



**HIT Standards Committee  
Architecture Services & APIs Workgroup  
Final Transcript  
April 23, 2015**

**Presentation**

**Operator**

All lines are bridged.

**Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – 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 Architecture, Services and APIs 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. I'll now take roll. Arien Malec?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I'm here.

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

Hi, Arien. David McCallie?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Here.

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

Hi, David.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Hello.

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

Albert Bonnema? David Waltman? Gajen Sunthara?

**Gajen Sunthara, MS – Presidential Innovation Fellow – Department of Health & Human Services**

I'm here.

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

Hello.

**Gajen Sunthara, MS – Presidential Innovation Fellow – Department of Health & Human Services**

Hi.

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

George Cole?

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Yes, I'm here.

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

Hi, George. Janet Campbell?

**Janet Campbell – Software Developer – EPIC Systems**

Hello.

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

Hi, Janet. Jeff Gunther?

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Here.

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

Hi, Jeff.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Hello.

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

And Josh Mandel?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

I'm here.

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

Hi, Josh. Okay, I'll turn it back to you Arien and David.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Very good, let's see where are the slides; I'm going to get...all right, next slide, first slide. Next one, we all know who we are.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I think it is a reasonable one.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, here's our planned meeting today we going to cover a couple of the NPRM recommendations or proposals I guess is the way to call them then we're going to meet again on the 7<sup>th</sup> and then read out our consensus on the 20<sup>th</sup> and I think we'll have some off line homework to do obviously to get all this covered by that date.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Michelle, do we have...do we have finalization of the priority Meaningful Use 3 standards comments and then comments on the non-priority items? We're going to have an ad hoc Standards Committee meeting to address the...

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

Yes, Caitlin is still working the timing of that.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Okay.

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

Yes.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Okay.

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

But we did just set up a call with all of the Chairs to walk through that...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yes, good, okay.

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

On May 7<sup>th</sup>. So, we might have to figure something out, but, anyway.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah. So, we're going to go in priority order working on the ones that are aligned with Stage 3 and then working on the ones that are not aligned with Stage 3.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, so does that...and our task today was to tackle the API generic and then the API in the context of VDT is that what everybody's expectation is?

**Debbie Bucci – Office of Standards & Interoperability – Office of the National Coordinator for Health Information Technology**

Yes, this is Debbie and that's how the slides are ordered as well to comment.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, good, yeah and I think that that's the right order is this approach the general one. So, Debbie, what did you do here? I see you've got some slides; it looks like you synthesized some of the feedback?

**Debbie Bucci – Office of Standards & Interoperability – Office of the National Coordinator for Health Information Technology**

I tried to synthesize but I did get feedback from George and Janet, and Josh and tried to pull it together in common areas so hopefully that will flow back out and that's what you're seeing.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay. Arien how do you...how were you thinking about working through this? You and I didn't get a chance, despite the fact that we were together a good bit of yesterday, to scope this out.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Do we want to see comments or walk through them one by one?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, what I've seen very successful, Micky does a good job at this in the IO Workgroup, what I've seen just successful is just walk through it discuss the consensus comments, solicit any other feedback and then we work off line to synthesize everything together into some level of transmittal form or in some level of kind of consensus-oriented form.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, so we're going to just jump in then and these comments have been anonymized but you feel free to own up to them or to correct the spirit if you think it is just...if you sourced it and it got mangled or changed along the way.

So, we're going to start with the API general question, the first comment here, FHIR is not ready to become a certification criterion instead we recommend an optional criterion explicitly tied to FHIR DSTU 2. So, I would read that as the proposal is to invert the current notion which is to require any old API but not tie it to a standard but make it required and your proposal here is to invert that make it possible...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I was...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But to tie it to an emerging standard.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I was confused by...I was confused by that comment and I was wondering whether the person who made the comment understood that the existing certification requirement is purely functional and could be met through FHIR.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

This is George, this is probably part and parcel of what I made as a comment which also if you look at...jump quickly to the next slide, bullet number one, Arien, addresses just exactly what you said that FHIR is just one way in which to meet this but many vendors already offer this as a proprietary way.

And so my thinking was I am uncomfortable with certification requirements that...where the certification statement is purely functional. I like where the test procedures are functional but where the certification procedures that's wide open, I thought, well, RDSTU 2 is in ballot now, hopefully it will fare better than the previous round and things are in good shape and by the time a final rule could be made we might tie this directly to FHIR DSTU 2.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, George, you're basically uncomfortable with the functional certification of something of this complexity it that the gist of your argument?

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Well it's the gist of it, yes, and, you know, so, look honestly many vendors could fulfill the requirement as it's written today functionally and so I don't think that having a certification requirement that's purely functional as it's written today does anything for interoperability in the first place and I don't think that it does anything to advance the stated intent which is to move to FHIR. I don't think it does either of those things. I think it just becomes another thing to do.

**Janet Campbell – Software Developer – EPIC Systems**

...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Yeah?

**Janet Campbell – Software Developer – EPIC Systems**

This is Janet, I had a similar comment or at least a similar thought process where I agree that if we're going to do this it should be FHIR, that FHIR is not ready and so what we're going to do is have either all of us run to some sort of mangled, I guess, implementation of FHIR which is the only smart thing to do, because you're not going to like go waste your time on something that's eventually, I think we could all agree, is going to become FHIR. So, my question was more along sort of timelines for this, but I had a similar concern as George that it should be FHIR and FHIR is not ready but then should we certify that it should be anything else.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So, this is Josh, I also share aspects of that thought process but I come to a slightly different conclusion, so I think what's written in the NPRM right now is wrong for a slightly different reason. I think, you know, if we were at a stage where we could say, yes, all EHRs need to implement FHIR with the following profiles that would be great, we are clearly not there yet.

