

**HIT Standards Committee
Clinical Quality Workgroup
Transcript
October 31, 2013**

Presentation

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Thank you. Good afternoon everyone, this is a meeting of the Health IT Standards Committee Clinical Quality Workgroup. This is a public call and there will be time for public comment at the end of the call. As a reminder, please state your name before speaking as this call is being transcribed and recorded. I'll now take roll. Marjorie Rallins?

Marjorie Rallins, DPM – Director, Measures Specifications, Standards and Informatics – American Medical Association

Present.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Danny Rosenthal?

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System
Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

David Baker? Keith Boone – I know –

Keith Boone – System Architect – GE Healthcare

Present.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Hi, Keith. Anne Castro? Chris Chute? Jason Colquitt?

Jason Colquitt, PhD – Executive Director of Research Services – Greenway Medical Technologies
Present.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

John Derr? Hi, Jason. Bob Dolin? Floyd Eisenberg? Rosemary Kennedy? David Lansky? Brian Levy? Rob McClure?

Brian Levy, MD – Chief Medical Officer – Health Language, Inc.

Yes –

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Robert McClure? Hi, Brian.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum

Present, Rosemary Kennedy, present.

Robert McClure, MD – Owner/President – MD Partners, Inc.

And Rob's present.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Galen Murdock?

Galen Murdock – Veracity Solutions

This is.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Gene Nelson?

Gene Nelson, DSc, MPH – Dartmouth University

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Philip Renner? Eric Rose?

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Joachim Roski? Randy Woodward? Kate Goodrich? Kim Schwartz? And, are there any ONC staff members on the line?

Julia Skapik, MD, MPH – Office of the National Coordinator

Julia Skapik.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Hi, Julia, thank you. And with that, I'll turn it back to you Marjorie and Danny.

Marjorie Rallins, DPM – Director, Measures Specifications, Standards and Informatics – American Medical Association

Okay, so good afternoon or good morning everyone, from where you are. It's been a while –

M

It's about 11 o'clock in the evening here.

Marjorie Rallins, DPM – Director, Measures Specifications, Standards and Informatics – American Medical Association

Oh, so evening, afternoon and morning, depending upon what time zone you're in. We'd been on hiatus for a while, so I think it'll take a little time to get back up to speed, but you should all have received the presentation from Keith Boone or that we circulated, that has some guiding principles for evaluating standards. And that was the charge from our September 13 meeting. Keith offered to take that agenda item to HL7. I actually attended that HL7 meeting and Keith led the discussion and the group developed a set of principles or a draft to work from, and we'll – I'd like to go through that today. But before I do that, Danny, did you want to make some comments before we turn things over to Keith.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yeah, yeah, sure Marge, thank you. So it sounds like we have maybe 10 people on the call today, so hopefully this will be a fairly informal conversation. If you look on the left side, there's the 9/13 meeting summary, and I was just reading through it, and it is keeping in spirit with Halloween, it is a particularly ghoulish description. This guy Rosenthal sounds like a real jerk. So, just to sort of summarize a little bit about where we are from our last meeting, we are being asked to number one, evaluate the appropriateness of certain standards for their intended use and number two, we're also being asked to comment on alignment of multiple standards within a particular domain. Those are the two asks. Let me just say that one more time, commenting on the appropriateness of individual standards for a particular function and also the alignment of, and Marjorie and I are working with the ONC staff to get some more granularity on both of those details.

But from our last meeting, we came to the conclusion that we can't do either of those tasks unless we have some guiding principles we use to identify, is this appropriate for its intended use and also, are these appropriately aligned? So what I hope to get out of today's phone call is agreement on the principles for appropriateness of a standard, and Keith will be walking us through that, and then for – by the time we have our next phone call, we'll have more granularity about the specific asks.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Danny, this is Eric Rose, can I ask just a quick question?

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yup.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Jus – I may have entirely missed it, but I'm not sure I was aware there was a meeting on September 13, did that –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

That was our last meeting, I believe.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Okay. And, okay, notifications went out and so forth –

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

No, no, no, Eric, you were on that call, I believe.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Well, for goodness sakes. Thank you. All right, thank you. Sorry.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yup, yup. Any other comments before we hand it over to Keith to walk us through guiding principles? Okay.

Marjorie Rallins, DPM – Director, Measures Specifications, Standards and Informatics – American Medical Association

I think we're ready to go then.

Keith Boone – System Architect – GE Healthcare

Okay, so we can go ahead and just skip to the next slide. So I thought it would help if we just briefly understood that what we're looking for is an accepted or professed rule of action or conduct, in other words, what we're – what is going to help guide us in our selection process, so in determining what the process would be for identifying good standards. So, we can go ahead and go to the next slide. So one of the things that I did in this deck was I said like, this is basically something that's been done many, many times in the past, and so we should take a look at some of the existing good work. So if we start with the next slide, I'm just going to take you through some of the principles that we already have in this country for standards selection.

And one of these is actually described in something called OMB Circular A-119 and explaining the government's principles in using consensus based voluntary standards. And the idea here is that it's going to lower the cost to the government for developing or having standards be used and also the cost of goods secured and make it easier for the population to be able to comply with agency regulation. And in our particular case, that's especially important because we're talking about meaningful use regulation. Provide incentives and opportunities to establish those standards, so to incent organizations like HL7, IHE, and ASTM. OASIS, W3C, and IATF, all of the alphabet soup of standards organizations, to create standards that are going to help us achieve what we want to achieve.

I work for a US enterprise and I totally believe that standards do encourage long-term growth and promote efficiency. One of the things that it does is it makes it easy to focus on what's really important, which is not necessarily the stuff that you can standardize, but the stuff where you can really do some great innovation. And then furthering the policy of relying on the private sector to supply the government needs, which the government does very well, relying on the private sector to supply the – and they also provide some additional criteria defining what a voluntary consensus standard is, so if that's something that comes up as a question, there's already some national policy in and around that space.

Now one of the organizations we get on the next slide, that spends a lot of its time and effort on standards and standardization and even in developing some national standards, is the National Institute for Standards and Technology. They not too long ago, a couple of years ago, published something called the Framework and Roadmap for Smart Grid Interoperability and in that framework, they developed some guiding principles for identifying standards for implementation for use in that framework. What I've done here is I've taken those principles and I've de-smart-gridified it so that what you're actually looking at is the essential statements without any specific reference to Smart Grid or Smart Grid technology.

