Health IT Joint Committee Collaboration
Certified Technology Comparison
Task Force Virtual Hearing
Transcript
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Presentation

Michelle Consolazio, MPA – Federal Advisory Committee Lead – Office of the National Coordinator for Health Information Technology
…the National Coordinator. This is a virtual public hearing sponsored by the Health IT Policy and Health IT Standards Committee's Certified Technology Comparison Task Force. This is a public meeting and there will be time for public comment at the end of today's meeting. As a reminder, please state your name before speaking as this meeting is being transcribed and recorded. I will now take roll. Cris Ross?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Here.

Michelle Consolazio, MPA – **Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology**
Hi, Cris. Has Anita joined us yet?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania
I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi Anita, perfect timing. Christine Kennedy?

Christine Kennedy, RN, BSN, MA, CNOR – Nursing Informatics Coordinator – Lawrence and Memorial Hospital
Hi, here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Christine. Chris Tashjian?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
Here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Good morning, Chris. David Schlossman?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
Good morning.

David Schlossman, MD, PhD, FACP, MMI, CPHIMS – Missouri Cancer Associates
Hello, I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, David. Liz Johnson?

Elizabeth Johnson, MS, FHIMSS, CPHIMS, RN-BC – Chief Clinical Informatics Officer & Vice President, Applied Clinical Informatics –Tenet Healthcare Corporation
I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Liz. Joe Wivoda?

Elizabeth Johnson, MS, FHIMSS, CPHIMS, RN-BC – Chief Clinical Informatics Officer & Vice President, Applied Clinical Informatics –Tenet Healthcare Corporation
Good morning.

Joe Wivoda, MS, CHTS-IM – Chief Information Officer – National Rural Health Resource Center
I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Joe. John Travis?

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, John. Jorge Ferrer?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician -Veterans Health Administration
Good morning.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Good morning. And Steven Stack?

Steven J. Stack, MD – President – American Medical Association
Here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Good morning. And from ONC do we have Dawn Heisey-Grove?

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Dawn. Okay, with that I'm going to turn it over to Cris in one moment to introduce the hearing, but just a few administrative items before I do. Some of you already heard but for those of you who haven't, for the task force members, when it's time to ask questions, we're going to use the hand-raising feature, which is at the top of your screen. So if you could just use that feature, it will put you in the queue and I'll just call on you in the order you have raised your hand.

To all of our panelists, thank you so much for agreeing to participate in today's meeting. Just a reminder that your testimony is limited to five minutes, please don't make me be a bad guy and have to cut you off. And with that, I will turn it over to Cris and Anita to introduce the hearing today.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Thanks Michelle, good morning. Anita and I are really glad that you could all participate today. So the agenda is shown on the screen here and we are going to be meeting today from 10 o'clock Eastern until 2 o'clock Eastern today. We have a really nice agenda. We're going to start off in a few minutes with a panel of primary care providers, and we have five people who well represent, we think, the needs of primary care providers across the country and have perspective from an HIE perspective as well. We'll go through those presentations in order and we then we'll have good time for questions from our panel members. I'll be facilitating that one. Then to follow that is a presentation by a panel of five experts who can represent a specialist perspective, and Anita is going to facilitate the discussion for that panel.

Following that, we'll have a few minutes to just do a summary and recap of what did we learn; what are the lessons we want to take forward, and so on. Then we'll spend about an hour going through some evaluation work that was done by task force members filling out some homework around surveys related to the work that we have at hand. And then we'll just finish with public comment and a few closing remarks.

This panel is…or this workgroup is pretty important. There has been a pressing need for us to do a better job, as a nation, of helping healthcare providers better select and implement and use electronic tools to support their needs to improve care, reduce costs, increase access, all those kinds of things, and in addition, obviously to help them meet the regulatory requirements of Meaningful Use.

We've got a terrific workgroup that has been working for about two months on this topic. Some of them have been workgroup members on other Health IT Standards or Health IT Policy Committee workgroups in the past and we also have some newcomers to the group who brought great perspective and energy as well.
So I'm excited about today's panels, I know we're going to want to get to it right away. Anita what would you want to add before we get started?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania
Chris, thank you. There is nothing I need to add other than a big thank you to the folks who have really devoted and given us some great information to share with the group today.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So Michelle, I think you're going to be our mistress of ceremonies today, correct, as always?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
I am.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
That's fantastic. As I said earlier, it's great when you're at the steering wheel so I'm going to slide over and Anita will slide over and please take the helm.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Okay, thank you so much, Cris. One more administrative item for the task force members, just as a reminder, in the agenda that we sent out today it includes the questions that we've asked of all of our panelists, if you want to look at that just as a reference.

And with that, we'll get started with Panel 1. On Panel 1 is Jignesh Sheth from the Wright Center, Matt Rafalski from the Dayspring Family Health Center, Randy McCleese from St. Claire Regional Medical Center and Geoffrey Burns from the Renaissance Family Medicine of Wellesley.

So again as a reminder to our panelists, each of you will be given five minutes and we'll start with Jignesh, whenever you're ready. If you could just let me know if you have any slides or anything that we need to bring up on the screen and then we'll get started. Are you ready Jignesh?

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center
I am ready and I did e-mail my slides over so if you can just put those over.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Okay, it looks like we're ready. Thank you.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

Okay, so my name is Dr. Jignesh Sheth; I am from the Wright Center. I'm the Medical Director at the Clinic as well as the Senior Vice President at the Wright Center, so I can speak about this from a primary care perspective, who is actually practicing as a full-time physician, also doing a lot of administrative work, so I can speak from both ends. Please next slide.

I come from a clinic that serves about 9,000 patients. We have about 27,000 visits. Our clinic is open 83 hours a week…7 days a week and total 83 hours. We are pretty much open almost 360 plus days a year. We have a lot of physicians, about 5 full ti…FTEs, nurse practitioners, physician assistants; we have a care manager, LPNs. I have listed this here so that the people who are listening to this know the kind of practice I come from and my perspective accordingly. Next slide, please.

So what's the current state of our EMR choices? I mean, we all know there are multiple EMR choices available in the country. Last I checked there were about 4000 plus EMR products available, at least 1900 of them in the ambulatory world are EMR Meaningful Use certified or have some form of certification. So imagine 1900 choices that I have if I'm actually going out to buy an EMR for my office. That is very confusing to a new user.

The cost of implementing most of these EMRs is extremely high, something that we cannot get out of daily operational budget of the clinic. Meaningful Use, even though we feel they are Meaningful Use certified, it's not available out of the box; that requires a lot of effort to be put in by the clinic, by the office, by the physician in order to actually…that EMR to function in that capacity.

For most practices there is a lack of clinical IT support in the office; it's not just about running the computer, it's about clinical IT, which includes an EMR specialist. Most offices don't have the liberty of having one of those in their office.

There are challenges with interoperability and connectivity. So most of these products are advertised as, yes, we can connect with an HIE; yes we can connect with your lab vendor, yes we can connect with the hospitals in your area, only then you find out that most of these are not available out of the box.

Ease of customization is usually the sales pitch that you will hear from a vendor who is trying to sell you a product, but people who have done population management know that customization is actually an enemy of standard…of actually good quality care. What you really need is standardized processes within an EMR in order to achieve effective population management. So again, the sales pitch is completely different than what we really need from a physician or a clinic perspective. Next slide, please.

So what should be the features of an effective comparison tool? If we were to go out and develop a comparison tool in order to sort out these 1900 certified EMRs into some form of a category, we need to look at what are the most important features.

First of all any comparison tool should have a score-based system. So you should be able to score an EMR after going through the checklist in that tool. The key area of the EMR should be identified for individual scoring, and I'll go through those areas which I feel are important in a little bit, but we should be able to score every EMR that we are reviewing in each of those categories so that we can come up with a composite score at the end.

We should have the…there should be ability for practices to choose what features are important for their particular setting and then they should be able to be able to look at those areas, all the EMRs in that area and go from there. We need to have clear definitions of what those choices are and what really matters when you are a practicing physician.
And the last thing that I feel is extremely important is we should have a defined set of core as well as optional features. Because a lot of optional features are advertised by the vendor, but we need to know as a group, what is considered the core requirement of an EMR? Next slide, please.

Okay, the key areas that I feel are important from EMR functionality in a primary care office, number one, accountability for team-based care. So primary care, like we said, we operate 83 hours in my clinic; I would not be able to support that if we did not have a team of providers taking care of all these patients. And that team approach is somehow not built into an EMR, and that's something that I feel is extremely important, that should be part and parcel of any EMR product and we should be able to score an EMR of how good they…that product is dealing with a team-based care.

For example, the EMR should be able…is it able to offer empanelment functionality built-in? Is it able to customize disease-management and health maintenance features? Is it able to provide customized progress notes which are still trackable and is still able to standardize the way you provide care, but is customizable to a point where you're able to run reports? Is it able to identify team-based care within the environment? Are you able to color-code teams within the EMR?

These are some of the elements that fit within that area. EMRs should be…we should develop a tool that we can score, say we're looking at five EMRs, in each of these elements and accordingly come up with a composite score for that particular area.

Some of the other important areas I feel is like population management, care management, portal functionality, referral tracking. Referral tracking is a big thing where we are trying to close out these open loops like you send a patient out for a referral to a specialist, either for a lab test or for you are ordering say physical therapy for a patient; all of these orders have to be closed. The EMR should have the functionality to be able to track those open loops, be able to close those loops and augment the way the care has been delivered by optimizing some of these elements, which are usually forgotten if the report is not generated automatically through the EMR.

Interoperability is another big thing. We have all the…we are practicing in an area where we have three different hospitals with three different EMRs. If my EMR is not able to integrate with those hospitals, I will not be able to provide the best possible care for my patients. So interoperability becomes very important to most primary care offices.

And again, the final thing that is usually not advertised by the vendors is, what is the interface between practice management where you do the billing part of your EMR and the electronic health record where you are documenting the care provided? The interface between the two is extremely important because that is where you get revenue and that is where you may lose revenue, and that may be the time where you implement an EMR and you were losing revenue because that interface was not functioning appropriately.

So I feel these are the areas that we should really focus on. We should be able to score the EMRs in each of these areas and decide what is important to us. But I would say that is the way to go. Next slide, please.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Jignesh, if you could please wrap up.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center
I think this was my last slide, I guess that is all I have to say. I will be obviously happy to take questions when the time comes, but thank you so much for this opportunity to speak on behalf of the primary care providers. Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Thank you. Matt, if you are ready?

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center
I sure am; if you could go ahead and put my slides up, please. I want to again thank you guys so much for allowing me to testify. I appreciate your interest in this, and I appreciate your enthusiasm about this particular topic.

I am a practicing family physician and also a clinical IT director at Dayspring Family Health Center. We are a rural, Federally Qualified Health Center so one of the issues that we deal with is, in addition to our isolation, our small clinic size, we also deal with a lot of regulatory issues and need to be able to have an EHR and the components that are able to handle some of the difficulties that we face on a day-to-day basis. And so I'm going to emphasize some of the concepts and then some of the additional materials in the written testimony that I have provided. Dayspring is about the same size as Dr. Sheth's clinic, 8000 users, about 30,000 to 40,000 visits a year; three clinic sites, 11 full-time providers. Next slide, please.

So the three concepts that I really would like to emphasized during the testimony is one, that I think this tool is particularly going to be important for smaller practices and smaller EHRs. I think that it is going to be helpful for a comparison both for purchasing a new EHR and also knowing when and if it to change EHRs. And then also I think there is going to become a new emphasis on modular components of EHRs and I think that is going to become more and more difficult to manage the number of entities that we are going to have to deal with to decide whether or not we need those additional components; and so a comparison tool that allows practices to do that is going to be very, very helpful.

If you can go on to the next slide; so again, for smaller practices and smaller EHRs, when we had this discussion with the ONC fellow group initially, I think there were a lot of folks that didn't necessarily understand the importance of needing this tool either because they felt that there were already resources out there or because many of the fellow's clinics didn't feel like they were in a position where they would be buying a new or changing an EHR anytime soon.

I think the problem with that is twofold; I think one, I think that even if you are not looking to change immediately, I think the environment is changing fast enough that there is always going to be a need to re-evaluate where you are, and even if it is not the whole EHR, again as we go forward to Stage 3, you may need to add a particular component to that EHR to be able to meet some of the regulatory requirements that you need for your particular situation and having a tool that allows you to look at

where you are compared to where the rest of the environment…the EHR environment is, can be very, very helpful.

I think it is important to emphasize just like Dr. Sheth did that small practices do not have IT departments, they have minimal IT staff. One of the reasons we do well is as much because of my own personal interest in IT and my desire to develop that as a career skill, not so much that we intrinsically had somebody here that was able to do that and particularly in a rural area, we have not only a lack of infrastructure in the sense of very weak Internet and we have to keep that in mind when we evaluate EHRs.

But also a lack of workforce; it is not easy to hire somebody with technical skills that can just walk into a clinic and be an EHR manager, let alone a nurse informaticist or a physician informaticist. Most of the other practices in our area do not have someone that is able to function at the level and actually we provide a lot of advice to them and to our local hospital, just because they don't have anybody available.

I think when a clinic does not have a lot of resources, the temptation is always to go for the cheaper product, and I think that there's going to limit some of their options later down the road if they don't realize the importance of some of the components that have to be present. And I think especially the smaller EHRs have smaller user groups, it is more difficult for them to get references, it is harder for them to have comparative data. And so when you look at some of the services, some of the information from the smaller EHRs is not as accurate as something from a large vendor.

A lot of the large vendors will not even deal with small practices like ourselves and I think that the more…even though I think that there is a desire to have some unity in the market, I think the diversity allows for diversification across the market so that there are multiple smaller EHRs competing with each other is going to get into a better product in the long run. Next slide.

I think important issues for small practices, again the cost, cost, cost; can't say enough about that. I think ease of installation, again you are not going to have additional clinical IT support a lot of times and so a lot of times the EHR vendors provide technical IT but not clinical IT support. It is good to be aware of that. Ease of maintenance so not just installation, but keeping it running, what do you need to do on a regular basis to keep it floating and then also, customizability in the sense that, you know as a federal agency, we need to be able to have a new report or a new item; we need to track new data on a regular basis.

We are always being asked to do something different or something new, having that available can be helpful. And then of course with the modularity, I think you know, having portal patient experience, population health, practice management, revenue cycles; all those are going to be real important going forward to be able to evaluate those pieces.

And then last slide; or…yeah, there we go. And again, just the idea as we go into Stage 3 that we were able to evaluate the pieces of the modules in addition to the main EHR, knowing what we need to add and if we need to change what entity we are on is going to be really helpful. And I think that takes me up to that time, so thank you guys very much and I will be happy to answer any questions.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you so much Matt. Randy, if you are ready?

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

Hi, good morning and thank you; if you will, pull up my slides there. Let me get started; I'm Randy McCleese. I am the CIO at St. Claire Regional Medical Center which is a little bit larger environment than the two prior speakers and we are a Northeast Kentucky, hospital-based system. We have primary care clinics, also have some specialty clinics here and it is in a rural environment. We are about 60 miles or so from any metropolitan area.

Our primary care clinics, which are what I am going to be talking about, I am actually going to be describing a selection process that we went through a few years ago just so that we can understand what we used and how we did that. That group has six locations and all of those are affiliated with the hospital and we have about 80,000 visits per year in the combination of all of those clinics themselves.

We serve a population both from the hospital and from those clinics of about 160,000 people and our IT, frankly is the hospital-based IT support, but it also supports the primary care clinics and we also go out to home health and also do the specialty clinics. As an organization, we refer patients out to the metropolitan areas for higher levels of care. Next slide, please.

The selection process that we went through, and again, this is a few years old but we went through the process of doing a Request for Information and then roll that into a Request for Proposal. And the vendors that we looked at, at that point in time, we were looking at…we looked at the Internet, what was available there, our knowledge of vendors that were out there, because we were trying to replace a sunsetting system. Also looking at vendor and industry shows such as HIMSS and things like that to find out who works in this space right here.

One of the primary things that we try to do, if we can at all, is to extend the current vendors offerings if they have these things available. So, you know to start and this is not just specific to this one process that we went through, but we look at multiple vendors, in the range of 10 to 12. We narrow that down to three and we do all kinds of phone calls and site visits as we feel appropriate, and we did in this case.

Then we set out spreadsheets, and I will talk about the areas here in just a moment, but we set out spreadsheets and assign values to that so that we can look at all the different features and functions of what we are looking for and this is a group effort. We bring people together from all different parts of the organization; physicians, nurses, clinic managers, IT staff, supervisors, and then we will narrow that down based on what we have seen in our scoring. We will select our vendor of choice and then we will start the negotiation process. Next slide, please.

The things you see on the left are the EMR portion; the registration, finance, these are all modules of essentially any system that we are looking at and like was mentioned before, we are looking at how do these different modules of the system work together. Are they all in one database or are they in dual databases? And how are you having to support those things as well as what is the interaction between those? I mean, can we get the patient data coming from the registration and flowing to the EMR, and the back to billing and collections.

And then the other things that we looked at too is, how often do these upgrades come from these systems and do we have to shut the whole clinic down in order to do these upgrades? Is this compatible with our current infrastructure and the way we are moving forward there?

And then like we were talking about earlier, interfacing into a health information exchange because we are a part of the Kentucky Health Information Exchange and it is pretty robust. But we are also trying to make sure that we can share the data from that primary care system into our acute care system and flow that data there. Last slide, please.

The things that we looked for in those six areas, I'm sorry, the seven areas that were mentioned there; first of all, appearance. You know, what does it look like on the screen? Is it easy for the provider to look at and how easy is it for the person, whether they are at the front desk doing registration or the nurse or the doctor, how easy is it for them to access that and move around in that application? And then are the pop-ups there, and especially if they are nuisance pop-ups and, you know, is it simple for those users to understand and to be able to look at that screen and make sure they can get what they need in order to do what they have to do to take care of the patient, whatever stage they are at.

And on the other side there, those underlying things that have to go on there, what are the time-saving features that this is going to provide for those caregivers and how do we go about supporting those dictionaries underlying all of this? How easy is it to get to those records? Does it take a split second to get to that record or does it take us a minute? And how easy is it to customize?

And that was mentioned earlier, but how easy is it to customize? And there is simple down here again because we are looking at the overall simplicity of this whole system and is it something that is easy for our users to use and also from the IT standpoint for the IT group to support? So, I will be glad to take any questions, and thank you again for the opportunity.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Thanks so much Randy. Geoffrey Burns, are you available?