I think the functional requirement could be okay. I think there are a lot of holes that it leaves open but it might still be a better world to live in where all the certified HIT systems offer some API and document it somewhere and have to show where they document it so anyone can go and read the documentation, I think that wouldn't be bad.

But as it's specified right now it's this weird middle ground where there is too much specificity for a functional API, you know, the notion that there is exactly one set of API calls to like get each type of element and one API call to get everything, you know, that seems overly prescriptive or the idea that you would just return your results to JSON or XML, again overly prescriptive.

If you're telling people they need to have an API and you're not telling them what API it is I can't see any reason for locking down random arbitrary details in this way.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

So, I'm going to suggest, this is Arien, that we split the "should there be a functional certification requirement" question from "if there is a functional certification requirement how should it be written, because I think there's a lot of meat in Josh's comment but I want to make sure that either there is a consensus opinion or a divergent opinion in the Workgroup and that we're prepared to report that out.

So, if it's worthwhile I can give you a perspective for how I see the functional requirement working in practice. What I suspect will happen with regard to a functional requirement and I just want to give some policy background to this.

This functional requirement came out of an expectation early on that FHIR and a FHIR-based API was the direction that we wanted to move but that it wasn't going to be ready for...that a formal certification process would actually have a counterproductive effect of getting people focused on checking the certification box and not focused on deploying and making functionality available.

So, the thought process behind a functional certification requirement was in effect give folks air cover to go do the legwork for FHIR-based APIs by the time that we will all be certifying without locking in the formal certification requirement at a time when we just aren't able to do that.

So, it's a bit of squaring circle between...you could do no certification requirement and then you have to either do an optional certification...the overlap between Stage 3 is really funny or you do more formal certification requirements against a standard that frankly needs more testing, needs more development, needs more all the goodness that we want to get done.

And so I see this as a way of encouraging the market to form around something standard without overly constraining the market. So, I just wanted to maybe provide some of the policy background.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

...

**Janet Campbell – Software Developer – EPIC Systems**

...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And this actually lines up with the request of the interoperability Workgroup and the JASON Joint Task Force from a policy perspective.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And it was also the recommendation from the NWHIN Power Team which Josh you and Arien were both on that I believe. All of those groups called for APIs and in particular functional requirements in this...functional requirements to get us through this transitional phase until we had a market-proven standard.

And, you know, the sad fact is, you know, you can't do it...I don't think that there is...it's not very easy to do it any other way because you need to have some way to get the markets moving on these things to do some experiments that's the point of having the functional requirement but wait until there is a proven success story before you nail it into certification.

**Janet Campbell – Software Developer – EPIC Systems**

So...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, I'm publically on record at the Standards Committee meeting yesterday of saying this is a good idea, the functional requirement, I perfectly agree that we could clarify the definition of what the functional test is, but a...

**Janet Campbell – Software Developer – EPIC Systems**

I guess...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

A functional requirement that we could all probably meet pretty easily today seems like a good way to do this, telegraphing intent but not penalizing do to immaturity of the standards.

**Janet Campbell – Software Developer – EPIC Systems**

I mean, I guess my concern, this is Janet again, and I mean, I think most of the folks on this call will know how hard it is to still meet the requirements for doing something that you already do today, that there is a really large gulf between meeting the spirit of the law and the letter of the law and it's the letter of the law that we have to meet.

And I wanted to go back to something, you know, that this is the only way to encourage this kind of behavior when we've got our own sandbox out there, Cerner is leading HSPC, Arien just got back from a FHIR meeting, Josh is obviously out and running with all the smart stuff, is this really something where legislation and regulation will move us forward or can this be spent better...can our development time be spent actually doing things instead of meeting the letter of every single bit of the law. That's what I worry about.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yes, the one...one comment I would make, this is Josh, on that point and, you know, I don’t disagree with the tenor of your comment, Janet, but there is 1000, there are over 1000 certified systems that do patient facing view, download and transmit, and it maybe that, you know, the biggest vendors have been thinking hard about this and are out, you know, on the front lines doing great work, but I would be surprised if anything like the majority of those systems offered anything like a patient facing API or a sandbox for developers, or public facing documentation for how that would work. And a functional certification criterion would force them to grapple with those questions.

**Janet Campbell – Software Developer – EPIC Systems**

So would market pressure.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

And the more folks that grapple early the more likely we are to land on patterns that work for the community.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And this...

**Janet Campbell – Software Developer – EPIC Systems**

Yeah, but wouldn’t market pressure also do the same thing and especially if we look at the ones that aren’t what percentage of the market do they represent.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, this is Arien, one perspective that I’d offer there is that as we go towards the Meaningful Use or the edition 2015 certification implementation phase I know that there is a hierarchy of needs and checking the certification box tends to be fairly high up on the hierarchy of needs.

So, at least internally, in my organization, it is easier to encourage people to do the right thing and build an open FHIR-based API and devote the time, energy and effort required to do so if they’re also meeting one of the major certification requirements to check that box. So, that’s at least one view inside a development roadmap, you know, I may represent the only organization that constrains and has portfolio management for development projects and where certification requirements tend to score high on the portfolio approach.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

I don’t think so.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

But...

