palo Alto Medical Foundation**

Great. Thank you. First I want to thank the panel for just a wonderful set of advice and shared experiences. It's been very, very helpful to us and informative. This is the beginning of our strategic planning for Stage 3 and so trying to skate to where the puck is going, one of your underlying themes is, for both panels has been the CQM, the clinical quality measures. It makes me feel a little bit like there

was a program maybe decade ago from CMS called doctor office quality and the idea was now that some of you have implemented EHR let's see if we can get some good quality data out of it. The regret was that what they gave us was the old definition from the administrative side. So it was a bit of a letdown and to try not to repeat that because in a sense we essentially just repeated that. And to speak to the breadth and depth, the goal was to raise the bar and raise the tide for everyone to get EHRs to start spitting out quality measures even though it's painful and rudimentary at this point because we know that just like Tom was saying, 75% of your effort is almost getting the data that you painfully got in out in a useful way.

So, one of the, by certification we were hoping that that would sort of make that smoother, it certainly doesn't sound like it's there yet and we may have to rethink how certification, what the, I mean you said that one the quality measures weren't tested even though they were "retooled" and two, they're not even looking for accuracy. I mean some of that was a little bit of a surprise. So we may have to work on that side. But, so the final question is looking towards where you'd like to move, knowing that if we got both these data collection tools and the reporting tools out to you that you would choose your own measures, you'd even make up your own measures if you had a good way of doing that. What are the kinds of measures that would be attractive to you?

So, some of the things that our Quality Measure Workgroup had put out included the functional status, patient reported outcomes, so this is not just medical facing, this is what does it mean to the patient, that was one of the things we learned from Eva, like what are the measures that matter to the patient or to the individual that isn't even a patient yet. If we went towards things like that or these delta measures and it plays on, someone mentioned it's a different way, so instead of just absolutes there's improvement. That's good for everybody. So delta is not you're A1c today, it's how has it been by patient, not average, that's the other important thing, population management is good, but if you just look at average it pertains to no one in that average. So, how can we improve the kinds of measures? These are qualitative changes and the kinds of measures that would move the entire workforce, the entire system to a different level. Because that's what we're shooting for.

So are we getting close in the measures concept that have been proposed and actually there's some contracting that HHS just put out to try to develop measures like that, are we hitting a better nail? Are we going to where the puck is going? Does that make any sense? It'll be a new game, a new set of challenges, but is that one worth it, in a sense this is a growing pain of getting started, are we putting a goalpost out there that's worthwhile to your systems?

## **W**

So for the physicians, since I'm not one, are you talking about they would be held accountable for the reduction in the A1c or that they would be accountable for reporting the delta in the A1c? Those are two different things.

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

So in some sense they would be accountable for working with their patient for reducing the A1c from wherever you are, not just getting an average population somewhere. That's a different approach and yes, it means knowing who your patients are, not just the ones who come in. And yes, it means having to work much more with them in partnership than maximizing some checklist or some kinds of other ways of gaming the score. It's sort of a different slant. It's a different perspective and that's what we truly meant by Stage 3, the outcome side, the outcome sequel.

## **Eileen Fuller, MD - Vermont**

I think you have to be careful when you are looking at the outcomes. First of all, they have to be measurable outcomes that have proven data so A1c are easy, LDLs, blood pressure readings those are concrete data that's easy to follow. But I think you alluded to the fact that you need to look at the individual patient, not the patient population because I think if we're all doing a good job we're going to be reaching out to these patients who have bad A1c's, who have high blood pressures who aren't coming in. So if you look at statistics it may look worse but we're really doing a better job. If you look at individuals

going, and individual with an A1c going from 9 to 7, great, but you have to be careful about looking at patient populations and individuals.

And I also think you need to look at the feasibility of the things that you're asking us to do. So, you know, to say we would have to have 20% of our obese patients lose 10 pounds or something. I mean the feasibility of working with obesity, even things like advance directives, when you're looking at concrete numbers, you talk a healthy patient population, we address that at every physical, we have a handout for an advanced directive that they can fill out and bring back to us, we get it back to way less than 1% of the time. Patients, unless it's fairly imminent to them, inpatients have much better statistics, but outpatient care, patients just don't, they leave it, they don't, they have no interest in filling out advance directives. So, to make them truly feasible, particularly when you're talking about resistant patient issues such as obesity and smoking cessation and things really important and we address it, and we work hard at it, but as far as having us be accountable for a certain percentage of that is probably not realistic or fair.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

And I would, I'd like to add to Dr. Fuller's comments in the sense Dr. Tang that again I think that everybody that participates needs to be aligned and by that I mean it can't just be the eligible provider as being held to this. We want to bring those patients in who are obese and whose hemoglobin A1c and are hypertensive, so that said, we get them in but to only hold those folks accountable for trying to do their best, no, the patient also needs to be held accountable. The payer needs to be held accountable to help us help the patient. So, I think that you need to look at all pieces of the puzzle when you're looking toward functional outcomes for Stage 3.

**Paul Tang – Palo Alto Medical Foundation**

Let me just clarify, so this group doesn't deal with the reimbursement policy at all, so when you say accountable, what we're trying to do is help the industry put in place tools that would allow us to measure these things. You don't have the tools to measure any of the things that we mentioned. We don't have the ability to get functional status; we don't know whether, after the knee replacement they can walk, it's not a quality measure. But it's a real measure to the individual patient. But should we be working on tools that would help you know those things. I think the people who do work on the payment policies will figure out how to get patients to have co-risk, but that's a separate issue. We're trying to put in place tools that would help us move in that direction.

**Carol Steltenkamp, MD – CMIO – University of Kentucky Healthcare**

I appreciate that it's a separate issue and I applaud it. Yes, do I think that is the way this segment can be heading and should be heading? Yes, I do. That's the greater glory as it would be; however, pragmatically most folks aren't there yet. They are living in the world of but you're holding me responsible and you cannot hold me responsible for things I have no control over. So, that's where my comments are based. So, yeah, I applaud the greater good. But most folks on the front line can't see the forest for the trees there yet.

**W**

From some of the work we've done we've done some of the HRSA models and tried to do the improvement in A1c levels and all that. Identifying who's patient it is and who is the responsible provider is still a challenge and I do hear providers say that if I'm held responsible for the outcome then I'm being incentivized to cherry pick my patients to the ones that are compliant and then we leave the worst of the worst situations out there.

**Paul Kleeberg, MD – REACH – Minnesota**

Yeah. I would respond to that as well. There is some concern about not seeing the patients...or pushing...practice, but at the same time I do think each of us needs to be completely responsible for our patient that walks through our door. So I think that makes sense. To respond to your functionality issue, I think there are things that could collect information from patients that would help paint a bigger picture for us across the enterprise or across the patient's life. I'm not qualified to think of what some of them are. I have seen some of them in your thoughts and recommendations, but again, it's important that all providers who touch these patients have access to this information.

**Chantal Worzala – American Hospital Association**

I just wanted to add one quick thing which is great vision, but let's make sure it can be done and I think there's a real role here for operations research as you're developing your strategic plan.

**George Hripcsak – Columbia University NYC**

All right thank you panelists for a wonderful panel.

*Applause.*

**Paul Tang – Palo Alto Medical Foundation**

Our next panel has 5 people. I'm not sure it's possible to go through the motions of eating within a half hour so if we could come back at 1:15 that'll still give us an hour for the vendor panel.

Okay we're going to get started with our afternoon panel. Are the phones bridged? Okay. Okay, welcome back and this is going to be our third panel and this was for the vendors who are the important source of the tools that we're all trying to use to change health care and improve the health of our community. So Dr. Marc Overhage is going to moderate this session.

**Marc Overhage – Siemens Healthcare**

Well thanks, everybody. We obviously, panel members have to keep everybody awake and energized post lunch. So you guys have a particular challenging job and given the timing we're shooting for 5 minutes as before so we'll be watching the clock and I do have a hook, so we'll use it if necessary. And just to remind everybody too that all the panelist bios are available in the packets and on line so we have a really wonderful group of folks to share their thoughts and insights this afternoon. So with that, let's turn to Sasha TerMaat from Epic Systems.

**Sasha TerMaat – Epic**

Thanks Marc. My name is Sasha TerMaat and I'm from Epic where I'm responsible for directing our Meaningful Use efforts. I also serve as the chair of the Meaningful Use Workgroup as part of the Electronic Health Record Association. So in preparing my testimony for today I worked with a larger group of the vendor committee to sort of combine all our perspectives into one. In the questions that you posed to the vendor community you asked about some of the challenges that we faced in Stage 1 and what our recommendations would be for Stages 2 and 3 and where are areas of concern where. And there was consensus amongst the vendors in our workgroup that both the largest challenge for us in terms of implementation and development and the area where we had the greatest concern was the clinical quality measures reporting which after all the testimony we heard earlier today, I don't think it is a surprise.

Sometimes there is this misconception and I think given the testimony we heard earlier today that that is starting to go away. But sometimes I talk with folks who have a misconception that reporting out a quality measure is sort of a simple development project that just involves sort of importing the calculation in the EHR and then running it on the data that's already there. And amongst the vendors we are realizing from our work in Stage 1 that that's not really the case and the most significant challenge in working and developing quality measures for the electronic health record is not on running the calculation at the end but it's on making sure that you have all the data captured within the EHR in the first place to then run an accurate calculation at the end of the process.

So the challenge being the new implied documentation requirements. I wanted to give a couple of examples of what some of those were in our Stage 1 experience so you have a sense of what the additional documentation requirements are being imposed by measure specifications that weren't otherwise part of the objectives for required documentation that are part of participating in the Meaningful Use program. So across the different quality measures we had things like recording discrete, things about what you counseled a particular patient about, what the particular patient's symptoms where, for example, what asthma symptoms they have to categorize them within a particular quality

measure, follow-up plans on particular issues with the patient, what communications you've had with other providers about that patient and what they were about and who they were directed to. And then another topic which came up earlier today, which was documenting exclusions which otherwise wouldn't be part of the documentation that you're putting within an EHR. But if you're trying to capture accurately for the measure you need to know if the patient's excluded for medical system or patient reasons.

So each of these things are certainly possible to document and I think in Stage 1 we've done that. But they might each require a new tool and a new workflow and training to know where to put that data so that can be calculated in the end. And I think that's where the challenge of the quality measures piece comes in and it leads to our recommendations for quality measures in future stages. I think choosing measures, and this idea came up a little bit earlier, choosing measures that capitalize on the data that you know is already captured within the EHR would make it possible to do a larger volume of measures in a shorter amount of time. So when you know that a certain data element is already captured, for example, because of they're part of another Meaningful Use object, like updating the problem list, having the meds in there, allergies, vitals, lab results, all of those things you know the data is there and that sort of minimizes the work effort to capture new data within the system.

Focusing on other data elements I think risks diverting attention and sort of minimizing effort on quality improvement and just the effort of capturing more data across the board. So I think there needs to be a balance and again the word balance came up in one of the earlier panels between sort of measures that are appropriate to all the different classes, specialties, and groups that want to have quality measure reporting, and also a balance of measures that capitalize on the data that we already have within the EHR system and can make good use of in the near term. And then sort of allowing enough lead time so that when there are new data elements that want to be captured for measures that we're looking at for Stage 3 that we have enough time between when we know what those data elements are and not in a sort of measure concept way but in an actual specification way where we can start to program this is where you would capture that data element, and this is how it would be coded, and this is where we go in a workflow and to start to introduce those to users that there would be enough time for that process to happen so that we can have efficient tools for data capture, effective rollout of those tools to providers and higher quality data within the quality measures that we would have in a longer timeframe. Thanks.

#### **Marc Overhage – Siemens Healthcare**

Thank you very much Sasha. Let's move on quickly to Michelle Freed, please, from McKesson.

#### **Michelle Freed - McKesson**

Good afternoon. Michelle Freed with McKesson, I'm responsible for the programs at McKesson associated with the regulatory components. Based on the testimony today that I found absolutely incredible I've changed many of my comments. So bear with me as I go through this. I'll focus my comments to a few points that have been either covered lightly or not covered. So I just wanted to make sure that we get these. I want to make sure that everyone understands that we agree in the testimony that, and as a high priority to harmonize the requirements across the federal programs, consider the maturity of those requirements, and the data elements that are captured, and provide better clarity on the methodology. So that's the main message, it's in my testimony and you can get into some of the details, but let me cover a couple of other points.

A couple of things were mentioned today and one thing from a vendor perspective I would indicate that the specificity on the requirements of the measures are really needed as soon as possible. In Stage 1, as we stated many times today, the specificity for the building of systems and using the systems weren't contained in the rules. So, as a result, at least my experience from McKesson's many EHRs that we do have we ended up with iterative versions of software and trying to get those to our customers as quickly as possible but with many of the changes we ended up having to backtrack, put out a different release or a different service pack, and not only does this have an impact to software but we spent incredible time, as everyone on this panel certainly did, with customers in providing user guides, in providing education sessions, so all of that also had to be changed. And so there was a lot of rework that was done.

You know Deven stated today that, indicated that only the recommendation for Stage 2 where available, but be assured that McKesson with the RFI in January began coding and began development of that software and anticipated changes that we would need to make. So, these plans have to include the design and development but also extensive resource for testing to make sure that there's customer validation, that we go through the pilots, etcetera, so to that extent there is a lot of time and I think that's one of the major lessons we learned through Stage 1.

Further, in Stage 2 and 3 with the use of the HIE enabled capability, there's really a very, very high importance on integration testing and testing the information that is exchanged not only sending the information but also receiving it and being able to take it back into the systems. So it's going to be more important for the vendors to get it right, but probably 10 times more important is what you need to understand is that the providers burden in order to do that with their unique set of systems and their unique HIE configurations, etcetera, is also going to be critically important. So I would stress that for every time there may be, you know, we may reference a development timeframe for the vendors, it is times 100 for the providers, so it's really important that the appropriate time and the specificity of those requirements really be made available. So we highly recommend that a definition for a longer term roadmap so that the vendors can get ahead of the curve and certainly we can stay ahead of the providers so that the providers can make choices based on their operational and clinical needs.

