



**HIT Standards Committee
Implementation, Certification and Testing Workgroup
Final Transcript
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Presentation

Operator

All lines bridged with the public.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Thank you. Good afternoon, everyone. This is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Standards Committee's Implementation, Certification and Testing 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 meeting is being transcribed and recorded. Also, as a reminder, if you're following along via the webinar and you plan to make a public comment, we may show that during the public comment period at the end of today's meeting.

With that, I'll now take roll. Liz Johnson?

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

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, Liz. Andrey Ostrovsky?

Andrey Ostrovsky, MD – Chief Executive Officer – Care at Hand

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, Andrey. Brett Andriesen—

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

- of ONC—sorry, go ahead. Cris Ross? Danny Rosenthal? David Kates?

David Kates – Director of Interoperability – The Advisory Board Company

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, David. John Travis?

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

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, John. Kevin Brady? Kyle Meadors? Rick Moore? Sarah Corley?

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hey, Sarah. Steve Waldren?

Steven E. Waldren, MD, MS – Healthcare IT Strategist & Physician Informaticist – American Academy of Family Physicians

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, Steve. Udayan Mandavia? Zabrina Gonzaga?

Zabrina Gonzaga, MSN, RN, cPNP – Senior Nurse Informaticist – Lantana Consulting Group

Here.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Hi, Zabrina. And with that, I'll turn it back to you, Liz.

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

Thank you, and good morning, everyone, or good afternoon, wherever you may be. Today we're gonna finish up with our group one work and get into group two, which is just a vision of the comments that we're gonna eventually give back to the Senators group on the 20th of May.

Yesterday—I wanted to let the group know this—the chairs met and kind of talked through the comprehensiveness of what we're looking at and where we need to be focused, and so on and so forth.

And certainly that's an emphasis that, you know, that the ONC and others would like us to really repackage to where standards are not ready, and if they're not ready, is there an alternative, and if they're not ready, is there a timeline in which we think they would be ready?

So, as we continue to formulate our comments, recognizing that we're—you know, a very short, 12 days away from being presenting. And of course, there will be a June board meeting, too, where we can add additional comments, but they will not be part of the comment period, but I can certainly tell you that ONC has been very receptive in the past to still listening and hearing our comments.

After the meeting, I also communicated with John Halamka and a couple of others, because one of the things that I wanted to be sure that we, that they were aware of and that they were comfortable with was, we would continue to bring back some of what I would call the pragmatic or feet on the ground concerns, and recognizing that this is a Standards Committee and that, certainly, our primary focus should be on, are the standards ready and can we, do we have something we can work with? I also think we have a responsibility and have got an agreement to bring back what we kind of called in our past presentation sort of general comments that lead to, "Can we get this done? Can we get it done in a timeline?" and again, how would we get it done? Is there something we can suggest, in a positive way, that would assist in this getting done?"

I think there is clear understanding that there's a lot in these, in these NPRMs, and we have to not only make a decision on what the final rules look like, but then we have to actually, of course, either build it out or build the workflows to make what we already have work, or any variation of that. And can we can back and, you know, add context and depth to, you know, is the market ready beyond standards? Standards first, beyond standards—and what can we do to help them get ready, or would we strongly suggest that something be delayed or the timing be slightly different?

And I know that's a lot of information to take in. We really met for a fairly short time, and I thought it was very productive, and I did want the group to know that, although we're going to complete our work by the 19th, right, because _____ Michelle and Brett have told us we need to get done, because they want to keep us on track, but also we will have additional, one more additional meeting where we can do a little more commentary related to this topic.

And Michelle, is there anything you want to add to that? You were engaged in that conversation as well.

Michelle may be on mute.

Anyway, with that, again, for the benefit of those who weren't engaged in the workgroups we've been doing in the last few weeks, I can tell you this—the incredible amount of work done will be related to those comments; e-mails were going back and forth, even as late as today. So, thank you for your engagement and really the fact that we realize that everybody has jobs and yet this has been an incredible amount of attention paid to what I think is really critical information to get back to ONC. And with that, I'll turn it over to Brett, who will finish up the slides, and move to group two.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, so just quickly, we will run through some of these initial slides to give folks a sense for where we are in the timeline, so onto the next slide, please.

Here is kind of the general milestones list here, if we can move onto the next one, I think we can see our current membership list. Thanks to everyone who is actively engaged in this. Next slide.

So, just to give folks a sense, again, of a more detailed timeline, we have a couple more meetings to work through all of this content, and we will jump right into it, since we have seven different topics that we want to cover today. But, as a follow up from the last meeting, moving now to slide six, we had one more area of discussion from group one, this would be the ONC Health IT Certification program and Health IT model—or module, excuse me. Some comments that we got back from the group were the proposal to remove the automated numerator and denominator calculations. It doesn't apply to CQM reporting, as those reporting requirements are covered by different standards.