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley
Yes. Yep, do you hear me?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Yep we can hear you.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley
Oh great. So my name is Dr. Geoffrey Burns; I am a family physician in a private solo practice in Wellesley, Massachusetts. I had been starting my practice in May of 2014 after having been in a very large hospital setting, employed physician that had a home-grown, longitudinal medical record. In the last year or so that I was with that organization, was involved as a subject matter expert in helping to tailor Epic, which was determined to be purchased at a one billion dollar cost by the organization to the current needs across several hospital systems, primary care connects inpatient, outpatient, acute care.

Upon leaving on my own, it was clear that Epic was not going to be something that I could have on my own as a private doctor in a solo practice, and that is really what I wanted to sort of talk about in my questions about a comparison tool, in my answers rather. So certainly a comparison tool would have been very helpful upon starting my own practice and what would have been helpful for me, and how I

went about it is really looking at some of the already, you know, everybody likes to look at top-rated things.

So if there is an organization that says, this is the top-rated EHR or this is the best plumber in your area, typically we are liking to know what those lists are and who those are and so working off of that. So I found that KLAS was a useful place to look as a strict structure, but also just people that were doing health blogs and IT blogs that said that these were the best and sort of why they were the best, why they thought they were the best, a sort of expert opinion as well.

And then from that, it was looking at the top-rated list, kind of giving myself a sense of okay that sounds like one that people like a lot, it is then trying to make sure that that would fit with me. And so in my office it is myself, my front office staff, we were going to be purchasing everything, all the software, everything else that would be needed and so it was is this something I can have in a small office? Do I want to store it as a single server in office? Is this something that I want to have as an out-of-the-box product or is this something that is going to adapt?

And so one of the ways and one of the questions that was asked is how would this…how would these be sort of addressed as a format that would be helpful? I sort of think of it like a…almost in a wire diagram more than really a spreadsheet as a way to get to the point of, what is my sort of small cluster, since there are over 100 different EHRs although all of them aren't, CCHIT certified and things like this, and that sort of was one field to whittle that down; who is certified? Who worked with my local hospital system, if I want to at all?

But since Meaningful Use has come along so far, most other systems are decently interoperable at least by using automated faxes, although they are not immediately digitally available. But using that wire diagram, it sort of gets me to, is it something I want to store the information on-site or do I want to have it a cloud-based, and I happened to want to choose cloud, and so that then limited and culled out a whole list of companies that don't have cloud-based opportunities.

Ones that again that are particularly designed to have whole soup-to-nuts kind of approach, so that do both practice management as well as billing, that do scheduling and do the chart component, and so that is what I was looking for, I didn't want to buy four different sections and then have to merge those on my own or hope that they competed…or didn't compete, but were compatible. So I really wanted something that did it all together. And so that again whittled my choices down to just really a small handful.

And then from that, I was doing demos myself; so it was then arranging and reaching out to each of the different vendors, and saying this is my situation, it's going to be me. I am interested in your product, you know; kind of show me what you have, what the capabilities are, what the things are and what the pricing can be. So in that way, somewhat similar to if somebody is trying to pick a car, you know, they don't walk onto the lot necessarily and drive off the lot with a minivan if they were thinking of a sports car beforehand.

This is a way that they have sort of shopped for this before and this was my way of shopping was whittling it down to a few and then actually taking a few for test drives, a demo, meeting with the different reps, seeing what the support were, talking to other current users in a similar size practice that are sort of referral or recommendations type where they…the company, the vendor will give this and say, hey, what do you think of this? We're thinking of that, how do you like it? Does it work for this? And

really sort of the word of mouth recommendation from somebody who was already using it ended up being very powerful.

I think that pretty much is what I wanted to cover, having looked at everybody else's slides, I knew that nobody had really done it as a sort of a shopping experience and so that was…I wanted to use that analogy to bring that really to what I had done, and I chose well, I think, and am very happy with my choice. I haven't been disappointed.

The fees ended up being variable based on productivity and volume and so I think that that is an important part of understanding and other people's slides it is, how much do things cost? And there is obviously fixed cost and things, but if it is a percentage of total volume that is a moving target based on utilization, closed loop reporting costs something through this vendor and so I think having closed loop reporting to laboratory, this particular vendor that I chose allows me to have in record feeds to LabCorp, to Quest and to other laboratories that if I use those other laboratories with sufficient volume, they will do the tie-ins so I am actually putting an order in the system and it goes really outside of my system, but it shows up electronically now to Quest or LabCorp or these others and so to those reports are then wired back into my system directly.

So it was really trying to take as many of the different additional steps. One of the providers that is not able to make the call today but has slides available, describes how his nurse and front office staff spend 50% of the time faxing and loading, and copying things into the chart and that is something that I was aware of and was really pleased with this vendor's ability to try to reduce that volume as much as possible.

So that is what I will close. Again I thank you very much for the opportunity to speak and would certainly help to answer any questions that you all may have about my experience.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you so much and thank you to all of our panelist on panel one. We will now transition to the question portion for our task force members. Just as a reminder, you can use the hand-raising feature to put yourself in the queue. I will ask when the panelists go to answer questions if you could state your name again for our transcriptionist that would be very helpful, we don't know your voices yet. So let me first ask if Cris Ross has any questions, and we do have a couple of people in the queue, so let me start with you Cris and then we will defer to those in the queue.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Michelle thanks very much and thanks to the panelists, that was really great input and a reminder of what is needed and what we can achieve. I'm going to defer to the people who have already raised their hands.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thanks Chris and the first person in the queue is Chris Tashjian.

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics

Hi, good morning. Like you, I'm a primary care provider in a semi-rural setting, and with similar sized practices. I wanted to get your opinion on, we talked…everyone talked about customization, some said it was good, some said it was not as good. I wanted to get your opinion on saying, what are the standard things, you know should the ONC or should we try and basically have a standardized package that we want the vendors to meet that actually meet the Meaningful Use standards? You know, you talked about adding things and subtracting things and I think that is fine, but at least it's been my experience is when you do that, it becomes so complicated and so expensive that it doesn't work nearly as well. And I am just curious as to the other panelists is what their experience has been.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy McCleese. I mean, we have had some customization done, but we do our best if there is any way at all possible not to have customizations, partially for the reason that you mentioned. First of all, it is expensive. Secondly, any time there are any upgrades or changes to the system, you have to pay special attention to those customizations and make sure all of the changes get made to those which again, adds to the expense.

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafakski; I think one of the other panelists used the word adaptability and I might like that better than customizability, just the idea that within the EHR, if you need to be able to do it, you're able to make some changes to fit with not only your practice style, but the requirements that you are coming under. And I think the probl…what the tool could do potentially for us is differentiate that because a provider who is a solo practitioner doesn't have IT support, but also runs a very straightforward practice might not need that adaptability, and would favor a product that you don't need to do a lot of maintenance on, you don't need to do a lot of upkeep on, it just runs; you walk into the office, you do your thing, you walk home.

Something like an FQHC has so many new requirements and new programs that I have to be able to design the templates in such a way to capture data almost differently on a weekly or monthly basis and so having that adaptability intrinsic to our system was very helpful. We could never do with a simple, straightforward system. On the other hand, we have a little bit more staff that we can actually do the programming it takes to keep things up-to-date with what we're needed to do.

So, and I think that balance needs to be clear in the tool if that's something that could be evaluated on a system, a system that's more straightforward, doesn't require as much maintenance, but isn't as adaptable could be very desirable and helpful to one particular practice, but that might not be helpful for another particular practice in the requirement needs.

And as to the modular component, I just…my reading of Meaningful Use 3 seems like that's going to be almost a requirement going forward, depending on the different regulatory programs that you participate in, it's unlikely that one EHR vendor is going to be able to meet all those needs. And certainly what we've found is, especially with population health, many of the smaller vendors especially don't have the firepower to be able to do population health well, and you do need to add-on a system if you want to get something accomplished really, really helpful. And I think that that's not necessarily a bad thing, I think it provides again some adaptability that you didn't have otherwise, although it does

increase the cost and I think it's good to be aware of that, if you need that sort of environment…if you need some of that tool for the environment that you are in, sorry.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

This is Geoff Burns. The only thing I would add to the adaptability statement would be input adaptability. So I had mentioned my lab experience, but also things like Google Glass applications, the remote transcription scribe activities, the ability to have photos easily merged or accessible so for these out-of-the-box, some of those are not capable and then you have to rewrite or add code or things like this and there seems to be an unwillingness to sort of share that, it has to…it seems like no one's ever asked this before, really? You serve how many people and no one's ever asked this so you can't…it has to be rewritten all over again?

It would be useful to know like that there's sort of these other kind of standing up flexible, adaptable systems to keep with ongoing IT developments as technology changes, not just demands for regulatory purposes.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

This is Jignesh Sheth. The only thing I would like to add for customization or adaptability as might want to call it, from a practice that has multiple physicians and multiple providers, each of them having a different way of practicing, customization is definitely important at an organizational level, but it can become your biggest enemy if you don't have central controls and if the customization is not across the organization. Because when you start doing user level customization, it really becomes very hard to do population management because the tracking feature for most of your reports is looking for a certain field within the EMR.

And if every user has a customized their version of EMR to a different style, your reports are never going to be accurate, so you will never be able to meaningfully achieve the requirements of say Stage 1 through Stage 3 of Meaningful Use or meaningfully do any kind of population management. So we have to be very cautious when we do…talk about customization. I think at organizational level it could be very helpful, but at an individual level it can become your biggest nightmare.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you. Jorge?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Good morning; thank you panel members. Dr. Sheth you mentioned that a scoring mechanism might be of value when evaluating electronic health records. So with multiple connections interactive within electronic health records for data entry integration viewing, do any of you panel members feel that learnability, usability and subjective impression how satisfying the electronic health records is to the user are attributes that should be in a score card?

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

Absolutely. This is Jignesh Sheth again; I definitely think that should be part of the tool. Having said that, we will have to be very cautious about including people in the decision-making process who are at the extremes of technology, like someone who is a quick adapter versus someone who is the most resistant adapter. You don't want them to be part of the decision-making process because it will skew your

decision; you probably want the ones in the normal curve who will be finally deciding if you are adapting an EMR, which one should be the one that you go with.

So I think a tool that kind of say lays down all these features and then as a group, an office can decide okay, out of these 15 core features, these top five are important for my office and then the scoring is done for those top five features and the tool allows you to compare the available EMRs in those areas will be helpful. But again like I said, you have to be cautious at who's at the decision-making table because the early adapter's core technology might view it very differently than an average user and I think the average users are going to be the category where most physicians will fall into.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Any other comments from our panelists? Okay, hearing none, Christine Kennedy?

Christine Kennedy, RN, BSN, MA, CNOR – Nursing Informatics Coordinator – Lawrence and Memorial Hospital

Hi, this is Chris Kennedy from Lawrence Memorial Hospital in New London, Connecticut. I'm wondering if any of the panelists had any hospital partnerships with their decision-making or their fiscally or with the implementation process? And if they did, what were the pros and cons of that? And if they did not, do they wish that they did have that? Thank you.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy McCleese again; I mean I'm hospital-based so the primary care operations that are associated with the hospital had heavy influence from the hospital itself. I'm not sure I understand the details of the question but it was an organization-wide decision as to which system we chose and when I say organization-wide that involved the primary care operations, but it also involved the hospital all the way up to the executive level of the hospital.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

This is Geoff Burns; so locally when I was deciding, I specifically ferreted out the local hospitals to see if I wanted to be part of the physician hospital group for, you know, added pay for performance lifts and things like this and that definitely was…would have been influential in my choice and would have pigeonholed me to very specific electronic health record offerings.

As a start-up, one of the locals was, everybody was using eClinicalWorks and it was very clear that if I wanted to be part of the network, I had to do eClinicalWorks at the cost of a $30,000 introductory and then ongoing fees that were monthly for upkeep. And a different system in order to be part of their PHO, then they had to have access to my records real-time, and again had to specifically be purchasing the record they are using or the one or two that they integrated with.

So it's definitely a major factor when you have an…to even be part of an ACO was part of both of those problems; so it's a problem. I chose to not partner or to align with either of those institutions and it turns out that one of the first ones that was the eClinicalWorks has now moved on to the vendor that I happen to choose separately so if I…fortuitously if I decide to whatever, to join their PHO, I'm already sort of set up ahead of time.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center
This is Jignesh Sheth again; at the Wright Center, we have a unique situation where we are not part of any major system, we are still an independent practice. We do have a residency program that we are a sponsoring institution for, but we have primary care offices, three of them, in the area.

We are not part of any major hospital system. At the time in 2005 when we implemented our electronic medical record, none of the hospitals in the area had any formal PMR. But looking back and retrospectively, even if they had an EMR, like we have two major hospital systems in the area, the big gorillas who can afford to have the million dollar or a billion dollar investment in getting a big EMR, I don't think that would have affected my decision going with MEDENT, which is our current EMR, which is not the EMR which either of the hospitals use.
I don't think that is something that will…would have independently affected my decision because we recently signed on to be part of the largest health information exchange, Network, in Pennsylvania. So once you have an HIE, functioning HIE in your community, and that's what I think the biggest push from the health IT world should be is to develop those HIEs so all these EMRs, regardless of their vendors, can talk to each other, can get connected and can transfer information because from the area where I come in, we have two major hospitals.

So even if you had gone with one of them, you would still be alienated from the other one and your 50% patients are going to go to the other system, so regardless of the way you do it, you're always going to have a good majority of your patients not within the same EMR system. So I think it would be an independent decision to get your own EMR, as long as you have capability to hop on to something like a health information exchange to transfer data, which also is a part of Meaningful Use requirements, so I don't think it is going to really affect my decision.

Christine Kennedy, RN, BSN, MA, CNOR – Nursing Informatics Coordinator – Lawrence and Memorial Hospital
Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
John Travis?

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Thank you; this is John Travis with Cerner. A couple of questions; one's kind of a follow-up and anybody can take this. So the first one is, some of you spoke to usability and really relying on a peer evaluation to help you understand usability of a system, but is there something that, you know, that's kind of tough to get at through a comparative tool, that's going to be more of what you derive by your own buying experience. But is there an importance to have a trusted source through the comparative tool of information on usability and perhaps how would you conceptualize that being provided, you know, whether it's something that the vendor has to go through or it's something that would be independent evaluation?

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center
This is Jignesh Sheth again. I would say that usability has to be defined by an independent group because the vendors are going to use their own sales pitch at usability and adaptability, not necessarily that's the

ideal thing from a physician perspective; it's good for selling the product, not really for using it. I think usability should be defined at a more like a neutral level by a separate entity.

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski; I know AMIA and HIMSS do have sort of usability principles that are out there, I mean if we could afford to do something that had some sort of independent testing as to whether it at least met a majority of those principles that would be nice. But I know that that might be cost prohibitive and difficult to do. A lot of times, if you have something that's rated as a score, like you said, it's very difficult to get at, but those are the situations where we often look at the comments and see what it is that made it difficult for them to use; those can be the most helpful, if it's at all possible that data could be captured in an organized way.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy McCleese; I agree with those things and from my standpoint, there may be a baseline that we have to work from that, you know the systems, whether or not they reach that baseline as far as usability goes. Usability, as we mentioned earlier, is somewhat subjective to each of us but there are certain things that you would expect any system to have or do and then we may have to evaluate…each individual organization may have to evaluate what goes beyond that.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Yeah, this is Geoff…

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

Well thank you…oh, go ahead. Sorry.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

This is Geoff Burns; I would agree with that and just to continue my sort of…my analogy from before. It's very much like, you know, most of us are probably of a similar age where we have children thinking about college or can remember when we were trying to choose college and a lot of it is sort of this, yes or no, you know, type of choices in that decision tree. Once you get to everybody that's in the tree has a four degree program, then it's, do you want to be at a big college or a small college? Do you want to be in a city, a suburb or in a rural setting? Do you want to have an independent island campus or a community-blended campus?

I mean these are things that sort of take the college decision-making process down to really a handful or dozen or so of schools that then you're interesting in looking at. And I think having, you know a reputable ONC source that helps to differentiate, you know, are you a this size practice, this you know, that it steers you towards this group of already pre-vetted, meeting the threshold for all these criteria the EHRs that then are in that pool, to allow somebody to find their own individual best fit.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

Okay, my follow-up…

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski again. Size of practice may be a very important filtering tool to use, you know, what's the typical size practice that uses this EHR. We've even seen our EHR fail with size…practice sizes

that were different from ours, in other words, if it got too large, it just didn't work anymore and that would certainly razor down your choices which could make it, as to the college analogy, could make it very…a little bit easier for a small practice to do.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

Yeah, and I imagine as part of that, any focus on specialties probably also would be significant. CMS just put out an RFI on quality measure certification and one of the things they're asking about is ways to assure adequate availability of quality measures. And part of that may be geared towards the intended marketplace the vendor has for the products. So, that might go along with it.

My follow-up here is maybe a little bit off track for what you would expect through a comparative tool but a number of you referenced, you know, the peer-to-peer conversation. Is there a role for this comparative tool to have an element where the vendor should be providing references, whether it's just simply contacts of people you can talk to or outright feedback whether the vendor provides it or it is independently collected of, you know, reference or testimonial, good, bad or indifferent? I'm not sure if there's a real role for this, but would it be at all useful to compel the vendors to have to provide that kind of information for at least a number of...it may be difficult to achieve, but presuming it could be, would that be something you'd look for this tool to help with or is that still something you would rely on your own resourcefulness to find out about?

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Well I think a lot of…this is Geoff Burns again. I think a lot of us that are at least starting out on our own or in smaller practice settings or are onesies or twosies or peeling off from some larger organization, you know, don't have an IT department, you know, don't have information technology degrees. You know, the bulk of the people on the panel, through this panel and certainly through the task force are people that have significant, you know, computer and IT backgrounds; information technology and understanding of it is not commonplace amongst most…more physicians, of certainly the elder group that may be paring down or and perhaps in the newest of the residents, it's how to then compare that, and certainly the new young people really like peer references a lot.

I mean, this is why things and Apps like Yelp and reference…excuse me, restaurant reviews and Trip Advisor, these things have taken off because people want to know what other people think. And so I think that it's a very powerful tool for vendors to do all of those that you mentioned, have access of real-time people that are cheerleaders for their product, that's great. But people that are survey-based groups that ONC could do separately that align with, you know, the vendor themselves surveying their own people or their own clients but having, you know Angie's List if you move to a new town or a new place or starting a new practice, is a place to have sort of pre-vetted vendors for your plumbing, for your electrician, for whatever and that's how something like Angie's List got going; you want word-of-mouth, it's always the most important sales strategy and it's really how to harness that for electronic health without it being a federally sponsored or obviously federally sponsored Angie's List.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy McCleese and I'll reiterate some of that tunes as well. But it's something that happened to us a few years ago that really kind of impressed me because we always check with other users, and we were going through a selection process, not the one I mentioned earlier, but we had narrowed it down to three and I asked for site references for each of those and I got, from two of those vendors, their

hand-chosen, their cherry-picked references. From the third one, they sent me all of their users in the entire state and I said that's highly unusual.