One point, the second point that I would make has to do with the EHR definition and the certification program. As mentioned, there are many elements that are needed for the calculation of the measurements and the requirements, and many of those elements were contained traditionally outside the EHR. So we spent an incredible amount of time trying to pull those elements or getting those elements into the EHR. But the value is really questioned, not only, you know, by the customers but the value in terms of why does it have to be in the EHR. So we would really encourage evaluation of the data that's needed and understand the source, and the flow so we can have a lesser burden and lesser costs associated with the deployment of the EHRs.

The other component that was mentioned today was the certification scripts often did not reflect logical clinical workflow but it checked the data flow and checked the technical aspects, and the use of the data, and I would agree with this. We spent an incredible amount of time going back after we were certified to optimize some of the workflows with our customers and very much so. I applaud the ONC now they're taking a very diligent effort to go through and look at EHRs and how they're operating, the demonstration associated with it, how the clinical workflow works, and it's very important, and I would really continue to encourage to do that.

And the last point has to do with the customer use of certified systems. It was referenced on the previous panel the possession rule that a provider has to have all of the components of the certified bundle whether they are going to use it or not. I would really question that and would really appeal to the committee to take another look at that. It causes a situation where customers actually have to purchase software that they're not going to use for a period of time and the bundling, and the requirements associated with the use of the certified bundle or, whether it's complete or modular, you have to have all of those components, that is another component that certainly many have talked about as to why that is difficult.

And I would also encourage one other point is to examine the portion of the rule that references that providers must use the latest version of the software no matter what stage they're applying for. This, I did confirm that it is in the final rule. We need to take a look at that. It's not a burden today, but certainly as we move into Stage 2, customers applying for Stage 1 will have the burden of having to get up to that release which may pose a tremendous difficulty for them. Thank you.

**Marc Overhage – Siemens Healthcare**

Thank you. Jeremy Delinsky from Athenahealth.

**Jeremy Delinsky - Athenahealth**

Thank you for the opportunity to speak with you today. I too found the testimony earlier today very insightful whenever we can hear from potential customers how they use our systems it's always a great benefit to us. My name is Jeremy Delinsky I'm Athena's Chief Technology Officer. I've been with the company for about 7 years and I'm responsible for managing our execution against Meaningful Use.

Athenahealth is a smaller company than Epic and McKesson. I thought I'd give a little bit of background on who we are. We are a cloud-based provider of practice management EHR and patient communication services to about 29,000 physicians across the country. I believe we serve customers in 48 states. Our products are fully web native and they're continually updated with payer rules around how claims get paid and quality programs that payers sponsor. So our platform today contains the rules for 30 payer specific pay for performance programs. Meaningful Use is the most significant one in terms of provider participation and the potential for financial reward to our customers. So we've alliance quite heavily against it to get all of our providers or as many of them as possible over the finish line this year.

As a cloud-based company and the way I define that is one in which every user of the system uses the same version of the software. So there is no customer specific version of Athenanet. We host one of them and it's in our data center. We have a relatively unique position in the vendor community. So when we hear concerns about timelines, about getting the product developed and the product deployed, those don't particularly resonate with us, so we get to release our product every month. And when we release our product every single customer is on that version that is now current. So every single one of our customers was upgraded to our certified version of Athenaclinicals within two weeks of our certification. And as you'll see in our written testimony we learned a lot in Stage 1 about what it really took for providers to perform against the measures and as a result of monitoring their performance we made a lot of changes to our product, and I think that the McKesson experience bore that out as well, that the certification criteria sort of if you went through a process to show basic capabilities but how they'd be used in the wild, to use a cliché, weren't exactly kind of what that process is all about. And so to put most simply what I'd say to the committee is don't hold back your aspirations for Stage 3 based upon what you perceive as the ability of vendors to meet those timelines because this is a market and good products should win.

The other thing I would say is that agile development methods, cloud-based architectures, these aren't new concepts, in fact the entire enterprise software market is moving away from on premise software. So if you were to pool colleagues and financial services, or other industries you would find that the vast majority of their core systems they are, if not already in the cloud, trying to find a way to get them there. And if you look at the public performance of cloud based companies I think you would see unbelievably tremendous growth and interest in those business models.

So we do have I think a unique position to talk about how Stage 1 is going and we included a lot of data. In the interest of time I will be brief on that, but as of 24<sup>th</sup> of September about 28% of our customers had already attested who were striving for Stage 1 and we have about 50% who have satisfied all measures and are in some form of attestation or having already attested. An additional 24% have 1 measure left to go and if you draw the line down to 3 measures 90% of our providers are within sight. We don't think 100% are going to get there. We think maybe 85-90% will get there and get there this year. There isn't a penalty for them not to get there this year. So we'll encourage them probably not to attest if they're not going to get there and just say you know, "let's try again next year." We do publish the data on our website and we refresh it every two weeks and we would be thrilled to take anyone through it if there is interest.

So I would share some perspectives on Stage 3 in the areas that we would like to see some additional clarity or at least focus and I think the most glaring one is in the area of interoperability or at least getting data out of systems so sometimes it falls under the public health measures. I think we need to think about what the use cases are for the appropriate exchange of health information, so the CCD is bear, it's a beast, and in fact if your doctor you probably don't want to exchange one or you certainly don't want to receive one because you have to reconcile the whole thing. So this unbelievable workflow has been developed to turn physicians into reconcilers of data, but if you look at what happens in a medical practice you're going to see a ton of health care information exchange happening, it's just happening on a fax

machine. So it's really nice to send a consult letter to a colleague and to get your lab results and to get discharge summaries, unfortunately the CCD is a rather rigid format that doesn't let you purpose, at least today, aren't purpose built to distinct workflows. So we'd love to see further examination there.

And then in the interest of time I'll close it down quickly. But the other point here is that we loved the definition of success of exchange to be held to actual exchange and not to one of failed test. And so I think that the vendor community has really let their clients down when it comes to the public health requirements. So I've seen some testimony today that suggest that vaccine registries weren't ready, that's not true. So we've built connections to 32 of them. We have 5 more that we hope to bring live this month and we certainly have a list who weren't ready but it's I think 8, and we've provided that in our written testimony. So, one of the doctors here said that the product should work as advertised out of the box, to me that includes the mechanisms to exchange data. We've gone about building those connections and I think that, I don't think its right that people should have to pay additionally for those interfaces when they buy a certified product.

The other thing I'd leave you with is I think that we should be mindful about the broader supply chains impact on physicians and how they can perform against these measures. So if we take structured lab data for instance, many small group practices today are refused interfaces from labs when they try to get results interfaces in place. You should just talk to those labs and understand their business practices, but it's usually tied to how much volume a provider sends to a given lab, and so structurally these practices will not be able to comply here and it is not within their control and they should not have to staff up data entry armies to be compliant and that's just one example of several. I am way out of time so I'll stop. Thank you.

#### **Marc Overhage – Siemens Healthcare**

Perfect. Thank you. Next on our agenda is Larry McKnight from Siemens Healthcare.

#### **Lawrence McKnight, MD – Siemens Healthcare**

I'm Larry McKnight and I'm a physician consultant at Siemens and like many of the others I feel like well I don't need to say anything because you've already heard all this wonderful testimony, and I could echo almost Michelle's testimony verbatim, or maybe call out things from this morning on, you know, you can't be clear enough, or early enough, alignment to the timelines, and the need for prior testing to make sure that the requirements are clear. But looking back at the focus of the meeting, the high level objectives of what does it take to get a provider to Stage 3 and beyond, I think you could almost look at that as from a different perspective of how do you determine that in general?

How do you determine whether or not a program is a success or not and in thinking about that, I practice as a physician, I've worked as a hospitalist, and I thought back on why do I practice? The reason that I practice is because what I thought would work in real life when I go out and I talk with the physicians and I actually try to use the product, well this patients just a little different than I thought and you know, it sounded like a really great idea when I started it, but, you know, well I need to modify my thinking. And so I think part of the key to that success and why I continue to practice is it forms a self check. It's a self-assessment and it's an assurance for me against unintended consequences. And so protection against unintended consequences if there's anything out of Stage 3 and beyond that I think we need to talk about and focus on is how to achieve that effectively. And so in that, I would say I applaud all of the work that has happened so far, there's been some fantastic foundations laid, but to get to making sure that that infrastructure is maintainable over a long period of time we could maybe work on a couple key aspects to make sure that it is, it continues to be relevant.

So the first thing is to ask the question and certainly to the extent that we're having these kinds of hearings that's exactly the purpose, it's basically to find out what is wrong, how can we fix it? But there is also a key in the early Meaningful Use discussions which I think needs to be highlighted. Before you even said CPOE should be a Meaningful Use objective, you went back and said what is the policy priority of this group? What are our goals? And by organizing things into goals and objectives you started out and you put a framework around it and that's understandable, it's straightforward and simple. I think that one of the things that needs that feedback loop to make sure that you're in sync is to make sure at every

level that you are always feeding against that and so not just asking the question but also ask, you know, for every Meaningful Use objective of the vendors as they're trying to implement, did this in your institution actually make a difference? Was it an opportunity cost? I heard that phrase. Was it an opportunity cost or was it something that really made a difference? If it's not in that list of the things that really make a difference it's a candidate for removal, which also I think needs to be a consideration here is that this has the potential to grow into an enormous check-list, that's not really what the goal is. The goal is leadership and to guide people in the direction of, you know, advancing over time.

The only other aspect that I'd like to maybe highlight that I haven't heard very much on is the fact that around this table we're largely the people that have succeeded in doing some kind of Meaningful Use and Meaningful Use I think needs to be more than just those people, it's the people that aren't Meaningful Users that we should be talking to and saying, why not? How come you can't do this? What was your obstacle? How can we remove that? And if we do those things then I think we'll be on the path of success.

### **Marc Overhage – Siemens Healthcare**

Thank you Larry. And our last panel member this morning or this afternoon, excuse me, Michael Stearns from e-MD.

### **Michael Stearns, MD – e-MD**

Thank you very much. Well again I'd like to echo most of the really, what my staff really wanted me to talk about has been addressed already, and those are primarily the clear guidance on specifications, definitions, etcetera. We started with that early on although I think the process is getting better. Earlier timelines for specifications, again we've all said that already, so that's huge. Eighteen months would be ideal, especially if we're doing some of the metadata request that come out in the paper released in the notes for proposed rulemaking in August, and then the contents around, clarification, what is a complete EHR, immunization registries, and biosurveillance were particularly challenging, confusing and even the RECs were giving different guidance to different providers on what to do.

I'm a little concerned what happens when the OIG then goes into effect and they start maybe perhaps challenging people that have attested successfully whether or not they're compliant. So that's created a lot of concern in our community. But those have been touched on before. What was really, one of the questions we were asked to address and to me they're the cool stuff was the measure concepts and those I'd like to talk about a little bit more. And they're pending right now and again I think we can do most of these with enough lead time. So 18 months minimum for short and this is really a long-term strategy down the road.

And then one thing that others have touched on some of this is some feedback and others have made commentary on this is reimbursement, provider range potential penalties should not be tied to the action of a third parties like patients. So if the patients don't want to cooperate how do we separate that so the provider is not given a negative rating. And then another common theme is the ability to use data to assess the quality and efficiency of care provided, that's an area I think is going to be a little contentious because it really depends on what exactly the data is and really being able to validate the data as accurate and we haven't really accomplished that goal yet. We haven't really reached that point where we can really go back in and assess whether or not the data is clean so we have accurate information.

And then of course we would benefit from the advancement standards, to facilitate some...and data integrity. So we're on the threshold of that right now, we're moving in that direction. I was the International Director at SNOMED CT and 10 years ago when we finished that project the merger or the creation of SNOMED CT I thought by now we'd all be using SNOMED like crazy, I'm very glad to see there is some considerable thought towards using SNOMED as a clinical exchange terminology, but as you know, SNOMED is far from perfect, it needs a lot of work in how to deal with the more complex expressions.

And then we also want to make sure that there's a medical legal consideration taken in. If we're going to have data available to assess the performance of providers how do we protect this from being used for,

you know, data mining and looking at how to rate providers in the community. If the ratings are poor, what's the mechanism for them to come back and challenge it? The American Academy of Ophthalmology approachment was to SNOMED and they said "okay who owns the data?" I said "we'll I don't really know we haven't worked it out yet" so here's the problem I've got two ophthalmologist, one will take a 70-year-old cataract patient who is nearly blind but has risk factors, another one won't touch that patient. So if we did the proper/improper outcome measures one is going to look a lot better but may not be the superior provider. So these are the kind of things as we get into that level of data analytics I wanted to mention.

There's one item that was mentioned, appropriate and timely follow-up and this is often referred to as orders tracking or orders management by some vendors, most of the vendors have that already and it's a huge patient safety component. So when I think that it's not widely used, one thing we did see with our current users, who are doing pretty well already, they got really into the product when it was a measurement, it was one of the qualities, they really got into reporting and all of a sudden they were really excited about it. So I think if we put the same thing on orders tracking, this is if you order a CAT scan, it doesn't come back, it's positive, that there's some mechanism in place and that solves one of the measured concepts which encouraged me, I actually kind of wanted to push that for Stage 1 because of the patient safety benefits.

I also wanted to touch very briefly on another question that was asked about supportive health information exchange, I do, as I mentioned before, I think the use of claims data, clinical information systems needs to be avoided, it represents potential for patient safety issue. I recently gave a talk on SNOMED CT versus ICD-10 CM and ICD-10 CM is very complex, very much oriented toward billing application it's even some ways potentially worse than ICD-9, and I think people are moving in that direction. We need guidance very quickly though if we are going to be using something besides claims data in CCD or other exchange mechanisms, we need to hear about it as soon as possible, you know, not 6 months before we have to release the product.