Regarding field surveillance, the deployed system ONC should clearly articulate what such a surveillance would entail some positive support for the fact that it recognizes deployed versions of the lab testing system, but those vary in performance from site to site. The variations are often the result of a site specific configuration. Alterations to the standard implementation should only require documentation if alterations affect the achievement of MU or other programs, and if ONC does not limit with specificity of what is meant by audit and/or requirement to document and report changes to that standard deployment of a lab testing system, there will most certainly be undue burden on vendors' sites, and that could threaten progress of MU and other programs, and then a final comment on expanding to other care settings and health IT is a sensible goal, but needs to be cognizant of the different business and technical requirements and incur baseline capabilities of the various different health care delivery entities.

So I don't know if anyone from group one wants to further expand or if other folks from the workgroup have additional comments.

David Kates – Director of Interoperability – The Advisory Board Company

So, this is Dave from workgroup one. No additional expansion. I'd certainly highlight the surveillance topic, which I know was a topic of some discussion with the group and raise that amongst the other—other points for the group, and then I have one final follow up comment. But anything from the broader group on the points raised, or on surveillance, specifically?

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

David, this is John. We might want to hold on some of the discussions, I think, raised by your fourth bullet, because they're very closely tied to some of the stuff we have in our, our group two report out on SED testing and on reporting version updates and things like that. We're actually gonna get into some very related material, and I thought we'd want to talk about that.

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, that was actually my—yeah, that was my closing comment is that our subgroup is gonna re-convene or convene for the first time on Monday, go through what we've provided, and why don't we just take into account the discussion that you're gonna lead, John—

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

Sure.

David Kates – Director of Interoperability – The Advisory Board Company

- and then we'll circle back to the broader group with refinements based on last week's meeting and this upcoming discussion.

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

Okay, and David, I don't know if you were planning to invite me to that, feel free. I think you—

David Kates – Director of Interoperability – The Advisory Board Company

I will do that. I think it's at noon Eastern on Monday, but I'll send out the invite to you and Cara as well. I'll send it to the broader group, to the extent that people can participate.

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

Okay. Yeah, so I'll turn it back over to Liz or John to proceed on the subgroup two topics.

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

Okay. I think—Brett, I think it sounds like you gotten a couple more comments, and we can keep moving; what do you think?

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, sounds good, yeah.

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

All right.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

If we keep moving at this pace, we should be [Laughter] good to go.

So, onto the next slide here, just so folks know, John Travis was the lead on this group here, and these are the different topics that John, Kyle, Steve, and Udayan provided comments on, so we will jump right into base EHR definitions on slide eight.

So, a number of good comments here, and I'll note that there are two sets of slides and we'll try to work through them pretty quickly, here. So, a summary of the comments here recommend explicitly including security criteria, referenced there in the base EHR scope as removal could cause confusion. It's premature to include UDI and the implantable device list to be included based on a number of observations, including market current state, implantable device information is most often recorded in surgical perioperative documentation and other systems and not directly first recorded within direct patient care EHR, so it might not be available. The current level of adoption for communicating UDI and implantable device information is not sufficient, available without redundant transcription, ability to make use of that manually transcribed data is problematic at best without specific guidance for how it should be captured. The issue of what to do about historic data, about device information that is still current but may be maintained in unstructured forms is not addressed. The purpose would be better served for ONC to focus on supporting reference implementations and pilots for proving out the use cases.

And then, onto the next slide, here, and we can jump back and forth between them as we work through the comments. Support the inclusion of application access to the common clinical data set for the provider to provider use case. ONC should note and define any prescriptive requirements for the architecture deployment of the application access for supporter provided access to that data set. ONC should support assurance to include strong privacy and security features for access requirements such as adequately ensuring that those requesting data are authenticated and trusted. Consumer access to the common clinical data set should be optional. The concern there is that, as proposed, the criterion may result in an emphasis on ingoing data requests rather than simply making it available to consumers.

Some elements proposed, like oxygen saturation, ABGs, EBIs, are not collected by all providers, depending on their practice specialties, so it should be required as part of that clinical data set. Include drug-drug and drug-allergy interaction checking for CPOE in the definition, and support the reference there as an equivalent alternative means to H1. Pros there are, it enables portability or modularity for paring without mandating or coupling of the two, and some cons, it would require more HISPs to adopt all protocols and would only work if HISP is aware of the EHR transport capabilities and can accommodate those, and then if the sender and receiver EHR supports, transfer protocols beyond those to which it is certified, if only one.

So, I will kick it back to John or others from the group to further expand, if necessary, and we can open up for workgroup discussion.

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

Yeah, Brett, this is John. Probably one more thing that we talked about a little bit and didn't include, but it's come more to light in subsequent conversation, in that it's either a question, and maybe also a suggestion, so the base EHR includes data portability, and it also includes the application—the accessibility to patient data through the API.

As I got to thinking about that, the portability of the C-CDA is very little different than the accessibility of data requirement when the full clinical and common clinical data set is requested. They both require you to produce the C-CDA, so I'm really beginning to be of the mind that, why do we have two criteria in the base EHR definition that really almost amount to the same thing of producing the full C-CDA, arguably, on demand or upon request. You know, so I raise a question of if there, I don't think there's much substance of difference between the two requirements, and I really wonder why we even need the two requirements.