**Janet Campbell – Software Developer – EPIC Systems**

I...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

But I suspect that practice and perspective will make it easier for a lot of people to do the right thing. At the end of the day, my perspective on this, at the end of the day we need other mechanisms that are non-regulatory to make sure that we're getting our act together and that we've got vendor oriented testing.

We had a group discussion yesterday at the Standards Committee that suggested that ONC should move towards mechanisms where data sharing arrangements and others could establish their own testing certification requirements and be deemed for certification and that might be an approach that we can consider, but I at least offer one perspective that says the certification requirement is doing the job that it's designed to do, which to encourage people to adopt but giving them flexibility to adopt it the right way.

**Janet Campbell – Software Developer – EPIC Systems**

I guess maybe if we built more flexibility into it then because I think Josh does make a good point that even with the way it's worded there is...the letter is going to be high and I do argue that I think that the needs of the particular data sharing arrangement or ecosystem that you're working in if you could focus on those needs that's probably a better spend of development time than hitting all of the needs that your customers don't need you to meet.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah so it's David, just another two or three points to toss in, I mean, to me this seems like the lightest possible touch, well, assuming we can define the functional requirements in a way that makes us more comfortable that this is the lightest possible regulatory approach and it seems like that maybe the devil we should prefer against the unknown of all the rumblings in congress from Burgess and others about, you know, requiring APIs that could be much more...much less well informed and much more prescriptive.

You know given the JASON Report and the JASON Task Force recommendation and the enthusiasm and excitement of the emerging ecosystems that are looking to the vendors to make these capabilities there, this seems like a light way to get that...to reinforce that, that we're committed to that without unduly premature closure on an immature standard and without basically looking like the vendors just don't want to do it because they don't want to do it, which is what we've all been accused of in the press almost every day.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

So, as a group would we...would we be comfortable as a group in working on cleaning this up so it's more functionally specified to say that?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I mean, I think that's exactly what they want from us that is the...we are the API Workgroup. So, I mean, we should have a strong voice in that conversation. So, maybe...

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Hi, this...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Let's shift the conversation to that, Arien, I liked your...you know, making this a two part question should there be a functional definition, functional requirement and now let's assume for a second that there is going to be for all these forces and reasons, what should it say, what's wrong with what they say? Is it fair to jump to that part of the conversation?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Before we jump in, this is Josh, I'd just like to make one high-level comment. I think this is keying off something George said earlier, this is not...having functional requirements for APIs will not give us what we've traditionally called interoperability and I think we should be explicit about that and say that's still okay and it's still worth doing. It's an investment in interoperability down the line, it gives people a guaranteed way to put functionality into their systems today even if they have to custom build it. But it is worth somehow trying to say that this is not going just...this functional requirement will not give us interoperability.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, Josh, if you'll accept a friendly amendment, it may not give us universal interoperability...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yeah, right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

It may in fact spur pockets of...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes, good.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Very powerful interoperability.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

And we should just be clear that's that powerful and worthwhile but it's not like the magic bullet that many people have in mind when they say interoperability.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

The other friendly amendment that I'd make, this is Arien, would be will not, absent a more coordinated approach to created vendor led or, you know, vendor public/private testing and certification approaches.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Right, absolutely.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Stuff like the Argonauts and the like that's what's going to...and stuff that's done in the context of data sharing arrangements that are customer-driven, those kinds of activities absolutely will drive interoperability in a true sense, but it's the certification alone won't...and I think our experience with certification alone, in general, hasn't.

**Janet Campbell – Software Developer – EPIC Systems**

Isn't that one of the complaints of certification?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes, that's right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Correct.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

And so you can address that by either trying to fix the structural problem and make certification somehow work or you could partially address it by setting expectations about what certification can and can't do and, you know, maybe someday we'll get to the former but I'm just suggesting that right now we could at least do the latter, set expectations.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, as Arien mentioned, yesterday's Standards Committee meeting had a good conversation about what Liz and Cris called deeming certification whereby at least for some of these things that are, you know, fairly well testable in the context of the data sharing network that supports it something like say DirectTrust for secure e-mail you could accept a pass from the network that you're part of would count towards certification so that the certifying body would credit a statement from DirectTrust for example that you passed their test. This is a notion that would be consistent I think with where you were headed Arien.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Yes, hi, this is...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That's exactly right, my comment was that the work that we've done in DirectTrust to do point-to-point interoperability with all the other HISPs and uncover the issues actually generated interoperability whereas we had previously been certified health information technology and the certified health information technology alone did almost nothing.

But we're probably wandering ourselves off the point, just want people to know that's the context in which some of these discussions are being made.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Yes, hi, this is Jeff, I'm just...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I'm going go through security screening right now so I'm going to not talk for a while.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Don't get caught.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Yes, hi, this is Jeff I'm just curious, so based on this let's...from a practical stand-point if other...if we say that in order to address the functional requirements would have to be adopted from a practical perspective when would FHIR become a certification criterion?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, there's two sides to that, when do we think FHIR is going to get to the point of where it's worthy of certification and then...