And the comment that came back to me was, we want you to hear the bad as well as the good; it's how we recover from the issues that we have because we don't think any software vendor is perfect but it's how we handle the problems that we want you to hear about. That really impressed me and to me that's one of the biggest things that we need from our standpoint that we need to be able to do is talk to those other users and find out how did they recover when they did have problems, because they will have problems.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Cris Ross?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Thanks Michelle and thanks to the panelists again. I guess my question relates a little bit to timeline and purpose. So, you all have been through some EHR purposes, you didn't say so explicitly but it sounds like some of you have been through this multiple times. And I don't think it's the case that you wake up on a Monday morning and say, you know, gosh, I've decided I need a new EHR; there's usually a discernment process or so on.

I wonder if each of you could describe if ONC were to foster a creation of some sort of tool, in whatever form that is, a commercial product, a nonprofit organization, something the government manages themselves, whatever that might be. And you imagine that this tool is a pretty good resource that would let you know what are the products that are out there, they address the issues that were raised around modularity, around cost, around usability features, those kinds of things. If you think about the process that you anticipate you might go through the next time you change EHRs, at what point would you want to engage with this tool, and for what purposes? So would you go to it first, would you go to it last? How would you…

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center
This is Matt Rafalski; I can foresee two purposes based on the description you gave me. Certainly one, if there was a catastrophic event that would cause us to need to change vendors, vendor failure, a large change in scope something along those lines, I could see that as a first step just to kind of get an overview of what the lay of the land is right now. I mean, I watched the lists, again more out of hobby and interest, but a practice that doesn't have an IT person would certainly need to go there to just see who are the major players that are out there and what's available. What's appropriate for my practice size? What's appropriate for my specialty? What's appropriate for my scope? And that certainly would be one use.

I think the other use would be as part of strategic planning; if you do have a practice that has a little bit of IT savvy, you know, that could become a piece of the puzzle for you looking forward to the next year, two, three of five years. You know, what are the different vendors are providing? You know, right now for example, we have a population health tool that's meeting our needs, but I, you know, looking at the

lay of the land and, you know depending if ACOs catch on in our region, depending on MACRA, changes in MACRA, changes in the regulatory programs, it may not be sufficient.

And if I, you know, in January I come to take a look at my strategic plan for the year and say, hmm, you know, all these other providers have this functionality and mine does not, it's going to make me consider looking at what it's going to take to change. Because I think a well-done change already takes time to do, six months, a year even longer sometimes and I think our markets are changing so quickly that having an up-to-date tool that gives a list of functionalities, and a list of appropriateness for your practice size and scope could be something that could even work into a regular strategic plan as well as a need…a reference tool for catastrophic change.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Um hmm, umm hmm.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy and I will agree with that. I mean, unless it is a catastrophic event that we need to replace something very quickly then we're going to take some time to go through that and what you mentioned, in our case would probably be very close to step number two, if we were to define it in steps. Number one is for us to define the requirements of what we need in a new system and once we've got that done, then we'd want to go to look who's in the market that has what we are looking for.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Um hmm, helpful.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Yeah I think that the…Geoff Burns again. I think, to hit the horrible analogy again, but the car analogy is the one where even though we're driving a car, we like our car, we still kind of look at Auto Trader, we still look at mag…advertisements and what's coming out. And we sort of always want to keep abreast of what's new and different and maybe a new addition or what else is available in a similar sized car and need that I have that might be better.

And if we do get frustrated, and I don't have the numbers, but I know there were a lot of early adopter electronic health records in smaller practices that really kind of got stuck, you know, they bought the product and the product never evolved and now they're, all right, I've sort of eaten through this and to bold on things or to add on a whole new population management system onto it or anything else is just going to be so costly, I think it would be helpful to have not just the grass is greener, but rather, hey this is just more, you know updated and it's going to continue to evolve type of product that's available and the cost isn't awful.

And the little bit of helpful lead time would be doing it along the way and when things get good enough to say, you know what, there's so much benefit and not as much, you know, there's the risk-benefit ratio, my benefit to changing EHR is greater…is better than my risk of staying with the same one because of the things that have been mentioned already, financial or interoperability between, you know local HIE, you know mixed groups or now the ACOs have arrived, these things are all putting me at a disadvantage. I want to know ahead of time not just be caught, you know, with my hands on a dummy laptop that doesn't connect anywhere anymore.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

So thanks, so I'm hearing pretty clearly that you would use this tool to help you decide whether to switch not just, once I've made the decision to switch, I'm going to pick product A versus B and that's a helpful perspective.

I guess a second question is, to what degree would you want to depend on peer review kinds of things like, you know Yelp or Trip Advisor or those kinds of things as opposed to say some form of expert opinion or, you know, objective data sorts of things? Can you just give us a sense of what the use would be to understand what your peers say about a product as opposed to what experts might say about a product?

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

This is Jignesh Sheth again; I think peer review and peer-supported like a website or place to go to will be important, but that cannot be the primary decider. I think an objective, expert-based system, scoring system, will be very helpful because like any other website including Yelp that we were discussing, it's usually the people who are extremely happy or extremely unhappy the ones posting their comments. So it's always hard to know if…what's the real deal with that particular product and we all know, I mean there is a lot of bad corruption in that area recently.

We know with Yelp, you know, people were posting good comments just so that they get good business. So we don't know how vendors, how strict a system that can be and are vendors going to be diluting that by investing in just getting good reviews on so that, you know, it can misguide people. But if there is an objective system that is really owned and governed by the federal government hopefully or an entity that is like independent and experts are putting their comments on it, it will be more reliable and accurate; it will be more useful, I believe, in my opinion.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Yeah, it's Geoff Burns again. I don't think that it's either one or the other; I think there's a role for both. I think that there's clearly people aren't again information technology experts of their own right when they're deciding this and they're in a smaller practice so they do, they absolutely need expert opinion; you can't go without that. And at the same time, I do think that the user experience is going to give more information, more personalized information, more, hey, that sounds like me, that sounds like how I react, you know, I'm a hen-pecked typer versus very fluid keyboard typer versus I do voice recognition, I have a scribe, I have whatever; these things experts aren't going to give us the details about that your user experience will.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

And this is Randy McCleese and I agree with that. I mean, I use Trip Advisor quite a bit, you know, something like that would benefit from the standpoint that we're hearing from other users about how this works and, you know, we could call upon them if we need to have more detailed discussions. I mean we've gone through an implementation just recently that it got to the point two weeks before go-live when we had to cut the project just because it would not work for what we needed to do, but yet it had been sold that it would do exactly what we wanted it to do; not an EMR system, fortunately.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

This is…

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski again. Just I…the most important thing, I agree that both are important, just making sure we label which is which is going to be…it would be beautiful if the site could be a clearinghouse that would have all different types of data, maybe even including vendor input, as long as it was separate and clearly labeled as to which was which.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

And that would then, you'd be able to…this is Geoff Burns; then if you were the user, you know, you were at that clearinghouse, you could then, you know in a somewhat of a pie diagram, you know, give value points to, you know, of a particular vendor you were looking at or service you were looking at, you know looking at the vendor's opinion and giving that a certain amount of weight…that wasn't me, sorry.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Sorry about…

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

It was weird to hear myself though. But then then having the vendor weighted plus the expert weighting plus that, and then would could sort of, you know either assign points or value and really say, wow, the experts really love this, but the users really hate it and the vendor is doing this; I think it gives that person a little bit more of a three-dimensional viewpoint of their experience when they, you know, a comparative experience.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Okay thanks, that's really great input. I really appreciate it.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you and I have a question that was sent to me. Please comment on how usability, integrated with clinical decision support, has either facilitated or slowed down effective and efficient clinical workflows in the care of your patients. Has your EMR vendor lived up to your expectations?

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Well, this is Geoff Burns. So it is, for all of the four…three of the different EHRs I've used in the last 10 to 12 years, it's always slowed things down only because it's more things to look at that don't directly involve keeping your eyes on the patient. So, you know putting your eyes on the patient, your hands on the patient, your examination tools on a patient, dealing with their current in-office issues immediately, which is what the patient is there for, for their immediate experience is pretty fast. To then slow down to enter it and to document, do all those things, slows that down. To then look at, oh, by the way you haven't had a mammogram in the last X number of years, you haven't done any screening for engines, are all the appropriate…to medical practice, but it does slow things down.

Clinical decision-making is, you know, I'd really like to…I think clinical decision-making initially can slow things down, but later can speed things up in the sense that, oh, I know that I used to like to choose a combination inhaled corticosteroid plus long-acting beta agonist, but the local insurers aren't allowing that to be covered first choice and the clinical decision-making says, you really don't need to have them

on that more than one refill if they're stable and so that prompt to get them off of their combo agent, even if they're on it, to just back down to a controlled thing is something that on the fly, in the room with the person in front of you, you're not thinking of.

So I think then in that sense it's allowing for better care and in that sense, faster. Not always, however, so it's just definitely a mixed bag. And the last part of that was the EHR has lived up to its whatever, what I hoped it would do.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

This is Randy McCleese. I'm speaking from an IT standpoint so I'm not sure that I can answer your question intelligently but, I hear the same things that were just said, you know and on that last question, has it lived up to what we expected? I mean, it's been in long enough now that actually it has surpassed what we were expecting when we first installed it because we're able to do some things now that we had no idea that we would be able to, a few years down the road. So, it has lived up to the expectations.

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski; I agree everything so far and I think that that concept of meeting that initial investment both on a macro and a micro level has allowed ours to meet and exceed expectations. I think the initial investment is a lot of time and a lot of effort, whether you're talking about setting up the system itself or seeing an individual patient, but I think in the long run, the time savings manifests itself after a period of time.

The only other thing I would say is from a…again from an IT standpoint of view, I might turn that concept on its head; it's the workflows that makes the decision-support and the documentation faster and more effective, not the other way around and I think that that is one of the concepts that, when we talked about adaptability, that's one of the things that I think is really important. You need to be able to adapt the EHR to your workflow as much as have to adapt your workflow to the EHR; and if you can't do a little bit of both, if you can't bend the EHR some to meet your workflow and bend your workflow to meet your EHR, I think that's where a lot of the discordance across the country comes from with ineffective systems.

You know, one of the interesting things that you might, as an exercise you guys might do as you develop the tool is to take a single vendor and find someone that's really, really unhappy with it, that particular vendor and someone that's really, really happy with it and compare the two of them. And find out what are the touch points that make it very happy and effective for one person and very non-effective for the other person and that might be the types of things you'd want to rate on a system so that you can figure out what…why a particular system works for a particular person and not for another.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you. Steven Stack?

Steven J. Stack, MD – President – American Medical Association

Thank you and thank you to everyone, it was one of the best panels I've been on…listened to for a while; everyone stayed in their five minutes, so thank you so much for that. But, I've listened to all these, I

think the questions others have asked have gotten to a number of the things I was curious about, but would offer the following observation and ask if there's anything else anyone has to offer.

One of the challenges with doing a tool like this is trying to boil the ocean and take on something so big that we will fail because it was too big to begin with. And so when I think about the fast pace of change, the complexity of the market and as at least one, if not more of you have commented about the modularity that may be coming down the pipeline to comply with future needs, doing something like a formal process like Consumer Union or AAA, or Michelin for restaurants or J.D. Powers for this size market could be somewhat challenging. I know it's already done in some ways by others.

So then when I stop and think in terms of the cost to sustain it and the complexity, so then when I look at the other options some of you have mentioned, things like Amazon or Fandango or Yelp or Trip Advisor, some of these other options…or even like online there are some things for like mattresses, this guy called Sleep Sherpa or for camera gear, the Digital Picture; maybe some blend.

And here's where I wonder if you have any thoughts; some blend where vendors self-report their targeted market so that by segments or the size of the practice, ambulatory inpatient, what specialties and they can self-report that just to help the potential consumer filter a database to find a universe of potential products, just to simplify that initial queue and then having the option for critic reviews, if you will, like you have on Fandango where you have the formal…or Rotten Tomatoes for movies, you have the formal critics who do it as a professional living and then you have the end user who puts their comments. And clearly we can see with movies there is a discrepancy between what the critics say and what the user is saying and often much more satisfaction with the user than what the critic site would have asserted.

So do you all think that having maybe a more simple product on the front end with just a filtering function by the targeted marketplace that they vendors seek themselves then with the option to have a good product description coupled with user and outside expert reports just posted there would be useful? Would that be sufficient to help people narrow a universe to a smaller subset of two or three vendors, they could then do their own deep dive? Sorry to be so complicated.

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski; I think that would be a really good start and in all honesty, I'd be favorable for you guys to start small but do small well rather than try and do something so big and so complex that it, like you said, becomes unmanageable. There may be other components that could be helpful to add on to that, including a set of categories of what's considered acceptable and not acceptable across the EHRs. But as long as it's labeled clearly where the opinions are coming from and what the expectations are of those opinions, I think that would be a reasonable place to start. And if it could be done very well so that it was easy to use, easy to see, easy to make those filters happen with some way of maybe fact-checking the hard data that could be very helpful place to start and could be sustainable, which of course is the most important thing about a project like this.

Randy McCleese, CHCIO, FHIMSS, FCHIME, LCHIME – Vice President of Information Services and Chief Information Officer – St. Claire Regional Medical Center

And this is Randy; just to add a little bit to that, and I agree with what was said but if it's somewhat of an exhaustive list of the vendors out there in that space where we know that we're looking at essentially everyone that can do what we're looking to do.

Geoffrey M. Burns, MD – Renaissance Family Medicine of Wellesley

Geoff Burns; so in…the only comparative tool that I guess hadn't been brought up was Consumer Reports so in that way that, you know, Consumer Report will look at…refrigerators and it will be refrigerators, all refrigerators that are dorm size versus, you know, walk-in refrigerators aren't coupled together, they're sort of broken out and then so that's practice size and as we said, scope.

And then within that then there are different categories of, you know, what makes a high satisfaction, either a full circle or a half circle or an empty circle, certainly using as a lot of people use with Meaningful Use, you know the green, yellow, red motif would certainly be fine. So that there are people that agree that its yellow based on what criteria has been determined of a particular user category or the vendors believes that the answers to this question are either yellow to green or moving from a particular place of yellow moving to green with a new adaptation. I think even visually it could pop a bit for people to be able to quickly see rankings like this or the US News Report for schools and universities and things like this.

Jignesh Y. Sheth, MD, MPH – Senior Vice President for Mission Accountability – The Wright Center

This is Jignesh Sheth; I agree with the current speakers that a hybrid system that kind of incorporates expert opinion as well as the user opinion will be a good start. Starting small, I agree, starting small and making it work perfect rather than trying to develop something big that…don't actually realize for a long time might be helpful because right now, like I said, I mean there are 1900 plus products that are, you know Meaningful Use certified for a user to go down there and start looking, it's almost impossible where to start so developing that…tool might be very helpful and the first step into developing something that might be bigger a few years from now.

Steven J. Stack, MD – President – American Medical Association

I'll say thank you very much for the feedback and…last thing and I won't turn this into a question, just a follow-up would be, the possi…unless anyone has a comment to follow; the possibility at the end for the users, the purchasers, three characteristics that at least seem to me might be useful are one, is there a way to say the verified purchaser, which I know is a subjective report, but it would be nice at least to say that, you know, the commenter say that they purchased the system or use it regularly.

Second, would you recommend this system to another purchaser? Then that promotor score which people use in all sorts of other industries and if you say yes, that's…I think many people would find that useful. And then the third question would be if they say no I would not recommend it, are there other products you are aware of that you think might have met your needs better, which might be, you know, a community of people, whatever the demographics are identifying those products that they feel fit their niche most compellingly.

Matt Rafalski, MD, FAAFP – Clinical IT Director – Dayspring Family Health Center

This is Matt Rafalski; yeah, probably the most helpful comments are the ones of someone that recommends the system, but here's a negative thing about it; that tends to be the most reliable comments, aren't they.

Steven J. Stack, MD – President – American Medical Association

Yes. Well thank you very much; I don't want to prolong my time here. I really found this helpful from all of you, thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
This is Michelle that was our last question. So let me thank all of our participants on panel one, we greatly appreciate you sharing your insights and now we'll move on to panel two.

I just want to do a quick check to make sure that everyone's on the line; we didn't have everyone when we first started. I believe Chuck Czarnik from Brookdale Living was on earlier. Can you just give us a quick hello to confirm?

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living
I am here, yes.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Thanks Chuck. Howard Landa from Alameda Health System?

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System
Yup, I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Howard; thank you. Amy Painter from Children's Healthcare of Atlanta?

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta
Hi, I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Amy. Steve Wilkinson, Rocky Mountain University of Health Professions?

Steve Wilkinson, PT, PhD – Associate Professor of Physical Therapy – Rocky Mountain University of Health Professionals
Yes, here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
And Lori Simon from the American Psychiatry Association.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association
I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Psychiatric, I'm sorry. Hi, Lori.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

Hi.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Hi, okay. So thank you everyone, I'm glad you were all able to join and just a reminder, everyone is limited to five minutes and we will start with Chuck.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

All right, well thank you all; it's a fantastic conversation so far. I am Chuck Czarnik, Vice President of Strategic Planning here at Brookdale Senior Living. Brookdale is the largest provider of senior living and post-acute care in the United States. We serve about 100,000 residents every day across a variety of care settings including skilled nursing, home health, outpatient therapy, hospice and senior housing.

I want to thank the ONC and the task force here for the opportunity to speak today, it's a great issue, it's a great conversation we've had so far. I need to caveat my comments before I get started. There are composite comments that represent feedback from many sources including the National Association for the Support of Long Term Care, several vendors and colleagues that I work very closely with also and may not reflect the sole opinion of Brookdale, my employer.

The first thing I'd like to say is to kind of point out how long-term care is a little different as a specialty provider from other specialties and from the primary care providers. We are typically not eligible for the incentive structures that have been created under Meaningful Use and various other healthcare reform. However, even though we're not eligible, there is or has been a certification path and many of our vendors in our industry have chosen to certify under ONC standards because we work very closely with many other kinds of eligible providers. It's definitely a topic of great interest to folks in my industry.