So I'm thinking one of our recommendations here for the base EHR ought to be to consolidate B6 and G—it's G, help me, the accessibility—it's G7, I believe relative to the full common clinical data set and rolled into one. I think a lot more people would find utility out of the API than would out of portability. So I offer that as probably another comment that we would want to make.

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

And—and you will see a number of these comments come up when we discuss group three because there's overlap, so the unique device identifier was a topic of group three, and so you'll see a lot of these same comments there, and data portability was an area, also, for group three, and there certainly were excessive requirement under the data portability that we don't need to talk about today because

we'll talk about it when we tackle group three. But, suffice it to say that, across the workgroups, we do feel like there's some overreach and redundancy related to the capabilities of producing these C-CDAs.

Steven E. Waldren, MD, MS – Healthcare IT Strategist & Physician Informaticist – American Academy of Family Physicians

This is Steve. John, I have a quick question. I completely support the idea, and so your idea of removing any duplicative requirements. So, the portability versus the API, the question I have is, with the API, there's not a need to have a client to actually call the API to make the data portable. I wonder if the portability provides that. So that would be my only question or comment on your request to, to consolidate those. Does the [Cross talk] that client?

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

Yeah, the—yeah, so I think what maybe is something to step back and reflect on is the experience that we've had to date with the portability requirement as it is, because it's, at least in substance, very similar to what was in 2014 certification. I think, for the vendors on the, on the phone—Sarah can reflect as well, and Udayan—I don't think we've found that people used it that, they didn't use it as a means to go from one legacy system to a, to a new EHR. I don't know that they saw it as a means of providing portability of data for other purposes, and—but when you really kind of look at the use case for a portable record, the API request process seems to be more tuned to the need of an actual use case where somebody does want the data, and the record needs to be patient, and the consumer access aspect of it is serviced, arguably, both by the consumer option under the API as well as the current download and transmit capabilities through the portal.

So we're really kinda left wondering what portability—portability, let's be honest, is not gonna accomplish supporting a data conversion to go from a legacy system to a new system. That—that's done really based on the circumstances at hand. It may not be easy, it may not—but it, but the data set here is hardly comprehensive to what, really, would be needed to port a production system database. So that's kind of the thinking behind that one.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

In some ways—this is Sarah—in some ways, I think it provides a false impression that you could use this functionality, as John said, to, to port your system from one vendor to another. Where, in reality, those of us that have been involved in that know that that's not the case. When you're doing that, generally, you know, the most important area most people are concerned about is porting over the financial data in their accounts receivable, which is generally always custom work, and is not covered by—is not handled by the EHR, it's handled by a practice management system. And then, you know, there's porting of text documents and, and other, you know, EKG images. There's a whole lot of other things that are generally part of the movement from one vendor to another, and we do have this whole capability of downloading the C-CDA and transmitting it through the patient portal as well as through other mechanisms.

So we would just want to encourage that we look and make sure that we're not requiring redundant testing and redundant development, and particularly in the, when we get to the data portability, you know, the requirement to generate these bulk things based on events such as dates, you know, that's not something you would do for data portability, and if the intention there was something for an HIE, that really doesn't meet the needs of HIE data sharing, either, and so probably shouldn't be addressed, but as I say, we'll discuss that in more detail with group three.

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

I don't know if there's any need for, you know, going into more depth on other things. Sarah and I talked a lot about the UDI. Maybe the only highlight there is really, we kind of have stated the concerns about the availability and the form of the data and in what is a direct patient care EHR which, quite honestly, that's still what most vendors would go out to certify, unless they also have an integrated perioperative system, they may not even have the data.

So, without transcription processes to go from the perioperative note into a form that is accessible in structured manner based on what is being proposed in certification requirement for its inclusion in the direct facing care EHR. So, it just—it seems like more exploration is needed to really look at where is the data typically documented, how may it be made available, and I don't think we want to accept that the answer is, "Well, you're gonna have to do manual transcription of that data, because I'm not sure that there's, effectively, an interface to communicate it from a surgical system to a direct patient care EHR that's strongly in use." Others may know more about that than I, but that's a little bit of the color behind the comment.

So, if there's no other feedback at this point, I guess I'd suggest we move on.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, let's move on to retesting and certification.

So, again, we have two slides here, I'll walk through, quickly, a summary of the groups feedback, and then we can launch into further discussions. So, in general, I saw support for this proposal. Some additional comments—ONC should adopt guidance for the ACBs to use in evaluating if user interface changes have been made, and an apparent significant, applying principles of passivity and non-passivity to the end user workflow to judge the materiality of the change, distinguishing what constitutes a major change that, should we get SED re-testing, determining when entirely new workflows have been introduced, and should be required to undergo such testing, limit the SED testing to one workflow per certification requirement. Much of what is proposed under the SED testing should be folded into surveillance activities, assurance to hold vendors accountable for disclosure and SED testing requirements versus specifying other potential retesting scenarios or requirements.

And then, continuing onto the next slide here, ONC should not fix a monthly update cycle, but instead gear this requirement to match a given vendor's typical release cycle for major and minor updates, and ONC should normalize how major and minor updates appear on a CHPL with consistent guidance to ACBs for how major and minor updates are represented, disclosure statements or reference within certification details, a table on version control section indicating the version number and date of grant of certified status, and then finally do not dictate version numbering conventions to vendors. So I'll turn it back to—to the group, then.