So standards that would be useful for implementation is well established and widely acknowledged as being important. It's open, stable and mature, so it's something that's been around, it hasn't changed much while it's been around and it was developed in a consensus process from an SDO. And when NIST uses the term consensus process, they're actually the ones who helped define what consensus process was in OMB A-119. Enables the mission of whatever program the standard is to be used for. And is expected to be used, right? There's going to be implementations and adoption of that particular standard. Is supported by a standards development organization or a user's group and ensures that that standard is regularly revised and improved to meet changing requirements and that there's a strategy for continued relevance. We wouldn't want to just create something, put it on a piece of paper, put it into a PDF or word document and then say, that's our national standard, we're going to go with it and walk away from it and no longer have people who are involved and encouraged to maintain and update that standard, in order to make sure it continues to be relevant, should there be any issues that are discovered with that. So it's not just a matter of having a standard, you actually have to have a maintenance process for it to truly be effective.

There's a preference for standards that are developed not just within the United States, but developed internationally wherever practical and that's because the international market is a broader, bigger market to this country. And so if what we're doing is using standards that have been adopted internationally, the selection of products that we have to be able to use those standards is much broader and wider. Whereas if we go down the path where we're using just simply national standards, essentially what's going to happen is that we're going to be limited to the selection of products and goods that are maybe manufactured in this country or manufactured specifically for this country.

Is integrated and harmonized or has a plan to do so, with complimenting standards across the utility enterprise, so that's where I forgot to drop the utility, but across the enterprise, through the use of an industry architecture that documents key points of interoperability and interfaces. So this brings up a point that we're also going to see later in this deck, which is, that it's important that your standard be able to work, but not just by itself, but also with other standards. When I teach people about standards, I tell them standards are like potato chips, you can't have just one. If you are viewing this on the web today, you're using a stack of about 20 standards to be able to see what's on this screen, and there's probably another 20 that went into being able to view the display and do the documentation and hear the audio that you're listening to.

It's going to, by doing so, enable framework characteristics of the program. In other words, the framework characteristics, the idea that there's actually an architecture associated with the programs, there's a plan for how all these pieces are going to work together. And addresses or is likely to address specific program requirements identified through stakeholder engagement. So, it's not useful to identify that we're going to use a particular standard if it's not even something that's relevant to what we're doing. Why would we select a particular standard for, I don't know, maybe doing mining in healthcare? It's not relevant to us, so we want to make sure that the standards that we're looking at are actually relevant to the stakeholders and do so by talking to the stakeholders and getting their feedback.

And is applicable to the particular set of priorities. And so, I think everybody here has probably heard the meaningful use priorities a gazillion times and if they hear the phrase Triple Aim one more time, it's just going to be one more time and a small drop in a big bucket of water in terms of the number of times that they hear the priorities of meaningful use. But the point about the standards is that they're actually significantly enabling those particular priorities. So on to the next slide.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Keith, this is Danny. Could you just give another example for, on the prior slide, of – about the framework piece?

Keith Boone – System Architect – GE Healthcare

So the idea of the framework is that the standard fits into an overall architecture of other standards and technologies that are all going to work together. So, the example that I've given was the use of the web where you have IT and then their protocol, TCP, transport control protocol, HTTP, hypertext transport protocol, HTTPS, which is the secure form of that, which is actually a combination of HTTP and TOS. And all of these things fit together and are designed to fit together in a framework where there's been some planning and thinking about how of all these pieces need to coordinate.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Got it, thanks.

Keith Boone – System Architect – GE Healthcare

Okay. So, I'm going to bring back some ancient ONC history and talk to you briefly about a more than 20 page document that elaborates on criteria that ANSI HITSP used for what it called its Tier 2 Readiness Criteria. So, the tier 2 readiness criterion ANSI HITSP, just to give you a little bit of history, was the process by which HITSP identified a number of different standards that passed its tier 1 sort of sniff test. And then we spent many months looking at the standards and evaluating whether they were suitable or the appropriate kind of use for the business criteria associated with the use case, whether they'd be compatible with the other existing standards that had already been adopted, that had been approved, were widely used. Readily available, which is not the same as freely available; it just said readily available, technology neutral and supports uniformity while demonstrating flexibility and having international usage.

This is sort of like a great big grab-bag bucket of all of the things that would be good to select for a standard. But the idea is that it's proved, it's widely used, it's readily available, and readily available I can buy it, I can find it on line in implementations, I can get it from open-source, essentially, it's available. It can be used, it's ready to be used, people are using it. Supporting uniformity, I mean, that's really what a standard is about is ensuring that there's a uniform way to do things. Demonstrating flexibility is something else that you'll also see and that is that the standard is able to adapt to a particular use. So when you get to that TCP step that I'm talking about, there's a particular protocol that was used to communicate with terminals, and that was the Telnet protocol. And all that simply did was allowed you to transmit a text string, probably a line terminated text string over to another device and then get some information back from the computer at the other end, and thus you could have a conversation via a terminal, you could actually – it's your command line interface to the computer.

Now that Telnet interface, that was essentially the basics of TTP with just a little bit added to that. Telnet is something that developers use today when they actually want to text a website and they want to actually see what's going on behind it or underneath, so when they want to get to a mail server and issue commands to it. Because that is what things like SMTP and HTTP are built on top of, they're basically built on top of Telnet; nobody ever thought we'd be using Telnet for file transfers, that's essentially what FTP does is it provides an additional layer over top of that, provides that flexibility. The other issue about flexibility is that you can't expect to understand every possible use of the stan – that somebody's going to put to a particular standard. So the idea that a USB cable is something that you used to connect up an electronic device to a computer was something that was well understood. But now there are little fans that you buy that all they do is draw power from that USB cable and they blow cold air over you or – little dogs that wag their tail at you every now and then that look stupid. And so this is the idea that you have some flexibility about how the standards could be used, even though there was never any intention to necessarily make USB a way to simply recharge as opposed to have your phone actually connect to your computer.

The other parts of the Readiness Criteria were identifying preferred standards development organizations. And you'll see that they specifically requested that the organization in the process meet selected criteria including balance, transparency, developer due process, stewardship and there are several others. Those first five or so on the list, if you actually go and look at what Circular A-119 uses to describe a standards development organization, you will see those same terms in that same order. In the Readiness Criteria, there was also a section on data element usage and where the data elements harmonized with existing data elements in other standards. And so as we're talking about some of this going forward, you'll see where there could be some issues if the data elements don't all have the same meaning or don't quite line up or map.