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

What addition of the ONC process would that get picked up by and I think the answer...I don't know the answer to either one of those. I think most of us believe that the draft standard number two, that is in the process of being balloted and then will go through a reconciliation process hopefully stabilized by, you know, early summer is something that the vendors are expecting, that Argonaut vendors anyway are expecting to I'll say go, you know, near production with, maybe, you know, extended alphas or beta tests or whatever you want but would build real code towards.

And then that would serve, that draft standard 2 fleshed out in real code, later in the year, would serve as the extended pilot that would either validate that we were good, that we got it right or that in fact it needs to go back to the drawing board for revisions. Assuming that it all goes well, you know, the earliest I think you'd see anything approaching, you know, widespread use would be next year, this time next year and that's pushing it.

Now when would ONC pick it up and say, the 2015 edition, which didn't require a specific standard now requires a standard, I'm guessing that wouldn't be any earlier than 2018. I don't know.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Right, so that's my sense and my question though from a practical stand-point does that mean though that essentially as an industry we will become splintered, because essentially every vendor is going to provide their own API and the functional requirements for that and then by the time the ONC picks up FHIR that everyone will be built upon the underlying functional APIs from each vendor.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, I think that's the tradeoff, this is David again, that's the tradeoff they were wrestling with here is they want, you know, to signal in no uncertain terms that you should be moving towards a standards-based API but they knew that it's premature to pick the standard right now. So, this is a shot across the bow that says get going, use whatever you've got and it will be fairly easy to get past, we know that's fractured but at least you're going to be working on the formal...on the right stuff for the long run.

You know you could argue the...as Janet did or whoever, I think George, with his initial proposal that they should invert that and say, it's our intent, we'll make it optional and then in the future we'll nail it down. But...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Well, they clearly stated the intent, right?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Oh, yeah, the intent is there.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

The intent is clearly stated, the intent is to allow but not require and that signals...you know if you were not at a point where you had an API then what would you do, well, clearly you should take that signal as a strong indicator of the direction to move so...

**Janet Campbell – Software Developer – EPIC Systems**

I mean, there's a point there though that, you know, the 995 other vendors that aren't going to move with the rest of the market also probably don't have as much wherewithal or motivation to use FHIR. So, I mean, I'm kind of falling down onto more George's side of it, but if we're going to do it make it standard so that it's not just signaled but actually there and I don't...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, let's shift to the second half of the question and maybe iterate on it. George I think you led off or maybe Josh you...somebody had a specific proposal around how you would restructure the functional test, let's assume for a moment there is a functional test whether it's optional or required, how would you structure it? Do you want to lead that one Josh?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Sure, although I don't think it was me who initially suggested that I had a way to structure it so if George did let me...I'll let George start.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

No, no what I liked from what you were saying Josh is you picked up...so in the NPRM and the PDF where they broke down 1-2-3, you know, for security and patient selection, and data requests, I think they missed and I think Josh hit right upon some of the things that you could actually require and they say that they would require for example that this be well documented, well, they didn't, you know that should have been number one.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Right.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

So, the goal I thought Josh had some good ideas about why...the things that you would do regardless of the underlying implementation as a functional requirement for this API, you know, it would be well documented, it would be accessible, it would be secure, well, okay they got security right, but then they became overly prescriptive when they got down to the data requests it became a real mix and match of formats and so those are some areas where I think there are some other ideas about how to clean this up.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, this is David, I mean, just, you know, for backdrop as to where this came from, I mean, it seems pretty transparent that this was a combination of the targeted query assumption that many of us thought would be in Meaningful Use 3 or in the certification associated with Meaningful Use 3 where you could do an XDS, XCA style query for a document that's the requirement that you need to be able to get a C-CDA mixed in with that the JASON and JASON Task Force recommendations that there also be APIs for discrete data access and that's how I read this is that it's...you've got to support targeted query we all knew that was coming, you can do it with whatever technology you want and you have to have discrete data access and that seems quite fair to me.

Now I would be perfectly happy to quibble with the words and say, they didn't express that sentiment very well, but the sentiment seems really straight forward.

**Janet Campbell – Software Developer – EPIC Systems**

That's an interesting point...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Well...

**Janet Campbell – Software Developer – EPIC Systems**

David, because I didn't read it that way, I read it as NHD was what they were signaling there because they had all the other FHIR stuff and all this stuff about REST and JSON and everything. I would almost say that...well, you guys know what I think, I think it should be a standard that's already there and that XCA or XDS would be a good one for this one, but...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, Janet I...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Yeah, David, I didn't read it that way either, I saw this as, okay, let's put the functional requirement out there for certification testing purposes and the fact that then this is linked only to view, download and transmit, so let's stick our toe in the water, let's let this be related to patient retrieval, I didn't see it as going further, I hadn't thought that this would...I see comments here about, you know, transition of care and retrieval, but the fact that they didn't relate this to anything but VDT made me think, well, hmm, again...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

We're just dipping our toes in and...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, but I...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I forget the context, maybe it was...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Measure two I believe does...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

We asked Steve Posnack if this was intended to be the targeted query and he said “yes.”

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, there is a measure...there is a transition of care measure that asks for retrieve, I think that measure right now is hardwired to retrieve the full document although I've argued in different contexts that this should also be inclusive of retrieval of relevant portions, clinically relevant portions of the document, but you clearly...according to some definitions of retrieve you could meet the definition, the functional definition for retrieve in Meaningful Use through use of certified health information technology that implements the API.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

So, then I think we should comment that, make those comments then, say, “yes.”