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

Thanks, Brett. This is John, again. Just a couple of comments behind the comments, as it were. In the area on what should be subject to SED testing, both for original certification and really to, to then evaluate updates, you know, the key should really be that, in certification as it is, we test one exemplar, main line, you know, happy day use case, if you will, to represent what vendors would present in observed testing.

And we think that principle really needs to be sustained as we look at SED testing, so what you—the vendor subjects to SED testing is not every single alternative workload to skin the cat but, you know, the main way the cat is skinned. And then, really, in judging updates, the certifying bodies already have the discretion to judge product updates, you know, for their materiality, but it probably would help to have some guidance when it comes to the SED requirements on looking at that, and having some useful guidelines to assess. And quite honestly, as long as the original certified workflow has not changed, and what is really going on is using the same basis of technology to deploy alternative workflows to do the same thing, then is SED testing really necessary for those alternative workflows unto themselves, we wouldn't have done that if they had been present in the original certification effort.

And so, Sarah pointed that out to me, and I think it's a very fair point—if all of the alternative workflows were immediately available as of the time of original testing, we would still have presented one mainline exemplar workflow for observed testing, for SED testing, so you know, don't impose a different requirement later on as long as the original workflow remains intact.

On the cycle of report, not every vendor releases monthly, so that's just simply recognizing, time it to when the vendor does release updates, and then we know there's a lot of variability in how versions are represented on the CHPL, when they are represented as another listing on the CHPL. We're not suggesting that ONC needs to get into trying to dictate to vendors at all how they version products, the meaning of the versions, that's all as it is. We're just simply saying, you know, create a consistency by how versions are represented on the CHPL, and probably most significantly to the CHPL cleanup, if Scott is listening—and he and I have had this conversation. You know, versions that are recognized as being certified for the same product, that could be a disclosure in the details page on the CHPL or in a change control table in the, that lists what versions the original certified status may have been extended to, where no new testing was involved, but just simply a product update submission with supporting evidence of release notes, or what have you. And you know, so if a provider wants to know, “Is the version I'm running covered by the certification that can be a part of the public test report?” it can be part of a version control table in the certification details you see when you click on a listing on the CHPL, the ulterior motive is really, clean up the CHPL when it's just an iteration of a minor update to the same certified product.

So those are just a few additional thoughts.

Scott – Office of the National Coordinator for Health Information Technology

This is Scott from ONC. I heard you, so thank you.

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

Do you want to say anything further on the SED testing—but I think that's kinda what we talked about.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Yeah, this is Sarah. I just want to point out that if you require expensive testing on every possible workflow, vendors would be forced to, rather than take the time and effort to certify every possible workflow, which would just be cost prohibitive, they would be more likely to constrain workflows to a single workflow, and we've already heard a lot of complaints from end users about their constrained workflows with meaningful use, and we don't want to compound that, so we want to make it, you know, real clear that it's sufficient to certify one workflow that meets the requirements for that certification criterion and that that's it—that there may be other ways to accomplish it.

In terms of the CHPL, we have seen, you know, I know it's been cleaned up some, but there's still just, it's hard to, for our clients to figure out which version to put in, so they end up putting them all into their shopping cart because there's just so many variations, and we have heard, in the past anyway, from vendors that some of the certifying bodies had had different criteria for when they had to list an update, whether it's, you know, just a patch, a bug fix that one vendor might not be required to list the new version number, another might. Which is why, you know, we're suggesting that we have some sort of standards for the type of—the type of release that is gonna require a new, separate listing on the CHPL without, without asking that people go overboard and come up with some numbering system that we then have to follow.

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

You know, I—this is Liz. I just have a question and a comment. One thing that would be helpful in terms of giving this information back to the standards committee and then to ONC is to give an example of a workflow so that they can understand that this is a fair—I think a fairly high level, generic workflow. I don't mean that in a way to demean the complexity of the workflow, I'm simply saying, I think, what you guys are saying, which is, there are many ways to do things. You will demonstrate that you can do it at least one way. If the owner of your software can, can use your software and achieve the correct outcome, it may not be correct—the outcome based on the workflow, it may not be the same, exact workflow you certified against. Is that correct?

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

That's correct. So, for example, let's look at medication prescribing. So we have a medication module, and when you order a medication in that module, you will get drug-drug, drug-allergy, drug disease, drug age checking. It will happen, and you will see alerts, if there are any, for what you're trying to do. But, we also allow our clients to create their own templates, and those templates could include the ability to prescribe from the template—

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

Right.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

- from the template, they, you know, they still have that capability of seeing these alerts, but it's not a separate workflow that we would do safety enhanced design testing on, because—

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

Right.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

- we're, we're doing it purely on the medication module.

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

Right.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

But our clients would not be happy if we took away their ability to, to prescribe directly from a template and require them to go to the prescribing module to do so.

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

Perfect, and I think if we—Brett, if we take that back, if we could give that kind of an example, it makes it more understandable, particularly for those on the committee that are not a provider or vendor, and they have a very difficult time understanding some of these concepts.