The real point about standards, the first point made in Circular A-119 was to reduce cost and the (indiscernible). Okay? And in the HITSP Tier 2 Readiness Criteria, one of the things was the fact that there would be lower expected total costs and that there would be ease of implementation. Now they went through a rather lengthy process – we went through a rather lengthy process in HITSP when we were grading standards and we had lovely spreadsheets, we did all sorts of magic things with numbers. The numbers that were entered on the spreadsheet in HITSP really weren't an overall grade, they were a gut check and so you would be able to relatively quickly and easily, by looking at the numbers that you'd produced, in consensus make a decision. And a lot of times the decisions that needed to be made were very, very obvious because you basically boiled everything that's on this slide down to a few short symbols in a spreadsheet.

We'll go ahead and go to the next slide. So another organization that I work with, with integrating the healthcare enterprise, and they have two places where they're dealing with standards selection. And that is in their – specifically in standards selection process that we use in IHE meetings, to determine what standards we're actually going to use to develop a profile An IHE profile is simply a specification that collects a number of standards together to solve a use case. And these are unwritten guidelines that are basically something that you learn as you become a member of IHE and you being involved in the committees. I've been involved in IHE now for a decade and was co-chair of one of the committees for eight years. So the sort of unwritten rules, and as I look at this – as I was creating this slide, I said, we really ought to write these down in IHE, so I'm going to bring that up next week when I'm at an IHE meeting or in two weeks when I'm at an IHE meeting.

One of them was the publication status, is this something that has been declared by a standards development as being ready for use in some way, is it in a final approve status? Is it in a draft-approved status? And for standards selection and profile development, it's also permissible to use something that is currently under development. But when you get to the case of, okay, we're done with this and we're ready to publish it, it won't get published until standards that it relies on are in some sort of final – is the standard suitable for the use case? Right, it would be very unlikely that for communicating text these days, that we'd choose a standard such as – it's simply not suitable. Does it align with the existing work? And so you see again that IHE, HITSP and NIST are all talking about the same thing; does it fit into our framework? Does it fit into our architecture? Are people using it, has it been deployed? Is it widely deployed? And then another issue that often crops up is are there any encumbrances? Does it require you to use or obtain access to a patent that would be difficult to obtain, or are there other barriers to use?

IHE does have publication requirements for its profiles, which are going to final text, which is an approved, published state in IHE, which is that the material should have been tested in two regions. IHE does testing internationally three or four times a year tests – testing in North America, there's testing in Europe, and then testing in – often in the Asia Pacific and I think coming soon we'll start to see testing starting up in the Middle East. Have all of the actors necessary to the function of the profile been tested? So has everything been tested, are we missing a piece? Do we have more than one implementation? And this is actually a criterion that several standards organizations have whereby there must be more than one implementation of the standard. So if you look at I believe either W3C requirements or OASIS requirements, they have requirements; there must be implementation in existence before the standard actually goes to its final done state.

Are there software tools for testing available? Can you verify that the software that's actually implementing the standard complies with all of the (indiscernible)? And I think obviously, has it been implemented? Can you buy it? And they're sort of two sides of the same question, it's one thing to say, well yeah, it's been implemented, and we've seen a bunch of people actually use it, but if it's not commercially available, then it's likely that it's probably not going to be all that viable. And have all of the issues been resolved, not just in the IHE profile itself, but also in the underlying standards, which IHE uses. So, go to the next slide.

So I also grabbed a lot of input from others. I reached out not just to the HL7 community in clinical quality improvement and structured documents and clinical decision support, where there's a lot of activity going on in quality there, but also to the IHE quality research in public health domain where my company is a member. And through a variety of other individuals who are involved in either clinical quality measurement or clinical decision support implementations, and some of those were from – healthcare and most of them were actually from a variety of different places. As mentioned at the beginning of the presentation, the Clinical Quality Improvement Workgroup of HL7 devoted agenda time to brainstorm a list, and you'll see that list on subsequent slides. And then I also had, as I said, I posted it on my blog and several people fed me input via email. Go to the next slide.

Now the input that I got from these other organizations and from HL7 was typically much more specific to the ask, in terms of clinical quality measurement standards, some of the material I've been showing. HL7, we did a bit of a – about 15 minutes worth of brainstorming as to what would be the important issues. And essentially all I did was stand up in the front of the room and write things down on the flipchart and what you see to the left is the words that actually appear on that flipchart, which I have a picture of on the slide. So is it easy to implement? Can it be easily used and does it have understandability? And by understandability, I think after somebody said that, oh yeah, it's got to be explainable to MDs.

There was a particular comment in there about over the wire sparcity and that specifically the issue was, does it use the minimum necessary – or does it require the minimum amount necessary to communicate the piece of information, or is it very verbose and dense? And that particular comment has to do with some of the verbosity and density of the HL7 version 3 family of standards, of which TDA is one and CCDA by virtue of being a member of that, also has some of that (indiscernible). Does it support graceful extensibility? Is there a way where you can say, well, they didn't really think about a way to do this, but we need to do this, is there a way that we can, in the same package, communicate this particular piece of information without breaking the standard?

One of my favorites, is it using existing technologies? Is it something I can build today, I can basically piece a bunch of things together and make it work or is this something I have to code from scratch? One of the things that I heard quite a bit in this discussion with many and various people was the phrase "stop reinventing the wheel." And this goes back to the concern that for many, there is a sense that in some cases, the standards that we have are good enough. So let's make sure that when we're doing something, we're not doing it just to make things a little bit better. I'm sure everybody has seen by now the XKCD cartoon about we have 14 standards, no that's way too many, we've got to create one to make them all better. And the new situation is, now we have 15 standards, we have to stop doing that.