And then accelerating the use of controlled clinical terminologies should be priorities we touched on. And then the role of codified data support, metadata is an important goal, however the process is relatively new and needs to be tested. I have some concerns about patient safety related issues if the metadata is somehow disarticulated from the source document. So my main...when I speak with HIE groups is that they maintain a link from the data that has been parsed out of a document back to the source documentation so they can always see that if there's a doubt multiple sclerosis, an example I use all the time, if they've stripped, the doubt gets stripped off we can go back and see the original document. Thank you very much.

#### **Marc Overhage – Siemens Healthcare**

Thank you very much to all the panel members today for your time and your written testimony, which I know many of you put a lot of time into and had a lot of very specific and detailed information. As people are thinking about their questions too I want to remind you one of the things that this panel brings is not just the perspective of the vendor, but literally hundreds of hospitals and tens of thousands if not hundreds of thousands of physicians who are complaining everyday I'm sure about these processes and systems and so they also represent I think a sort of an integrated view of where the community is as far as providers and trying to leverage these tools and achieve these goals so David has this tent up so let's start with him and we'll work around from there.

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

Thanks Marc. Thank you all. I really want to thank you and your companies for all the work you've done to make this program happened. Without you we would have a real hard time moving this agenda forward and I appreciate your candid feedback in what we've heard this morning. So, again I'm going to ask sort of the same question I asked the earlier panel about the architecture of quality measurement and where we go from here. So I think the paradox is the policy objectives, I mean if we want to support the new policy vehicles, episode payment, ACOs, and other things that are on the radar both in the commercial and the public payment world, we need information to do that and the information has to be linked across a variety of settings and providers and across time in terms of change measures and so on.

But what we've heard from a number of vendors and the others is the timeline for execution of new quality measures is much slower than the deployment of the policy initiatives. So really from what we've heard, if we get the measures specified and getting...to endorse the measures and then we come to you said 18 months engineering them, and then it goes through a testing and validation process, and then it's certified, product certified, and then we have a user deployment, a release functionality, and adoption by those users, we're literally, if I have an important new policy relevant measure in front of me today we're talking 4 or 5 years. And as you know, when looking at the debt crisis and everything else that's a very slow timeframe if we want to deploy a new measure for purposes of policy, payment, recognition and so on. So we've got to find a way to compress, as Patrick said this morning, the cycle time for this enterprise.

And so I'm really, a couple alternatives come to mind, one is, is there a different architecture of your product that would lend itself to much more flexible and fluid creation of measurement outputs instead of being hardcoded with 18 months of engineers sitting in a room. Alternatively, is there a model like I suggested this morning in which basically the products are not computational engines, they are data capture machines, and they export raw data to some third party that does the calculations across, perhaps across settings, across products, across components, even data types. Or do you imagine that basically we send all the raw data to CMS and they do magic with it, and they will compute whatever they think is necessary to judge an ACO or the provider performance in PQRS or another source. So, I guess I'm asking you, with your vendor hat on what are the architectural options we should be thinking about for a future of flexible adaptive policy relevant quality measurement, which isn't a 4 or 5 year production cycle for every new requirement that comes down the pike.

**M**

I can start the ball off. I think to many extents that is precisely the approach that we took and tried to employ, we have a separate engine and a separate database that is dedicated for this purpose, and one of the issues around that is the way that products are sold, have been historically sold and the way certification gets established. So one of the problems that we had for example is the fact that if you have a separate data warehouse that is dedicated for that purpose of, you know, collecting all the information up and having your reporting framework in a generic way that you can do that, then that creates a certification problem because not everybody has that particular component and so there are some challenges that occur in that space.

The other thing that I would say is especially for the hospitals it's a different beast than it is for the ambulatory settings. And I think it's that way for a number of different reasons, one is that its many more providers are entering into the picture and so you can get disagreements with the data. One is that the time span tends to be much larger and so the quantity of data tends to be larger, but also the occurrence time is ambiguous. So if you say did the patient have an MI? The only time that you can say that really is after the fact. So you can't capture that, you know, on admission or whatever you have to at minimum capture it twice, you know, did they have an MI before they came into the hospital or did they have an MI during their hospital stay, and so there's some challenges that come around the workflow and that workflow is really where the hospitals have challenges I think in trying to implement some of those aspects. So it isn't just a question to the vendors but it also I think very much does affect the providers and how they're going to execute on that particular aspect.

**M**

I mean, I have a bunch of thoughts here. So I think the first is maybe challenging the idea of using another system is the computational engine and I think not because of, sort of wanting to claim real estate, but because ideally these platforms become about real-time enablement of decision-making, and so if you have to export data out of your EMR to have someone else scrub it and then import it back in you might be losing an opportunity to act on patient now. So the way we've architected our system is that those measures present in the workflow while you're seeing the patient and they present out of the workflow if you want to run reports and call patients who are out of compliance. The way we've, I think what you heard is that the challenge in measure development is around making sure that the clinical concepts and the data are residents within the application itself and so the way we've solved that

problem, at least for our customers, is by controlling the templates and the schema itself that clients interact with. So we maintain the golden copies of all the templates whether they be for an orthopedic surgeon or primary care doctor and when you introduce a different clinical concept, to take for instance smoking status, you know, Stage 1 introduced new ways of capturing whether someone smokes or not. We updated every single template that referenced that. And so if you have that ability to change the content that in the exam room on a timely basis, so for us that can be every night, but within some reasonable timeframe, I think you have a hope of compressing those timelines to get new measures out.

**Michael Stearns, MD – e-MD**

Yeah, I mean, I talked with my staff, the easiest part of all the Meaningful Use was the clinical quality measures. The 18 months was not, that was more for writing new code, new modules, but the clinical quality measures the framework is already there and as we've already heard it's more developing the content, coming from the codified elements, which are not supported right now. If we already had codified elements we could use, you know, recommended it'd be even easier, that we could draw from. So that wasn't as difficult as other areas.

**Sasha TerMaat – Epic**

I was just going to echo the point Michael made, which was that I don't think outsourcing the computation elements of the quality measures compresses the timeline for making sure your capturing all the correct data in a codified way in the first place. So I'm not sure there would be acceleration in that way.

**Marc Overhage – Siemens Healthcare**

Thank you. Let's move around clockwise. Deven McGraw.

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

Thanks very much Marc and thanks to the panel, really terrific testimony, which I'll have to admit that I haven't had a chance to read yet so if you addressed this all in your written testimony you can just tell me to go read it and it's all there and I'll do that. What are we going to do to make exchange not come up as the problem that providers can't seem to be able to do or to attest to and we're sort of really looking to lean on Stages 2 and 3 to really get this data moving for care coordination purposes as well as to the patient for patient engagement. So there's, much was important in Stage 1 in terms of getting the right data in and starting to get measures out, but at the end of the day if we can't solve this problem of moving data and data being able to be incorporated once it's received in an easy way, I mean essentially we will not have hit a number of really important goals in the waning years of the incentive program.

So, Jeremy you may have touched on it a little bit with some sort of difficulties in terms of the CCD being, you know, somewhat clunky and maybe more data than sometimes needs to be shared, but I would love to hear from you all about what you think we could do either from a certification standpoint or a Meaningful Use standpoint to build the foundation for exchange so that when we're sitting here in another year or two we're not getting the same comment that people can't exchange data or they can't incorporate data that they get electronically, or people are relying increasingly still on fax machines to share data.

**M**

Yeah that's the magic question. So, you know, I think certification.

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

The Nobel Prize I think for the person who solves that.

**M**

Yeah. I mean I think that certification could be expanded to include the features that people expect out of the box. I think that was an important statement that we heard earlier. So, I consider the public health measures personally to be part of health information exchange and I don't think it's beyond any competent EHR vendor to be able to support those connections today. We did it with, you know, fewer than 10 FTEs. So I think, you know, although we've now certified like a gazillion products so I don't think

that's going to be true of you know product 600 on the list. You know, I think that the larger issue around exchange and is one that our CEO talks about quite a bit is the lack of a business model to support it.

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

Right.

**M**

So in the revenue cycle world we've got millions and millions of transactions flowing and it's because we've got an established clearinghouse model where people, we're there's a financial incentive for somebody to be the keeper of the transactions.

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

Yeah.

**M**

And to build the pipes for everyone to use. We have not gotten to that in health information exchange except for very discrete workflows that make sense across the supply chain, ePrescribing, everyone uses it because it provides a lot of value to everybody right and the someone came in and built the pipes and they had a financial model to do it and God Bless Surescripts our hub. So, I think my comments earlier about you've got to think about the use cases, I think that's maybe where I'd go back to is what are the behaviors we really want other than broad exchange, but in the concept of a, you know, care transition, what is it you really hope to accomplish and then where on the supply-chain can we lean to provide the infrastructure and the capital to build those pipes.

**Marc Overhage – Siemens Healthcare**

We have 5 people who would like to ask questions yet and 20 minutes, so I'm going to move to Paul Tang, but ask the panelist to be as succinct and to the point as they can, not that you haven't been, but think hard about your answers.

**Paul Tang – Palo Alto Medical Foundation**

Okay so we all heard about the CQM, you heard that people were not that happy with EHR certification as might be hoped, and chances are you share that feeling. So I guess one of the questions is how do we improve that? What could ONC do to change the certification process or criteria to make that a better process? So, some of the things I recalled that the certification process doesn't even require accurate reporting of data when it comes out, that apparently you don't have to do all 44 measures just some selected that this whole buying a bundle of certified just so you can have that it in your hands. And that some of the vendors weren't necessarily living up to their certified functionality. So, can you give us feedback, and then somebody did mention the CCHIT process actually was better and one of the reasons was more comprehensive and two tested in the field. Can you comment on that how can we improve the certification process so that it works for all parties? So I think actually when it works for all parties it just does a lot better.

**M**

I was in charge of the certification program at CMS for both the CCHIT process and the ONC process and as far as the actual testing was concerned there are different flavors of that, you know, with CCHIT certification it was more about specific feature functionality and they did go a little bit deeper into depth. And they had a workflow around it. So I would say that there are some benefits around that. I'd say when I talked with our customer base they didn't find tremendous value in the certification and the reason was because I think they already had an RFP process, you know, for the larger vendors or for the larger products, they already have an RFP process where a lot of that was already occurring. And if anything was not tested enough it was in the fact that there needed to be better integration, better definition around the standards and the exchange mechanism as opposed to the feature of functionality. I'm not sure that that's the same case on all of the different products along here. So I'm sure that, for example, Jeremy may, probably has a very different perspective because his client base is very different. I would say that is one major improvement.

The other major improvement is from my perspective around the bundling and that happens when you have existing customers that already have a number of products and they're working it's very difficult to go in and say "well you've got to change that." "Why it's working?" "Well because I can't certify that particular combination because it only exists in your institution." And so if there are better ways for a customer that is meeting Meaningful Use in other ways to claim certification without having to buy a module just to say they have it I think that would help things out tremendously.

**M**

Yeah, one we did early on we had discrepancies and guidance from ONC versus CMS. So I know efforts have been made to harmonize those and I said before early as possible you know guidance and very clear specifications, definitions that we touched on already. I was a little concerned though with the number of new products that emerged and there was no requirements for actual use in the field by a provider and that generated some concern if there was to be a patient safety event and there was no validation process of actually using it. CCSD had I think it was 45 days of at least one practice. I'd actually like to see that go to like 10 practices for use and evaluation ideally but just a thought.

**M**

Yeah I think, a little conflicted in some ways. I think it is an important buyer protection to be honest with you. So I think that the fear that providers have of CMS shouldn't be underestimated, you know, they're afraid that someone in a Crown Victoria is going to pull up and take them to client jail for doing something wrong and I think there's value to hold your vendor to a standard and say "well show me how you did it to get certified" and then they have some reasonable belief that what they're doing is kosher. So, I think that's important, but the, you know, what we got was 1 million products certified and so there's got to be some balance I think. I think that idea of requiring some reasonable usage in the field is kind of interesting, but I don't know, I think that it serves a purpose and maybe it's just, I think the industry, a lot of people have gotten over the hurdle so it doesn't seem to be overly burdensome.

#### **Marc Overhage – Siemens Healthcare**

Thank you. Let's move onto Amy Zimmerman.

#### **Amy Zimmerman – Rhode Island Department of Health & Human Services**

Hi. Thank you very much this has been helpful. My question goes back a little bit to sort of building on the quality measurement aspect and while we talked a lot this morning about harmonization of standards, which I agree, is essential and there's a lot of work. The other challenge that I hear often is the variation on the data capture. So where the data is put in and will only get good measures on the out, you know, on the coming out side, if there's a way to be able to sort of standardize in some way, shape or form, or train a practice, or, you know, providers on where to put the data to make sure it's being captured. So even when someone I think earlier was saying the numbers aren't where they expected it to be and there was a question about is that because the data just isn't mature.

So my question is really sort of from the vendor perspective, are there things from a Meaningful Use perspective or from your perspective that would help? I mean, I know the products are different and they need to be flexible because that's what the customers want, yet that sort of works against the ability to do standardize data capture and quality metrics. So, I just was wondering your thoughts on how to be able to improve that challenge and if you've heard that across your customers what supports you provide your customers or if you've changed your products to address that?

#### **Michelle Freed - McKesson**

The comment that I would make is that I think that, you know, my comments associated with let's get to specifics, you know, if we could get a roadmap that would outline that data that we do need to capture and I mean and there's some sources that we certainly can use, but that would help us out tremendously because the change, someone mentioned this morning going from text to structured data, you know, is one of the most, you know, stressful components that is happening with the providers today and that is very true, but if we could identify that, that would be very helpful so that we could get on the road to that structured data and getting that in discreet formats.

The reality is, and I know that you know this, is that, you know, many of the quality measures were done in manual abstracts and they were done in the back room, and someone went through the chart. So producing those quality measures is very, very different than getting to an e-measure component. So just stepping back and being able to look at where we're trying to head and identify those elements would help us out tremendously in getting ahead of the game to be able to provide those.