The other question I had was one of the experiences that fails to pass is where someone, a vendor, did a patch, a fix, or whatever, but it wasn't necessarily related to meaningful use, but it was something that, it may be enhanced functionality in lieu of a break. But then, on the CHPL, they would put the new version on—well, the, the customer, so to speak, would not necessarily have to take that. They are still meeting meaningful use, they are still, you know, they've just chosen not to go to the next advanced functionality, but the only thing listed on the CHPL was the new version. Is that, have you, in any way, anticipated that issue, and does this cover that, or am I just not understanding how CHPL works? I mean, I—go ahead.

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

Yeah, Liz, let me answer it a couple of ways. First, and probably the main probably in, you know, you look at the CHPL **certifiers** out there, we list every version that we release monthly. There are historic reasons why that is, but—you know, and there are other vendors who do similarly, but there are still yet other vendors, and I think Sarah was speaking to this, that, you know, they still do product update reviews with the certifying body, but they may not necessarily cause a new version to be listed, and actually it's usually the reverse of the problem you say. The original certified product is listed, there might be other disclosures buried within the test report that indicate, you know, that, well, this has been extended to other versions versus having listings issued for new versions.

And we've had—you know, that was one of the things we ran into early on. We kinda started in that mode, but we had clients saying, "Well, I'm on this version, and I don't see it listed, and it's a version that's newer than the one originally certified," when the one they're running on was the only one that was a minor monthly, as you know, in our vernacular service package update. And so we erred on, we worked with CCHIT and got their best advice to list every version face up, but that is just—the cost of that is just innumerable listings on the CHPL.

You know, I think what Sarah and I are both saying is that it—it is better to list the original certified product face up on the CHPL and then, as a disclosure, within the detail page you might open up when you click on the main page of the CHPL, either there, there's a table or a statement of the range of version updates that the certification status extends or inherits to, or it could be in the test report that there's something maintained to do the same thing. So we're not saying there should be no disclosure of that—absolutely, the user of the CHPL should be able to figure out that the version they're running is covered by certified status, but it doesn't all need to result in a singular listing of each new version of the same product for minor updates on page one of the CHPL. That's clutter, and it doesn't enhance anybody's understanding—as a matter of fact, it makes it—

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

Yeah, you're right. Yeah, it makes it very confusing, and I think that you both hit the head directly on the nail, both from the cost and complexity for the vendor as well as the buyer of the product, therefore the user that provides care using the product. But I think we've got to explain it in a way that ONC, that the translation works. It's very helpful to have folks on the call with us, because it's very difficult to understand that a version change may—or, as you said, a package of some type, however a vendor may term it—may have nothing to do with meeting the MU standard. And yet, so the customers are incredibly confused, and when they go onto the CHPL and they can't find the version, or they think they can't find the version that they're using—which is, I think what you said about opening up that, then they're in panic mode, because we get calls all the time. They're in panic mode that we know that they're no longer covered or that somehow they missed the certification process or an upgrade or something.

Anyway, you get the process. If we can make sure that we have an example of a workflow, Sarah did a great job of explaining one, and then secondarily, if we can make sure that what John and Sarah and others have just articulated around options to making sure versions are covered. But were not creating an unnecessary certification process for functionality changes that are just not—we don't need to re-certify every time. I don't know how else to say it.

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, and then, Liz—this is Dave Kates. I can bring that back into the comments on the section we went over last week about creating improvements to the structure and the searchability of the CHPL. So I might try and incorporate what John just said—

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

That'd be great.

David Kates – Director of Interoperability – The Advisory Board Company

- so that there's one entry per cert or millennium or whatever, then the structure and search accommodates what we just talked about. Because that's the issue is that you've got pages and pages and pages of [Cross talk].

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

Exactly.

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

And I think what we're speaking of, too, Liz and David, we're not suggesting that there's any less diligence done by the certifying bodies of updates.

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

Oh, no, no. Right.

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

I mean, because I think we all, universally, do report updates to our certifying bodies. The real difference is in what they do with them from there, and whether or not those version updates wind up with their own listings or own certified product numbers and so forth on the CHPL, when they're really, you know, a monthly update to a previously certified product and, as Liz says, the updates most often have very little to do with causing any major change to the certified product. It may be unrelated, it may be very, very minor in nature.

And you know, I think there's always been a bit of a, of a standard for, when retesting really is involved is when the changes are major in material, but as long as the original capability remains intact and you're not materially adulterating, removing, modifying, or replacing it or obsoleting it then, you know, that's really, where the yardstick is. So I think it just needs the consistency, and the quickest way to clean up the CHPL, to me, would be to collapse all the version updates down into one hosting of the original certified product, its version that kind of demarks the as of as to when certification occurred as to the version that it occurred originally. After that, it becomes a disclosure statement of, "If I want to know if my version of the product is covered by that certification, tell me where I can go very predictably and very consistently to find it across all vendor products, click on the front page, pop up the details page where I list the criteria that the product certified to, why can't there be a simple statement that's a version range right there, or a table that indicates, you know, the version and when it was released by the vendor or when it was accorded status recognized as being, you know, granted certified status" — there are a variety of ways you could handle it, but it could be very helpful to clean up the face of the CHPL.