We want to support reusability and reusability can be reusability of information models, reusability can be reuse of other standards that are part of the architecture or the framework. It can be reusability of other software and other code that can be used to support the particular program requirements. This was one that – this next one, don't adopt untested was one that I heard strongly, and actually, this one there were a lot of head nodding when the person who said don't adopt it untested, in the room. And the idea here is, don't take the latest and greatest and best thing without doing some testing first because it's in the testing where you're going to find out that something doesn't quite work. And it's a lot cheaper to do some testing first than it is to have everybody run down the path of implementing and then they wind up being your test subjects. It's why they say, never get a dot 0 version of any software product, always wait for the dot 1. Make sure you pilot test the work in a live environment. And what that means some – we had some emphasis from the commenter on that one, was that this isn't just you tested it, it works, you did it in sort of an academic setting where all of the inputs were perfect and all of the data was perfect. No, you really used it, okay.

We can go ahead and go to the next slide. I spoke with a number of implementers one on one and actually had a lot of good discussions. One of the key points in a lot of those conversations that came out was, make sure your information models are aligned. And two things that came up over and over again, in terms of quality, was the quality data model is hard to use for clinical document architecture, the two standards are not aligned. When they talk about a procedure for this, it doesn't actually map up to the thing that's called a procedure in the CCDA standards. Sometimes it's a procedure, sometimes it's an act, why don't those two things mean the same thing, why do I have to deal with a cognitive load of jumping from what one standard calls it to what another standard calls it.

The other issue that came up was the mismatch between value sets that appear in meaningful use and value sets that appear in clinical quality measures. And the first place where many people found this was in value sets for tobacco use and the various and sundry issues that they had with trying to align the values they needed to apply the quality measures or smoking in meaningful use, which is actually reflected as a different value set regarding tobacco use – in the quality measures. Smoking is simply one form of tobacco use; there are many other forms of tobacco use.

I heard not just once, but several times, don't reinvent, and I think somebody else said, wheels are round. Support existing rule platforms, so in the context of CDS, often we're talking about rules and there are a number of different existing rule platforms. I'm principally a JAVA developer and I was speaking to another JAVA developer on this particular topic and he was saying, Drools, everybody's using Drools for doing their rules. Now that happens to be a platform specific rule language, it's something that could be integrated, but make sure you actually do support the existing platforms. And there are ways that you could say, well, this standard will support the use of Drools by translation of the standard into a particular (indiscernible) input.

Come out of the cloud, get out of that ivory tower, come down here and see what we're actually doing in the real world, especially in the context of clinical decision support. There was a sense that – amongst developers that the work that was being done was very, very academic and was trying to isolate and get to every last trying point and that while doing so, making it very, very difficult to do something very simple. And then, it needs to be tested before it's named, and that just sort of reiterates what we've seen before on the feedback that I got from not just the Clinical Quality Information Workgroup. But there were members present from Structured Documents who developed the HQMF specifications and also members of the Clinical Decision Support Workgroup, who were also present, provided their feedback on that previous thought. So again, it needs to be tested. We can go to the next slide.

So, I got this input from a dumb family doc, I won't tell you his name (indiscernible). But basically what he told me is, he says, what I really want to see is that the models are aligned at the core semantic level and that that is the first and most important step. The idea that we have the same conceptual data model and then maybe a more detailed data model that's used for things like clinical decision support and quality measurement. Because when clinical decision support says if the patient is in this situation, perform this action, the quality measure says, how many people did you perform this action, for whom they were in this situation and so you want to have that harmony in the logical inference. The logic, according to him, is nearly the same and I would say it's identical, and ideally both are framed from this same building block. So again, that sense that the pieces that you're building these things out of are similar. We go to the next slide.

This was some input that actually came to me from Eric Rose and he said, we did some work last year about optimal characteristics of CQMs. And so there's actually a slide deck from July 25 of last year on the Federal Advisory Committee site, and you can actually look at that deck. And in there, the optimal characteristics: usability, feasibility, accuracy and use of standards terminology. In other words, use of other standards. So thanks to Eric for resurfacing that. We go to the next slide.

So, I tried very hard to reach out to a number of different groups, but I couldn't turn down the opportunity to put in my own plugs for what I thought was important, so this is my list. And my first and foremost item is the standards that you're looking at should fit into your architecture. And the question that that raises – I think that should be raised, not just for clinical quality, but for all of what we're trying to do in the standards (indiscernible), what is the architecture for Meaningful Use? Because if you don't plan an architecture, it doesn't matter (indiscernible) around what you do. So we need to make sure that we're in control over that architecture.

The standards should be aligned around a common data model. We should all know what we're talking about and we should all be talking about it in the same way. It's a constant source of frustration to me that when we talk about, well what's the best way to talk about problems and be able to do work on things that the patients are suffering, we talk about problems and we use a reference vocabulary called SNOMED to deal with problems and then we get billed for ICD codes. It would be very, very good if we had some sort of common data model around which we're discussing things so that when we call it this over here, and we look at something with the same name over there, we know what we're talking about. If it's a procedure over here, it's a procedure over there, not an act.

And if you have to go from one standard to another, the translation should be obvious and not ambiguous, you shouldn't have two ways to map. I mean, sometimes you're going to have to map and we have to understand that there are going to be cases where standards don't fully map out and talk to each other. There are things that you would do in a declarative representation of a quality measure that you might not do in pattern action rules in clinical decision support. But, you ought to be able to clearly and transparently go from maybe a decision support rule that says, if the patient suffers that, then do this to what I call almost the intrinsic quality measure of for how many people did we do that for patients who suffered from this? And then this is one, I think I did some reading where this popped up, a value set should be able to be separately maintained and aligned. So the standard itself should be one thing and some of the terminology that's associated with the standard should be able to be something else and be able to be separately maintained so you won't have to update the whole standard to add a new value. And this is something that HL7 has done in its version 3 standard. Go to the next slide.

So, before I finish up on some of this, there are some important activities that are going on in the standards space that are related to clinical quality and the particular question that's being asked of us of what's the right criteria under which to evaluate it? How should we evaluate it and what's going to make a good standard? And this actually gets to one of the particular criteria that HITSP had used in its selection is, how responsive is the standards organization to, in this particular case it was the needs of HITSP; in our particular case it's the needs of the Meaningful Use Program, in being able to support that work? And so here's a case where you have Health Level 7 is actually developing a collection of standards, one of them being common metadata information models. This is a conceptual model that describes the kinds of metadata that show up in documents for quality reporting, documents for computing a quality measure, documents for supporting CDS intervention, documents supporting an order set and documents supporting definition of a template for capturing information.