#### **M**

I think somebody else also mentioned that when you look at what is trying to be measured there's different degrees of data quality and there are different interpretations of a measure which have relevant importance. To the extent that, you know, many of the measures were designed for abstraction of charts after-the-fact, the questions are embedded within them are still relevant, they still hold value but they hold value in a different way and they're designed to be sampled one, and they're designed to be something that I think is perhaps a little bit different perspective than what's looked at for all measures. When you're looking at a measurement, the measurement is to determine what happened so that you can better understand the process and maybe fix something and make it better. The goal is not necessarily the same as the workflow which is to fix the process.

So measurement is about understanding where your gaps are. Where the workflow is about trying to achieve the goal. And I think part of issue in trying to define some of these quality measures is that we're doing both of those at the same time and so by trying to better tease out what things are you really trying to make process improvement around, capture those at the point of care and make sure that they are captured correctly for all patients and the requirement there is simply to measure the fact that it is being captured on a regular basis so that it can be used in appropriate workflows.

And then the other is to measure what is going on and did my intervention actually lead to the expected outcome. That's a different question and it also gets back at the higher level abstraction which is am I shooting towards better quality care and efficiency, how do you know that, because you're measuring it, are you sure that your measure is in fact measuring what you think it is, and so you have to a variety of different ways of getting at that.

#### **M**

Very briefly, to support moving forward we need some agreement on the metadata approach because that's really what it's all about and moving forward, so that as early as possible, that's going to take a long time, looking at all the complexities, as to how we put that together, test it to make sure it protects privacy, patient safety, valid information, medical/legal constructs, etcetera. So from the vendor side I would ask for some guidance because I know there's something floating out there now like the PCAST model. If we're going to do that we'd like to know as soon as possible.

#### **Marc Overhage – Siemens Healthcare**

Great. Thank you. Greg Pace.

#### **Greg Pace – Social Security Administration**

Thank you for your input. I'm going to go back to the exchange issue. I think it was you Michael you mentioned about ICD-10 CM and it was more towards billing. I'm curious about; I didn't get a chance to get a reaction from the other panelists, but when you mentioned about you need something that's more oriented towards clinical, the way we make use of that information, we're definitely interested in that because that tells us the functional capability of this individual. I'd just like to hear you're other reactions from the others about this ICD-10 versus ICD-11.

#### **M**

We use SNOMED for our problem list and we basically translate from SNOMED to ICD-10. The big challenge in that, I mean we support, you know, basically any of the coding systems, but the big challenge is that with ICD in particular, ICD is a classification system; it's not a terminology like other, and most clinicians don't use ICD I think like it's intended to be used. ICD is like a pachinko game, you know, where it, basically it's, if you're in this category then you go this way, if you go, and basically by following all the rules you get down to the end category and that's how you're supposed to code.

Clinicians think of it as point-and-shoot, you know. I got this concept and I'm just marking it down. So the disconnect happens that if you were to really get the clinicians to do that you have get more from the clinicians and a classic example that I have is aortic stenosis. There's no aortic stenosis in ICD. There is aortic stenosis or regurgitation rheumatic or there's a second code which is aortic stenosis regurgitation non-rheumatic, well that requires that the clinician is not specific in saying whether or not it's stenosis or regurgitation and it doesn't say whether or not it's, or the clinician may not know whether or not it's rheumatic or non-rheumatic, so he can't appropriately code that, and he can't say what he wants to say. So we use SNOMED basically as an intermediate and then, you know, try to figure it out through other mechanisms after the fact.

**Marc Overhage – Siemens Healthcare**

Other brief feedback from the panelists?

**M**

Just very quickly I compared the ICD-10 to SNOMED using the desiderata of controlled terminology...and it's very interesting the criteria how they line up and it's very similar to ICD-9 and really haven't made much of an advance so I'm concerned about claims data, and I jokingly to get people's attention say if you're going to use claims data in health information exchange it's I call it Double-O HIT License to Kill, just kidding, but some people think that's funny, but it's from the Book House of God anyway it's written, but so anyway, so it is a big concern and I think right now a lot of technology professionals without an informatics background or clinical background are going to do things like...mentioned about put that information in the system, the problem it's going to get in front of a provider they're not going to know that it's not real data and they're going to take action. So we're trying to make sure that that doesn't happen.

**Marc Overhage – Siemens Healthcare**

But it does allow us to deal with coding patients struck by falling debris from a spacecraft subsequent episode, so I'm not sure I agree with your point that there's no advance, but, Josh.

**Paul Tang – Palo Alto Medical Foundation**

The committee members first.

**Marc Overhage – Siemens Healthcare**

Thank you. Eva.

**Eva Powell – National Partnership for Women & Families**

Thanks, Eva Powell with the National Partnership for Women & Families. Just real quickly, if we're going to expect patients to be more engaged in their care than they have to be able to see, transport and contribute key data into some version of the electronic health record, into the electronic information about themselves. And we heard from the last panel some questions about business case for this in terms of are we going to invest a lot in this when they don't want it and yet it's I think dangerous to create a demand for something that doesn't exist even though a lot of the panelists from the previous panel were providing information, many, many more providers are not and there's a real danger in trying to gin up interest and demand for something that no one is providing. So there's a bit of a chicken and egg problem here and so I'm curious from the vendor perspective since you all are creating the tool that enables this, what are the challenges for enabling patients to see, transport and contribute data, and therefore be key members of the team?

**Michelle Freed - McKesson**

I'll start off. Within McKesson we have RelayHealth and RelayHealth has been a longtime provider of getting the patient engaged in the patient health record. To that extent, I think that what, I mean we have seen more and more as we have essentially a private HIE and we span that out, you know, to some of the major areas, that the patients are getting engaged. I mean the secure messaging, certainly the appointments, all that. There has to be a compelling value associated with it in order to engage the patient. So I think that some of the stories this morning that were used in terms of, you know, putting, I think it was you who indicated that that you put the information in even before you went into the Minute Clinic, that level of engagement has got to be encouraged by the provider, but I think that one of the

things too is the challenges that the providers are frustrated with what they can control and what they cannot control. So we're looking to make certainly our tools available to the customers, available to the patients, trying to give some level of monitoring as to how they're using it, some level of exchange, but it's going to be a challenge in terms of being able to communicate to the patients in a standard, say in a consistent format and a learning environment for those patients as well.

#### **Marc Overhage – Siemens Healthcare**

Other comments from the panel?

#### **M**

Yeah, I mean, I think one of the ways to make this a win-win for the provider and patient is really if the vendor community can come with products that actually make the provider's life easier here. So I think we've taken great inspiration from ATMs, from airlines, and, you know, there is an increased documentation burden that has come with EHRs in general with MU in particular and, you know, other industries have solved that problem of administrative costs in an office by pushing to the consumer that which the office staff used to do and so that might be a way to have providers be on board here. And it's incumbent upon us to develop systems that enable that. So whether that's kiosks or tablets, or something like that, that's what we're thinking about.

#### **M**

I can also say that it's not all just about the portal. A portal can be a very useful tool but for example one of our customers suggested their particular patient clientele does not use the portal very much but they rely on text messaging. Text messaging is the way that they communicate. So keep your options open.

#### **Marc Overhage – Siemens Healthcare**

Okay. Thank you. Josh.

#### **Josh Seidman – Office of the National Coordinator**

Thanks. Well given the discussion on the last panel about how providers are using electronic data to drive quality improvement I was intrigued by something in Jeremy's testimony in response to the questions about which objectives are most challenging, sort of this approach of okay this is a challenge, we started doing data capture, data analysis, then doing an intervention to try to improve, then, you know, study it, and if necessary redo it and re-measure, and I'm kind of curious on what other models are out there among the vendors for how you're addressing, you're kind of using data to drive kind of interventions on the vendor side to improve the quality of the performance on Meaningful Use?

#### **Michelle Freed - McKesson**

From an overall perspective I think that even minus Meaningful Use there's been a, we have had a number of initiatives of one product in particular we call quality monitor that has really allowed at the point of care, you know, the monitoring of the key data and essentially that data and those alerts can be, you know, customized, they're in templates as well. But that's the most significant piece that being able to get it at the point of care as opposed to quality measures that are down the line, I think that some of the reference today was after the data is submitted or even after the data is corrected or the data comes in how to do those measures then get changed and adapted but the focus to many of the products that we have put out has been at the point of care as opposed, you know, down the line. Then from a repository standpoint, from a retrospective standpoint that certainly has gone into our analytic products and they can be able to get that information out of there.

#### **Sasha TerMaat – Epic**

I'd say that the answer depends greatly on what you're improving. So your techniques to improve compliance with updating the problem list each time you see a patient are going to be very different than your techniques to make sure that you're asking the patient about their race and ethnicity when they come in and I see, you know, posters about "we ask because we care" about why, you know, we're asking about race and ethnicity and, you know, I see folks using tools like requiring a problem list entry when a patient is admitted to the hospital to sort of work on that objective and I think each objective folks

are trying to use tools that are appropriate to workflows involved, which means that they are sort of unique across the board. It's not like one sort of button to improve compliance.

**Josh Seidman – Office of the National Coordinator**

No easy button.

**Sasha TerMaat – Epic**

No.

**M**

One of the things that I put in my written testimony but I think is an important aspect of this is to focus on the quality of the data that you're getting and by setting particular measures and counting them particular ways you're driving behaviors and those behaviors may not always be what you anticipate. And the example that I use is on the problem list. What I see is a lot of things like rules that if the patient has a BMI greater than a certain value that they get the problem of obesity, all right well I checked the box, that doesn't mean that the problem obesity is being managed. And so by focusing on trying to make the problem list in particular something that's meaningful, meaning that you're not just putting a problem on, one problem on the problem list for a large group of people, but rather focusing on the quality of that problem list being a relevant managed problem list. The things that are not supposed to be on the problem list are taken off because they're inactive. The things that are being managed are on the problem list, why is the patient on Coumadin, oh okay, you know, those kind of things have particular use. Aligning the measures with that so that you're capturing the right kind of things and driving the right behaviors I think is an important consideration.

**Marc Overhage – Siemens Healthcare**

Good. Paul we're at the end of our time but Neil has a question can I let him pose it since we stole a little bit?

**Neil Calman – The Institute for Family Health – President and Cofounder**

I'm cutting into my own panel.

**Marc Overhage – Siemens Healthcare**

Great.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Questions about clinical content. So new information comes out across the country, you know, there's a new drug interaction, there's a new side effect, there's a new disease entity, and you all have hundreds if not thousands of clients, to what extent do you see a role for yourselves either in providing the framework where each client has to build the clinical content in or, and Jeremy you can't answer this question, because, but for the people who are distributing software out there versus trying to establish a framework where this can be done once across the country and you have an option to roll something out to all of your users based upon new information. So are you building clinical content either in the form of alerts, report, things like that into systems or building the, only building the framework for people to put their own clinical content?

**Lawrence McKnight, MD – Siemens Healthcare**

Yes and yes.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Okay great.

**Marc Overhage – Siemens Healthcare**

That's as succinct as you can get Larry. Thank you.

**Neil Calman – The Institute for Family Health – President and Cofounder**

So who builds the clinical content and how do you get people.

**M**

That is my current role.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Well how do you get people to agree on it and you know, not all clinicians agree on various things.

**M**

It's a complicated question but basically we have a framework that basically allows us to define a model and from that model the customer basically takes it a different way where they're able to tweak. If our base is good they don't have to do very much. If they have specialized workflows and specialized needs they can overwrite particular sections of it.

**Neil Calman – The Institute for Family Health – President and Cofounder**

I'll buy that. What would be the turnaround time from a new piece of critical information coming out in the literature until when you might be able to deliver that to your client? Is it weeks, months, years?

**M**

We try to turn over content, it depends on the type of data and the content it is. Medications typically happen monthly. Problem lists are updated, you know, we base it on the SNOMED core subset so that comes out of a different cycle.

**Michelle Freed - McKesson**

Just to clarify too is just that some of the content, you know, as was stated, it depends on the type of content, if it is something that can, I mean it can go in the current release it's not a matter that development has to occur and you have to get it in the next release or anything to that extent. Most of the content changes can occur in the current release. So those are typically either out on an alert if in fact the customer needs to make that change within their system or it'll go out as, you know, an update to sometimes third-party software that will certainly, you know, go out on a monthly basis.

**Marc Overhage – Siemens Healthcare**

Great. Thank you very much and thanks to all the panelists not only for your answers to the questions this afternoon but all the work preparing to be here and time to travel here. So thank you very much.

*Applause.*

**M**

How are you doing?

**M**

Thank you.

**M**

Oh okay.

**Paul Tang – Palo Alto Medical Foundation**

Judy's on the phone.

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

I'm here.

**Paul Tang – Palo Alto Medical Foundation**

Okay and for our final panel we are asking, we're only asking them to come up with a solution. That's how it is labeled anyway, it's really a number of different perspectives that add onto, it's not just, we're not just out to capture data and store it away, we want to keep this system, to have a learning health system. And so we're interested in other perspectives on either how to make other uses furthering the care of

patients of this data or to make the data more meaningful to both the providers and the patients. I mean ways to make the data sing and just improve care and health. So this panel has a number of participants and Neil Calman is going to moderate.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Great. So first let me thank you for your written testimony, I had an amazing 2.5 hours reading it on Amtrak coming down this morning between 6 a.m. and 8:30 when my mind is fresh, so it was really interesting reading. We're going to start with Dr. Weiss and why don't we just work our way right down the panel, assuming some of the chairs get filled in.

**Kevin Weiss – American Board of Medical Specialists**

Great. Thanks. So the good news is you did not have to read my written.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Right.

**Kevin Weiss – American Board of Medical Specialists**

Stuff ahead of time, I will be more than pleased to submit a written follow-up. And our message is relatively short so I am Kevin Weiss, I am the President of the American Board of Medical Specialties. I imagine a number of you know what ABMS is. I'm going to just do a 30 second clip on what it is for those few who may not know what ABMS does because that actually is the crux of the nature of the recommendation that we'd like to put in front of you.