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah. So, yeah, so that's why I'm reasonably comfortable that all of us and probably most of the other vendors could meet most of this just right out of the box today as long as the certification is clear, you know, and not too picky on the letter of the law as Janet has been wisely pointing out.

But if you have an XDS registry today or an XDA gateway you can do secure connection, you can do a patient look up and you can do a document query all you have to add in is an API that also shows discrete data and I think one of the questions we need to very clearly get, you know, crystal clarity on is that these APIs, these requirements could be met by a family of APIs not necessarily by the exact same API.

So, to your NHD verse of XCA that's a critical question, you know, does it...if you do use FHIR for discrete do you have to use FHIR for documents there is nothing in here that says that so I would say that's not what they're intending but we should find out.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I'd remind everybody a couple of things, one is that Debbie got clarification from, I assume, Steve that the intent is for this to be a single certification criterion to be certified as a whole.

I do think if we believe that security...the privacy and security for example for authentication and authorization might well be done in different ways for different APIs that we should explicitly comment that we think that's appropriate or we don't and make sure that there is appropriate flexibility in terms of how you do secure an authorization.

So, to the extent that we think it would be appropriate to do XDS and FHIR for example, and that should be an allowable set of APIs that fulfill the requirements, then we should make sure that we're writing comments on the certification criteria that allow that.

**Janet Campbell – Software Developer – EPIC Systems**

And this is Janet, I think that maybe a good...this would also be a good place for the commenter to question about clarification around XML and JSON for this where it's one of those tricky and/or's like we had with I think view, download and transmit or one of those.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

This is...

**Janet Campbell – Software Developer – EPIC Systems**

Unless it's clear to everybody else that is.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

No this is Josh, I definitely think we should address the XML/JSON thing that one is a pretty concrete one. I wanted to say though just in response to David's question from 10 minutes ago in terms of the overall structure for functional testing of a system like this, one very abstract thing that I could say is, you should be able to take these kinds of APIs and build a patient portal from them and so if you needed to build a portal that did VDT and all you had is a portal vendor with access to these APIs, you know, could you do it? That's one kind of functional question that we could ask, I'm not saying that that's something we can necessarily test to but just in terms of the intention.

You know when I read the CMS NPRM around patient access I get the idea that these APIs are supposed to in some ways substitute for a portal and to me that would suggest that they should be able to satisfy the needs of a portal. Do folks generally think that...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, this is Arien...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Or is that going too far?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I don't think it's...so I've got a couple of perspectives here, one is that we...with my RelayHealth hat on we provide an enterprise portal that offers access to multiple patients. I think the most we would hope for and expect is the ability to acquire data on the patient's behalf across multiple systems to pull it together to a single record, but we would not expect in the short-term to completely subsume all of the functions of a portal, although that would be nice and a nice policy goal, I think that's too much to expect.

So, for example, many portals offer secure messaging, they offer appointment request reminder, they offer prescription renewals and these other things that I think would be great to expose as APIs to allow that kind of functional requirement, Josh, but I don't see as the intent here and don't see as realistic as much as I'd like it to happen. So, what I'd say is...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

No, I think you said that perfectly.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, okay.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

And those examples are exactly the right ones, secure messaging, prescribing, appointments are the kinds of things that portals do, these APIs don’t do, but that left me puzzled when I was reading the CMS rule and I know that we’re not convened here to opine on that one, but there is some back and forth, there is some yin and yang here between what the CMS rules expect in terms of functionality and what the certification criteria from ONC will provide and this strikes me as a gap and is...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, I don’t think there is any...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

I think just is worth noting.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I don’t think there is any reason why we can’t comment on the CMS and the Meaningful Use side of this even though our primary mandate is the CEHRT rule, because clearly the CEHRT rule is there to do something I think it’s worthwhile to say, hey it can do this but it probably can’t do that.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I’m...this is David, maybe I’m just in a, you know, a sleep deprivation induced generous mood today, but I just think this is really clear, they’re saying you need to be able to fetch the discrete elements that are included in the C-CDA and a patient could do that into an App of their choosing and as such could begin to create an aggregated view of a distributed record or an aggregated view of a multi-portal record around those data elements that are in the common core dataset. I mean that seems clear as a bell to me. Why is that...why does that mean...Josh, why do you think that means you have to replicate a portal?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

The reason I say that or the reason I asked the question for feedback from this group has to do with the CMS Meaningful Use attestation requirements that have been proposed for MU 3. And those proposed requirements, to my reading at least, seem to suggest that either you can offer a portal for VDT or you can offer an API and as a provider you get to pick, you can do both or you could just pick one or the other. Does anyone else from the call agree or disagree with...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

No...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

My reading.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Josh, this is Arien, I believe the intent would be and we probably should provide some comment here, I think the intent would be if you used the API to access the record that should count as a download, it should count towards your VDT numerator.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Right, so, right ...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

It’s all...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

There are two requirements one has to do with what you offer to patients and one has to do with how many patients actually access your services. And the point you just raised is about the latter, how many patients actually access the service. So, that part makes perfect sense to me if somebody accesses the API and they’re getting their data that’s great you can count on us having done it.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

But when it comes to what you actually have to offer to your patients, I may have misread this, but my impression was it might be okay just to offer the API and not to offer a portal and does that combined with this particular API definition seems like a mistake.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

I see the “or” in the CMS proposal in that measure in that proposed measure. VDT or an API.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