The – what's called the CQI Domain Analysis Model or CQI-DAM is yet another conceptual model and it's also got another name, I think it's CQI Information Model, and I'm sure that because I pulled these names out of the project scope statements and not the most current active ballots, that these may have morphed yet again. But this is another conceptual model, it is really a very high-level description of HL7's Clinical Statement Model. Now, every standards developer at HL7 knows what the Clinical Statement Model is and they all have the same conceptual model in their head, right, but we don't know because we never wrote it down, it's actually lore. It's very well understood lore, it's very easy to go back into all of the standards and look, and I've done several studies where I've sort of traced the history of the conceptual – of the Clinical Statement Model through a variety of different efforts. But we don't have it written down, so we're writing it down.

And then the other piece that's happening is the Expression Language Functional Model. How do we compute the thing? We've got all of this data, now we need to compute with it, we need to ask questions about it, we need to sum it, we need to average it, we need to computer a correlation across it. Okay, so how do we do that in some sort of expression language and what should that expression language support? And again, a conceptual model and I think we all have in our heads a model of what it means to compute with this. But if you don't write it down, you can't really compare two things and say, well are they doing the same thing or is there actually a difference here?

And then finally, Integrating the Healthcare Enterprise in two weeks is going to be discussing again work on a data access framework whitepaper and that whitepaper is actually going to be taking advantage of some of the HL7 work that's going on. And is going to be looking at, how does some of the data access standards actually align with and work with some of the existing IHE efforts and some of the national efforts that are already here in the US, like the Direct Project. So these – all of these activities are working very, very hard to get material out by quarter one of next year, even though this is a very tight deadline, because we keep hearing that meaningful use is coming, meaningful use is coming and that we have to actually have this stuff done. And I say we, this is the participatory we, I am involved in every single one of these projects, I'm actually going to be the editor for two of them, one in HL7 and one in IHE, and we're working alongside ONC – some of this work.

So it's important to know not just about the criteria for standard selection, but to also understand the landscape that you have to choose from. So if you're out shopping for transportation, and you're offered a skateboard and a bicycle, you might think the bicycle better, you might think the skateboard's better, you might still have to get from Boston to DC and if you didn't know anything about cars and trains, you might think you had the best bicycle in the world, right? If you don't know what's out there, it – you're not – whatever selection criteria you apply is going to pick the wrong thing. Go to the next slide.

Now I've talked a lot about, in this presentation, about architecture and you've heard the word framework show up and you've seen the people who commented on making sure that it all fits together and it's all harmonized. The activities that HL7 is engaged in came out of an application of something that HL7 calls their Services Aware Interoperability Framework. And they've been trying and playing around with this for years, trying to figure out how to roll it out to members. We actually had three workgroup together in the room trying to figure out, how can we address the disparities between representations in Healthy e- Decisions and in HQMF and in CCDA, QRDA and QDM? And what we did was, we said well, there's stuff in those standards that really talks about specific business requirements.

There's stuff in those standards that talk about conceptual information models. There's stuff that talks about how you compete with – and how systems are supposed to behave, and how expressions are supposed to be evaluated. And then there's stuff really that's just about technology, engineering and that's all at a high conceptual level. You're not getting down into a very detailed ERD diagram or UML diagram with types, but it has classes and all of this stuff. You're really just starting to establish kind of – so you talk about procedure, what a procedure is.

And then we talk about platform independent level which is where you start to get into that deeper level where you might get into detailed UML diagramming or you might talk about interaction patterns, you might talk about kinds of existing models or libraries that are out there that you can just simply use. Or something they call intended transparencies. The transparency is something you can see through, we also call it hiding in another way. The idea is you're not actually supposed to see the thing that is transparent, so there are lots of things that you might want to make transparent in an implementation such as location, such as, so where the thing is that you're actually interacting with or such as information model. You have ways of interacting with the thing and that thing has an information model, but you don't care about what the information model is because you have a way to interact with it that's completely independent of the information model.

And then you get down to what you actually have to do to implement all of the detail, and that's where standards can actually make different choices and produce different result, that's when you decide that well, I'm going to build an operating system, that's the conceptual level. I'm going to write it using C, that might be considered to be a platform independent level and I'm going to implement it on a – I'm going to implement it on PC, I'm going to implement it on a Macintosh. And it could be the same operating system with the same commands and yet you're going to find that it's got different behaviors because of the hardware, maybe the graphics are prettier on the Macintosh.

The notion here is that you can replace things at a variety of different levels, so we replaced hardware at the platform specific level and got different results. But the thing that we have is actually UNIX or perhaps I should use a standard name like – for some of what that is. So this provided for us a framework around which we could write the names of the different standards on little stickies and put them up on a great big piece of paper that was drawn with this grid on it and identify where all of the different things talked about something. And then we talked about, well, where do we agree with these standards? Where does HeD and HQMF and QRDA and CCDA agree?

And the conclusion that we came to was, we agree at the conceptual model. And we actually had a room full of standards experts who said, we all agree at the conceptual model – in the clinical statement model or the information model? We're viewing the same behaviors for the behavioral model for the things that we need to deal with for expressions. And I said, well where is that, and we didn't know because it was never written down. So that's what HL7 is doing right now is writing that down. This is an architectural framework and it's actually showing us all of the different places where we can have different blocks that can be compatible with each other or we can take one of those blocks out and replace it with one that's a similar size that maybe has a different feature and it's able to support that. So if you'll go to the next slide and then I'll be finished.

So to summarize, we've got consistent principles to draw from, we simply need to adopt them. Testing, testing, testing. And as I said, architecture is important and lastly, timing too is important. We need to give some of these organizations that are working on this stuff time to actually get it right. So, that's the end and –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Thank you Keith. And just looking at our agenda folks, we have another 20 minutes for discussion in where we take these recommendations and how we sort of weave these into our process. Unfortunately, Marjorie had to step off the call early. So, Keith, how do we, and I open this up to the group, how do we take this work that has come before us and distill it down into a workable checklist that we could potentially use as a group, when we are going through our evaluations of the different standards?

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

Danny, this is Floyd.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Hey Floyd.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

May I make a comment?

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Please.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

So I think that's the next step. It was a very nice presentation, very comprehensive about history and what has been discussed. I think what might help is in our last call there were actually two types of principles that were discussed and this is one of them, and that's principles for the standards we choose.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Um hmm.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

There might also be principles of governance to manage the process, and that may not be on the table today, or even in the future, but I think we need to just differentiate, these are principles for the standards that we would recommend and not specifically the governance of the process to use them. It may help to go back to the slide that listed the specific elements for the principles and see what folks have to say.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Excellent. Floyd, do you remember what slide that was off hand?