So the American Board of Medical Specialties is the umbrella organization for 24 member boards that represent pretty much the house of medicine of 24 specialties and another 80 some subspecialties. We have over 750,000 physicians in the US who are certified by one or more of our boards and this happens as part of the process in training where physicians will finish medical school, go into residency training, will get their license, the license boards are a different group of boards under, are aggregated to the Federation of State Medical Boards. They get an undifferentiated license and then if they choose to be a specialist they may choose to go through one of our boards to get that certificate. So it's a certification process. A certificate used to be what we would call a non-time differentiated certificate now it's pretty much time differentiated and we have a program called maintenance of certification which means that physicians have to actively engage on an ongoing basis to keep their certificate active for most doctors and that's rapidly evolving. We have about 300,000 doctors who are participating in the maintenance certification program. I give you that by way of background because it may give you perspective on, that we feel your pain, of what it is to try and do something nationally to try and change the entire culture of health care.

When the board set forward, about 10 years ago, to envelop a comprehensive continual professional development program called MOC the physician community was not there with a warm and fuzzy saying we're waiting for you. It was actually a very difficult change and in fact what perhaps we can bring most importantly to you all is this concept of change management. And with all the urgency that we have of trying to make sure that we rapidly adopt HIT we have to be careful that we don't do the proverbial pushing the grapefruit through the keyhole because it's possible to do. We at ABMS and through our member's boards have recognized how important it is to pace ourselves in that change.

What I'd like to suggest as the issues at hand for us is one, and if I can, if nothing else not one, two or three, just one and that's alignment. What you're doing by putting your recommendations forward to ONC is giving them a sense of the major scripting of the signaling that you as an advisory board are saying this is what's important for ONC to consider as they try and push that proverbial grapefruit through the keyhole at a very rapid rate. We need HIT adoption no question about it. We need it rapidly as well and the question is how do we best create that. So the word I'm going to put in your mind's eye is alignment and the alignment I'm going to suggest as you go through this is the alignment with the other national standard setting activity as it goes to the profession in way that is not currently built into the expectations of ONC. Not that they're not trying to achieve it but actually more scripted, in the sense of saying that there are things that are probably a higher priority for them to consider.

So in doing that, what I'd like to do is reflect on how the standards that we set through our member boards at ABMS are affecting the physician community and particularly as we're starting to do it in relationship to HIT and the messaging that we can do to provide to help assist ONC, boy that seems like a lot of alphabet there in quick fashion, with the intent of accelerating ONCs capacity and the nation adoption, national adoption of HIT.

So, specifically we have, through the maintenance certification, a program that studies 6 competencies of which several of them fall right heart and center into what you would consider for issues related to Meaningful Use although we put them in a different set of language, but system based practice, patient care competencies, and ethics and professionalism. All of those fit very nicely with different elements of HIT use adoption and rapid adoption. Our boards have not, up until recently, tackled the problem and the concern of HIT directly but have started doing work on MOC that relates to HIT and specifically with what's called part 4 of our 4 part activity, which has to do with performance, practice performance activities. What we would like to do in that context is continue the work with you.

ONC has helped worked with us to develop a knowledge assessment component and we're getting ready to launch that this month and that was with the support of ONC. We think we can do some more work with you all, but it's not just us, we would like you to consider working with us and the other standard setting activities in the profession and to do that to consider recommendation to ONC to find a way help develop a working group with not just ABMS but with FSMB the Federation of State Medical Boards, the AAMC, MBME, MBOME, the alphabet soup of the physician regulatory and self-regulatory authorities that can actually help with ONC to align what you're trying to do with what we set as the professional expectation and the signaling to the profession of what is expected of a physician. I imagine that can be done in other parts of the professions of other providers as well as healthcare environment, but at least for the profession of medicine I think that my recommendation...to that effect could accelerate alignment. I'll stop there.

#### **Neil Calman – The Institute for Family Health – President and Cofounder**

Great. Thank you. Karen Kmetik.

#### **Karen Kmetik – American Medical Association**

Hi everyone. Like Kevin my dog ate my testimony so I apologize that I didn't send you anything in advance but we handed out some materials this morning. For those that I haven't had the pleasure of getting now yet, I'm Karen Kmetik, I'm Vice President for Performance Improvement with the American Medical Association and also the Physician Consortium for Performance Improvement or PCPI. PCPI is a group, we are a body that does develop quality measures, create those EHR specifications that you've been talking about all day today and testing those measure in practice sites with EHRs.

Just to very briefly share something about Stage 1. At the AMA we have taken steps to also, like everyone, try to ascertain based on experiences with Stage 1 what is the readiness of physicians for Stage 2. And so I've shared with you hard copies of a letter that we wrote to the secretary with a readiness grid where we talked with the different specialties and tried to find out where are you ready, where are not ready for what's outlined right now in Stage 2 because that's valuable information I think for all of us to keep sharing with each other. As we do surveys you do surveys we should share that information.

One thing that comes through and it also came through at a meeting I was at yesterday with many specialties is a plea to focus on measures going forward that are clinically relevant to the providers patient population. And you've heard that throughout the day and we can add to that focus on measures that are relevant from the patient's perspective. So if we can marry those two things right, that's the sweet spot of where we want to get.

But I thought I would take my brief time today to not speak anymore about measures, because you've heard a lot about that and I certainly live and breathe that every day, but maybe to throw out another idea to think about for the future and that is this notion of attending to information, as Don Detmer said just

yesterday, and also a way to think about it is the article you've probably all read from September New England Journal that compared care for diabetes patients using EHRs and paper medical records.

But was interesting to me there is that those partner sites received comparisons with other practices in their organization and nationwide, and region-wide. And I just wanted to bring that point forward today, that maybe as we think about Meaningful Use Stage 3 that we need to bring back into the conversation a common value proposition if you will. So a way to translate this very thoughtful core and measure framework that you all have developed, very thoughtful, we're there with you, but I think we kind of need to start translating that and so I just throw this out the strawman. What perhaps is the common value proposition is that in areas relevant to your practice population, this is how I would phrase it and you might phrase it differently, as well as national goals, because we hear CMS saying there are national goals, you provide data from your EHR using standards and you're going to get something back. You're going to receive back credible, timely information for action and for shared decision making. I mean I know that's in all of our heads as part of what we're striving to but maybe we can start to bring that language as we speak more about Meaningful Use Stage 3.

Some other ways to think, I've been thinking about translating the language of menu and core is to say we want EHR enabled dashboards of measures. We know what we want the elements to be in those dashboards. We want them to be relevant to providers and patients. But let's start thinking also about, again, the attention to the information. We want the ability of providers to receive timely reports in comparison with others. I would suggest quarterly as a minimum. Those may have other time frames. And we want confidence in that data for shared decision making so that in a discussion between the physician and patient when a patient says what about patients like me there's some data to their to say well here's about patients like you that have been treated for this across the country.

So I'm not speaking about what the previous panel spoke about the importance of having the data at the point of care for decision making, absolutely, but what I'm speaking here about is if we're also going to take that initiative to send data somewhere, so as part of Meaningful Use the data are going somewhere, right now somewhere to CMS is the picture, what is the value proposition that we can all rally around, and if part of it is giving data back to providers and patients so they can see the quality of care in relation to others across the country, then maybe we should spend a little more time thinking now about where should that data go to enable that kind of timely feedback.

So my message today is just to put that kernel out there. I was thinking not just about the measures but where will data go to how to realize this value proposition if this is the right one, are there some alternative models to think about as to again, if we're to make all this effort to send data somewhere, aside from point of care, actual improved practice real time, but this secondary approach, are there other models such as EHR fed patient registries. Some of us around this table have been thinking a lot about that with multi stakeholder input, and should we now be thinking about to demonstrate some wins there so that people can start to see all that we are laboring through now we could deliver this proposed value. Thank you.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Thanks. And I'm told that Judy Hibbard is on the phone. Can you hear us?

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

I can hear you. Can you hear me?

**Neil Calman – The Institute for Family Health – President and Cofounder**

Yes. Thank you for joining us electronically.

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Yes. I apologize for not being able to be there and you have my slides, wonderful. So actually let's go to the first slide...going to...

**Neil Calman – The Institute for Family Health – President and Cofounder**

Yep we have it.

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Great. Thank you. Thank you. Okay, so my comments today are really directed at how measuring patient activation can help improve outcomes and can be an important tool for managing the health of individual patients at whole populations. So I'm going to start with what does that mean to be an activated patient, I know people use this term in lots of different ways. The way that we have defined it and measured it is when an individual understands their role in the care process and they have the knowledge, skill, and competence to carry out that role. So being able to manage their health and their health care. It's measured by the patient activation measure which measures people on a 0-100 scale. This is actually a latent construct which means we're tapping into an underlying idea and I think what we're measuring is the individual's self-concept as a self manager and that is why the activation score is actually associated with most health behaviors with many health outcomes and with health care costs which I'll with share with you in just a moment.

The idea that the construct is changeable and clinicians can be more targeted in how they support patients if they know where they fall on this dimension. It can also be used to track progress and to know that what you're doing in supporting patients is actually working or not. Let's go to the next slide. Here is just an example of how the PAM the Patient Activation Measure is related to different health behaviors, this is in the behavioral domain of how people behave in a medical encounter. So read about complications or side effects when they get a new prescription. The yellow bars are the people who are at the highest level of activation and the blue bars are the lowest group. And so as you can see with all of the behaviors there's a difference by their level of activation. Do they bring a list of questions to the doctor when they don't understand? Are they persistent in asking? And do they look up a doctor's qualifications before making a choice?

So, and I'm just showing you one example, but in many health behaviors you'll see the same pattern, and it really doesn't matter what the patient's condition is, the pattern is the same, this is an example of being adherent to one's drug regimen and so you can see for different conditions it pretty much looks the same. It's also true that the activation measure works for people who do not have a chronic condition. So the point is it's more, there's a parsimony here by understanding that the patient's level of activation, one has a lot of insight into their likely behaviors and also it gives the clinician information about how to really support this person. So just to give you example, people at the low end of activation tend to be discouraged, very low confidence in themselves to do what they need to do, they feel overwhelmed, they may not understand what their role is in this process. So clinical teams can support the patient by simply breaking things down into smaller steps, giving them permission not to do everything at once and basically give them an opportunity to start to experience success because they've had a lot of experience with failure. Okay we can go to the next slide.

I'm just going to show you a couple of slides here from a study we're doing with the Fairview Health System in Minnesota where they're using the PAM as part of patient care. They're entering the PAM score into the electronic medical record and so what you're seeing here is the results of an analysis where we looked at PAM scores and we looked at outcomes. We actually looked at 14 different measures in the EHR and 12 of them were significantly related to the PAM score and so this is an analysis where we controlled for age, income, other chronic illnesses, and you can see that predicted probability for example of if someone has a PAM score of 50 they have a 20% predicted probability of having an ER visit versus if they have a score of 100, and again these are people who are using the system who came in for care and in the primary care setting they got a PAM score.

We also looked at, go to the next slide, we also looked at their total cost of care and the first column shows the lowest level of activation is the reference group here, you can see that the first column is unadjusted. You can see that there's a very strong relationship between total cost of care and their activation level. The second column is where we've adjusted for many things including the ingenix retrospective risk score and there's still, its reduced differences, but there's still significant differences by the level of activation. So let's go to the last slide.

This is a whirlwind explanation about activation that now the PAM is being used in patients in a medical home and some places are taking a very interesting approach where they're using the team based approach and they are, so everyone on the team knows the patient's activation level, they look at it as a vital sign and they use it in two ways, they support the patient according to their level of activation in terms of what they're encouraging them to do, understanding to start with small steps with the low activated. And they also allocate their team resources differentially both based on the patient's acuity level and their activation scores. So patients who have less ability, less skill to manage their health, they get more support from the team.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Judy you're going to have to, can we ask you to wrap up?

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Yes. So it's basically a more efficient use of resources targeted to those who need more help, that's it.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Great I'm sure there'll be questions from the panel. Okay. Maureen.

**Maureen Dailey – American Nurses Association**

Hi I'm Maureen Dailey and good afternoon and thank you for the opportunity to present on behalf of the American Nurses Association. I'll be addressing transitional care coordination in particular complex chronic care and end-of-life care across settings. Care coordination is lacking in transitional care. Nurses have experience and expertise in care coordination within settings and in transitional care across settings and are pivotal to patient centered care, however, without efficient harnessing of health information technology nurses and other professionals on the team frequently cannot effectively communicate patient standard goals and integrate key data essential for good care coordination. Now ANA has empowered by engaging nurses and activating them to meet the partnership for patient goals and we know they're in two buckets, the hospital acquired condition such as pressure ulcers and injury from falls, and infections, and another adverse event, unnecessary use, readmissions and use of the emergency room.

All patients, particularly vulnerable patients, are at risk for these adverse events when adequate care coordination doesn't occur and when necessary case management is not provided. The following example, an example of poor transitional care will continue without effective HIT integration in phase 2 and 3 of Meaningful Use. The patient is 89 years old with multiple chronic conditions, the main attraction is worsening vascular dementia, she resides in a nursing home, she's duly eligible Medicare and Medicaid, comorbidities include multiple medical conditions and she has a new diagnosis of a new right heel pressure ulcer stage II for which three antibiotics have been ordered in the last couple of weeks. Why did the family choose this nursing home for usual reasons, the primary caregiver was close so that she could visit, unaware of the star rating system for CMSs nursing home compare.

Patient lost function in leaps and bounds. Eight psychotropic medications in different combinations were used in the first few weeks. She became wheelchair bound in 3 days. She lost ability to feed herself and in the last combination of drugs had problems swallowing liquids. She went to the emergency room, two different emergency rooms in two different hospitals in two days. Similar testing was done in both emergency rooms, the usual urine, lab, physical exam, medications, and x-rays were done. In both exams it was torturous for the patient kicking, screaming. The family had to hold her down. And the family was employed in both those situations to give information about the patient because no medication list was sent or information about the patient's clinical status, or her advanced directives, which were in place for no feeding, no breathing tube, or any of those lifesaving measures.

The family had been looking into palliative care but were having trouble accessing that information. They were told that the certified hospice no longer had a contract onsite and that the nursing home had their own in-house palliative care. But after five days, before the ED visit, the palliative care team had not come in.