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

Excellent. [Cross talk]

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

The only other thing I was gonna say, and this ties back to some of David's surveillance—you know, there's suggestion that there's retesting that can occur for the sake of SED testing, dealing with, the standard, I believe, was used of apparent significant changes. Well, part of the surveillance process is to do retesting of particular criteria on a routine basis. You know, every vendor of a period of time is gonna face it. Why not invest what you might do here for SED testing as part of what you do for surveillance and address it at that point if it needs to be addressed, or the point of evaluation of materiality of change, maybe it belongs there or is better suited to go there.

It certainly is an opportunity to pick it up on a very routine nature that's gonna happen anyway. That's kind of our last point on the first of the two slides in this area.

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, this is Dave. That makes sense, and so we'll make sure that we're consistent and reflect that in the comments about surveillance.

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

Okay.

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

Good. Should we go to the next one?

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

Yeah. Safety-enhanced design? Brett, I think.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, so, for safety-enhanced design, again, two different slides, here, starting out on slide 12. Some of the criteria proposed are more administrative, and therefore should not require recruitment of clinical end users for testing such as configuring drug-drug alert settings or CDS rules. Consider reducing testing burden, especially for smaller vendors and practices, suggestion to reduce the number of testing participants from 15 for each category to 10 for a clinical task and 4 for non-clinical tasks. The minimum for clinical roles should be a total number across all clinical roles and not by category of clinical roles.

Descriptive factors such as sex, age, education are not evidence of correct use and application of user-centered design procedures. Focus on a summary descriptor information that demonstrates that participants have a relevant perspective such as occupation, role, and professional experience.

And then moving on to the continued comments on the next slide, clarification is needed regarding test standard deviation percentages. If this portion of the rule is defining the physical procedure to use or measuring effectiveness, which would not make use of the context of successes or failures, or the effectiveness metric, which is not standard deviations, but simply task deviations, so we need some additional clarification there. And recommend using industry standard literature, recognize satisfaction measures such as a single ease of use question which employs a seven point scale or a system usability scale or software usability measurement inventory. Recommend against a proposed user satisfaction rating with a scale of 1 to 5 as it's not representative of an industry standard, and then urge that all certification bodies include the full, complete usability test report in the public test reports.

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

Yeah, I don't know that I have a lot to elaborate—this is John, again. I think that things are fairly self-explanatory. Probably the biggest thing to emphasize on the first slide of the two is to make sure you're being fair to, to smaller vendors as to the size of the testing panels, and I think some very good suggestions were made—made there. And on the second slide, you know, I think they, they stand as stated in terms of these—these were things we all observed in our subgroup when reflecting on what was proposed.

David Kates – Director of Interoperability – The Advisory Board Company

And John—this is Dave Kates. So, I may have missed the context of this, but is, are the usability and, and other criteria that are described, is this a transparency type of initiative to get some indications about how the products perform, or is it a set of criteria that the products need to meet?

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

It is a criteria primarily aimed at getting user feedback on—you don't want to just strictly couch it as usability, but that's a lot of it. It is aimed at assuring, in terms of usability, clarity and ease of use. I mean, safe use is ease of use in that dimension, so it really is looking at that and is trying to assure that you have sufficient, relevant, real world participant users that would represent the demographic of the

expected user base. And I think, in a lot of what's proposed, they're trying to get to broadening that to try to assure that's really representative, but I think it, it, it almost serves to be overdone for smaller vendors that may be very focused on a given specialty or a given size of practice where it's gonna be very difficult and expensive for them to convene, you know, 15 nurses and 15 internists and 15 physician assistants and 15 advanced practice nurses and what have you.

So, it—it kinda has a one size fits all approach when it really needs to be scaled to, to reflect what is, you know, a fair cost for the effort for different sizes of vendors. I don't know if that answers your question, but—

David Kates – Director of Interoperability – The Advisory Board Company

Well, let me ask it a different way—is it a process measure to ensure that the vendor goes through testing from a diligence standpoint to make sure that the product is safe from the perspective of its safety—usable from the perspective of safety, or is it, is there an objective measure that the EMR needs to meet in terms of attaining some level of safety/usability?

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

Yeah, I think it's intended to address a lot of what's kind of been a recurrent discussion in, in the FACA hearings over the safety of EHRs, to make sure that they're—we don't get judged, per se, qualitatively by the certification, but it is there to provide a level of assurance we are putting things to diligence to assure safe use. That—Sarah, go ahead.

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, go ahead.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

I would say—I would say that it's really not safe use that we're talking about here, because the data we have actually shows that electronic health records increase safety, and we know there's anecdotes about, anecdotal remarks made out there where risk has been introduced, but so far, the data that we've seen does show that they are safer. I think what this is designed to do is to appease those who feel that there has been inadequate user-centered design, and therefore products are not as usable as they could be. And you will hear many people say that when a product is not usable, that creates a safety risk, because you may have cognitive burdens or other issues that are not, not what you might traditionally think of as a safety risk with an EHR related to a software bug, but because of presentation or other reasons, you may find that the information is not presented in a way that is as clear.