I wanted to kind of structure my comments in a question and answer format and address two of the questions that were posed to the specialist panel. The first question is stated, if a comparison tool was established would you use it? I think the answer to that is yes, but I would need to qualify that answer and say I don't think it is a tool that the ONC should be directly developing or sponsoring.

And when I say that what I mean is, I think there are many existing resources that are already out in the space that allow us to evaluate and review technology. And one thing I don't want to see happen is us create an island of certification data that may be hosted by ONC or some independent party. I'd rather see the data incorporated into resources that are already available, some of which we've already talked about, HIMSS, KLAS and many of the industry-specific provider associations and resources.

How would I do that? I'd ask that we make it available in a standard way. Think about data.gov and other similar structures where the data is open, and we let the market sort this out. I think if you take an approach like this, the data will get out, and if the Yelps of the world and those analogues in our industry want to pick it up they can and it keeps ONC out of the business of developing consumer tools and creating winners and losers.

The second question that I want to talk about is what is important to you in selecting a health IT product? That's a fascinating question and we could certainly go deep far longer than five minutes

talking about many things we've already covered, workflows, patient engagement, decision support, interoperability. Those are all the top of the list but I'm going to go in a different direction and try and relate it to the topic at hand and at a high level what I think it's about is removing the friction from healthcare. Now that's a very rhetorical statement so I want to go into three areas and try and explain in some detail what I mean.

The first is, when I've talked to vendors I understand that certification is very complex and very expensive. They've told me that it's a six-figure investment, and that some of the criteria are nothing more than core features of what I would consider any minimally viable electronic medical record. There's irony here because the certification program should be about reducing the friction that I spoke of, but the result is busy work for the vendor and that creates cost and complexity that are passed along to the provider and ultimately the patients and payers and that's something that we want to try and…we need to squeeze that out of healthcare, we really can't afford it.

I'd ask that we examine the criteria and simplify the process, and I cannot speak of course without going to the proverbial car analogy so, here it is. Imagine the onboard diagnostic scan when I take my car in for an emissions check. The result is pretty clear, it's a red light/green light, pass/fail on the certification standards and I think we should strive to make HIT certification as easy as we can using a metaphor like that. No ambiguity and for interoperability testing, the technology to stand up those kinds of tools I think is in reach today via standard interfaces that could be publically available on the web.

I think this also touches a little bit on information blocking that we've heard a lot about in both ONC and also on the Hill, and in my opinion, that's a concern that lives in a shadow. It's a shadow that's cast by incomplete interoperability standards. So if there was a way to simplify and streamline those standards, can we make blocking a test as simple as pass or fail? That's something that I'm wondering if we could do it.

Here's my second point on friction, and it's about the six-figure investment that I mentioned. It favors large entrenched vendors who have that kind of money to spend. Startups can't afford it, but I think we'd all agree that we need those entrepreneurs working with us. I think we should try and make certification modular, which is a word we've heard multiple times already today; agile and accessible to the multinationals and to the guy in the garage that's working on amazing things. We need these kinds of folks working with us to remove that friction and the certification and evaluation philosophy shouldn't discriminate.

Here's my third and final point on friction and it's about this panel. I've been listening, taking fantastic notes this morning; great, great thoughts and it's really cool to be able to study policy at this level. But it's starkly different than the typical provider who's just looking for technology to improve some element of their practice. I'd say that many of those providers don't know who ONC is and frankly I think that's probably the way it should be.

Treat people, pay the bills, don't get sued are three goals that I think many of these providers have, that's what they work on day in and out and our efforts need to be to meet them where they are. If they get trade magazines, if they get association materials, industry websites, that's where this data needs to be. And we need to work on certifying what's important and bring that data to them; that's removing friction.

So in conclusion, I'd like to reiterate two points. The first is to develop a comparison strategy that is market-based, open data that the industry can digest and run with and that not necessarily would be something sponsored by ONC. Send the data closer to the provider rather than sending the provider closer to ONC.

The second is to streamline the certification process itself lowering complexity and cost of certification overall. Make it more affordable and more relevant to provider needs. Thanks for the opportunity to comment and I'll provide written testimony after the session ends.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you Chuck. Howard Landana, Landa, I'm sorry.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

That's okay. Thanks very much. So I've got a slide deck if you can bring it up. First of all I want to thank everyone for allowing me to participate; this has been a great educational experience and very exciting to be a part of.

I am going to speak today from two viewpoints; one of being a pediatric surgical subspecialist, a pediatric urologist and someone who's been in medical informatics since the mid-1990's. So professionally I've done both through primary ca…through fee-for-service, managed care, safety net, academic and private practices, so I've kind of got a good smattering of all the different areas.

I think as you've heard, EHRs in the past have been designed I think more for primary care than specialty care and very recently so, considering the goals of ONC and CMS. And the degree of adoption of those has kind of paralleled that design principle. Next slide.

Specialty care has a lot of different components that need to be addressed. For example, we have a greater number of clinical locations, both physical locations and types; so my practice includes clinics, hospitals, operating rooms, outpatient surgery and procedural areas. We're on staff at multiple hospitals; at one point I was on staff at 13 different hospitals and actively practiced at six.

We also spend a lot less time in clinics, so we have less control over whatever EMR we select for the office since we need to be either integrated or at least interoperable with the records of through inpatient care. So for example, if I do a history and physical in my clinic, that's actually for a surgical procedure that's going to be done somewhere else. So that integration becomes significantly more important for a specialist.

There are a lot of special-needs relative to documentation types. So we do both therapeutic and diagnostic procedures, which require a different form of documentation, and especially on the diagnostic side, the need to integrate patient monitoring, different types of data gathering tools, and outside data from lab, radiology others in a more evaluatory mode. So in addition to my simply looking at an x-ray report, I'm also looking at the films themselves and also doing an interpretation.

And then finally, there are a lot of specialize workflows and data needs through the medical and surgical subspecialties. So in my world, in the pediatric needs, many EMRs and because so much is based on billing and based on Medicare billing criteria, pediatric needs are kind of not been in the forefront,

especially on the specialty side. And then the regulatory reporting needs, both, you know Meaningful Use if you talk to a specialist, they will tell you that the quality reporting and the functionality asks of Meaningful Use specialty care don't always align with what they consider the best quality care that they are providing.

And then finally, there are specialty areas, and this is one in my area in particular, so that's an example. So SOGI, sexual orientation and gender identity is something that I've struggled with professionally and from an electronic standpoint, both clinically and from a data perspective because of my practice in pediatric urology. Next slide.

You know, if you look at where we get information from, a specialist, about EMRs, you know there's a lot of data that comes from specialty societies and specialty groups but as we've heard a lot already, those recommendations tend to be more the testimonial or survey type. There's really…the information that is available is superficial.

So yes, we have a template for a given specialty, but really evaluating how good it is, how easy it is to use is something that is very subjective and there's a lot of…and there's an insufficient amount of time spent addressing the workflow and data that I've already talked about. There's really no standardized or evidence-based comparisons available. The vendors that have been discussed by KLAS and HIMSS do a very good job of putting data together, but it's still a subjective interpretation. The landscape is changing very rapidly, both the requirements and the software and as has been discussed, usability is something that's really difficult to evaluate. Next slide.

So when we talk about decision-support for choosing an electronic health record on the specialty care side, the tools would be really helpful. I think that there needs to be a lot of research and education done about are there standardized or can we develop standardized, evidence-based approaches to usability and the overall quality of these systems? A lot of work is really being done recently on the interoperability and intraoperability and then again, getting to a fully integrated system is something that we all struggle with.

In looking at an evaluation tool, looking at common workflow types across many specialties, like aggregating of monitoring information, adding the integration of operating rooms, procedural sedation with ambulatory visits and inpatient care and then coordination of complex care with these data. So for example, if I'm taking care of someone with prostate cancer, I need to be able to simultaneously track symptoms, labs, imaging over time to evaluate patients, and that's something that most of the software's don't do very well. So the support for the specialized data like SOGI, as I discussed, and the ability to do analytics that are specific to a given area.

So I think I'm already at my time limit so I'm going to stop there and happy to take questions afterwards.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you, Howard. Amy Painter?

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta

Hi, this is Amy Painter. I am a nurse practitioner that also serves as a Clinical Program Manager of an Aerodigestive Center at Children's Healthcare of Atlanta. Children's is a very large pediatric hospital; it actually owns three hospitals in Atlanta as well as multiple outpatient specialty centers. So I coordinate a value-based team that includes pediatric GI, ENT, pulmonary general surgery, nutrition, speech and respiratory therapy to care for patients with complex illnesses and my comments are not necessarily the opinion of my employer.

So as I was commenting on the specialist portion about accessing information about health IT products, my caveat would be that often times the decision on which EMR to choose is done at a very high level within a complex organization such as myself, so it doesn't necessarily include any, you know, maybe one subspecialist that is on that committee. So…but I think it is very helpful to administrative leadership to have this type of tool. I agree with one of the former commenters that said it may be better and more useful to have maybe a protocol set in place for what standard information or in what way this was made available by vendors instead of re-creating the wheel.

But I have written in my testimony different things that I felt like were very specific to pediatrics and subspecialists about what details we need to know, particularly that most vendors lump subspecialty care into one umbrella, and don't explained whether or not that's pediatric or adult medicine, and those two things are very different. And how much and EMR can be modified or comes prebuilt for pediatrics is very important to an organization, otherwise, it's like trying to put a round peg in a square hole.

So some of the specific things to pediatrics that we need to know are what prebuilt departments, order sets and notes are available for subspecialties. What pharmacy customization is available for weight-based dosing and liquid and oral enteral medications? Our ability to customize the products for pediatrics including things like history, social history and specific growth charts available. Our ability to have parent and patient education integrated in the EMR as well as an ability to communicate with patients by portals.

Ability to have patient intakes filled out electronically before visits, and imported into the EMR. The ability for parents to check-in via kiosks or electronically without face-to-face registration. Our ability to customize for pediatrics that meets Meaningful Use; for example, meeting tobacco cessation for a parent and for a pediatric patient is very different than for an adult. Our ability to link with other large QI databases and upload patient information into registries; for example, Improved Care Now is a very large institutional-driven G.I. registry and they are supposed to collect specific data at each appointment that is then fed into a registry, so our ability to do that with our EMR is very important.

Our ability to access peer-reviewed medical information and journals from within the product. Our ability to communicate in HIPPA-compliant ways with other providers. Our ability to access it on mobile devices. Our ability to functionally ePrescribe medicine. Our ability to interact with various security levels of clinical providers with different scopes of practice and apply state and billing and legal laws. So you often have attending MDs, fellows, residents, nurse practitioners, and physician assistants, and all their security has to be unique.

We ran into this problem in Georgia where there was a legislation passed that said certain things had to be on prescriptions, and unfortunately, the ePrescribing amount of characters was too small to fit those and so our organization has particularly had a huge amount problem allowing nurse practitioners to

ePrescribe without having a physician cosign every single prescription, even though that's within our scope of practice.

Our ability to use a product for students in training, which is often very high on a priority for academic medical institutions. How much time or clicks it takes providers to review a Meaningful Use criteria. Our ability to access and share historical records electronically with other regional hospitals or understanding what hospitals in our area use. For example, pediatric institutions typically can be regional, especially if they're large, so they're getting patients from all over the region and we don't want to re-create this patient's evaluation, we want to be able to access it without a huge amount of administrative time.

Our ability to have multi-disciplinary departments or collaborate. For example, I have seven specialties seeing our patients in a combined fashion and often I think that is being driven. In fact, one of the more recent reports by the Institute of Medicine that was released talked about diagnostic error, and how making team diagnosis is important for reducing error. But often times the way EMRs are built are very siloed; they're very siloed by specialty so the ability to be flexible and to have multiple specialties caring for the same patients without a huge build is very important.

The usability and integration with ER and urgent care products as well as inpatient records so the patient data is organized and up-to-date. The ability to clinically pull meaningful reports for QI and value-based research. What is that EMRs strength and weakness? What's the EMRs typical size and population of practices that use it?

And one thing that's very important is the average infrastructure and time needed to implement and continue to maintain the EMRs. So things like average ongoing IT support, the build and support for IT. The time it takes to build and customize it for the institution, and the average training support that is needed. So I think that type of information is very important for strategic planning when an organization is deciding whether or not to implement the EMR.

And also, once they decide how long it is going to take to go live or to really realistically build that because often, I've been involved in multiple builds, and I find that the institutions are chronically under…are staffing and underestimating the amount of support that that type of project takes. The average size of the organ…

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Amy, could you please wrap-up? I'm sorry.

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta

Yup. So the average size of the organization and the average length of time for established and new patient visits because again, once you implement an EMR and slows the data. Thank you very much.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you. Steve Wilkinson?

Steve Wilkinson, PT, PhD – Associate Professor of Physical Therapy – Rocky Mountain University of Health Professionals

Thank you. Good morning, my name is Steve Wilkinson and I'm a Physical Therapist. I earned my physical therapy degree at Columbia University and my PhD in Biomedical Informatics at the University of Utah. I'm currently Associate Professor of Physical Therapy at Rocky Mountain University of Health Professions and I'm here representing the American Physical Therapy Association. Next slide.

I would like to thank the ONC for inviting me to give testimony to this task force. It is extremely rare that physical therapies…physical therapists are invited to be at the table, so I give you my sincerest gratitude for the opportunity.

I wanted to give you a story that illustrates some hurdles that we have in the therapy world. In 2010, I accepted a job offer that in addition to practicing physical therapy, I was to select and implement an EMR for a rehab system of 16 clinics that included physical, occupational and speech therapy, and counseling for adults and pediatrics.

Although I had received confirmation that I'd have sole decision-making, within several weeks I was told that since we had a parent company that was purchasing Epic, we would also be using Epic. I asked if I could at least check out what Epic had to offer; they agreed. I called to talk to someone from Epic, but was denied talking to anyone because my organization did not meet their criteria.

We took an opportunity for an established Epic site visit recommended by Epic that had many similarities to our organization. We were shown the interface that consisted of simply a text box for therapists to write their notes. The text box did include a feature that would copy and paste the previous treatment note for the therapist to alter, that could indeed save some time.

There was no structured data outside of the patient demographics, no alerting, no decision support, no reporting capabilities, no compliance trackers, just a text box. The upside was that the therapist could access other providers note and could easily contact them through an email system.

My colleagues and I were disappointed at how little it provided the therapists. When we arrived home I was able to set up a time to meet with our CIO. I argued the absolute need for help with Medicare compliance that Epic did not provide without major optimization. Functional limitation reporting was about to be released where therapists are required to report a G-code and modifier at initial visit, at or before visit 10 and at discharge. If we do not comply, we do not get paid.

We also needed a way to track the Medicare cost because of the cap on costs shared with speech therapy that combined is $1940. This includes the needs to see what the costs are from speech and what other costs have incurred within the year, both at our facility or anywhere the patient may have had physical or speech therapy.

We needed to track whether physicians signed our plans of care, another Medicare requirement, and if we do not get a signed plan of care, whether it's our fault or the physicians, we do not get paid. The burden of proof is on us so we need a tracking system of how often we attempted to get a signature. Not only do we not get paid for the encounter, but if we are out-of-compliance, then we also run the risk of being penalized. The Epic system we were shown did not none of these things; it could be configured to do these things, but out of the box it did not.

Presenting these compliance issues and also noting the cost of purchasing a therapy-centric, bolt-on would be less than being penalized by Medicare was enough to convince the CIO that we could move forward with the therapy-centric EMR that would interface with Epic until we could optimize and start to use it. While I gained a win on one front, the fact that the EMR had to interface with Epic drastically reduced my options. Very few of the already limited therapy-centric systems had integrated with Epic.

My story illustrates common barriers of rehab providers for the adoption of HIT. So in summary and to more specifically answer your questions, next slide, what was lacking in your ability to identify whether the products supported your specialty need? Basically the paucity of information about compliance, and I've listed several here. This is not an exhaustive list, but you can see those are most of the things that I've already spoken of. Next slide.

What are the factors that would entertain…you would entertain to accomplish making a change? A value for therapist to be better therapists including structured data, to be able to perform analysis, reporting dashboards and outcomes. Clinical decision support, intuitive interfaces that match therapists workflows, physical therapy content out of the box. Easy customization, optimization and true interoperability with therapy-centric EMRs, if the big vendor systems do not include what's listed above. Next slide.

What resources would be necessary? Incentives. We as physical therapists have very low profit margins, much lower than physicians and hospitals. We are not eligible providers, and this is something that I have a hard time understanding. Chiropractors are on the list, but physical therapists are not. And since we're not eligible providers, we do not receive incentives and that's something we desperately need. And I thank you again for the opportunity to speak with you today.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thank you. Lori?

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

Good morning everyone. If you could put my slides up? Thank you. So I'm actually a psychiatrist in private practice in the New York City, Northern New Jersey area; I've been doing that for about 15 years. But actually prior to that, I spent 18 years in the computer field, a lot of that developing software. I worked for IBM for about 13 years and in about six years of that, I supported their healthcare accounts in New York City. So I've kind of been on both sides of the fence, so to speak; and I've actually been using and EHR in my own practice for about four years.

With regard to the psychiatrists and behavioral health community, there is actually a pretty low level of EHR adoption, particularly amongst the solo and small group practitioners, which make up a good majority of where psychiatrists and other behavioral health providers practice now a days. And I think that's for several reasons; I think there's a lack of time, as well as a lack of technical and financial resources.

There's also…now there are some good EHRs that are out there for behavioral health, but not a whole lot. A problem I think which is common amongst all specialties is that there's also been a lack of, I think of comprehensive requirements that are…that developers can access. And I think for psychiatry, I

suspect some of that is they don't see it as a viable market and there hasn't been quite as much effort on the vendor's part in trying to gather those requirements.

With regard to Apps, they're out there. Some of the Apps, particularly in the behavioral health field, are particularly good for patients; for example, those struggling with depression and PTSD symptoms. But they're scattered all over the place, they're hard to identify what's available. There's a lack of ratings. So, psychiatrists are hard pressed to know what to recommend to their patients. As we all know, there are lots of EHR lists available, but…and one of the reasons for the task force, the tools are not there to help guide those selections. Next slide, please.

American EHR is an organization, they have a website which has made an attempt to identify and rate EHR usage amongst providers and as a member of the APA's MHIT committee, in 2013 we actually got involved in trying to extend their support to psychiatry and behavioral health, and so we were asked to provide a list of questions that could be use as part of the rating of users or providers that were using EHRs.