That’s what I’m saying.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah and I think it would be...it clearly should be allowable for somebody to offer only the API, probably along with a good ecosystem of Apps, but it should be possible for people to offer a portal and an API and...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

You know make it easier to get credit.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well we sure are being funny in that one place we want them to loosen up and the other place we want them to be more constrained, which is it right? I mean, if a vendor can get away with just offering an API and make it in the market and it passes CEHRT why do we care, right? Isn’t that what we’re basically saying give us the flexibility and let the markets decide? I mean, I...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

David, that's my perspective as well, I think the only nuance I have is that if somebody offers both it shouldn't...they shouldn't...a provider should not be in a bad spot because they offer both.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And some patients choose to access via the API and some patients choose to access via the end user portal...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah and...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That's my perspective that I have.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I mean, if there is flexibility offered that's goodness in general as long as you don't get caught in the "you have to do both" in order to be flexible. True flexibility as opposed to the, you know, "or's" become "and's" kind of flexibility, but more broadly it seems to me fairly clear here that what they're doing is to say in addition to supporting the current ways of liquefying your data, which is to read it at the portal or to download it in the form of a CDA, or to have it sent to somebody, transmitted to somebody we're adding a fourth category is they can get at it through this API and I find that really hard to argue with.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

That seems perfectly reasonable.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

This is Arien, I think that's not everybody's read of the CMS side of this.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, so okay, let's ask...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I don't know if we're allowed to comment on that. We have our other channels we can do that in.

**Janet Campbell – Software Developer – EPIC Systems**

But it doesn't get to the interpretation of the functional requirement I think is what people are arguing.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, so how...so what...come back to the functional requirement, what words would we use that would make people happy that are different than what we've got?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So, looking at the notion of the...this is Josh, looking at the notion of a data category request that seems to presume the idea, basically seems to presume a very FHIR-like API, you know, get medications, get prescriptions, get lab results and there is nothing wrong with that, but I don't see why we would bake it into this functional requirement.

The functional requirement should be at a little higher level, it should say, discrete data are available in a way that let's Apps query for the things that are relevant to those Apps and, you know, return some kind of subset of the data that the App is looking for. I don't think it makes sense to try to say exactly what those calls are and try to align them one by one with data types, I don't think it makes sense to say what the return mime types are, something very generic like what I just suggested might be easier to agree on.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But, so Josh, just to rip on that a second, so they have also declared the long range, the longer term intent is to in fact use FHIR, your suggestion is to say, okay that's fine when you get there nail it down to FHIR but in the meantime leave it more generic.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

That's right, I think it's funny to say, in the near-term you don't have to use FHIR but you have to use APIs that look vaguely FHIR-like in the four following ways that to me just seem arbitrary.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But you're okay with the telegraphing of the long-term intent?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Oh, I think that should be explicitly said that our long-term intent is to use FHIR, in the meantime you should use any API that can provide the following features and the features should be functional features and not like explaining what the API calls are or what the return types of the data are.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And we would encourage you to join together in a data sharing arrangement or otherwise to make sure that you're using an interoperable FHIR implementation.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes, no, we should absolutely make it clear that you can...that FHIR is a good way to do this, the best one we know, but don't require, you know, random bits of FHIR just because it seems closer to FHIR.

**Janet Campbell – Software Developer – EPIC Systems**

Yeah, I had similar feedback actually, I agree with that.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

I can see that.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And what would your...Josh, just on the...I mean, off the top of your head, how would you craft the language to get at meaningful access to discrete data? In other words, I'm assuming the policy driver here is the culmination of things like JASON and JTF and others that said "we need discrete data." So, they've got a checklist, we've got to require discrete data, how would you define that?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yeah, so let me first pick on the language here a little bit because I think it's actually really hard to define it properly and I'm not sure I would try.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So, it would appear that the language in the ONC proposed rule actually takes a good step in this direction because it says basically, you should be able to get all elements in any given data category, we don't know exactly what the categories are but they correspond to the common clinical dataset so things like prescriptions or vital signs.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yes.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

But if you read the language here what it says is that you'd have an API to respond to requests and return the full set of data for that category.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

So, I read that literally it tells me I need to have an API call that returns every lab result ever on the patient and that's an API call. And I might say, okay, I wouldn't mind having that call but maybe I want an API call that just gets me glucoses or it gets me all the lab results from the last three months. Is it really useful to have one that gets everything? If I wanted everything maybe I would just call to get everything call which would give me all the data, having an API call that just gets all the labs and nothing else might not really be that useful. I'm not trying to say it's not, but I don't know why you would call that out as specifically the one thing that people had to do.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, this is David, I stumbled on that phrase as well and I took it that their intent was get all the relevant data elements in that category not all the data in that category but I totally agree that's completely ambiguous the way it's written and that certainly needs to be clarified.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Right, I mean, so maybe something like, you know, the vendors should offer an API that allows Apps to query for discrete data in a way that's scoped down in a fashion that App developers are likely to find useful and just leave it at that.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yes. I like that suggestion a lot because I agree that the notion of full set was very confusing. Are you...are we as a group comfortable if we're going to go with discrete that it be the discrete elements, the discrete categories in the core clinical decision support or whatever they call it now?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I think, again, if you take a purely functional approach that can get very limiting as well, you know, I think the intent...I think the functional intent is that if there is data that would be retrievable in the aggregate it should also be severability retrievable. But there may be multiple different approaches for doing several retrievability some of which might have better more value added aggregations in them.