So I think this requirement is designed to show some transparency at the level of which the products have been put through their paces with formal usability testing. It was a stage two requirement, and we certainly see that some of the people that are—you know, some of the people who have the loudest voices in criticizing vendor products raised their voices saying that, looking at this from stage two data, it wasn't always there on the CHPL, it was hard to find. Some of the vendors did not document significant numbers of end user testing, or did not provide the type of criteria that these researchers would like to see. So I think that that is why this requirement is here, to add more transparency and to sort of level the playing field to make sure that there is more extensive testing that occurs with end users. But, as John has mentioned in his comments, you need to—this is expensive and time consuming to do, so you need to make sure that you're not overly burdening small vendors who would be disadvantaged over larger vendors. You want to make sure that the—that the features that you are testing are ones that,

you know, that the people you are doing the testing with are the ones who would be using that functionality and not have every single class be testing something that they would never be using in production.

So I think we need, you know, obviously it's—it's good to have more transparency on what processes were, were gone through and what you did, and some of these requirements are for really detailing the types of testing that can be done. So, you know, it's very unlikely that the end user is going to be—or the end purchaser is gonna be familiar with all of these standards for usability of, of programs, and it's more likely that this data is gonna be used by researchers or other people doing comparisons, but that, that's my read on why this functionality is required under certification.

David Kates – Director of Interoperability – The Advisory Board Company

Great, yeah, thanks. And the point of my question was primarily what you just restated, that you know, that we want to be _____ the recommendations and the rationale that mainly that, in the spirit of this, we get it, but in terms of the actual application of it, that's what you just articulated, Sarah, that there's an appropriate balance here so that we get broad participation.

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

Anything else on—on that, before we get to the next topic?

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

I guess that's all we got.

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

Okay.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, so shall we move on to web content accessibility guidelines?

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

Yeah.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, so just one slide of comments, here—recommend that ONC postpone raising the web content accessibility guidelines level to 2.0 level AA. Rationale behind that—there's lack of quality compliance test tools and a need for clear guidance on mobile accessibility, which would be valuable given increasing use of mobile technology, and ONC should do the following—support improvement of tools, or at least better consolidate existing viable tools, should help develop guidance for mobile accessibility and then revisit the decision on moving to 2.0 level AA.

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

Any additional feedback on that? This is probably one of the shorter areas of our conversation, but the consensus was staying with the current level of level A accessibility.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

I, I just agree with what you've got there, so I don't have anything further.

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

I think we're good, John; let's keep going.

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

Okay. Brett—design and performance?

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

All right, for design and performance, generally supportive of this proposal, recommend pattern requirement after the 2014 edition, quality system management which permits a response that no health IT accessibility centered design standard or law was applied to all applicable capabilities as an acceptable means to satisfy this proposed certification criterion. Rationale there—avoid the need for rewriting the whole user interface, which is not feasible for most CHRs and situations where vendors have legacy systems which were developed when the standards for accessibility centered design were not as mature. Recommend requirement related to identification of user-centered design standards or laws for accessibility that were applied to be limited to only the 17 criteria proposed for UCD and G3 safety enhanced design.

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

This is John. That last one kind of, for what we were just saying, kinda reconciles back to the SED testing. But any comments here—again, this was, I think, the main point.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Right, so, so we know that we've seen public comment from the visually impaired about meaningful use changes and how a lot of products that perhaps in the past might have supported screen reader technology don't now because of the rapid development changes that, that were required with meaningful use and that, that—you know, they would, they would certainly encourage vendors to support this type of technology, but we have to recognize that most vendor products don't currently support it; certainly not for all of their products. So it's—it's not something that we could mandate without putting a lot of companies out of business for, you know, having a lot of vendors the, the meaningful use program and leave their clients in the lurch.

So, what we're just recommending is that you be able to easily, you know, state, you know, what you do and do not support, and I would—and the last bullet point John is making is that you are, you are asking to limit the accessibility to the 17 criteria for safety-enhanced design. I'm not sure, was that just simply to limit the documentation? Because I would certainly say that, if the goal is to allow people who are visually impaired to, to do tasks related to meaningful use, limiting it to 17 of the criteria is probably not gonna meet their needs.

But again, if most vendors are not supporting it, you don't want to have to be able to call out where you don't, where you don't support accessibility criteria by criteria on it. You should be able to simply have a global statement of what accessibility features you do or do not include in the product and, and if, you know, there are parts of your product that support them and parts that do not, I—I don't think that that needs to be specified in minute detail on the CHPL but, you know, would—would be a flag for those who see that it's only partially available to do their due diligence when evaluating purchases of new products.

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

Yeah, Sarah, I think there's a friendly amendment in there somewhere that I certainly would accept, and maybe it's that this criteria asks for a demonstration of what a vendor is doing, not what they might suddenly start doing relative to the scope of certified EHR technology, but be transparent about what it is they are doing. That may be a better way of saying it.