The problems were that we were only allowed a limited number of behavioral health questions, so it wasn't comprehensive in terms of rating an EHR in detail. And if you go out to the website, you can search for, for example, psychiatry EHRs. You can also search for size of practice, but you can't do both and so if you're looking for if a provider who has a solo or a small group practice is looking for a psychiatry EHR, they're going to be sort of seeing a lot of the EHRs which for psychiatry may actually be used on inpatient psych units in hospitals so it becomes more difficult to identify what they can use.

Also, the participation rate for these surveys out on American EHR are pretty low. The greatest that I saw for any of the questions for behavioral was like 37. And they don't address the needs of other behavioral health providers. As I said, this was from the APA's involvement, but we represent psychiatry, we do not represent psychologists, social workers and others who are involved with providing behavioral health to patients. Next slide, please.

In the interest of time, I'm not going to spend a whole lot of time on the next two slides talk about the various selection criteria that are important in deciding an EHR, and this has been talked about earlier. And…but so briefly again, satisfying function and data requirements and those are, you know, although there is commonality among specialties, there are also things, as we all know, that are unique for each specialty.

Cost, initial, ongoing; data and user volumes which can affect response time, hardware platforms, system availability, interoperability both within large institutions, next slide, and as well as providing information to external systems and database, for example HIEs. The degree of Meaningful Use support, certification, security and privacy requirements. Customer service and tech support, actually really important once you get an…you have an EHR and, as we talked about, has been talked about earlier, customization as well as training and documentation.

And the customization really has to be balanced between vendors providing standard modules as well as, depending on the specialty, where they have to allow more customization. You can't go too much towards customization because then the vendors aren't going to have a product that are viable for them to market because it's going to be too limited to a particular institution. But again, you can't go the other way and not have any customization, because you're going to have some very unhappy providers.

And usability is huge; I think that's one of the biggest problems in EHRs nowadays because the vendors have not provided products that providers really like. Next slide, please.

Two ref…two sources of further information that I talk about with regard to selection, I actually wrote a chapter in a book which came out last year, Mental Health Practice in a Digital World: A Clinicians Guide, and also the APA's website has a document I created on evaluating, selecting and implementing EHRs. Next slide.

So I briefly would like to discuss three efforts that I am involved with, which right now are in the planning stage. And again, although they're applicable…although they're for behavioral health, I think they're really applicable to other specialties.

The first one deals with involvement with HL7 and right now in psychiatry/behavior health, there are three sets of pretty comprehensive requirements. I was very much involved in one that the MHIT committee put together several years ago. CCHIT developed their own requirements for behavioral health and HL7 itself has also requirements.

What needs to be done is those requirements need to be consolidated, they need to be expanded. And then the other thing that HL7 has are they're called domain analysis modules or DAMs, which basically contain data elements for use cases that they describe. But what's not linked are requirements with data elements, which I think are important and which would be MHIT…through the MHIT committee's requirements.

The other thing that then needs to be done as a result of this is a database needs to be created and access tools in which vendors can indicate which requirements that are in this database their products support. And then for providers to be able to go out and search and say, hey, you know I need this requirement, I need this, I need this; let me see which vendors have products that support what I need. So that's one effort.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Lori, could you please wrap up? Thank you.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

Okay, second slide…next slide, please. APA is also developing a way to rate Apps and EHRs. And the final slide is that I think it's very important for…that professional organizations take the lead in providing requirements and getting more involved in this because they're the ones that can represent the interests of individual providers and provide ongoing requirements and assist with the reviews and address interoperability. Thank you

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thanks Lori and thank you to all our panelists on panel two. We'll now open it to questions from our task force members, if you want to start putting yourselves in the queue. I don't see anyone as of yet so I will defer to Anita to see if you have any7 initial questions to get us started.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Thank you, yes I do. I, you know, in listening and I'm trying to pull together what we heard from some of the primary care as well, I was interested in understanding how any of you, because you do represent so many of the specialties that a primary care provider or other specialists rely on for information. How is it that you are handling interoperability now? And by that I mean, how are you handling those transitions of care documents, the summary documents or continuity of care documents, whatever phrase it is that you have for it. How are you handling getting that information to folks outside your health system, for those of you who I heard Children's of Atlanta?

It's, you know, when you're within a healthcare system, it's one thing to share with folks who are part of that, but it is a struggle when you are a doc who happens to be on an independent system outside of a healthcare system. So, I was wondering how it is you are currently doing that and what it is you would prop…you think is most important that we think about then going forward for a tool.

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta

I can pick up on that. There are a couple different ways is one, whether or not the EMR has an access portal for primary care physicians and other providers in the community. So we have Access Children's which allows PCPs to sign up for access so they can actually get in to a version of the medical record and see their patients.

Discharge summaries are faxed to the PCP listed on the chart and whether or not the EMR has capability. Epic has capability when an outpatient encounter is closed to send a note to the primary care provider, so that is done automatically in some of our practices and manually in other practices.

The other thing that I particularly utilize, since my patients see many clinicians is something called a care team where we can put various clinicians that the patients are seeing and then we manually send them a note so that, I mean, it can be 10 or 15 providers and ranging from speech language therapist to attendings to outside PCPs and they either get that electronically through our EMR or if the EMR can't send it to them, then it write faxes or electronically faxes to their offices.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

This is Howard Landa. We have set up the ability to send out transitions of care documents from our…at the time of discharge. Unfortunately when they go to a clinician portal, the clinician gets a message that they have portal entry they need to go look at, but it doesn't tell them who it is, it doesn't tell them that it's important or the timing, so we've had very poor adoption of people going and looking at that information based on that methodology.

We are working on getting those transitions of care documents sent directly to another EHR. I think once we have that, if that comes to the in-basket of a provider, I think getting it into their workflow in that way actually makes it usable. Failing that, I think a simple fax of a discharge summary, a consult, you know electronifying the way that we have always communicated with physicians up to the next level of care is probably the most effective, despite all of our electronic attempts.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

Chuck Czarnik representing long-term care. Great question. We, as a large provider, we have several different approaches that I comment on. The first is there are a number of proprietary interfaces that we have with both the private HIE organization that we partner with that we use for population health management. The interface there is a derivative of HL7. We also work with some of the leading referral management systems out there that also have some quasi-standard based workflow integrations that programmatically send over referrals to one of our care settings. Those are probably our two highest volumes.

I'd also comment that we are partnering with a number of hospitals and health systems that are using the Direct protocol to message us inbound with standard CCD type documents. It's clear that the hospitals that are doing this are doing it primarily to attain some benefit through Meaningful Use or an attestation or something they need to make. I would say that that particular approach, at least today, it has potential but I would not characterize it as very valuable because the data, by the time it arrives, we already have all the data that's come inbound on paper face sheets or through other structures, so it's...even though it has potential, it's largely redundant.

The third direction that we actually have quite a bit of traction with are proprietary web portals that are set up and established by our EMR vendors, that allow physicians and other care partners to log in to a purpose-built view of our EHR and provide oversight or entry and solve various workflow tasks.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Thank you, that's hel…so, and certainly the Direct messaging has been one that folks have tried to employ. The problem is trying to get access to those white pages of other Direct addresses. So in terms of a tool, what specifically for interoperability, you know, because I at least as part of interoperability would include trying to get this type of information whether it's, and we've seen tremendous challenges trying to get behavioral health summaries back to primary care, what would need to be in a tool to help folks determine that one product is clearly easier to navigate than the other, without having to go outside the system to an HIO, which we heard in the earlier primary care presentations? But in terms of functionality, what needs to be there then?

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta

Some of the things I would thing about is ability to electronically fax, ability to maintain unique care teams for patients. An ability for there to be sort of a system in place for either having addresses and fax numbers downloaded into the system via state portals or such, but also an ability to create those for vendors. We don't just need pediatricians; we need pediatricians, subspecialists, therapists and then vendors of the patients.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

This is Howard Landa; I agree. I think having a directory and the ability to get information to the correct provider is step one. I think the other part of it though is, and it is part of an assessment tools how is that information presented to the clinician who it gets sent to? So is it in their workflow? Is it in an electronically consumable format? Does it align with other tools that they use within their EHR?

We have a lot of standards about how documents are put together and sent. but what the vendors have really not done well is taken that data that is reasonably standardized and then created a look and feel so when you're in the EHR, you barely know that that data came outside. It should look like the rest of your data just the elements are what gets transmitted.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Thank you.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

It's Chuck; I'd also comment on this one, Chuck with long-term care. I think when, and I'm not an expert on interoperability by any means, but it appears at least from the long-term care perspective that the various standards are focused on sort of the payload. So we have CCD and, you know, we've got a transport mechanism like Direct to pass the data back and forth, and there's a lot of data in there, but there's no real action associated with it. It all just seems informational from our perspective, at least today.

And so if I was…if I could sort of design my own tool to look at the intersection of interoperability and what matters to me as a provider; it would really be an attempt to link interoperability to key workflows and where we need to communicate with some external entity in the discharge of care for that patient. And so off the top of my head, could we have purpose-built protocols and certification standards that make the order process, the order entry and order approval process absolutely objective? Because today, we have tools to do that but they're proprietary to each vendor.

So if I have a physician that's serving patients in my building and is also serving patients in five or six other long-term care providers, that physician may be using five or six different tools that are supplied by the host's LTC providers. If we could somehow objectify that into a payload and link the workflow of order entry and order approval to some text standard, then perhaps that order function could occur in the physician's EMR and he or she wouldn't be required to log in to six or eight or a dozen different portals from all the providers that he's working with.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

And thank you because that is what I was trying to get to, how do we avoid that because that just becomes then an additional pain point on top of all the other pain points that are already happening related to changes in workflow.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Jorge Ferrer?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration

Thank you, Michelle. Dr. Simon, I had a question for you regarding your presentation. You mentioned usability and I'm wondering if you could maybe speak a little bit about, what is it about behavioral health that because there are some inherent workflow differences in behavioral health that are not replicated in other clinical specialties.

And by that I mean the ability to have undivided attention when you doing interrogation with a patient and this is an area where clinical nuances are picked up as you are dialoguing with your patient because a lot of the…is clinically driven as you are having the...patient. Another area is turning your back on a patient doing the computer can be sort of unacceptable, although irritating to the patients but can be an acceptable mechanism, because you have to do data entry.

So I wonder if you could speak a little bit about, what is it about behavioral health that is so inherently different that, is it the data entry? Is it the viewing? Is it the content? What is so different about the usability that electronic health records in this particular domain have not been able to get evolved to the level of scrutiny that behavioral health providers need?

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

Yeah, two things, I mean when I talked about usability I was talking very generically because I wasn't talking specifically about behavioral health. One of the things I'll address here, then I'll address the issue about notes, which is a big issue.

You know, I started developing software many, many years ago, more than I'd like to admit to and back then, and this was in other fields, this was in banking, but it was the same in other major industries in New York. And what was drummed into me is the users were paramount, okay? So from the very beginning, I mean I was working in a personal trust division, what did I know about personal trust? I would sit down, I would work with users of the software that they were currently using and went and talked to them what they needed. I'd look at their reports, I would really understand what…and talk to them directly.

And they were involved in every step of the development process; signing off on documents, design documents that they would…we would write for them. They would be involved in testing, etcetera. And so by the time that product was done and completed, most of the time it was okay, you know, it was what they wanted. That has for a variety of reasons that has not happened in healthcare and I think that's one of the biggest problems that exists and continues to exist.

And what has happened is that the vendors became, you know, the source of the software, not individual which…not individual institutions, with some exceptions, and certainly not in small groups, you know, it couldn't happen. And so the vendors are trying to make money, and that's understandable but they're trying to make the most generic product there is and so a lot of that talking to users and understanding particularly with specialties went out the window.

And so we need to get back to more of that and the vendors need to have a much better understanding. That's what I was talking about the requirements and some of the projects that we're trying to do with HL7. There needs to be a much closer connection. Now, so that was one of my general comment about usability.

Now what you were talking about in terms of the note taking, it is a problem because, you know, and to be honest with you, what are the notes, the progress notes are primarily for insurance company and therefore if they're legally needed, with the exception of the medical, which I do ePrescribing, those notes are meaningless to me, but I need to do them.

And so yes, when you're talking with a patient, to stand there and start ta…I mean, it's an issue for any specialty; I hear all the time when doctors go to their internists or whatever, it's a problem because you want to feel that the doctor is listening to you. One of my colleagues actually what they've done is they actually have a big screen in their office and they're writing the notes with the…and the patient is seeing it so the patient has a chance to kind of comment and make any changes or things like that, so it's kind of a collaborative thing.

But so the other option is, well then when do you write the notes? When do…and it's not just for specialties, it's for anybody; do you try to grab five minutes, ten minutes between patients or do you work at night after dinner to try to get them done? So I think it's an issue that's not necessarily unique to behavioral health, I think it's an issue for everybody.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
John Travis?

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Thank you. My question is probably mainly going to be aimed at Howard or Lori, but anybody can certainly jump in. What you've have been speaking of kind of brought to mind to me a different concept of what may be an important evaluative element for any comparative tool and that's suitability for the specialty or suitability for the venue of care. You've describe a lot of elements that are, you know, unique practice elements for those.

I guess I'd pose to you, I'm having a hard time phrasing the question but, in order for you to really get at the distinguishing characteristics of an EHR vendor and, you know, considering market referenceability, suitability for the specialty, you know, is there a role for a comparative tool and what would really be kind of the compelling factors of evaluation, if you accept that premise?

I'm also thinking about very fresh on the mind, we've been doing a lot of work here at Cerner with the Impact Act and there's a lot there for post-acute and for home health around, you know, discharge planning, coordination of care and quality measurement; maybe those are some food for thought for things but, I hope that makes sense. What would your reflection be on really what would be useful if we were trying to look at a comparative tool that would help you get at the question of the suitability of the product at hand or the products for your specialty or your venue?

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association
Umm, go ahead.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System
You know, many things.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association
You go first.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System
Okay, you know a couple things. I think that a lot of the specialty…a lot of the specialists have similar workflows that differ substantially from primary care, so things I talked about like integration of monitoring equipment, EEGs, urodynamic equipment, the echocardiogram, in-office ultrasound, those kind of things. And then the special workflows that talk about, you know I want to track a collection of things, symptoms, labs, imaging in some kind of a longitudinal fashion because I'm really focused on a disease-process. And yes, I need to know about the other medical problems and issues the patient is dealing with, but we tend to be very focused longitudinally on a given concern.

So I think those kind of workflows are common across many specialties, so if use cases and usability evaluations and benefits can be looked at in a particular use case, so integration of ambulatory with the operating room. Integration of an encounter with equipment. If those kind of things can be looked at, the specialist can look at those kind of evaluations and say, oh, I do one, three, five and eight, but the other two I don't do because I'm not a behavioral health specialist or I don't do pediatrics and then it becomes easier for them to use an evaluation tool.

So that would be my high level take on it. I do want to push on the whole idea of the fact that some effective software can do something doesn't mean it's incorporated into the workflow and is really usable. So I still want to come back to the idea of standardizing and really getting into the usability because it's the one area that I think all the evaluation tools skimp on.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association
Okay, and I guess my feeling is that you guys are going to have to do your homework and that's what I was talking about, you know, earlier. I think if ONC could really take the lead in going out to the professional organizations, because they're the ones, you know, if you…you can't go out to an individual practitioner or a small group practice, I mean, they don't have the time; it would be crazy, you'd be here for 20 years. But the professional organizations represent their specialties and if you could go out to them, go out…go to a conference that a particular one has, can talk to and gather and understand what their needs are. And if you could do that for the major specialties, and then bring that back and then see where the commonalities are and where the customization is needed and where the differences are.

And then pull that together and then be able to, and that's what I was talking about with HL7, to develop a database where…that indicates what are these requirements and for what specialties and see where the commonalities are, see where the differences so the vendors get a better idea number one, what they can make into standardized modules and number two, where they have to customize.

You would come up with… and then, if you allow access for that and so the vendors can indicate in a database, okay, this is what I have, this is what I support and providers can go out and say, okay, you know, I'm a urologist or, you know, I'm a surgeon, I'm an orthopedic surgeon; okay, this is what I need. Let me see which vendors support the particular requirements I need? Then you've got a tool that can really help guide not only the users, the providers, but also the vendors.

The ratings, and that was what I didn't really have time to talk about earlier, but the ratings also can come through the professional organizations. Once you've got products that are out there, you can then use those professional organizations because who knows better that what's important than those a professional organization for their specialty? You can then rate them and then have tools there where you can have user comments, you can have ratings so then that can be another source of guiding the providers.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

I'm Chuck with long-term care; I'd make a couple of comments also, especially since home health was mentioned. The first observation I'd made is, this is…I've been in this career for about 15 years and it's taken me…I'm still learning about the subtleties and how the various long-term care settings differ from each other. Even though they probably have more in common than they have differences, it's really the differences that define them.

And I'm trying to think about, you know, when we talk about tools and some service or approach to be able to kind of quantify what's unique for all these subspecialties and even the sub subspecialties underneath them, a couple thoughts. The first is, when you start to kind of narrow down to that level, the universe of EMR systems or supporting systems for any…whatever specialty you're looking at gets smaller and smaller. And so for example, for outpatient therapy in terms of core EMR systems, there are kind of two big vendors out there. And so when you get to a universe that small, and there are a number of other vendors as well, but it's fairly easy to figure out who the players are and so I'd kind of caveat our thoughts there.

The second though is, in listening to some of the testimony earlier, for example with therapy and the situation with an EMR vendor that clearly didn't know what G-codes were and a therapist that's treating in 2016 absolutely knows what G-codes are. It might be, you know one way to approach this is to really boil down the suitability question into attributes that are applicable and score vendors true or false on those attributes. So G-codes for therapy, maybe MPPR calculations for therapy, other types of measurements for home health; there's probably a lot of stuff on Face to Face, upcoming Impact Act, that sort of thing. And really sort of make it an attribute question and drive from that angle.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Steven Stack?

Steven J. Stack, MD – President – American Medical Association

Thank you. So, my observation then two questions are that Meaningful Use may not be a very usable or useful yardstick for many of these niche communities and so looking to the future for a world we may get to in the next few years, could any of you comment on…I wonder if knowing the interoperability, you know perhaps how many interfaces, how much connectability some of these vendors have with other vendors could be particularly useful for specialty settings who may need to select tools that work better for their environment, but may not necessarily fulfill Meaningful Use, with their knowledge that the vendor they select is committed to interfacing, connecting, communicating, exchanging with others?

Would that be a unique or a uniquely emphasized aspect of utility in any kind of an EHR comparison, rating, selection tool that we're discussing today?

And two, do you have any thoughts on how, for your specific niches, we could do umm, you know, I think what we need to find out is what vendors are good fits for your specific settings. So what you do in long-term care versus physical therapy versus behavioral health can be very, very different needs and can you think of ways where we could have one or two relatively simple things that could be multi-purposed to help us offer usable information to the greatest number of specialty settings with the least amount of effort so it's scalable, you know, across a lot of settings with reduced effort and work?