So, for example, I might be able to offer a medication list, I might be able to offer an active medication list, I might be able to offer access to an individual medication and we don't want a certification approach that requires or locks me into one and only one way or locks me into some artificially constrained way of offering access to that discrete data.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, so that was Josh's point about appropriate scoping of the query what about the categories do we think it makes sense to call out those?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I was arguing against the categories as well. I think...as I said, I think the intent is that all of the data that's included in the aggregate must also be severability accessible.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And I think that might be a better way of wording it or some other semblance to that.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

This is Josh, I would agree, we can refer to the categories in that we can say, the common clinical dataset has all these categories and all the data and all the data in all those categories should be somehow accessible through a discrete API.

I just don't want to prevent vendors who have better ideas about how to expose the data from doing it and if somebody wants to say, great here's an API call that lets you get glucose values as just a JSON list of numbers and we will tell you up front what the units are going to be then you can make a plot like that should be okay we shouldn't have to return all the data from the whole record.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, Josh, just, you know, how do you reconcile if you have a better idea with the notion that we're headed towards, we've telegraphed the intent to move to FHIR? Do you just say...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

I'd separate those...I'd separate out the two states of where we are and where we're going...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

And we explicitly say where we want to go, but we don’t...the reason we haven’t jumped to FHIR already is that it’s not ready and so we shouldn’t be imposing those details of how FHIR works today on today’s implementations.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

I like the direction that’s moving, but I still would continue to be uncomfortable about the differentiation on the format of the return for all requests versus the data category request. I thought that was overly constraining also.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, what...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

So, I don’t know what we’d do about that.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

George, what would...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

This is Josh, I certainly think that the individual discrete data requests we shouldn’t be specifying anything about the return format, I just think it’s a mistake. Part of me understands...I think I understand the intent for the “get everything” which is the intent being there are a bunch of places in this certification process where EHRs need to spit out C-CDA summaries already and those should be exposed to the API, you know, since they exist there should be a way to get them and that seems like a reasonable position.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And so, like I said if...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

So, what if...what if we didn’t specify that for certification, so “all” could be a FHIR composition resource.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Oh, yeah.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

However...so we don’t specify the return format in for certification but if you needed to use the API to meet the measure number five or objective number five with CMS, you know, proposed measure number one where you did need a transition of care document that, you know, the use of the API to meet that measure would, yes of course have to today return a Consolidated CDA document.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I think...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

But you'd only specify that in certification.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

I would propose a slightly different tweak that might also accomplish the same goal. So, one thing George has said that I absolutely agree with is, let's say somebody wants to dig into FHIR right now real deep and they say, we're going to expose all the discrete data through FHIR and we're also going to have a FHIR API call to get everything about a patient, which by the way exists there is an operation called dollar sign everything that you can call on a patient and it's supposed to return all the details that you need to interpret that patient record, so if a vendor wanted to implement that "everything" operation, you know, it should be clear to them that that's a fine thing to do and they should be encouraged to do it. And nobody should come away with this, from reading this document, with the impression that they need to offer a C-CDA and nothing else.

So, one small tweak might be to say, everyone has to provide a C-CDA end point because after all the C-CDA's are there, the API is there they might as well expose them. But also explicitly note that this doesn't need to be the only way you expose all the data about a patient and if you want to have a way that is more congruously aligned with your discrete data approach like a FHIR composition by all means vendors should implement that too.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, you're not loosening the requirement that you expose it, you're not proposing to drop a requirement of exposing a C-CDA you're just...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

No.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Making it clear that...but how would you...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

That you...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

How would you be constrained to...I mean...

**Janet Campbell – Software Developer – EPIC Systems**

Yeah, how would that work any other way?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, yeah, exactly, I mean, if you're certifying to a specific set of things and you want to do more than is required for certification sure go ahead, knock yourself out.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

A lot of this...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I mean...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Just signal it.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

A lot of this is in the Reg text, the explanatory text that we would want ONC to be writing about this because in the past we have seen people being rather overly literal in these areas. So, making sure that it was clear both in our comment and asking ONC to be clear that we actually encourage people to provide multiple options in this area would be very helpful.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah and so that tweak was not for you David or for you Janet you already got it, but it’s for folks who read that thing and think “oh, this is exactly what I need to do and nothing else.”

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, but so you’re saying you want to require more of everybody?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

No, no, no.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

No.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

It was just commentary language as Arien said.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I’m trying to trap you here, okay.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

This is about...so I think the request would be to make sure there are sufficient explanatory facts, I think there is a preamble to this functional requirement that we want ONC to write and that preamble is words to the effect of, we’re adopting a functional requirement because FHIR is not yet there and not yet adequately tested, however, we believe that FHIR ultimately will be the approach if it proves it’s worth it actually will be a certification, we believe it will be a certification criterion in the future and we highly encourage people who are developing APIs to develop them in these ways, number one.

Number two, we are providing a minimal set, we would encourage API developers to develop functionality beyond that minimal extent, we do not intend to discourage people from providing FHIR aggregates or others, or, you know, FHIR-based documents in addition to a Consolidated CDA.

So, explanatory text to that nature that makes it very clear what the regulatory intent is I think would be really useful.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Perfect.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

By the way is anybody on and taking notes? I guess we’ve got a transmittal and so we can go back to the transmittal but we’re saying a lot of really good things and I just want to make sure we don’t lose them.