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

Sorry, I don't remember the number. Keith might.

Keith Boone – System Architect – GE Healthcare

So which – can

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

The principles –

Keith Boone – System Architect – GE Healthcare

So Floyd, are you talking about the –

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

Sorry –

Keith Boone – System Architect – GE Healthcare

Was it the readiness criteria slide or the framework and adopt – I'm sorry, the readiness criteria or – there were several slides that listed out some principles –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Try slide number 5, it's this slide, but it's labeled 4 in the bottom right-hand corner? The NIST roadmap? That one there, yeah.

Galen Murdock – Veracity Solutions

This is Galen, this is the one that resonated the most with me as well.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Others or Floyd –

M

I liked this –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

– is this what you were talking about?

M

Yeah, the NIST roadmap, sorry.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

This is fine, I was actually looking for the feedback he had from the various –

Keith Boone – System Architect – GE Healthcare

Oh, the HL7 feedback. So that starts after this and that goes at slide – you've got four slides down from here. Yeah, this was the HL7 feedback.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum

Many of these kinds –

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

– this – align together, but I think it's a place to start.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum

This is Rosemary and many of these kind of could be mapped to what was on that prior slide, I think, slide 5.

Keith Boone – System Architect – GE Healthcare

I think that you're correct, I mean, one of the things that I was trying to bring out in all of this is that we have been doing this criteria work for years, we've done it, NIST has done it. It's been done in ANSI. And really, coming to a good set of criteria is something that – there's a lot of history behind it. I have to tell you that NIST was, I'm certain, very involved in helping ANSI with the criteria that it evolved. They've been doing work in this space since their inception, it is the National Institute of Standards and Technology. And I've – I saw this in the Smart Grid Interoperability work, but I've seen this in so much of their other work. And I think it would be useful to maybe just go back through and I'm willing to take these materials and consolidate them down to a slide of about this density, or maybe two slides, as being a proposal for what we could go forward with.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

This is Eric, I think that kind of straw man is a great path forward. There was one thing that I didn't see on here, Keith, and I'm wondering if it might be considered applicable to standards for clinical quality measures. Namely – the specific issue with clinical quality measures is that often the logic for a CQM and the logic for a clinical decision support function are largely the same, or would be a desirable outcome –

Keith Boone – System Architect – GE Healthcare

Oh, so, that gets to the dumb doc.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Well –

Keith Boone – System Architect – GE Healthcare

If you go to the dumb doc slide –

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Yeah, I don't – I'm not sure if I saw it on the dumb doc slide, but the general principle there would be just reusable across multiple use cases.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yeah.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Or –

Keith Boone – System Architect – GE Healthcare

It says right there, the logic – so, Jacob Reider, who identified himself as a dumb – I'm just a dumb family doc, but the logic is nearly the same, and ideally both are framed from the same building block. And I absolutely agree.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Okay, just – yeah, I'm looking now at that slide, it just doesn't say, both what's, so – and I think that the issue is simply use cases. So, applicability across multiple use cases is a desideratum.

Keith Boone – System Architect – GE Healthcare

Yes.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Because it reduces – maintainability. And may I ask just an informational question about the current state? As Keith was talking, I was looking through the 2014 certification criteria and I had – I was under the mistaken impression that it actually required HQMF, it doesn't appear to, it appears to require QRDA for import and export. But as far as the actual standard, it refers to clinical quality measure by measure data and I wasn't sure what – if that's a standard or if that's a way of saying just sort of the ad hoc description of quality measure – so I just want to –

Keith Boone – System Architect – GE Healthcare

The clinical quality measure data that they were referring to in meaningful use in that particular case was essentially the data set established by the value sets in the quality measures that are found in meaningful use. And part of the reason that they went that route was because they were missing conceptual information model from which they could actually identify and say, this is the data set.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

So currently there is no – standard required for expressing clinical quality measures for meaningful use?

Keith Boone – System Architect – GE Healthcare

So, there is no standard that's required for expressing the quality measures for meaningful use; however, HQMF released one, use the standard that our national program is using to express and publish the clinical quality measures that are required for meaningful use. So they're using release 1 and they're transitioning to release 2 and HL7 is in the process of actually getting that published, but at the same time, we were trying to figure out how to align all of these pieces. So HL7 hadn't published HQMF release 2 because there was still this issue of the disconnect with HeD. So, while HQMF isn't named in Meaningful Use Stage 2, it is certainly a standard that lots of people don't know it, but is already being used to deliver the clinical quality measure representations that are required for Meaningful Use Stage 2, and Stage 1 as well.

Julia Skapik, MD, MPH – Office of the National Coordinator

And this is Julia Skapik from ONC. HQMF is also the way the Cypress imports the quality measurement information, so that they can do certification testing, and they're using R1.

Keith Boone – System Architect – GE Healthcare

Right.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Okay, thanks. So –

Keith Boone – System Architect – GE Healthcare

And the HQMF is linked up with QRDA as a computation site.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Yeah, so, I mean, it could – it's – I mean, I would think that ultimately our – whatever recommendations we give ought to be objective and not based on what's – not based exclus – unduly on what's currently in use, but we can't ignore what's currently in use.

Keith Boone – System Architect – GE Healthcare

Well this is the idea that you – if you don't develop an architecture, one is formed for you.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Yeah.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

This is Danny. I had a couple of comments on slide number 9, the HL7 Clinical Quality Workgroup.

Keith Boone – System Architect – GE Healthcare

Yes.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

So, Keith, as you're going to be taking some of these thoughts and consolidating them a little bit, both of these slides resonate to me. However, the first one resonates a little bit more closely than this one and let me explain why. I want to hear other people's feedback to this. So, someone argued that the mp3 standard is a fairly good standard and has fairly good adoption. I can't explain it, my mom, not that she's not an intelligent person, and it would be very difficult for her to implement it, right? So, how do – if – using that same sort of rationale, if we were to look at HQMF R1 or even R2, it's not necessarily easy to implement, it's not necessarily easy to understand looking at the guts of it. It's not necessarily easy to explain the details. If it's told in the story, hey mom, the mp3 you put it in your iPod and it plays music, sure, I understand it. But if he have to get into the bits and bytes of it, that isn't going to fly. So, how do we sort of align NIST with the other slide.