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

So this is Howard, I'll take a stab at it. So on the Meaningful Use side, I guess what I would really prefer is nothing, we shouldn't do Meaningful Use, but there's no reason why Meaningful Use can't adapt to different specialties. So, good example is as was discussed about specialty societies. The specialty societies would be more than happy to provide quality analytics and other functionalities that, you know, if you're a urologist, you do these pieces and that gets you to Meaningful Use. They'd be very happy to help and it would be relata…and it would turn around and really drive the quality care because within that specialty, these are things we know we need to do to optimize the care we provide.

As far as the interoperability, you know I really hope we don't get to a point where we really need to do an assessment of that between vendors, I think that just has to be a, you know, that's got to be core functionality. You've got to be able to get data from one to another; you have to be able to see things going on outside of your environs because if you can't, we're never going to get where we need to get to. I've always been amazed that, you know, a never event wasn't. If you did a test because you couldn't get the result of one that was done somewhere else yesterday. You know, why aren't those things incentivized from a financial side to say, no, you can't just do another test because the other guy didn't give you the information or you didn't call; so I think there are ways to drive that

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

This is Lori. In behavioral health, a huge interoperability need is between primary care and behavioral health, you know, there have been studies, many studies to show that a vast majority of visits to primary care providers have an emotional component to it. And it would be so much…so helpful for the primary care EHRs to be able to capture some of the behavioral health information that primary care providers are getting when they're talking to patients and then to be able to share that with behavioral health providers who they may refer to and then vice versa. So it just would provide so much better optimal care. It's very sorely needed and not there right now.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

We're working on just how to get…

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

Chuck, go ahead Howard.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

So one other piece on, I mean, if the interoperability allowed a vendor to go out to, you know, if there's a behavioral health component that can be interoperable with your primary care EHR so that data can

be brought over and the specialty provider has tools that really help optimize the care they deliver, but the data comes back to another system in a clean way, I think we've taken down so many barriers.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association
Yes.

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta
Absolutely.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living
Chuck. So a couple of more thoughts regarding long-term care. With respect to specific interoperability standards, the ones that pop out at me are some type of order management workflow to be able to initiate and approve orders; I think that would benefit multiple settings. I think there are already standards in place for various labs and the flow of that information. I would say that long-term care is probably behind the curve there; I'm not sure if that's a standards problem or an industry problem but having that diagnostic information available to our clinicians would be very important.

The other angle, which maybe is bordering on out of scope, but I'll go ahead and throw it out there because at least in my specialties, we're very involved in sort of community delivery of health care in the community and I don't think there's been a focus on telemedicine and telehealth technologies like there should be; that's certainly a way to lower costs. It's…I think it's far more complex than just throwing devices out there, I think we need to figure out the interoperability issues there so that we can make the information that those systems produce actionable.

Steven J. Stack, MD – President – American Medical Association
Thank you, I don't have any follow-up questions.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Thank you. Chris Tashjian, did you put your hand down?

Christopher H. Tashjian, MD, FAAF, FHIT – Vibrant Health Family Clinics
Yeah I did originally. My one question was, and it was kind of a, for a full disclosure, I'm a primary care physician so one of the things that really struck me that I never really thought about was, and the importance of this for my specialty colleagues is, on a high, medium, low basis, this idea of having to understand multiple EHRs, you know, going to when the, I think the pediatric urologist said at one time he was on 13 different hospital staffs. Where does that rate on your list of, you know, how do you decide or how do you know is the, you know a common workflow, or the need for a standardized workflow? Because I couldn't conceive of having to understand 13 different systems.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System
You know, fortunately when I did that, most of the places were still on paper. But I've worked at places where you're on two or three different, you know, EMRs. The same level workflow is relatively similar but the differences between the tools are dramatic and it really I…and even just when they do a major

upgrade and you open it up and all of a sudden everything is moved and it looks different, it really rocks you. So, the need to standardize the approach is one that would be great.

I'm not sure we're going to see that, there's too much benefit to the individual vendors to having a more customized look for if you are in one system. But what we certainly have seen is there are places in the country where one of the, especially in the big acute care systems, where one of the vendors predominate. So whether it's Epic or Cerner or MEDITECH, you know, you're in a community and you see that repeatedly through different organizations.

Chuck Czarnik, MS – Vice President, Strategic Planning – Brookdale Senior Living

It's Chuck; I would say it's a reciprocal problem for both sides of our industry. Our nurses and therapists and other caregivers are increasingly being asked to consult the EMR systems of the upstream hospitals and physician practices that have referred the patients that we're treating for continuity of care purposes. And as a non-integrated provider, it's a freestanding entity that takes referrals from many places and refers to many places, it creates a many to many problem. So our nurses have to log in to multiple systems, all which may be different platforms. Conversely, our physicians that are overseeing the patients that we treat may have to log into our system for oversight for our patients, but then "N" number of systems down the road for all the other long-term care providers that may be on different platforms. So, and this is growing every day.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Anita?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

One of the things that I did hear over and over again, and certainly want to be sensitive to is that what a spec…what's going to be important to a specialist is not going to be that same Yelp template or user tool that a PCP would use. It almost seems to me that, you know, although we've always grouped pediatricians under PCPs, that there's a nuance there that almost puts them in the specialty category.

As we look at tools, how do we define certain things that would go across; is it reasonable right now, and I know that not everybody is eligible for Meaningful Use incentives, but using Meaningful Use criteria, is that, you know, so the demographics, being able to record, you know certain…the clinical decision support, drug-drug allergies, those types of things. Are there certain things that we could absolutely define across all multi-specialties and primary care? And do we then need a subset for things that would be of particular needs to specialists and is it really going to require having to get down to the level of specialty?

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

So, this is Howard Landa again. I don't think you need to get down to the level of specialty, but there is a higher level between all providers and primary versus specialty care. So I think you can say, anybody who admits to a hospital from their office or anyone who does consults in the hospital as well as sees patients in their office. Anyone who brings a patient to the operating room at the surgery center or a hospital. I think…anybody who uses equipment in their office or in the hospital that needs to be incorporated into the EMR. I think those higher-level workflows you could probably do an assessment as to how well software manages and then the specialist can look at it and say, oh I do these things. So I

think that is…I don't think you need to get down to saying, what…how good is this for a pediatric urologist? Please tell me you'll never do that for the 300 of us in the country, that's kind of ludicrous.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

This is Lori. I think there's more commonality than you think, it's actually what data is being captured. So, for example, demographics sure, we all have to capture demographics, but there may be fields that are particularly unique for certain specialties within demographics that's more important than other specialties or in primary care.

For example with history, hey, we all take history, okay, but for me, I'm going to focus heavily on psychiatric history where another specialty may not. So it's not so much that the functions are different, it's what data is being captured within those functions that may differ.

Howard M. Landa, MD – Chief Medical Information Officer – Alameda Health System

As I mentioned before, certain quality metrics are going to be very different from primary care to specialty care and as a good idea the demographics, it seems really generalizable, but in my world, I need four of five different sex fields to really outline what…I'm not sure a real percentage of my population needs to have addressed.

Amy Painter, MSN, FNP-BC – Aerodigestive Center Clinical Program Manager – Children's Healthcare of Atlanta

This is Amy Painter and the other thing that I've noticed with EMRs is, if there's a Meaningful Use criteria, like review allergies or understand allergies, it's often the EMR doesn't…if the clinician looks at that or reviews it or changes it, it doesn't register unless you click a review button. So the actual function of us doing our jobs or inputting information doesn't count as Meaningful Use. So many clinicians quite honestly don't care about clicking a review button, they care that they did their job and that they inputted the information. So it's…the criteria is not matching up with the actual function of what we're doing.

Lori Simon, MD – Member, Mental Health Information Technology Committee – American Psychiatric Association

That's a usability issue.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Anita, you're the last one in the queue, so just one final check to see there are any more questions from the task force. Okay, well thank you so much to everyone on panel two and also on panel one. That is the end of our virtual hearing portion. Is Cris back?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Okay, great. So let me defer now to you and Anita to do a quick wrap up and then we will go into the homework evaluation.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Thanks much and we're a few minutes ahead of schedule. First I want to thank everybody for the time that they took into preparing both written comments and their spoken comments and great responses to questions, very thoughtful analysis today and everybody stayed on time, which is great. Thanks to the workgroup members who asked great questions and keep us focused.

So, you know I think we got a couple of things; I don't think this is in any way a comprehensive summary of the discussion we had today, but I'd make a couple of comments on the primary care panel and maybe Anita can do the same thing for the specialty. I think what we heard overall is that we need some…whatever we do in terms of fostering development of a tool needs sophisticated information on a very complex product, service and vendor selection and awareness issues.

This is not a, we had a lot of discussion about you know, Consumer Reports and various ways that you have peer reviews and we talked about expert opinions and so on, all that is great. At the same time, I think most people noted that these were simple analogies and that this is a much more complicated purchase than what car to buy or what movie to go to or what restaurant you might like or what vacation you might take. So the scope is interesting and I think we're going to get to that in our con…our next agenda item. But clearly people are cognizant of that.

A second sort of piece that was a finding for me anyway in the hearings today was the use of this tool to help determine whether to buy a product or switch as well as what to do once you've made the decision to buy. Panelists noted the possibility and utility of having something they could refer to to keep current around what's happening in the industry, how does that compare against their current capabilities, what their competitors and peers might be doing and so on. So, I think thinking about this from the framework that this isn't just a buying guide that you'd go to at the end of a process, but something that might have longer and broader use was interesting to me.

And then obviously we had a lot of discussion about peer versus expert versus objective versus open data kinds of approaches to supplying data and fostering the creation of data. And a lot there obviously in terms of how this is designed and what we might recommend.
Obviously there are many pathways that this workgroup might recommend that ONC takes, only one of which would be that the government have an active role in actually creating and fostering such a tool. I think in our earlier discussions as a workgroup we've noted that's probably not the most likely path. So how do we incent the market or encourage the market to create a nuanced, balanced set of comparison tools that includes all the attributes that were discussed during the panel.

Those are at least a few of the takeaways that I got across the comments and questions. I know that there are other more significant findings as well that we'll have a chance to summarize. But that's at least some of my takeaway from the panel number one. Anita, do you have additional comments that you'd like to make?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Yes. Thank you, Cris. IT support; for those that are not a part of health systems or large integrated networks, understanding how much the IT support…or understanding how much IT support would be necessary resounded with several members. Specialists are not, you know, one size does not fit all and in particular, you cannot just ask the same question for primary care that you would for specialists for any tool that would be developed.

The impact of additional functionality or any additional functionality on workload and whether that workflow means extra clicks, additional screens or perhaps having to actually go and look something up out at an HIO is really very important to how it is that interaction, both with the patient and additional time for the visit was important to folks.

And that the information that is shared, if you're going to call it interoperability, that that information can be…is actionable and it's not just checking the box type of information that's shared, but information that is actually then useful and usability. We heard that that comes in many forms and really needs to be an important focus of any tool.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Michelle, I think that wraps up probably our summary comments. I think it would be tempting to turn this over and ask for comments from the rest of the workgroup, but I think that our time right now doesn't allow for that and we're going to need to move on to some other items. Do you have any additional guidance for us, Michelle?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Yeah, I think that we should, if we can, transition over to the homework so we can have that discussion. And then maybe people tonight can reflect a little bit on what was discussed today and bring forth any summary comments because we do have a follow-up meeting tomorrow.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yeah and we'll talk about those next steps in just a minute. Okay, so something's gone wonky with my slides on the ONC website so I don't see what's up on the screen right now, but are we going to pull up the Certified Technology Comparison Task Force homework piece?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Yes, we are and let me just say for the panelists, you are certainly welcome to listen in to the next portion of our discussion. I know you all are very busy people so if you need to drop off, we understand that as well. We're moving into homework that was assigned prior to the holidays to our task force members and we're just going to walk through the results of that homework.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

And thank God my screen's refreshed and my slides are back here. So I think Anita and agreed I was just going to walk through this briefly and then we'll have time for discussion. And on our agenda right now Michelle, we've got just about an hour to walk through this, correct?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Yes.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Okay, we may not need it, but we'll take what time we need. So, what is the purpose of this homework assignment. So we had a survey done of the task force members and we'll have the data associated with that and this PowerPoint deck is a summary of those responses.

So the intent here was to identify places where there was clear consensus. There were also some places where there's lack of clarity or perhaps not as much consensus. But hopefully this will help us augment what we just heard in the panels around some practical things we can do to focus this work, and hopefully this will help us in draft final recommendations. So if you can go to the next slide, please.

So just a reminder about the task force charge. So we're charged with providing recommendations on benefits, resources and so one of a certified health IT comparison tool, emphasis a bit on certified health IT. And this task force is charged with the three things that you see around identifying different health IT needs for providers across adoption, implementation spectrum, and I think we heard that pretty clearly today although there was an awful lot common within the panels and across the panels, there were some different needs for sure from small groups, large groups, those with IT support, those without IT support, specialty and primary care.

We also need to identify user needs for this comparison tool; what exactly are we trying to accomplish? We want to build something that's actually practical. And then the third is to identify gaps in the current tool marketplace. You know, if this is a good idea, and based on what we heard from everyone on the panels today, there is a large appetite for these kinds of tools and data to help people make better decisions and move forward. So why is it that that doesn't exist in the current tool marketplace presumably? And let's identify what the barriers are to addressing those gaps. Go to the next slide, please.

So this slide is a little bit complicated, but this is the comparison framework that lists the domains that are potentially to be used for comparison of certified health IT tools and there are 11 of them. It lists with the headings what are the particular items and then some subtext that lists a better definition of what's meant by each of these areas. So these were the questions that were used when task force members responded with their opinions about usefulness of these tools. So we can go back to this for reference as needed. So can we go to the next slide.
The next slide just as a header simply says, okay, now we're going to identify the user needs for a comparison tool. So if we can step into the next slide, please. So the question was, do we think that this category, of the 11 listed on the earlier slide, is it in scope for the comparison tool? And you can see that there was broad consensus across at least nine of these categories. And frankly, good consensus around the two that had lower numbers, practice management and alternative payment models.

Now maybe a little bit of question about alternative payment models will get teased out in some subsequently slides, but we have unanimous agreement amongst the task force members that this tool ought to speak to things like usability and accessibility, total cost of ownership, regulatory requirements, privacy and security and we had sort of seven out of eight kind of consensus on the following five, and so on. So in general, the survey says that of the 11 criteria that were presented to us as candidate

criteria by the ONC team, the members of the task force had high consensus that they ought to be included. Can we go to the next slide, please?

So here's where sort of the fly is in the ointment, if needed which is that the comments came back saying that some of these categories are useful for comparison. There's work to be done before we can come up with some form of standardized comparison measures, and three were picked out.

The first was alternative payment models; two kinds of comments, one of which is that this is a future facing as opposed to today kind of requirement. I think we heard from the panelists today that if this is in the future, it's in the near future, so we need to be attentive to this.

The real question though is the second comment around the necessary function to support alternative payment models and other kinds of advanced care models is still being identified. Not full clarity on what are the full range of alternative payment models today and as they emerge and how specifically with certified health IT support activities under alternative payment models. Probably not surprising given the evolution of our market at this time.

The second one was of interest to me around interoperability. A comment made about metrics needed to identify usefulness and completeness of the data as it gets integrated into the patient's medical record. So to some degree, I think, and this is maybe an opinion, perhaps a consensus opinion, we're in the early stages of interoperability. Documents are beginning to move around at higher rates in direct vendor-to-vendor kinds of communications through Direct and the HISP infrastructure as well as regional kind of exchange infrastructure and other kinds of infrastructure.

But I don't think anyone would say that we have really nailed the problem of how do we pack up a summary of care or a continuity of care record or a transition of care document and found a way to deliver it relatively automatically and in a non-manual way into another EHR system. There's still an awful lot of work to be done around interpretation of record and inclusion of record.

So to get to full interoperability it's not just can we put the data in an envelope, seal it up nicely, get it to the right address, open the envelope on the other side. It's around the readability and usability of the data once it arrives. So the question related to that would be, how do we compare interoperability capabilities given that landscape?

The third area around population health, two relevant comments around the definition of population health varies based on medical specialties, communities and sites of service. And I think we heard that today from our panelists. Those who spoke about population health referred to it in different ways, depending on context. And then the second comment about research is necessary before these…before metrics can be used in a comparison tool.

How would you, in an objective kind of way, come up with some sort of ranking or completion of function or quality of function and so on, across population health when it remains a somewhat broad and non-homogenized kind of function? I think those are the principal takeaways from this slide.

I think I want to pause here for a minute because I think these two slides really help set up the rest of the conversation. I'd like to ask the other task force members if you have any other additional comments that you'd like to make about these two slides before we move on, or frankly any of the slides before.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Yeah Chris, this is John Travis at Cerner.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Hi, John.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
You know, I think I was probably one of the people that said under alternative payment models, that second comment and we're wrestling with that for our own sake at Cerner trying to respond to everything from BPCI to dealing with other forms of fuller risk types of models.

And I think that that for me raised the question, because certainly those criteria, well, the definition of what the scope of 2015 certification edition criteria entails does not include really any, arguably care plan may fall, probably does fall in there, but there's probably not a lot of direct applicability of that criteria edition yet to what would be the functionality of an APM set of requirements. Some of them get out into revenue management and into contract management into how you manage a collaboration agreement for revenue or cost of savings sharing.

That's the part that I really struggled with in answering the survey and why I kind of said what I did. I'm not sure there's a lot of consensus around that and there are some scoping challenges about, some of those things are not attributes of certified EHR technology, given the scope of what is CHIT today.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Right.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
So it's hard to say, can we evaluate things that are not…is our charter especially bound by that or is it by the breadth of what we see as CHIT for the criteria set ONC curates at any point in time, or is it to also get into other areas evaluation? That kind of gets over into a lot of the panel discussions, especially the specialist area where…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Right.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
…you know, those are capabilities not really evaluated. They're important to evaluate product, are they within scope of what we're trying to do here? That's the boil the ocean part to me.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah John, I totally agree. I think there's probably an expectation that we must deal with requirements associated with certified health information technology. The question is may we argue or recommend comparison tools that goes beyond the regulatory requirements for CHIT; I think that's an open question and I'm sure we're going to get feedback on that from our ONC team. But it's a great question. In addition to the issue about the sort of squishiness of the APM models right now as they're emerging. Great comments John, as always. Any other task force members want to comment on our slide deck so far?