What saved the day, after asking the multiple personnel in the emergency room, do you have some kind of unit to evaluate the psychotropic medications because this nursing home was shopping this patient to get admission. A case manager, a nurse came down and empowered that family, as she said, put the flag up the flagpole to make sure that two things are addressed, number one, palliative care, that the family should be empowered to demand that that palliative care consult happened so that a palliative care plan could be put into place. A patient centered, family centered goal and also to address pressure ulcers and to that end ANA is providing leadership in the completion of a comprehensive pressure ulcer data model. This model captures pressure ulcer assessment, risk assessment, and prevention of risk across settings and into professional team members for multiple purposes, to calculate the quality measures, for public reporting, pay for quality, and for research, and predictive risk modeling. The data captures the care coronation across all the team members and settings as well as in the context of care. Thank you for your attention.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Thank you. Sarah.

**Sarah Woolsey, MD – Beacon, Utah**

Okay so my name is Sarah Woolsey, thank you for your interest in my comments. So I'm a board certified family doctor. I work at a federally qualified health center in Salt Lake City, I've been there for 11 years and I'm the lead clinician for the Beacon Community Project in Utah, so our project is improving diabetes mellitus outcomes using office electronic records and robust quality improvement support. Our beacon clinical project has 66 primary provider offices and we cover 19 different electronic records where all our providers are attempting to go from Meaningful Use. We partner with an REC and then they're also required to submit diabetes outcome measures if we can get them. Personally my practice implemented eClinicalWorks about a year ago and I personally am in the throes of implementing and then attesting at the end of this year.

I wholeheartedly support Meaningful Use framework as a floor condition and combined with the directed disease process like diabetes providers are quite excited about it, so not just Stage 1, but sort of the well let's make our diabetes care better I find sells to provider offices, but there are barriers. I've been asked to address barriers first so I want to talk about vendor availability. So we've already about this but I feel like my team behind me needs me to say this one more time. So complexity and change are two consistent features of medicine. In our beacon community we have 19 vendors and 66 clinical sites. The vendors are working hard and trying to keep abreast of the current Meaningful Use standards as well as the changing standards in medicine but in many cases they're behind, as a result some of our offices lack capabilities that we need and require for Meaningful Use and disease outcome improvement.

The timelines for useful software development, ONC, ATCB certification, attestation, deadlines and requirement don't match, and I fear that subsequent stages will increase the numbers and complexities of the requirements for vendors, and they won't be able to keep up, and thus we won't be able to keep up. Also, truly meaningful thresholds for clinical quality standards will be updating as research shows and there will be more or better different levels or methods for best care. This may ultimately be too much for certain products and where will that leave providers who have invested. It's very expensive to repurchase electronic records even if they're better and it can put small practices out of business.

Also in the area of our state health information exchange we're concerned that some vendors won't be able to connect in a timely fashion and we see the health information exchange as an important community place to improve quality care not just locally but at the whole community level, and we worry that some offices might be left out of the opportunity for a bidirectional interface which is the most useful for workflow. Reporting standardization, we've heard about already, I just want to say providers are expected to collect data for lots of different people in lots of different ways and it leads to confusion, under performance, and frustration. We appreciate the efforts of the National Quality Forum and other national initiatives to put things aligned, like we've heard many times today, but they just represent part of the solution, and local entities need to be engaged. So whatever happens nationally we also need to look at, similar to what Karen talked about, what does the local community need and make whatever we do viable for a small rural practice, for a 4 person private practice.

As a state, just on Friday, we had a governor's health summit and I watched a table that looks just like this with Chamber of Commerce present, payers present, large hospital systems present, providers present, talk about well if we want to do something, and we had claims data talking about the most expensive health issues in our community, if we want to do something using our HIE how can we get behind it and do it and pick like 3 things to do, and without a health information exchange it seems like insurmountable, and yet that's a barrier.

So solutions are things, a policy thing that I feel like has to be mentioned as privacy and security laws and rules need to be clearly articulated. Information exchanges are slow to frozen due to concern of the adequacy of protection from current laws. Some health organization states may interpret their responsibilities conservatively and thus be less willing to speak connectivity in a regional area. If clear guidance can be made available to support regulatory development in these areas it might speed data exchange.

And then just want to comment on one of the pilots we have as the Intermountain patient worksheet. So Intermountain has had a patient worksheet that pulls data from varied places of a patient's care. So depression scores that are done by care managers are entered, as well as vaccinations, as well as lab data, as well as eye exams for a diabetic patient, gets put together in a composite sheet. We're building that at a level so the HIE could provide that. So as the patient crossed lines of care there is a concise sheet that would show the things that a patient with diabetes would need to have done or make sure had done or could be referenced, but that requires that we be on board. So optometrist at Wal-Mart have to be connected, and the podiatrist, and the health department with the immunization, and the other place they got the immunization at the care center some time, they don't remember, and then my labs, and then the foot exam I do in my office. All that has to be able to be transmitted concisely, then being able to be shown and be timely. And so, you know, that's the challenge for somebody like me working in the trenches, how could I have that for a patient who crosses all these lines of care and so that's the solution I want.

#### **Neil Calman – The Institute for Family Health – President and Cofounder**

Great. Thank you very much. Reid.

#### **Reid Coleman, MD, FACP – Lifespan Rhode Island**

Hi, I'm Reid Coleman and thank you very much for the opportunity to speak. And my first and most important message to this workgroup and to the the Office of the National Coordinator in general is thank you because the work that you have done has made us much more successful in what we're doing. I am a primary care internist, I was in private practice full-time for 20 years as a primary care internist. For the last 13 years I've been the informaticist for a multi-hospital system and I've continued to practice internal medicine on a part-time basis because I think it's important for all of us. Our hospital system, we have 3 acute med-surg hospitals, all of them have successfully attested for Meaningful Use this first year. One of them has actually gotten the money. The other two are waiting for their money, there was a little problem with the PECOS system, but the money is coming. So I guess by the comments that have already been addressed I represent 2% of the successful hospitals, not bad.

We also have about 130 employed physicians. Most of the physicians affiliated with our hospital system are not employed they're foundation based. We expect to have 100% of those physicians attested by the end of calendar year 2012. So we are being successful. What you have done that has made us successful is you have allowed us to push forward measures that we are not going to get measures get pushed forward before. A simple one, venous thromboembolism prophylaxis. I will answer Neil's question later about how we improved the quality, but after months of meetings with groups of doctors who found reasons not to implement any improvement mechanisms, the fact that it was being measured meant that we had to get off the dime and put the improvement measures into our order management system, helped tremendously.

Where has it not helped as much? Where the standards have not been well defined. We collect smoking cessation information. We transmit it as part of the discharge. I wish Jeremy were still here, we're using

the C32 very successfully. We crank one out, a CCD, every time a patient is discharged and put it in our XDSB registry and repository health information exchange, which we built privately around our health system. It is only being used by a small number of doctors because we're still building it out, but it is being used and it is working. And smoking cessation information in that CCD is almost useless because every EMR that the doctors in the communities use, use a different expression for smoking. And as a matter of fact, there are two different programs that use a different definition for what smoking is. When was the last time you had a cigarette? Six months ago, yesterday, a year ago and does anyone at home smoke, and there are different definitions for each one. Please do not take your foot off the pedal. Keep specifying very granular standards for these measures because we can meet them and it's easier to meet them and implement them if we don't spend a lot of time arguing and fighting. All right?

This is very important for us going forward to continue to be able to get good definition around these items. The question that was asked is where do we need better measures, more measures? What else can we do? Well I gave a very simple answer to my colleague from Siemens, you know, quality is the degree to which we do the things that are proven to increase your odds in the desirable outcome. So any time we've got evidence that something produces the desirable outcome we should be measuring it. And so the question isn't what do we need for measurements, the question is how rapidly can we standardize how we're going to look at those things with the help of our vendor and they shall remain nameless, their initials are Siemens. Every bit of data for the quality measures is being collected in our system as defined data. We are doing it through physician notes and nurses that I've defined data fields, we're doing it through a problem list, we are doing it through orders, it is all going into a warehouse and we can do that data reporting as long as we know what it is that we are measuring and the place that we're having the most trouble is when we're really uncertain as to what it is that we are supposed to be measuring.

Could we do better with other tools? Will there be a time when free text narrative can be turned automatically into defined data? Yes indeed and I am working on that and I hope that sometime I'll be able to come back and say that we're doing that, but in the meantime the ability to collect defined data in all these tools means that we put it in a warehouse and we get the reporting and we can put the data in a CCD and share it with other doctors. So thank you for setting these standards. Please keep doing it, give us really granular goals and we'll be better able to meet them than if they're vague.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Thank you. Richard.

**Richard Elmore – Office of the National Coordinator – Query Health**

Thanks Neil. Thanks for your comments Reid those were terrific. And to the committee I'm just thinking back to the beginning of this whole journey when you had that swoosh arrow and it started in 2011 with a toe in the water and 2015 is transformational, it is so exciting to be here talking about, you know, the potential of that transformation, that we've gotten to a stage now where folks are getting it right, they're figuring out how to get it implemented. We're seeing, you know, the evolution of critical mass and it allows the opportunity, as Karen was talking about, to really think differently about the kinds of questions that we can ask, the way we can address them and our opportunities to really implement kind of learning health system concepts on top of that base that was so ably described by Reid and others on this panel and others.

So in connection with that transformation, I think it's really important that we never ever lose sight of kind of the principles of privacy and security. It isn't kind of a, you know, the balance has swung too far one way or the other, it's that we have certain goals that we need to maintain and we need to meet. They're very clearly spelled out. There's some challenges of course, but we need to be, to keep in line with those principles as we're moving forward on that transformation and I think as we think about solutions we shouldn't lose sight of that. I think it's absolutely critical to our future success. And the last point I just wanted to add in opening was that we keep our eyes on the consumer perspective whether that's to get at, you know, kind of rare diseases which otherwise may not get attention, or whether it's to get at disparities, whether it's to get at, you know, kind of other priorities that may not be otherwise in the conversation. I think it's really important that we maintain those perspectives.

So my name is Rich Elmore, I work in the Office of the National Coordinator for Health IT, I'm the coordinator for Query Health, which is an initiative that's focusing in on asking questions of the clinical record to get aggregated information back. So being able to ask a question about a quality measure, a performance measure, disease prevalence, you know, anyone of a number of things, health outbreaks, you can imagine the list of aggregate measures that are possible with that kind of distributive population query. So no centralized database in the sky or anything like that, but you know, consenting, voluntarily consenting organizations control of the data under control of the data steward, but being able to ask questions of the data at the source which are respectful and actionable from the point of view of patient consent, respectful of patient privacy and being able to get that information back to researchers, to public-health officials, to, you know, anyone of a number of, to payers, to anyone of a number of participants in the health care system who may be able to take advantage of that kind of information.

We did a population, an environmental scan this summer and we heard from a number of practitioners that are doing it today and they're doing fabulous work. And one of the challenges is that it's only available, you know, to the fabulously wealthy from a researcher and IT perspective and we want to try and get that available to a broader segment by establishing the standards and protocols by which, you know, distributed population queries can be asked. So that's the goal of the project. We think it's an important one. We've heard loud and clear that there's a lot of value in being able to do that in the areas we talked about. Just the idea of speed, adaptability of broad patient coverage to clinical questions that's in control of the data stewards so there's a lot of, you know, kind of strong positive attributes to this.

And the question was asked, you know, what are the key data challenges to accomplishing this and, you know, one of the things we've heard loud and clear is that there is a need to establish consistent expression of clinical concepts. There's been great progress made so we will have with Stage 2, you know, standardized vocabularies, you know, the indications are we're going to end up with SNOMED, LOINC, RXNorm, you know, we're going to have a discrete set of vocabularies that we're working with, but nevertheless, in the case of SNOMED, because of modifiers or not and so on, there are different ways in which the information can be expressed. If we were able to get more consistent, kind of to Reid's point of we're able to get that clear about how that coding should be done I think we'll have a better job of being able to do a comparative effectiveness research and better able to use the information that's out in those systems. So right now, today even in the same practice information could be coded differently. So it's not a matter of which EHR, it's a matter of getting in use those kinds of standards.

Secondly, we need to shrink the time it takes to produce observational population studies and influence and introduce flexibility in the kinds of questions that can be asked. So distributed population queries will accomplish that. We've seen lots of good examples of how that can be accomplished through practitioners that are doing that today. We also saw a strong recommendation from PCAST that strategically we needed to be moving in that direction.

So as to your questions about what approaches or solution alternatives that we should recommend I've got 3 for you. The first is the consistent use of computable expression of clinical concepts, I really think that's job one. It's an important one. As Neil mentioned this morning it's really challenging. It won't be perfect but we can do better than not addressing it. The second is to include the standard use of distributed population queries as a part of the portfolio for a learning health system and the third is to include the standard use of metadata tag data elements to support patient consent and coding, and data segmentation, and potentially other uses that may be identified. So thank you very much for the opportunity to be able to present to the committee and thanks for your great work.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Great, thank you all. So we'll take questions from the group and I know Dr. Weiss do you have to leave? There was a.

**M**

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**Neil Calman – The Institute for Family Health – President and Cofounder**

Okay. So let me address one question to you to start out while people are putting their tents up and that is you mentioned something about sort of better coordinating the maintenance of certification process with maybe Meaningful Use and we've talked about that here before which is can we use some surrogate measures rather than of sort of putting out all our own requirements, but I wasn't clear whether you were suggesting that Meaningful Use be a way to meet maintenance of certification or part of it or vice versa?

**Kevin Weiss – American Board of Medical Specialists**

I wasn't being that gullible. I was, because I don't have the solution in mind.

**Neil Calman – The Institute for Family Health – President and Cofounder**

But you have to that's what the panel is about, it's about solutions.

**Kevin Weiss – American Board of Medical Specialists**

So the solution here is, because I don't think ABMS and MOC should be a principal driver at the exclusion of other pressures that are on the physician workforce right now. So, MOL is a huge pressure that's coming on, Joint Commission is also.