Keith Boone – System Architect – GE Healthcare

Okay, so let me tell you a little bit about the understandability piece here.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yeah.

Keith Boone – System Architect – GE Healthcare

So, I've been teaching CDA to people for eight years and I know the amount of effort that it actually takes to teach CDA for somebody to become productive with it. I have seen people pick up HL7 FHIR in days and start doing something useful with it, whereas really for CDA, it takes weeks.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Um hmm.

Keith Boone – System Architect – GE Healthcare

It's an order of magnitude more time. So the idea of ease of use and understandability is something that sort of fits also with sparsity. Is it something that I can explain to a developer and the value of having something that I can explain to a developer that they can then implement correctly –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Um hmm.

Keith Boone – System Architect – GE Healthcare

– is that we get a lot more correct implementable implementations and a lot less whining and complaining, however justified it is –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Right.

Keith Boone – System Architect – GE Healthcare

– from industry of, oh, that's too hard, oh that costs so much for us to do. And I'm speaking as a member of that industry, I understand the pain of doing that. So that's part of the understandability and the next piece there, explainable to MDs, that's in the context of the clinical decision support intervention –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Got it. Got it.

Keith Boone – System Architect – GE Healthcare

– where you're actually showing the MD what the intervention looks like and they have to be able to make sense of it, right? And so that was one of the key goals of Arden, and I can tell you, if you've ever looked at any Arden clinical decision support implementation that does anything real, clinicians are no more readily able to understand it than they are to understand something written in XML within CDA. So, I don't buy in necessarily into that one, but –

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yeah.

Keith Boone – System Architect – GE Healthcare

Yeah.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum

This is Rosemary. In terms of understanding it, we're talking about clinicians and developers, but going back to OMB recommendations related to cost, it needs to – the value proposition needs to be understandable at all levels and the implementations are funded by fee levels within the organization and that's always a significant challenge, number one, that's my first comment. And the second comment is slide 4 doesn't necessarily address some of the financial considerations from slide 3. One could assume that significant implementations means its cost effective, but implementation cost at all levels for the standards, I don't know how to take that into consideration looking at slide 4, and certainly for the market to adopt it. And I don't know how to measure it, and one could say, well if it's implemented wide scale or in a significant fashion, then it's – the costs are somewhat absorbable by the market or you could say, because its mandated, they need to absorb it. But I think some analysis or consideration and – could be taken in this area to –

Keith Boone – System Architect – GE Healthcare

So, even HITSP in their 20-some odd page document never got to be able to readily address cost of implementation. And that's realistically a very hard thing to sort of put a value on because what you really have to rely on there is expert opinion and the challenge with expert opinion is that sometimes you also wind up with experts who have an ax to grind. And so they're going to tell you, well this is easy for me to implement and I'll tell you, CDA is very, very easy for me to implement because it's what I know.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum – Associate Professor Thomas Jefferson University School of Nursing

Yeah, and is – .

Keith Boone – System Architect – GE Healthcare

And if I were to compare it that to Open Air, I would say, no that's extremely difficult, because I don't know it. So it's something –

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum

Unless –

Keith Boone – System Architect – GE Healthcare

– that's hard and it's going to be, I think in some ways, subjective.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Rosemary, you were going to say?

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum – Associate Professor Thomas Jefferson University School of Nursing

Well, I was going to say, it is hard, but it does have a quantifiable and does have quantifiable attributes. And may be ways to address it would be to – and have some of the testing move more upstream in the process would be one way to at least identify some of the variables associated with cost and economics, because it's something we see, as you just stated Keith, you see it –

Keith Boone – System Architect – GE Healthcare

You can test for how much it costs to implement something, because you can put a bunch of skilled, experienced people in a room and you can say, go implement it. And you can actually measure what it takes and you can look at how much technology they had to apply to solve the problem and how much time it took. And that's something that in standards selection, we don't do, we don't take a test drive.

Rosemary Kennedy, BSN, MBA, PhD, FAAN – Vice President for Health Information Technology – National Quality Forum – Associate Professor Thomas Jefferson University School of Nursing

Yeah –

Keith Boone – System Architect – GE Healthcare

We don't actually say, let's – when you go out and buy a – it's sort of like buying a dishwasher. Oh, well I think this one's going to work. That's sort of what we're doing here is we're going out and buying dishwashers and we're trying to figure out which one's going to work the best, rather than taking it home and trying it out for a couple of days.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Well, it – this is Eric. I think it's really, really important, I think it probably was represented in some of Keith's slides, I think there were two bits there, one is the ease of implementation and another is ease of use. But I guess maybe a third is validity. And I think with clinical quality measurement, I think that's a really big open question. Being involved with a lot of healthcare organizations right now who are trying to get this to work for Stage 2 of Meaningful Use, there's a real open question as to whether the results of the clinical quality measures are truly going to reflect the processes of care that are going on, even with diligent user behavior to capture data. So, I think that one thing that we may want to include is proven validity to a gold standard, if we're talking about a measurement standard and call for studies to determine that. I mean, it wouldn't be – it would be expensive, but it's not infeasible to actually do manual chart reviews and see to what degree for a selected set of patients the CQM reflects what the full manual review of clinical care documentation –

Keith Boone – System Architect – GE Healthcare

So when you're talking about validity and you're talking about CQMs, you're talking about specific – a specific definition of a clinical quality measure – .

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Yes.