Steven J. Stack, MD – President – American Medical Association
Yeah Cris, this is Steve.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Hi, Steve.

Steven J. Stack, MD – President – American Medical Association
Hi. So on the bar chart slide, those two things at the very bottom, both the APM one and then whatever that other one, I think it was practice management...

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Practice management.

Steven J. Stack, MD – President – American Medical Association
Yeah. So I think having practice management is important and physicians need an integrated solution, but I would say, we are going to have more trouble finding things we don't do than we are finding things we want to do. So, I would suggest that there's a clear break point for those bottom two ones; it may not be a huge one for the second to last, but I would at least suggest that it be moved further in this process, we at least contemplate just dropping those out of there…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
That's interesting.

Steven J. Stack, MD – President – American Medical Association
…just to save ourselves some work. And then the whole thing about the APMs, it is such an influx area where people's aspirations and dreams and hopes and desires in what we use for language and politics and advocacy and the reality that's attainable, there are so many divides that for a tool like this where we're trying to make something that's pragmatic and usable and easily accessible, I just think it's a grand overreach from what we're trying to do in this tool.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, fair comment because remember downstream presumably if we have comparison tool that would influence the way people buy and the way that vendors produce software, right? So if the comparison tool has some attributes around alternative payment model given the state of where we're at, the question is, I'm totally sympathetic to your issue about feasibility and how could you possibly do this without being over prescriptive, right? And I think we run into those challenges today. Great point, Steve.

Steven J. Stack, MD – President – American Medical Association
Thanks.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
Cris, I have a question; this is Jorge. On that same slide you have usability and accessibility up top. What do you mean by accessibility?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
I'm sorry, the question is, what do we mean by usability?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
No, accessibility.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Accessibility. So, I think for that we'd probably have to go back two more slides to look at the usability and accessibility and Dawn or someone else from ONC might want to comment on this. The criteria here are clearer about usability than they are about accessibility. Dawn, do you want to...if you're on the line, can you comment a little bit about accessibility?

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
Sure, sorry. Accessibility is really it's the ability of the product to present information to people who may have disabilities. So if a provider is using a tool or using IT products and has, you know, trouble seeing, does the product enhance the view so that he or she can see it, for example?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
So this…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So this is limited Dawn to the ADA-type requirements?

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
Accessibility in this context is, yes.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, okay.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
(Indiscernible)

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Okay, other comments? Great feedback.

Steven J. Stack, MD – President – American Medical Association
There's one other thing. So, I was the one who made the impolitic comment the last time about the accessibility piece.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yup.

Steven J. Stack, MD – President – American Medical Association

I would say that, maybe impolitic if not, I didn't intend to be insensitive when I said it last time, but the, you know depending on how a tool that we're discussing here could be designed, you know, here's an example where it's clearly an important facet it's critically important to a small percentage of the whole.

But if we have a situation where a vendor has a description of what it's accessibility features may be or a search that it is accessible, and we have the opportunity for, you know, kind of like I'm thinking of Rotten Tomatoes for movies or you know, Fandango for movies where you have users who opine. And then of course there would be the motivated subset for whom those features are particularly important who would say, yes, this was very usable; I'm thankful for it or no, it was not and here's why or some combination thereof.

And then if you have some, you know, if there are other outside parties who choose to offer, you know, third party pseudo or genuine expert reviews of these products, they might offer their own opinions or comments based on their review of the products. Because a lot of the valu…the input is being outsourced kind of cloud-sourcing it if you will, we could have things that are very beneficial to smaller populations but not to enough to in a big effort like this, have sustainability over time. So depending on how we structure the overall creation of the tool, I think it would play in not on this topic because we're discussing it, but on a number of these topics for how many audiences we can make the tool usable and serviceable too.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Um hmm, um hmm. Yeah, we're always going to have challenge, I think we heard it on the specialty panel is different audiences are going to have different buying criteria, for sure. I think Anita's comment is one size definitely does not fit all in that space and I don't want to limit that just to specialty. But your point is a good one that folks who have accessibility issues either through sight or physical ability or whatever it might be may have some very particular buying requirements.

John Travis, from a…if I can put you on the spot, from a vendor perspective, is dealing with accessibility something that you think the industry has a handle on or needs some additional help? What's your opinion from a vendor perspective?

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

I think it's, umm, this one's been hard and we've been dealing with it for a long while because we have, as I think people know, a fair amount of government contracting that we're dealing with. But I think the market perceives it in two ways and it's not all things, but it's mostly how they probably perceive it and that is for I'd say primarily sight impairment and then second, hearing impairment and then there certainly are things that deal with physical accessibility that may not be entirely up to the software vendor, other than perhaps compatibility to assistive devices that enable access for people who have physical disabilities that could impair interaction with a device.

The real challenge there though is to have a good basis of requirement and what would normalize the definition of accessibility and something to really keep an eye on is, there is a proposed rule out right now for nondiscrimination in healthcare for a variety of requirements, but one of them most definitely is this topic. But even there, the Office of Civil Rights at HHS has not, at least not in the proposed rule, they were kind of asking about potential standards by which to judge it, but they did not nominate, you

know, a specific set of standards or requirements in the proposed rule, so maybe we'll see something in the final rule that could actually inform that.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Um hmm.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
It's aimed at consumer access because really what the focus of that rule is is to reduce barriers or, you know, eliminate discriminatory practices that are basically tantamount to denial of service to consumers who fall under certain protected classes, and one of them being individuals with disability.

And, so that may be interesting to even reach out to the Office of Civil Rights. I don't know that as a matter of, you know, discussion, but it might be something for the ONC staff to make note of; is OCR thinking about a set definition of requirements by which compliance with the nondiscrimination in healthcare regulation would be judged? Quite honestly that's probably something that everything else ought to follow suit with, at least it deals with the consumer-facing application and in certain ways that may provide a good framework to push off of and challenge why it should be different for work force in healthcare as well.

So, that would be my suggestion. We're keeping an eye on it because in a lot of ways, that may really rein in the focus for vendors because it's probably going to come down fairly…to 2015 certification and Stage 3 use where we have to test for accessibility relative to the consumer-facing applications that are part of view, download and transmit. So, you know, I think that that's going to be an informative thing to keep an eye on from a definitional state of looking at what vendors may be doing to respond and by what standard are they doing their accessibility testing.

That and making available the, you know, there is information that vendors will have to provide when they go to certify for view, download and transmit that at least with respect to that function, has to speak to how they're doing accessibility evaluations of their consumer-facing product and maybe that's a starting point as well to provide information here, at least in the context of that criterion relative to certified products. I mean, we certainly already should be able to recommend using that information in a more public way.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah. Yeah.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
(Indiscernible)

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
A lot of content in what you just said, John; the one, I don't want to minimize your point by pulling out one piece which would be the comment near the beginning about patients. It feels to me as though usability and accessibility, we ought to be thinking about patient usability, accessibility in addition to clinicians.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
Yes.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

And you might make an argument that amongst the two populations, accessibility issues are going to be a bigger deal for patients than they will be for clinicians potentially. It just feels like the population mix might be that way, so we probably need to be attentive to patient tools. I'm sorry, someone else was trying to get in and I think I spoke over you; I apologize. Who wanted to speak up next?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veteran Health Administration

This is Jorge and I apologize for coming in a little bit mid-discussion here. It just, you know, we obviously at the VA have to address accessibility…compliance with a good bit of the work that we do, but putting these two attributes together, it almost seems like you are parting the Red Sea that you plan to be Moses because usability in and of itself when you have your fully able clinicians that have 20/20 vision and a phenomenal clinician, they're struggling like a bunch of buffoons trying to get through the software yet with an accessibility almost in the same rubric here that…and so this is why I think the overarching categorization is, I think it's just pretty…almost grandiose.

Usability, we've been at it since 2010, really, really, really difficult and we're barely scratching the surface. Yet here, because of some political policy driver, we're clumping these two things together and now we're putting together both clinician-facing and patient-facing usability and accessibility where this project is for the clinical end user base to have a tool that will allow them to better decide how they're going to choose a tool that's going to affect the very essence of their daily work, day in and day out.

Does it make them more efficient? Are they better providers? Are they better able to capture patient stories and a whole litany of things trying to…they're supposed to do. Yet, you know here we find ourselves having discussions on just these two little, itty bitty words and those two things together are probab…each one of the separate is a multi-year project in and of itself.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yeah, great points. Dawn, we should give you a little bit of air time from an ONC perspective, if you want to speak up around the questions that Jorge just raised.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology

I think that those are all valid points, everybody's points, John's and Jorge's and I think the question becomes whether we think that in a comparison tool, do we need these features to be a comparison?

So one of the reasons why accessibility was put in this list, from an ONC perspective is because with the new standards that are coming out in the new certification process, there is a simple check-box that says yes, we have accessibility-centered design in there. And so that might be a very easy thing for providers to pull in or for…I'm sorry, comparison tool vendors to scrape off of ONC…the Open Data CHPL and incorporate into a comparison tool. It's one thing, it's one point in many to consider on what should be included in a comparison tool.

David Schlossman, MD, PhD, FACP, MMI, CPHIMS – Missouri Cancer Associates

Hi, this is Dave Schlossman. I just wanted to say to Jorge, well said and I think that he expressed the thoughts and sentiments of hundreds of thousands of practicing clinicians. And not to minimize the importance of accessibility, but it does muddle things to try to put it together in one category with

usability. We can keep it in the comparison tool, but I think it would be a lot clearer and we'd better accomplish the mission if it wasn't lumped into the same category with usability.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Good feedback. I'm going to suggest that we move on to the remainder of these slides. We've got, I think, about four…about 30 minutes left and some more interesting material to go through. So, can we skip ahead now to the subsequent slide, slide 8 I think, which is the next material?

So this one we're going to dive down into a little bit more detail on each of these characteristics. So the question here is how important is cost to the user for this category? So, when one thinks about interoperability, for example, the top one on the list, how important is cost when you're considering this characteristic?

And you can see some variation along the way here that some of these had pretty high consensus that when you think about interoperability for example, cost is really important. And if you think about quality improvement at the bottom, cost is probably less important. Now this may be a question where there's kind of a signal-to-noise problem in terms of how people interpreted the question and so on, but I think these results were a little interesting and in some ways a little bit provocative. I'm wondering if anyone wants to offer some opinions about why you think the results laid out the way they did and, you know, are these powerful findings.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

This is John again; I'll maybe take the first one, I may provoke some comment back. But I think the way I viewed it as I completed this, and definitely I think, you know, the interoperability services and the regulatory requirements and data migration all kind of echo the same, and security as well. I think there's a lot of sensitivity to the cost of something that the buyers and the provider implementers really get very aggravated when they see things as being à la carte or kind of almost, I don't want to say custom, but add-on fees, things like that, and those are all areas where that is very, very possible.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Common, you know.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation

And so when people look at, I hear quite a bit, you know when people think about regulatory compliance, the top-level impression often times is that that should be endemic to the license of the product. Why are you charging me for something that I think is related to enabling me to comply with a regulation? And so that almost equates anything that has to do with enabling compliance ought to be either already bundled into the cost of software or it shouldn't cost me anything extra to do it when in reality there are a lot of things there that bear cost and have a real value, not solely because of compliance, but even if in face of compliance.

And then certainly otherwise those are areas of sensitivity that are areas that if vendors don't engage in adequate disclosure about them up front as to what is in the base solution and what might be at an additive cost, then there's very strong reaction…so. But I think as I viewed cost in all those categories, I viewed those as a question about whether or not I really as a buyer expected there to be added cost out of those; I'd probably mark…cost is a high point of sensitivity to me in those areas is maybe how I viewed it, a vendor's perspective

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So if the Travis hypothesis is true, the reason why quality improvement has a low cost importance is not because cost is no object, but instead because hey, we assume the quality improvement is baked into the product? Is that sort of a short, crude version of what you're…

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
It actually might be a little bit the reverse of that.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Okay.

John Travis, FHFMA, CPA – Vice President & Regulatory Solution Strategist – Cerner Corporation
I think that cost is a high sensitivity, I don't expect to have to pay something extra or I expect it to be moderated or built-in to the base cost of the product. You shouldn't be charging me separate for privacy and security or…and it's an odd way to look at it, but I have a great sensitivity. So cost is important to me from the standpoint that if you're charging me more for something on account of that, that's going to go adverse for me evaluating your product in the buying decision or cause me to have complaints about you if you're charging me and nickel and diming me. So it's kind of that perspective; don't nickel and dime me or I have a high sensitivity to you nickel and diming me.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Got it, got it. Okay, any opinions from others?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
Yeah, this is Chris Tashjian. You know, when I looked at this, I looked at the interoperability as being something I have to have to practice and so it's something that If I really want to take advantage of the EMR on my expenses and I think that's why cost is so important, because I don't feel like I have an option. I feel like I'm going to be forced down this road and if the cost is expensive, it's just one of those things that's really irritating. And I think it kind of goes back to what he was saying earlier in that the lab is expected to be, you know, already in the base package.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Um hmm. Um hmm.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania
Cris, this is Anita. That, you know, for a number of the categories, the sticker shock in the real world with the small to medium practices, they just could not afford all of the little things that they couldn't possibly have thought of upfront, like that, okay, I have to pay $2500 per provider to connect to my state surveillance; really? You know, that was just not something that any of them thought to ask upfront.

And then the changing paradigm for a lot of the labs initially vendors reported that they would not charge for the cost of getting lab interfaces, but then it became that the hospital system said, well you need to have a certain threshold or we're not going to provide it and that cost was then passed along to…at the practice level. And again, things that they absolutely need in order to practice but didn't have

necessarily the funds to be thinking about how to add that on after having just laid out the dollars for a system.

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
I think that's correct.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, yeah. Okay, well in any case, there may be clear consensus around cost sensitivity issues and the mandatory optional, or not optional but mandatory kind of nature of some of these characteristics. But clearly cost is a big matter. I don't mean to cut off the conversation; are there other people that want to comment on cost before we move to the next category?

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
Cris, this is Jorge, this is…I assume this is operating costs, this does not capture the opportunity cost loss by inefficiencies or added labor incurred by the end user clinician, in addition to their operating practice, is that correct?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Well, I don't think the questionnaire was explicit around which cost categories so it might be a little bit eye of the beholder, but I assume that what you're saying is right. But as you know, in some of our earlier conversations, there's been discussion about total cost of ownership, inclusive of, you know and acquisition and operating costs, but potentially some of the other kind of cost categories that you're talking about. I don't think we've drilled into a lot of detail there yet, we probably want to, Jorge, before we're done.

Jorge Ferrer, MD, MBA, LSA – Biomedical Informatician –Veterans Health Administration
Okay, because for the clinician, the two hours added to their daily life is a real cost to their lifestyle.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Absolutely critical point; critical point; we've got to keep remembering that these are real tools for real people. This isn't an abstract kind of thing. A great point; I'm not sure we've put enough focus on that so hopefully we will continue to do so as we go forward.

Other comments? If not, let's move to the next slide related to usability. And this one had some interesting results, too. So the question here is how important is usability and ease-of-use to the user for this category?

So on one hand, when we think about things like practice management is usability, ease-of-use important and there seems to be some pretty good consensus there. And on the other end of the spectrum, data migration; potentially usability and ease-of-use is lower if one's thinking about that as data migration as something that you do as part of a conversion, then that makes logical sense.

People might think other things about data migration perhaps related to HIE kinds of functions or maybe usability is a bigger thing. But the headline that Dawn and her colleagues from ONC put on this is that there's more variability regarding the importance of usability as a comparison factor, but majority still consider it important. So, comments on what we're seeing in this slide?

Joe Wivoda, MS, CHTS-IM – Chief Information Officer – National Rural Health Resource Center
This is Joe Wivoda.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Hi, Joe.

Joe Wivoda, MS, CHTS-IM – Chief Information Officer – National Rural Health Resource Center
I'm struck by patient engagement, you know, that we're completely polarized where 87% say that it's highly important that, you know, usability and the other 13%, you know, maybe that's one person, that's it's not.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
It's one person, yeah.

Joe Wivoda, MS, CHTS-IM – Chief Information Officer – National Rural Health Resource Center
So, yeah. But anyway, I think that's kind of telling. This is an interesting slide in the fact that those things that are more kind of outwardly facing or physician facing, you know like the practice management piece that makes a lot of sense. But on the other hand, alternative payment models is a little bit lower because I think, my prediction is, that we kind of expect that to be a little less easy to use when it's kind of an emerging functionality. So, at least that's my take on it.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yup, yup, great points. Others?

David Schlossman, MD, PhD, FACP, MMI, CPHIMS – Missouri Cancer Associates
Yeah this is Dave. I think that, you know Jorge mentioned the extra two hours that the inefficiencies of EMR adds to life every day of the average practitioner and again, the patient engagement piece in answering all your messages on the portal and trying to interact. It adds to that extra two hours or extra two and a half hours of your day so you want that to be as easy as possible and that's what I was thinking when I wanted the patient engagement to be high usability. It would also be nice if I didn't have to spend one minute out of every 15 minute clinic visit begging my patients to interact with me so I that I don't get my Medicare reimbursements cut next year.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Good points. Anybody else want to opine on usability, ease of use? All right, if not, we're going to go to the last sort of comparison criteria on the next slide please. This one is a question about how useful would the tool be without the following for each category?

So if I'm interpreting this right, this is one where a high number is low usefulness, so if we're thinking about cost information…I'm sorry, if we're thinking about in the left-hand column regulatory requirements, how important is cost considerations? And regulatory and interoperability are high, that the tool would not be useful if it didn't have this and similar interpretation on the right-hand side on usability and ease of use information.

This one is complicated enough that I'm going to ask Dawn to offer her first comments on how we thing, how you thing we ought to interpret this, since I know you and your team went through this in detail and then we'll turn it to other comments and questions.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
Yeah, this is Dawn and I apologize for the complicated nature of this particular…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
No, it's really good. It's just hard information.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
I tried it many different ways to make it work.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
Essentially what I wanted to show here is, we talked a lot about cost and usability in the previous meetings that we've had and we went back and forth and back and forth. And then there's the phrase that I keep hearing, boiling the ocean; are we trying to like pull too many characteristics in here? And so I wanted to show that there's big variability in what you think…the way I'm looking at this is, is a tool going to be useful if you don't have cost information about the regulatory requirements?