**Neil Calman – The Institute for Family Health – President and Cofounder**

I don't know what that, what is MOL?

**Kevin Weiss – American Board of Medical Specialists**

I'm sorry Maintenance of Licensure. So that's coming on board. I was just actually with the Board of the Federation of State Medical Board this morning talking about aligning MOC with maintenance of licensure. This is their new program. The Joint Commission has the Ongoing Professional Performance Evaluation (OPPE) or OPPE, and Focus Practice Performance Evaluation (FPPE). These are just to name a few in addition to the Meaningful Use. And so you're asking a lot of physician workforce right now. We're asking a lot of the physician workforce right now and we're all vying for attention. And the physician workforce by and large is trying. It's just they're being torn in different ways and at the same time being asked to generate more and more...and so what I would ask. I'm not trying to avoid an answer with a direct response, but I would say is let the recommendation be, if there were to be one, is that ONC should be asked to sit down with these principles of the other standards setting activities and the physician workforce to work out a good work plan as opposed to us all doing it independently and just touching on an ad hoc basis which is what we're doing now and then we'll get to the right answer to that question.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Why don't we start with you Michael.

**Michael Barr – American College of Physicians**

Actually we think a little bit alike and I'm glad that Kevin and Karen are sitting next to each other, everybody else can free to answer but I wanted to ask them a quick question. I think you both spoke about clinical relevancy and Karen you talked about being both for the patient as well as the clinician and I'm wondering whether a different kind of measurement, talking about solutions would be something to consider with response what ABMS and boards need and would certainly be something PCPI could look at, and that's sort of what is the clinical decision making at the point of care and looking at the interaction between not just the clinician but the clinical team in terms of taking care of a patient, a particular patient, the decisions that are made and response to information presented through the electronic health record clinical decision support systems, alerts, all those kinds of things, and could it be turned into a way to collect information as part of the workflow so you're not asking clinicians or physicians to do anything other than doing really good clinical care captured that, report it to the, with respect to the boards, maintenance of licensure, and be a measure for Meaningful Use.

**Kevin Weiss – American Board of Medical Specialists**

I'll take a first shot at it while Karen is thinking about her response. First, which is important for the committee to know, one degree of alignment that has been very helpful is ABMS and the PCPI have a formal collaboration agreement to develop measures together and we've last year developed our first

couple of sets of that so we're learning that process which has been huge in terms of us creating that sense of common engagement of the two parts of the house of medicine. So this is an opportunity for us to maybe even consider that as well.

I know within the context of our boards, at least one of our boards is working in that direction and that's ABIM which Mike you're well familiar with their Practice Improvement Modules, PIMs. Up until recently under a contract from ONC, which was to try and integrate the comprehensive PIM, which actually looks at several different sets of measures around different types of conditions, diabetes, hypertension, hyperlipidemia, and integrating into the workflow so that they're actually doing their practice improvement while they're seeing patients, and then getting that data collected and that's not an easy process to do, but once it's engaged it is exactly the type of flow that meets sort of triple opportunities. The opportunity for the doctor to learn, the opportunity for the patient care to be improved, and the opportunity for the regulatory authority to know that that's happened. I'm sorry to say ONC had, because of budgetary constraints had, to stop that project, but ABIM is going to move forward with it anyway and so we're going to see that it may come a little slower. I think that those kinds of innovations are just ripe for the picking in terms of improving Meaningful Use and driving it into the workflow process. I gave you some time to think there.

**Karen Kmetik – American Medical Association**

Yeah. Thank you.

**M**

Good.

**Karen Kmetik – American Medical Association**

Great comment as always, Michael and I guess it makes me think of the one area where we've tried it but now that I listen to you we probably picked the more hard area, is care coordination between discharge and hand off, right, is that getting at what you are saying so?

**Michael Barr – American College of Physicians**

I was actually thinking even simpler, escalation of therapy for an out of control blood pressure and the point of care. So if you come in, you're blood pressures not normal, it's recorded, you know how many times the blood pressure has been recorded, did the clinical team, you know, escalate therapy?

**Karen Kmetik – American Medical Association**

Yeah.

**Michael Barr – American College of Physicians**

Or do something. That kind of clinical between the ears thinking is really a measure of quality and good care.

**Karen Kmetik – American Medical Association**

Yeah. I think it is a great idea and all I can say is that's beginning to be kicked around. So, absolutely, I agree worth pursuing.

**M**

While other people on the panel may be thinking a response, you know, that can also be applied peer-to-peer. I think in the world of for example ophthalmology, a person may have a retinal tear that created some acute glaucoma and that level of communication, I mean sadly the fact that, you know, the house of medicine is fragmented enough that you actually have different doctors in different offices doing that care and the patient's left in the middle of trying to manage that, no different than that poor very sad description you gave of what was sadly, I think, not uncommon care for nursing home care. So, I think the question is can we drive those scenarios into our thinking about aligning the different standard setting activities that point to some high and visible versions of that that get embedded not just in the regulatory question and authority and the incentives that ONC has to its disposable and CMS has to its disposal but

also that all these other standard setting bodies can do and help create the common signaling to the profession and to the health system.

**Karen Kmetik – American Medical Association**

And just one comment I want to say too is there's times when it's best not to do something and if the electronic record is really good at recording stuff we do, so I also want to, thinking is something you don't do, and so just a button to say didn't do anything because I was thinking.

**Michael Barr – American College of Physicians**

Didn't order the MRI for low back pain. I mean these are really the, it's not just quality, its cost, its efficiency, its use of the team, there are lots of different things that can be measured. Thanks.

**Neil Calman – The Institute for Family Health – President and Cofounder**

I agree. We go to Art, I think you were next.

**Arthur Davidson – Denver Public Health Department**

Yes. Judy, this is a question for you. I was intrigued by the patient activation measure that you described and wanted to understand a little more about it. I mean, how much has it been used? It seems like an excellent measure of consumer engagement, but are there any demonstrated methods on how to change the patient activation over time? And then you suggested that this might be a vital measure, you know, like a vital sign to be used during the encounter with the patient or might be collected outside and then used during the visit to promote change. So I just had some questions about how you use that and the last one about that would be is it generic? Is a patient activated uniformly for all of the medical problems or is it problem specific so that I'm really good on my diabetes, but I just could care less about something else? Could you comment on that please?

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Yes. Thank you. So about the change, so there has been a great deal of research using the PAM and actually researchers all over the world are now using it. The research looking at change is not as fully developed as the basic research that's been done, but we have, we did a trial where we worked in disease management where the coaches tailored on the activation level and the other coaches did not, but they were still being coached, the patients in the control group, and the outcomes we saw improvements in activation, we saw improvements in adherence, in clinical indicators, as well as reductions in hospitalization and ER. So that was the, and then there are, as I said, there are other researchers out there using it in a lot of different ways and it's now being used in patient care in different settings. So it's, the spread is happening and the researcher is kind of going on in a parallel process.

You asked me about how generic is the measure and this was something that we explored early on in our research, you know, when people answered the questions were they thinking about their hypertension or were they thinking about their asthma, or what were they thinking about, and they said oh no, no this is me. I'm thinking about me and so it is generic. However, when you look at sort of the behavioral profile of someone at different levels of activation, what you'll see is that at the highest level they have most of what they need to be doing. They may have some behaviors that they are lagging, you just don't know which ones they are, you know, prospectively. But they mostly have the skill and motivation to fill in those gaps. Did I answer all your questions?

**Arthur Davidson – Denver Public Health Department**

Yes, thank you.

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Okay.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Yeah.

**Sarah Woolsey, MD – Beacon, Utah**

In the Utah beacon one of our small pilots with the University of Utah is looking at a cohort of high-risk patients, so a patient with multiple medical conditions, elder patients, and using the patient activation, the PAM, to score them and then look at both care manager interventions as well as patient portal interest in connecting to the provider. So does an HIT look at, does it increase activation. So just maybe keep your eye on that portion of our beacon because it may be a place to stratify those really high risk patients and intervene. So I would say that it could be a useful vital sign if you saw all those patients with very out of range factors are the ones that don't come in. I mean that's a really good group to look at affecting that.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Judy, can you mention how you incorporate that into your workflow and how long it takes to administer?

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

So Fairview is doing this and they're collecting the data as people come in, and so it's part of one of those sheets that someone fills out when they sit in the waiting room, and then they do have office staff that just enter the data then after as part of the intake process. It takes about less than five minutes to fill out the PAM and it can be done in basically any format. So on the web, self-administered or with an interviewer. I just want to follow up on the patient portal comment also. In the Fairview system we looked at which patients were actually on the patient portal and we also knew which of the clinicians they had recommended that their patients go on the patient portal, which is the main way they get on it, and what we found was that the clinicians tend to encourage the high activated to go on the patient portal and then among that group there is the higher activated within that group tend to go on the patient portal. But I think that with more sort of outreach and help you could get a broader spectrum involved.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Okay. Yeah.

**W**

So my question is for Sarah but I welcome others to answer. It relates to the issue of information exchange and I know the beacon is the real test of what Meaningful Use is, is getting these beacons to a high level of adoption, a high level to exchange to actually show the value of having information at least traded across doctors and providers. My question is that, you know, in the beacon communities obviously they reflect it because they were more advanced in other areas, and especially when we're talking safety net providers, a lot of those have not been approached by states to be part of their information exchange activities or they haven't figured out how to tap into those resources. So I was wondering if you could speak to strategies you guys have used to get more providers that are not mainstream like academic providers involved in the information exchange network.

**Sarah Woolsey, MD – Beacon, Utah**

So yeah, so what I would say is that, we're the largest SQAT set in the counties that are in our beacon and in the state. I don't think there's been any barrier to have us involved, the only thing would be, you know, consenting patients, so we're opt in, you know, we haven't had a Spanish version of that, so you know, there are barriers in terms of kind of patients we take care of, but in terms of being invited to be part of it, I think our patients are just by all the factors that they're dealing with go to the ER a lot, they spend a lot of money on the system. I think we've been highly invited to be involved so I haven't seen a barrier there personally and we've been offered all the same financial incentives to be part of it. So I don't see a barrier for us.

**W**

Thanks.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Good. Eva.

**Eva Powell – National Partnership for Women & Families**

Eva Powell from the National Partnership for Women & Families.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Oh, sorry did you have a comment to that?

**Reid Coleman, MD, FACP – Lifespan Rhode Island**

I just wanted to add we too are using a community opt in program, we're getting I think 96% of people, 94, something like that of people jumping in, and just for anybody who's interested in trying it, we are allowed under...relaxation to provide a large chunk of the cost of software to physicians. Providing access to the HIE has turned out to be tremendously economical, much cheaper than providing them with EMRs and has been a great attractiveness to the physician community, because the HIE that we're using does have a subscription fee, it is a commercial product.

**Eva Powell – National Partnership for Women & Families**

Eva Powel with the National Partnership for Women & Families. I too wanted to follow up on Art's question about the patient activation. You answered some of his questions about format. I'm curious would this be an opportunity for the patient to provide the information themselves? In other words you mentioned that there's an intake worker that takes less than five minutes, but would this be just as valid and useful if the patient say on a computer screen as they were waiting provided this information themselves without any intervention or workflow change for the provider themselves? So that's my first question.

It also seems that this is a key component in understanding some of the complaints we heard earlier about patients don't want this information, which I think is untrue, but I certainly understand how that can be perceived from the provider perspective, and that this notion of patient activation is a critical piece of understanding in terms of what information patients do want, and how they're going to use it. And so with that in mind, my second question is, is there an opportunity here not just to implement this in primary care where I think that you've demonstrated beautifully how that might look, but is there opportunity to implement this as well in hospitals and specialty practices given the fact that this is a generalizable activation, it would seem that it would be equally applicable in those settings. And if so, what would that look like?

And then finally could this be a mechanism for coordination between all of those? We heard earlier that one of the things that this Workgroup and the committee itself should be looking at is how can we incentivize hospitals and physician practices to work together and I'm curious as to whether this might be a place where we can work on that. So, first of all, is this something that, is this an opportunity to use patient provided information to relieve clinicians of their workflow burden? Is there opportunity to use this in the hospital and specialty practices? And then is there opportunity for this to be used to coordinate care and to promote collaboration among all of those?

**Judith Hibbard – Institute for Policy Research & Innovation - University of Oregon**

Great questions. Yes, so the first question is yes you could have a kiosk or some computer in the waiting room or the patient could do it from home through a patient portal. Yes, it can be done electronically and it would be much more efficient. The question about hospitals and specialists, people are actually using the PAM in hospitals for discharge planning as a way to reduce readmissions. We do know that the low activated are more likely to come back into the hospital and actually CMS is now supporting the use of the PAM, I think maybe requiring the use of the PAM in the new partnership with patients initiative. In terms of specialty care, you know, the way I look at it is wherever the patient has a significant role to play this is relevant and so yes, both in the hospital and in specialty care because we always have a role for patients to carry out when they go home and to manage things on their own.

The last point about coordinated care, one a recent study showed that higher activated patients have fewer care coordination problems and so I think that there is a role here across providers and I think the reason that the high activated have less care coordination problems is because they understand they have to play a role in the handoffs and in information transfer, and they do play that role. So among providers if you know about a patient's activation level, you may know that you need to do more hands-on for those handoffs and coordination. Did I answer your questions?

**Eva Powell – National Partnership for Women & Families**

Yes, that's very helpful, thanks.

**Maureen Dailey – American Nurses Association**

The pressure ulcer the data model that I spoke of earlier is a prototype for a future care coordination model and within that model are assessments for patient engagement including patient's readiness for change and self-care activation, and certainly nurses, as the most trusted health care professional often, especially in the community based environments are the first ones to hear about non-adherence to medications and many different things. So in the pressure ulcer module we built in we want to prevent that in depth admission for the spinal cord injured patient, many of which die from pressure ulcers like Superman. So why is there non-adherence and how can we partner with patients to move them along in their readiness for change including, you know, assessment with valid tools like the PAM.

**Neil Calman – The Institute for Family Health – President and Cofounder**

George.