I think what we were focused on, if you go back and look at most of those 17 criteria, they probably do represent the substance of the end user workflow—maybe not universally, but it, but it includes the things that are probably already mostly the subject matter of what would be exposed to accessibility questions, anyway or, you know, things that, in other vernacular, we might call section 508, you know, types of requirements that a lot of us face under different state and federal procurement requirements.

So I think that we, we'd accept an amendment to say, "Be transparent about what you're doing and, and what it covers, and let that be a matter of attestation." I think we were falling into, a bit, the discipline of trying to map the G criteria also back to what those G criteria get applied to as to when you would need to, to test for it, or certify to it. So maybe we got a little carried away with that, here, trying to suggest the applicability of G3—I'm sorry, not G3, but G—

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Eight—G8.

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

Thank you, thank you—God, I'm trying to read quickly and think, and that's a bad thing—G8, in the same manner that we saw with G3 and with G4, and maybe that's—

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

But while we say transparency, we just want to make it really clear, we're not recommending measure by measure that we indicate—

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

Yeah, I would agree with that. Make a general statement, yeah. We were more on the circumstance of when would you test this, or have to include it in your scope of certification would be when you're testing to those criteria, not that you would report it out, criteria by criteria, if that helps.

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

Does anyone have anything else they wanna comment on this one, or can we move on?

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

I think we can move on. I think one more—summative testing?

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

Yep, the request for a comment on summative testing, so, comments here—formative testing should not be required, not be required for testing, but that, at most, it may be an alternative or option to summative testing, and issues relating to formative testing and certification are listed here, it occurs during product development life cycle and hence may not correctly represent the product which is being

certified. It's difficult to achieve standardization as it approaches very widely and are context specific. Results may be deployment specific. The purpose to identify opportunities for design improvement is consistent with that of certification testing. Results of testing and development versus testing of the final product may not be useful to buyers of health IT solutions or EHRs, would need some additional guidance to properly constrain and direct and would require user evaluation at multiple stages, which could be a burden for some smaller vendors.

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

So, this is John—I think those are fairly self-explanatory, the upshot being, not to be crass, but you know, identification of any issues that occur in the development life cycle. Yeah, they may be interesting, but they may not provide a whole lot of value to what the end product is that becomes the original basis of certified product, and that's in the end what really does matter is, you know, what is that final product then subjected to and what are the results of the testing that goes towards the version or product that's being deployed as certified.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Yeah, I can shorten this to just simply point out, what end users care about is the final product—

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

Yep.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

- which is the summative testing. There might be researchers that want to know about formative testing and, you know, what types of testing resulted in what outcomes, but the fact of the matter is it's not, you know, it shouldn't be included. It would be expensive in terms of the time to document it and it could be, as John mentioned, it could result in confusion because if you're doing a lot of formative testing, which much of us do, in the early stages, you're gonna get a lot of people that are unhappy, and you're changing it. And so we really aren't going to want to have, you know, our early test results put out there when they don't reflect what the final product is, and it could backfire in terms of vendors doing less formative testing if they're required to document all of it.

So, bottom line—no benefit to end users to see anything other than the summative testing, and a burden and possible source of unintended consequences.

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

Yeah. Any comments or feedback on that?

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, now that—it's David. That all makes sense. I think the _____ statement you're gonna make is that the process of making the sausage is probably not something that's gonna add value to folks. I mean, I think Sarah stated it well—both, isn't that a burden that will be a disincentive for the testing, and the negative consequence is the fear about things in terms of in process activities that don't reflect on the final product. I'm just restating what you said.

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

I think that's our last item that we were assigned, Brett, so back to you, if there's any other comments people want to make, or a preview of the group three.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

Or we can open up for public comment—

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

Yeah.

Sarah Corley, MD, FACP – Chief Medical Officer – NextGen Healthcare Systems

- and get done early.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

Yeah, so if there's no other comments here, at least we can kind of open up and move onto the next slide here and just give a preview for group three, which Sarah has been leading, and I know I've seen lots of e-mails going back and forth already to, to get some of these comments more finalized. I really appreciate everyone from the workgroup in doing a great job and putting these comments together and doing some work in advance to, to help come to some agreement. That really—it really saves us some time in our quick turnaround to turn it back to you all to discuss.

So yeah, Michelle, any—or Liz, if you're still on, any additional comments you'd like to make?

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

Nope, _____ on the comment. [Laughter] Lonnie or Caitlin?

Public Comment

Operator

Yes, if you're listening through your computer speakers, you may dial 1-877-705-2976 and press *1 to be placed in the comment queue. If you're on the telephone and would like to make a public comment, please press *1 at this time.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

Well, it looks like we have no public comment, so thank you all for a very efficient call. I'm sure people are happy to get a little time back on their day on Friday afternoon.

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

Thanks, everybody. Have a great weekend, and happy Mother's Day to all the mothers out there.

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

Very good.

Michelle Consolazio, MPA – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology

And thank you all for your hard work. Thank you.

Brett Andriesen – Project Officer, Office of Standards & Technology – Office of the National Coordinator for Health Information Technology

Yeah, thank you very much.

David Kates – Director of Interoperability – The Advisory Board Company

Yeah, good job, John.

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

Thank you. Bye bye.