And 75% of you said no, a tool would not be useful if cost information isn't provided on the regulatory modules, or the criteria that I'm comparing up. And 63% also said, you know, a tool would not be useful if I don't have usability information. So it's very similar to the previous two slides, it's just getting down into could we…would there be utility in producing a tool that doesn't have this information? Because we've also heard that it's very hard to get this, it's hard to define it. And so, this is kind of the converse of that, if we don't have it, are people going to come and use the tool? And so that's it.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So that's really helpful. So if we look at the bottom of the chart, you might look at some number like APM, which is something we talked about before. This is one that says that cost information and usability ease of use information is not as highly relevant as it is in other areas around selection where APM is involved. And maybe that has to do with the sort of amorphous nature of APM at this time. And we see a similar thing on data migration.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
Yeah, I would definitely agree with that interpretation and I think given the conversations we're having, that all of that kind of jives with what you all have been saying up to this point and what we learned today.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, yeah. Okay. Any quick comments on this? We've got a bunch of other materials we want to cover in about the next 20 minutes, so, any other comments on this slide?

If now, let's go on to the next chapter here, which is identifying gaps in the current tool marketplace and the barriers to addressing that gap; that was the second criteria that we were getting too. So, can we go to the next slide. So here are some comments. The idea of concern that the EHR vendors make it difficult for us to get to this because of usability and user experience ratings through product contracts that include gag clauses that, you know, you can't comment on the product, for example. And the second, which I think is related to the first or similar that physicians should be allowed to publicly discuss costs and services fees. So at least one of the gaps that's identified or a barrier that's been identified is this idea of inability to make public information about EHR vendors and contracts and experience that consumers have with these products. Anyone want to comment on this?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics

I guess I'll say, this is Chris Tashjian, I wasn't aware that that was even a problem. We comment about our EHR all the time, you know, if we have a gag clause, it's news to me.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

So that's sort of a question I would say, just to be provocative, how much of this is a real issue as opposed to a folk loric issue? I don't have a good sense about that. I can say from where I sit, we don't have limitations on the contracts from either our existing or our future vendors that don't allow us to share this information. There are some things we don't share. We're in the middle of a big EHR conversion and we're not telling people what that costs, but we don't have that limitation.

So, but yet this is a persistent issue that comes up relatively often so there must, you know, the question is, if there's smoke, is there fire? Does anyone want to comment on this, perhaps those of you who did raise it as an issue?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Cris, this is Anita. I didn't necessarily raise it as an issue...

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yes.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

…but what we did see is that practices that got, I don't know if special is the word, but favors or status as, okay, if you agree to be a beta site we're not going to charge you for this, that or the other thing; or if you agree to be one of our test sites for folks to come in, you'll get a discount. Those types of things were not allowed to be shared in terms of what kind of…what was negotiated as part of being a beta site or being a test site?

But I don't know that I would include it fully with this package, but that was where…those were some of the things that we did see over and over. We also saw that early on, when we were trying to put together comparisons for practices to be able to go in and do an ap…as much of an apples to apples as they could that the pricing piece, the vendors really, really pushed back and they pushed back hard to the point where we were told, from ONC at that time that we had to cease and desist.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Got it, yup.

David Schlossman, MD, PhD, FACP, MMI, CPHIMS – Missouri Cancer Associates
Yup, hi, this is Dave; I had a couple of experiences. First off, when I was working with one really big pain point of a very poor function of our hospital's EHR and I thought I'd figured out how I needed to make it do what we needed to do and I worked my way all the way up the information technology chain to the to the chief and I said, show me the structure, show me the databases, why can't you do this? Any rational thing I'd be able to do this. And so he finally tried it out and showed me the structure and he said, oh, by the way, you can't talk to anybody else about this structure; its proprietary and there is a gag clause in our contract. So, such things do exist.

Second is, there's a lot of talk in AMIA and AMDIS about academic studies and comparisons, especially in the usability sphere that want to show screenshots and specifics of performances of various EHRs to allow trying to get to the science of what is usability and what's perceived as useful and efficient for clinician. And trying to show these screenshot or anything like that has provoked legal action from several of the software developers who said, no, it's proprietary intellectual property, you can't show a screenshot; doesn't matter how valuable the science is in your paper. So there are these factors out there still.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Any other comments?

Steven J. Stack, MD – President – American Medical Association
Well Cris, this is Steve Stack. So, I don't…if a company makes available at no cost beta testing and supplemental services that would normally be at cost and the understanding is you're an early iterative partner in that process, I think that's a whole different scenario. You potentially get access to a tool and a benefit; it's a separate discussion between the vendor and the user in what the value of that transaction is to either party.

I think my principle concern is that it should be very clear that if you buy one of these tools, if you buy one of these packages, it should, I mean, these are essentially becoming compulsory or have become compulsory for the entire health sector. So I would liken it like buying Microsoft 360 to buying a Macintosh computer with its embedded suite of core software products. There is a known cost for that; you can go online, you can search the cost, you can comparatively shop across different third party vendors who sell those products that have those particular software packages.

I think that we have to have that kind of transparency. I don't think it works when there are compulsory tools required as a condition, essentially, of almost there's a condition of successfully participating in these federal programs and state federal partnership programs that it is a proprietary piece of information for what is…the cost is for the standard purchased software tool and the reasonably estimated total cost of ownership of some sort.

The other point though I would mention is I would separate the issues of can the actual cost of ownership be quantified because I think that that is…that's challenging. It depends on the purchaser, how they use the tool, what they do with it, how they customize it or not. I think we should see if we

can as a group take a stab at that, but…and see if we can come up with something that's either reasonable or a good surrogate for it.

The other part though is the transparency piece. So those who have purchased the tool, if you said do, you know, is your cost for this product consistent with what you were told when you were sold it or in your experience or your judgment? So, I think that's getting at a whole other point; we may not be able to nail down with high precision exactly what the cost is for these things, but we should be able to have users or purchasers who say, hey, I was told that this is roughly what it was going to cost and, you know what, this is roughly what it costs or, no, it was 80% more.

And I realize there are other facets to that; did you change your expectations? Did you have added requirements? But I think it's important we're trying to get at transparency here, right? Did what I get…did I get what I was sold or was I sold something other than what I got so there's the transparency piece and then there's the actual absolute kind of cost estimation.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yeah, great points. I've tried to raise similar kind of issues which is, you gave much more nuance but, it will be hard in some instances to do apples to apples and oran…kinds of comparisons across different customers, different use.

Steven J. Stack, MD – President – American Medical Association

And I don't want to be unfair to the vendors, I just want to be fair to the purchasers.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yeah. Yeah, yeah, yup, which is the goal. All right, any other comments on this, otherwise I think we need to step on the gas here a little bit. So the next slide has a question around whether for each of these categories, does it include CHIT functionality?

So the headline here is that CHIT functionalities, when we look at it that way, provide on…an incomplete picture for comparison tools. So, again, this is one that may require a little bit of interpretation, and I don't want to do damage to it, so Dawn, would you mind commenting on this a little bit about how we should look at this data?

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology

Sure, when ONC came up with those 11 categories, what we recognized was that a good portion of them had some technology, health IT technology that may not be certified health IT. All of you in the beginning, on one of the first slides that we talked about was, is this a good factor for comparison and we agree, yes. But we still need to talk about the fact, and this goes back to an earlier question, are we moving out of scope when we talk about some of these categories that are not, or that have a little or a lot of components that are not…don't touch on certified health IT.

The question then becomes is this, and I think this gets into how this should the tool be raised? Should it be a federal government thing? Should it be a, you know, however the tool is created, who might be best to do this? And I think this starts getting into it. If a tool isn't…we've acknowledged that some of these items here are very, very important for a tool.

I think that the best one is the population health management, practice management field. But I think this says 38% say that it doesn't include any CHIT and then another 38% say, it only includes some CHIT. So…but we also acknowledged earlier that it's an important piece for a comparison tool. If it is an important thing for a comparison tool, and providers aren't going to be using a tool if it doesn't have these categories in it, or pieces of this information in it, that's something that should be used.

And so that's what I'm trying to get at with this slide and I think that this speaks to a lot of the comparison categories that we're talking about may delve into non-certified health IT and if that's the case, how would that happen? And how would…should the recommendation be, should it just be a certified health IT tool? Or should it be a blending of certified health IT and non? Does that help at all?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yup, very much so. Very much so, thank you. Comments, questions? Okay. I think this one is complicated but speaks largely for itself. So, if we can walk to the next slide, please.

This is around some specific criteria, five of them, where this speaks to the idea of comparisons to include products or functionality beyond certified technology where it's listed here as crucial. And the five that you see are listed along with people's comments here.

So I think this is one of these issues about that we must cover all the certified technology requirements, presumably. The question here is should we and may we offer opinions on other topics? And here are five potential topics and you can read…you read where they are.

Usability and accessibility and practice management we've discussed before. We haven't talked as much before about data migration, patient engagement or privacy and security, except in passing. But clearly these are attributes that will be important to someone deciding whether to buy and once they buy, and they're not necessarily included in the CHIT criteria. These are great insights; any comments on this slide?

Steven J. Stack, MD – President – American Medical Association

Chris, just as so…this is Steve Stack; something you introed. I don't know about whether we expand beyond what's covered in certification, that's a whole good discussion. But I also, I hope it's not in our charter, but maybe it is, that we must cover everything that is in the certification. I think that…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Ahh, great question, yup, you're…good point. I don't know. What…

Steven J. Stack, MD – President – American Medical Association

Because I would prefer that we don't have to cover everything that's in the certification. I think we should take our best good faith effort at what is most salient or important in order to make it usable in terms of its overall size.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Yup, fair point. I that the point I was trying to…

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
And this is Dawn…

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, go ahead Dawn.

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology
I was just going to chime in and agree with that because one of the points in the charter is to identify user needs for the tool, so that would say, only those components of certified health IT that are relevant.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
Yeah, that makes complete sense. I think what I was trying to get to is to the extent to which we do offer up some criteria to be used in the comparison tool, when appropriate they ought to align against the certification requirements so that the tool is aligned in those respects. Any other comments on this slide?

If not, let's go to the next one, please. This was a question that was addressed in the panel, the idea of what data sources? So this is the question around are there data sources that provide information that's comparable across products? And there were four answers allowed; that yes, there are data sources that exist, representative samples and/or unbiased reporting. There are some answers where we said yes, but there's limited availability. There are some where we said yes, but they're perhaps not representative or may be biased. And then in some of these characteristics there is no data sources that provide information.

And as you can see, data migration is the most difficult with the fewest amount…most limited amount of information and as we go down in the chart you could look at something like regulatory, where there is a belief that there was a significant amount of information, except for one response that said that there was none. Comments on this slide?

So I think clearly consensus of the group, if you look at the red across this list, there are some important criteria here where it was the belief of those who responded that there isn't data associated with some really important areas, and I would note two that we've discussed…three that we've discussed a number of times, usability, accessibility, APM, population health and then we've had a lot of robust discussion on total cost of ownership.

So let's go to one more slide. This dealt with the issue about what data currently exists through Open Data CHPL, which is a source that's been in operation for a number of years that, you know in our earlier conversations there's been a discussion about why isn't Open Data CHPL sufficient or can it be a foundation for some of this work?

So, the comments indicated that there probably is some information relevant for comparison obtained through the certification process and there are five that are listed here. Any comments on this slide? Good feedback.

So let's run to the end here, we just have two more slides and then some next steps. So the next and final category here is identifying the different health IT needs for providers across the adoption implementation perspective. And I think we heard that from our panelists clearly today.

And two slides here relevant; first was ease of use and other relevant comparison metrics may depend on the provider characteristics. These are more sensitive to the provider characteristics, and four are listed here; APM and population health are two that we've talked about before and I think we heard some comments around these from our panelists.
Let me jump to the next one and we'll…you can see the other four that are also listed. The quality improvement, regulatory requirements, TCO, privacy and security may depend on the provider characteristics. Any comments on these two slides around provider or context specific needs?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
Is there an option…this is Chris Tashjian, is there an option to maybe solicit from not the vendors but from the actual users some of these things like what they feel their total cost is?

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So Chris, great question; do you mean that in the context of kind of peer supplied reviews or those kinds of things that we discussed earlier, the kind of Yelp or Trip Advisor kind of comparisons or do you mean something different?

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
Yeah exactly.

Charles H. Romine, PhD – Director, Information Technology Laboratory – National Institute of Standards and Technology
Yeah.

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics
No, that's exactly what I mean is to set something up or a forum where people can talk about that.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic
So I guess there are probably some lawyers listening in or participating in the call who could comment on that, whether that's something that the government can or should foster? I think there's the other question that came up earlier on these, are there limitations in contracts that keep people from being able to say what their software costs and how deep does that go and how significant is it? That's a good question. I think we want to put on the table the possibility of encouraging user supplied information, crowd-sourcing kind of information.

Does anyone else want to comment on Chris' question? If not, and I think we're already a minute over where we're supposed to be before we get to public comment and so on. If we can just go to next steps for everyone on the call here from the task force; can you go ahead two slides? Maybe my slides are wonky but I think we're still a couple of slides back. If we can move ahead to the task force work plan slide?

Well I'm going to assume it's just my view that's screwed up. So, looking ahead here we have upcoming activities. So you can see on the slide, for those of you who can see it, that today we had our virtual hearing; thank you very much for everyone's time and attention, a long morning.

Tomorrow the task force is going to meet to summarize this hearing and begin drafting recommendations. So while it's fresh in everybody's minds, we've got a good working session tomorrow. I'm looking forward to that discussion. Then we follow-up with another virtual hearing a week from tomorrow and Michelle or Dawn, can you comment briefly on what those panels will be on January 15?

Dawn Heisey-Grove, MPH – Office of Planning, Evaluation and Analysis – Office of the National Coordinator for Health Information Technology

Sure, this is Dawn. The panel three are the EHR or health IT…certified health IT vendors. I think panel four is the comparison tool vendors and panel five is the panel on advanced or alternate payment models and quality improvement.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Those should be great panels. I'm glad we heard from the customers first and then we'll hear from the vendors and those who are in the market. We've got a very quick turnaround time to finalize our recommendations by Tuesday January 19. That really only gives us a day and a half working days, so I know that the ONC staff, as they always do, are going to do fantastic work and the task force will do everything we can to support and advance that. And then we'll present our final recommendations the following day, on January 20 at the joint Policy and Standards Committee meeting.

So, if everyone can between now and tomorrow try to come up with your, you know, concise viewpoints about what did you think we heard from the hearings? What do you think we got out of this survey of the task force members? And what are the really salient points that we want to bring forward in summarization of the hearings? With that, I'm going to turn it back over to Anita for any wrap up comments you'd want to make. I think I've said more than enough. I think we've done some great work. Anita, what other comments would you make before we go to public comment?

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

I have nothing else; I think that we have really provided a comp…had a fairly comprehensive discussion here and you've done a great job Cris, by the way.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Hey, I'm just riding on the shoulders of ONC, as always.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Indiscernible.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Career tip, if you want to look good, be on an ONC task force, they always make you look like you know something. Michelle, I'm going to…

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Yes.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

I think we're going to turn it back to you for public comments and any comments you or Dawn want to make about process or wrap up and then we'll go to public comment and we'll end.

Public Comment

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Okay, Lonnie, can you please open up the lines?

Lonnie Moore – Virtual Meetings Specialist – Altarum Institute

If you are listening via your computer speakers, you may dial 1-877-705-6006 and press *1 to be placed in the comment queue. If you are on the telephone and would like to make a public comment, please press *1 at this time. Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

And while we wait for public comment, I want to personally thank Kim Wilson who did a lot of the legwork to get all of our volunteers together today for the virtual hearing and for next week's virtual hearing. Thank you so much Kim, we couldn't have brought it all together without you, so thank you so much.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Thank you, Kim.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

And it looks like we have no public comment so, thank you everyone. Again we appreciate all of the panelists sharing your expertise with us and taking time out of your busy schedules to do that. And we will talk to all of you tomorrow.

Christopher H. Tashjian, MD, FAAFP, FHIT – Vibrant Health Family Clinics

Thank you.

Cris Ross, MBA – Chief Information Officer – Mayo Clinic

Great, thanks everybody.

Anita Somplasky, RN, CHTS-CP, CHTS-PW – Director, Transformation and Development Services – Quality Insights of Pennsylvania

Thank you.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology

Thanks, bye.

Public Comment Received During the Meeting

1. Thompson Boyd: Thompson Boyd. Hahnemann University Hospital Thank you for your informative presentations. Please comment on how Usability, integrated with Clinical Decision Support, has either facilitated or slowed down effective and efficient clinical workflows in the care of your patients. Has your EMR Vendor lived up to your expectations?

2. Randy McCleese: Randy McCleese, St. Claire Regional Medical Center, correction to earlier comment. It is very hard to find a source of truth.

3. Randy McCleese: Randy McCleese, St. Claire Regional Medical Center, there is not an exhaustive source of all the products available and which ones meet the needs of a specific organization. It is very hard to find a source of trugh.
4. Rick Edwards: For Behavioral Health, are there any measures of EHR Adoption nationwide or broken down by state? - Rick Edwards, Iatric Systems

5. Thompson Boyd: Thompson Boyd. Hahnemann University Hospital Who owns the data? Have you had a problem where the previous EMR vendor was reluctant to give your patient data to the new EMR vendor?

6. Steven E. Waldren, MD MS: I missed the "*" I did have a comment. We at the AAFP have been providing comparison support to our members on EHRs since 2005. We would be glad to provide you with information about that experience. Based on our experience, any comparison tool needs to (1) be multi-source in nature including objective testing, expert opinion, and user experience; (2) you must include a social component to be able to scale to meet the needs of the diverse provide community and to stay current on requirements.

7. Steven E. Waldren, MD MS: Also a couple of high level comments, (1) MU has drive the adoption of EHR and we still struggle with substitutability of EHRs and health IT ; therefore any comparison tool should include "compatibility" with other products as a critical component. (2) EHR is a part of a system which includes the work environment, workflow, and organizational structure therefore testing the EHR in isolation will be insufficient; there should be a comparison of implementations; This necessaites the need for reviews and user experience. (3) Comparisons need to be focused on "capabilities" not functionalities; We need to understand how the EHR/HIT will be useful in accomplishing the need capability, such as management of chronic disease. We do not need a comparison of how well the EHR creates a patient list.

8. Steven E. Waldren, MD MS: Also, it is important for the compassion infrastructure to not only identify difference among products but also drive improvement of products

9. Steven E. Waldren, MD MS: It would be great to see a common infrastructure for a common comparison process for HIT that multiple entities (medical societies) could use. This would support the expansive scope of such a comparison tool and would help create a common pathway for vendors and identify common needs across specialties and workflow.

10. Jennifer Harbison: In regards to primary care and behavioral health - doesn't behavioral health data sharing depend on the state law? Jennifer Harbison University of Iowa Health Care