Keith Boone – System Architect – GE Healthcare

– and most of what I've been focused on here is really not about a specific quality measure, but standards to represent a quality measure. But much of what you have said, I think, can also be applied in ways to – ways that standards can be applied. If you took two or three pilot tests of different standards and said how well did this work? You could do some comparative analysis to see which ones maybe worked better and might be easier to use and were easier to implement. That might also just tell you a lot about the management of the organization that was setting out to implement them, so you have to very carefully do that and that too is, like you said, very expensive.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

Well actually –

Keith Boone – System Architect – GE Healthcare

There are some ways, I think, to address – maybe think about how you can address some of that and how you can say, let's do some comparative research on some of these pieces.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

This is Floyd with a comment. I think the last two comments actually were very insightful because when we look at quality measures, there's a multifactorial issue here. It's not just the standard, although the standard's part of it, but it's also what the standard was used to express and in some cases, it was used to express things that aren't standard in workflows, so they're hard to access. So it's not always the standard, but it's the governance of how the standard gets used that I think we need to address, if this is going to work, quality measures and decision support as well, it doesn't just lend itself to standards. I think the problem is, we're kind of close to the end of the call and this may take some more discussion.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Floyd, that's a wonderful segue. So, I want to hear some feedback from the group as far as agenda items for our next call, which is going to be November 7. One thing that – let me start the conversation, one thing that I want to have is as explicit as possible clarity from the chairs of the HIT Standards Committee as far as what are the specific questions that they need to have answered with regard to quality measurement, clinical decision support, defects and registries. Those are all sort of listed on our domains of interest that they're looking for feedback. So I want to hear the specific questions we need to take back to the group. So I will present that at our next meeting. And then it sounds like Keith, another follow up item was perhaps distilling some of this list, based on the groups feedback, into a checklist that we could potentially use to answer questions like, is HQMF – where are the gaps in HQMF R2? Do we need to have additional logic expression standardization? Does that need to align with HeD? I know that your framework doesn't sort of cover all of that, but can we use some of these guiding principles going forward?

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects This is Eric, I have two suggestions for the agenda. One is, I think we probably want to try to move pretty quickly to getting to consensus on what the desiderata or qualities of a good quality standard are. And I would propose that if Keith is willing to write up a straw man and circulate that by email, that we could have the majority of the discussion by email and that there's something approvable by the next meeting so that we're not – so that we don't have to do a lot of discussion at the next meeting.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System
Great.

Eric Rose, MD, FAAFP – Director of Clinical Terminology – Intelligent Medical Objects

The second suggestion is, if we are going to be likely looking at HQMF R2 as a candidate standard to analyze and poke holes in and so forth. I'm not sure I speak for the entire workgroup, but I sure don't know a whole lot about it at a deep level and having someone who's knowledgeable be able to give us a tutorial on it, to the degree that it's necessary to do so to evaluate it, might be a help.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Hi Eric, this is Michelle. We got a lot of interference when you were speaking, I'm sorry, maybe it had something to do with Halloween, but it sounded like there was a ghost in the background, so I don't know if maybe the mike was too close, so I apologize, others may have heard you, but it was a little bit hard to decipher.

Floyd Eisenberg, MD, MPH, FACP – Independent Consultant

Well, there's always a ghost on Halloween, but I think what I heard was, it would be – as a summary, it would be very helpful if Keith can prepare a list and circulate it through email so we could all evaluate and provide feedback to have a perhaps decision more quickly on the next call as one possibility. And also, a presentation on HQMF R2 for some of us who are not –

Galen Murdock – Veracity Solutions

This is Galen –

Keith Boone – System Architect – GE Healthcare

So I heard two action items for Keith. I was the principle modeler for HQMF R2, if Bob Dolin were on the call, I'd be calling on him and saying, Bob, can you take that one, because he's also been very involved in that particular effort. So, maybe Marjorie or Danny could reach out to Bob and ask if he'd be willing to take that on and I'll take the other one on. And if Bob's not able to do that, I can certainly do that.

Galen Murdock – Veracity Solutions

This is Galen speaking. I really appreciate what we've talked about today, I like the principles. I just have two additional comments, perhaps an action item. I think that in addition to general principles about standards that we as a group ask for consensus on, we should look at what additional, more specific standards might apply to efforts like CDS or others. And we might have, for example, a general set of principles and then a more specific set of guiding principles in these other areas that can more closely help build consensus and help harmonize these standards. It would – I don't know if we're prepared to have a set of those proposed, on which we can align next time or if that's a goal of the next meeting, but I have a sense that that's where we need to go.

My second comment is that if we're going to hear specifically about HQMF, I'd like to be better educated on HeD in the same conversation, so that I can myself form deeper opinions about the comparisons between the two. Is that necessary?

Keith Boone – System Architect – GE Healthcare

I think that that would be worthwhile and certainly there are a couple of people, I think Bryn Rhodes is probably the right person to have given a presentation on HeD, since he's one of the people who's very involved in its development. Yeah, and again, I'll send you his email.

Galen Murdock – Veracity Solutions

Actually, Bryn and I are well acquainted so I'd be happy to ask Bryn.

Keith Boone – System Architect – GE Healthcare

Okay.

Galen Murdock – Veracity Solutions

In fact, I was just chatting with him about his willingness to do so and he is. So, that would be great.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Great. Folks, I'm looking at the clock, it is indeed the bewitching hour. So if anyone has any other suggestions for agenda items for the next meeting, please email them to Marjorie and me. And then folks from ONC and Altarum, do we need to open up the line for public comment?

Public Comment

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

We do. Operator, can you please open the lines?

Ashley Griffin – Management Assistant – Altarum Institute

If you are on the phone and would like to make a public comment, please press *1 at this time. If you are listening via your computer speakers, you may dial 1-877-705-2976 and press *1 to be placed in the comment queue.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

If you're calling from another world, please give us a sign.

P. Jonathan White, MD – Agency for Healthcare Research & Quality

Hey, can you all hear me?

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Yes.

P. Jonathan White, MD – Agency for Healthcare Research & Quality

Okay. Hey everybody, this is Jon White from AHRQ. There's really not time to discuss this so I'll just put it out there and let you chew on it until the next meeting. Keith, my compliments, as always, an extraordinarily lucent discussion of standards and why we do them. One of the things embedded in there is the idea of an architecture, and actually you mentioned it when you said that if you don't think of an architecture, somebody's going to think of it for you. I'm not sure that we have a good enough handle on architecture, and by that I mean, a set of different software components and a common understanding of how they're going to get used and where they're going to get used and by whom they're going to get used. I'm not sure that we have that – our hands around that well enough either for quality measurement or decision support to really do the right job here. I think you can probably do a reasonable job, but I'm not sure that – having thought about this for a while, I'm not sure we've got enough to do the right job. So, like I said, probably not enough time for discussion, so I'll leave it at that. Thank you.

Ashley Griffin – Management Assistant – Altarum Institute

We have no further public comments.

Danny Rosenthal, MD, MSc, MPH – Director of Healthcare Intelligence – INOVA Health System

Thank you everybody and we will talk next Thursday. Have a safe Halloween.

Keith Boone – System Architect – GE Healthcare

Will do.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Thank you.