**George Hripcsak – Columbia University NYC**

You mentioned computable expressions of clinical concepts. So by that do you mean say if I want diabetes say explicitly, I mean two ICD-9 codes plus at least one high glucose, or at least one antihyperglycemic medicine, that kind of computable or what do you?

**Richard Elmore – Office of the National Coordinator – Query Health**

Yeah, so we're trying to look ahead to where the puck is going so we probably won't be focusing on ICD-9, per se.

**George Hripcsak – Columbia University NYC**

Oh, no, no of course.

**Richard Elmore – Office of the National Coordinator – Query Health**

But, but.

**George Hripcsak – Columbia University NYC**

You're looking back but retrospectively.

**Richard Elmore – Office of the National Coordinator – Query Health**

If you look at kind of the primary vocabularies that are, look as though they'll be associated with Stage 2, you know, RXNorm and LOINC more or less in one-to-one association are pretty good at doing their job. SNOMED has a great degree of flexibility and the ability to be able to describe the same signs, systems, problem in different ways is possible and probable, and so, you know, even using the same EHR in the same practice it's likely that same clinical concept could be coded differently. Now, if we can get ahead of that and as, you know, adoption begins to take place of SNOMED and use of these kinds of codes in hospitals that are practices, that will give us a much better ability to be able to use that information on a comparative basis. We've seen that problem in spades with earlier vocabularies and so it's really anticipating where that's going. It's the basis for that recommendation experiences of practitioners.

**George Hripcsak – Columbia University NYC**

So you think, because I'm wondering who's going to be, so my question is really going to be what process should we use for doing that. I think the Policy Committee, Meaningful Use Workgroup, Quality Measures Workgroup, what I want them to be doing is to produce a concept and probably what I want there is not the computable one unless it's really obvious. But it's really a long textual definition of what they meant by it and why, the intention and text, because that's something that has to be interpreted and as things change, as vocabularies change we can reinterpret it in that context, and the best way to get the computable one is to go on a real database as your implying in you're talking there about EHRs, you know, what is the best way to know whether someone had a given disease, it may not be just looking for that code but looking for, looking around a thing or to verify it in some way. So, it seems like there would need to be a, the Quality Measures Workgroup job would be to express their intentions on ambiguously,

but not necessarily yet computable, and there's some second step that actually makes it computable in today's EHRs and I don't know who does that.

**M**

...

**George Hripcsak – Columbia University NYC**

I mean that the validation step maybe of the measure, but it's not just validation it's a definitional step or something.

**Richard Elmore – Office of the National Coordinator – Query Health**

And so my recommendation for this Workgroup is the use of that anticipating that we can get to that place. Certainly as part of Query Health we hope that we can identify some use of existing standards or practices to be able to advance the thinking of how we might be able to do that and learn from that practice. But, you know, today, we do not have standard commutable definitions of type 2 diabetes or acute hepatitis B or angina. We're not talking, you know, kind of arcane stuff, we're talking about what makes up to 2.5 trillion dollars worth of spending in this country. So, if we can get that right and we can make it comparative, and we make it visible, we've got a better chance of being able to do something about it as we move forward. So, I think this group has a very important role in being able to, you know, kind of set the table for the practitioners, the clinicians on how they should be communicating clinical concepts.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Just to go back to one of the comments a few people have made already today though, in order for it to be computable the things that you're computing on all have to have been captured in the same way and so that goes all the way back to the beginning, and unfortunately, we're dealing with data that's being captured today while we're sitting here, and at some point, you know, it's not being captured in a standardized way, and at some point we're going to be going back and looking at the stuff, and trying to make sense out of it, and that's going to be really, really hard, especially for those of us who've been on electronic health records for a long time, and know how bad some of the information is, and how the transitions, how things have gotten better in capturing the data over the years, but we still have all that old not so well captured data in the systems. So, it's going to be a big challenge, but I think one worth attacking.

**George Hripcsak – Columbia University NYC**

You want to work at getting it captured better and the other is given what's there do a better job of getting closer to the concept you have because the EHR is just evidence and so what you do is you iterate, and get the best specificity for the concept you're aiming for, because no matter how much we get the things we know about captured well, they'll be the new thing that you want to do that no one ever thought of, and you have to do the best you can, and so you have to use these other methods where you iterate on a database, and come up with a surrogate definition that has sufficient sensitivity and specificity. So, but I don't think the Quality Measures Workgroup is going to be doing that. There has to be a place in our process for doing that and trying to do it in a broad way that it's applicable to a lot of EHRs or a lot of doctors.

**Neil Calman – The Institute for Family Health – President and Cofounder**

You want to talk to this point. Okay. Art was next then.

**Arthur Davidson – Denver Public Health Department**

No I think actually David was next.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Oh, sorry, David was next.

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

Thank you. So you've brought us a lot of interesting challenging ideas from things, the potential we can leverage to this whole enterprise. The nature of the law and the incentive program is that we're providing incentives to individual physicians and hospitals, and I think almost everything we've talk about in this hour stresses that mop. You're talking about capturing data from patients in Judy's case, we're talking about connections, HIE strategies, we talked about Query Health as a federated model, the registry scenario Karen described, I think we're really wrestling with what we can we do within the structure of the Meaningful Use program and the tools we have at our disposal to facilitate those kinds of connectivity, and data sharing, and feedback systems that we all aspire to within this fairly constrained program.

So I'll just put it out for you all to give us some suggestions of what, within the, if you were picturing yourself with, you know, a quill pen and a spreadsheet trying to figure out what to put on the Meaningful Use criteria for 2015, what kinds of things could we put out there that are generalizable enough to the environment that we're trying to address, but leverage the strategies and solutions that you've all advocated for?

**Richard Elmore – Office of the National Coordinator – Query Health**

Just saying that, you know, I think whatever it is that we do we need to make sure that it's being done in the context of what can be generated in the routine course of care. We can't add to the providers burden and we need to make sure that we're addressing it in a manner that's going to be as consistent as possible, you know, certainly it's what Reid said the more prescriptive we can be about how that's done so that we get, you know, that greater, you know, kind of greater understanding, kind of greater degree of accuracy, and the information is available to us, I think that's going to be very beneficial. In the case of Query Health that's applicable to a clinical record whether that's an EHR or whether that's a health information exchange or perhaps a PHR, so that from the point of view of sustainability, having that as part of what a meaningful user of an electronic health record would be asked to be participating in would go a long way towards establishing that for a learning health system in the country.

**W**

So maybe it's obvious, it seems obvious to me, but just like the connectivity expectation that an electronic record connects, well that it connects, shares, and benchmarks itself or whatever, I mean, you know, I mean in my state we had the immunization record is not connected, but, you know, we have standards if we are using Medicaid money for vaccines and so we're graded, you know, as providers on this and we provide this data. So, I mean maybe there's a meaningful participation in a quality project related to that. We do a physician award through the QIO that I work with and, you know, one of the requirements is that you're participating in something where you're benchmarked, and so we just elevate that, but make it meaningful to the community, to the provider specialty, and to the diseases they care for.

**W**

I'm going to jump in.

**W**

Go right ahead.

**W**

Oh, I'm sorry.

**W**

Go right ahead.

**W**

I'm just going to pile onto that bandwagon. I mean I think that we do have a constraint David obviously of the law and the program, but there's a lot of around it that we want to tap into, and so trying to marry also what we said about the standards, if we keep our eye on where we want to get to you could imagine a stage being we want you to be able to participate in whatever quality improvement effort is important to your patient population. But you've got to do it in a way that's national, it's got some of these key things in it, and so you've got to have these pieces, but then go for it, you know, to not be so limiting that we don't

encourage this innovation and this energy of being part of these collaboratives where the improvement I think Neil was speaking to will happen.

**Reid Coleman, MD, FACP – Lifespan Rhode Island**

...one thing to add to that answer, the thing that I agree with the need to look for the things that we can measure without increasing physicians workload, as a physician I like the concept, I started doing quality measures in 1998 off of administrative data. It's a horrible way to do it. I'm very sick of doing quality data on things not that count but things that I can measure, and if they are things that we should measure, and we don't know how, that's one of the things that the vendors and people around this table can figure out for us. So I would not necessarily say if it requires more work to get the data we shouldn't do it. I think that we should look at what we need because the days of measuring the number of people with a given disease who are on a drug based on ICD-9 are pointless.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Okay. Art.

**Arthur Davidson – Denver Public Health Department**

Okay I'd like to direct this to you, Rich, about Query Health. We started the day with a presentation from CMS and we saw that the population in public health measures were relatively abysmal to date and maybe this is not the best group or the early group may not be the ones to show us how we can do it, but there's a high deferral rate in those measures. We had several opportunities to hear people describe how difficult the public health measures were and how even they would have to invest money in things that they couldn't use because public health wasn't ready to receive the data. And then we heard from Jeremy an example of, an elegant example of something that had legitimate value to the community. The Surescripts RX hub example of how a business model could be built out and I think Karen was saying a little bit also about what's that local value? What's the exchange that will kind of drive this to success? You know I really enjoyed the summer concert series and hearing about the few and fortunate, but the real challenge to us here is to find a way to make that expand and be valuable to more communities than the few and fortunate, and that, you know, doesn't require several federal agencies to fund it at enormous levels. So, I'm worried that we're not really going to be able to have a business model for this and I'm wondering whether there's any thought about how to create that business model. We need transformation for sure, but I'm not sure when that's going to happen in time for us to do Stage 3 to make Query Health really embedded inside of the measures.

**Richard Elmore – Office of the National Coordinator – Query Health**

Great comment and really important comments. The Query Health concept is enabling infrastructure that can be applied to many different business models so we heard through the environmental scan of, you know, payers working with providers to figure out what's clinically effective and cost-effective in terms of delivering care. We heard about FDA uses for being able to look at, you know, surveillance after a market introduction and a number of other uses, Massachusetts Department of Health, that was all in one technology that was being used. So, there are lots of different kind of virtual networks of participants that will have different economics, different drivers, and different potentials for success.

Public Health has a regulatory mandate which insures some sustainability in the providing of the data. They have problems, we've certainly heard in a number of cases, of catching that, you know, I think you'll hear from Seth tomorrow, he may be speaking to this, I'm not sure, but certainly CDC and their...program is designing a catcher's mitt which will enable, you know, Public Health on a local and regional basis to be able to leverage the availability of information, and you know, they'll make their own decisions in the future whether or not Query Health is an applicable part of their digital infrastructure for getting access to information which Public Health could use, but I would say that the models and problems will probably not be determined at the Query Health level but they'll determined in particular applications like what's the best, you know, supporting sustaining infrastructure for Public Health Agencies.

**Arthur Davidson – Denver Public Health Department**

Thank you.

**Neil Calman – The Institute for Family Health – President and Cofounder**

Well this has been an amazing panel. I don't think it was really solutions as much as people really thinking innovatively and creatively about, you know, what's happening now, what's coming next, and I don't know I found it to be very stimulating. I want to thank you all for participating and with that I'll turn it over to you, Paul.

**Paul Tang – Palo Alto Medical Foundation**

Thank you as well.

*Applause.*

**Paul Tang – Palo Alto Medical Foundation**

So I think this has been a tremendous day of a lot of good information. Information from the field. I think we have reached an inflection point in terms of people spending time, money, effort getting on EHRs. I think they're pointing and the right direction. I feel a little bit like we're trying to get to the Pacific Ocean, not necessary California it could be Oregon, it could be Washington, i.e., a direction and we've decided that we can't walk there and we've put people in cars, but as sort of Reid summarized we only give them a rear view mirror from a quality measurement point of view. It's not because we were responsible for that, but that's just what exist today, just, again like you said, so I think the challenge that's been laid in a number of panels is can we get something with a windshield or a heads up display? Can we pave the interstate so that people don't spend most of their time looking out or other cars, that's the 75% of 36 miles an hour and could there be an entrance ramp so that you can merge and not interfere with your workflow in a sense? So can we go in direction towards the Pacific Ocean, can we, and the interstate, those are good examples of public goods that I think somehow we need to, and using these levers, policy levers can we create the public good that would allow an efficient way of going in the right direction even though the direction may have some local variance.

But I think the main message, both the challenge and the opportunity was with CQM as one of the examples, and the reason is because that's a goal. It's not how, it's a goal. And we need to get better at those things I think. So anyway, our challenge, thanks again to all of the panelists for a very engaging and informative day. Our challenge tomorrow is to start deliberating on how to create a strategy for making Meaningful Use Stage 3 much different. I mean, perhaps in the extreme it's much more, I forgot who was telling us, oh I think it was Patrick Conway was talking about should we go just towards the outcomes and let's all not worry about the how. We all have local outcomes we need to achieve with our local populations and that goodness is what we need to focus on, and a lot of that has to do with the mind of the patients of course and the consumers. So, I think we have our work cut out for us tomorrow. We start at 8:30. I'm not sure exactly where, is it in this room again?

**W**

Yes.

**Paul Tang – Palo Alto Medical Foundation**

Yes, okay. Thank you. Well thank you, everyone for a very meaningful day.

**M**

...public comments.

**Paul Tang – Palo Alto Medical Foundation**

Oh, sorry, sorry, sorry, sorry my fault. Can you open up for public comments, please?

**M**

...

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Okay. Thank you everybody. Yes we now have time reserved for public comment. If there's anyone in the room who'd like to make a public comment please come forward and sit at the table and for anyone on line who'd like to make a public comment please dial 1-877-705-2976 and press 1 to speak. First is there anyone in the room who would like to make a comment? Come forward, and please introduce yourself, you'll have 3 minutes.

**Carol Bickford – The American Nurses Association**

Carol Bickford the American Nurses Association. In the conversation we heard today there was a discussion about multiple strategies for outcomes and quality improvement, but there was not any discussion about lessons learned, and what CMS is doing about those lessons learned as all these things are being reported. So I just bring that forward for consideration.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Operator, is there anyone on the phone? Is the operator there.

**Operator**

We have none on the phone.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**

Okay. Thank you. Paul?

**Paul Tang – Palo Alto Medical Foundation**

Okay well thank you, everyone and see you in the morning.