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

Yes, I’m on, I’m trying to take notes for Debbie but I didn’t capture all of that but we can go back to the recording to make sure that we do.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Okay, good.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So...

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Mark the time...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, let’s see, let’s talk a little bit about the patient...I’m going to just push us forward a little bit, these are...

**Janet Campbell – Software Developer – EPIC Systems**

Are there...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Good thoughts we’re going to have to synthesize.

**Janet Campbell – Software Developer – EPIC Systems**

...other comments then? I did actually have a few comments on pages 3, 4 and 5, but I agree we should get to VDT.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, I was going to get to the other aspect of the API spec which was patient lookup because I know there were a couple of comments on that.

**Janet Campbell – Software Developer – EPIC Systems**

Oh, okay.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Before we go to VDT...

**Janet Campbell – Software Developer – EPIC Systems**

Sorry, okay.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And the API section. Somebody made comments about patient look up...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

This is Josh, I definitely did.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, Josh why don’t you walk us through.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah, that’s me. So, just to frame this, I think this again, falls in the category of commentary language rather than necessarily a change to the actual certification criterion, but to put it this way, if we want to provide patient facing Apps that can access patient data and be authorized to do so, by the patient, it’s not really the case that the App needs access to an API call that’s like “get me the patient now.”

Often times in a...like in an OAuth process you learn about the patient or who the user is as a natural byproduct of the authorization process itself and so I just think it should be clear to API developers, they don’t need to have an API call like “get user” or “get patient.” All they need to do is functionally allow the App to be authorized by the patient to access a record and then that authorization itself conveys all the information the App needs.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

This is Arien, I do not believe that’s actually the intent of that functional requirement. I believe the intent of the functional requirement is something that’s the moral equivalent of a PIX lookup or an XCPD query or...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

A patient facing PIX lookup?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

No...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

No.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

This is provider side, so you’re right on the patient side that particular API doesn’t make any sense.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, this is the...I see this as just the other side of the targeted query. If you’re going to support XCA you’ve got to have XCPD or some other mechanism of identifying the patient before you query for their documents.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Okay, I think that’s fine but it sort of breaks this abstraction barrier that like there this is common API definition that’s used for the patient side and for the provider’s side because some things just clearly don’t make sense in one category.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yeah, so I agree and it is odd to have jumbled these two different worlds into...I think they thought this was parsimony but I believe they’ve...what did you say, crossed the abstraction barrier? I like that.

So, maybe, you know, I wonder if a broad commentary might be that this should be...I don’t know what I’m trying to say here, but, if the intent here is to support what would have been called targeted query, which is the ability for an outside system to come in locate a patient and fetch, at a minimum, a summary document on the one hand decoupled from the notion of App integrations where in fact the context may provide the patient and the APIs are going to be much more likely to be focused on data, is it those are separable concerns...I don’t know now does that make the certification too complicated?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

No, I mean, it may be as little as just an addendum to this point about patient selection. So, there is a list of four things, security, patient selection, data requests and all requests. So, it may just be as little as just labeling the patient selection piece as only applying in provider context and not in patient context.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, the separable...so I go back to the...Debbie’s comment which I think...the intent is to have one holistic set of functionality that works together. The net side-effect of that is that if you wanted for example to get document-based query by participation in an HIE but API access alone it’s not clear how you’d meet the certification criteria and the Meaningful Use criteria or we may end having to build some additional fake API stuff in order to meet the certification criteria even though your real intent is to get this done through HIEs or others.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Sure or if you wanted to build and certify a limited purpose system that just provided patient access...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That’s right.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

It wouldn’t make sense to do quite all these things.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That’s right and so...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

That’s a VDT.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

There are benefits to making the requirements severable. The negative of making the requirements severable is the point about making sure that they’re a holistic and seamless whole, I guess holistic and seamless whole is redundant, but anyway.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But so Arien are you...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Why...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Are you concerned...I’m not following you, so if they declare that the intent is for this to be holistic you’re worried that it will create “make work?”

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I’m worried about two things, number one is that it doesn’t open enough market opportunity for somebody who wanted to offer for example the API access requirements as a severable component, but didn’t want to offer maybe some of the other components or it would not offer flexibility for EHR vendors, technology vendors or providers who wanted to meet their requirements through an HIE that might only be certified for the document-based access but not certified for other capabilities.

If you remember at the end of the day this comes down to collecting a set of modules that meet your base EHR and certified EHR technology capability and it may limit your ability to collect that bundle of modules.

So, I would argue in general for severability of requirements notwithstanding the intent to make the capabilities work together relatively seamlessly.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, so that’s what I was...I think that’s what I was suggesting is that they could have done this with these two teased apart the, you know, the API that would be used to support or the capability that would have supported targeted query is a separate thing from this API discrete data access that may or may not include a CDA document in the requirements and unfortunately they’ve lumped them together.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That’s right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Now clearly it makes life more complicated for providers...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Right.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Because they’ve got to assemble modules and make sure that its modules work together.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, so let me...let me ask just a trivial question and I know that the assumption here is not that you have to go and do FHIR, but if you implemented the FHIR patient resource with the standard suggested query terms you would meet this patient lookup requirement would you not? In other words...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

That's a somewhat easy one to meet if you're headed down the FHIR path.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

And I can't imagine any other APIs existing, proprietary API that wouldn't have patient lookup in it. So, maybe this is much ado about nothing? I mean, are we really worried that you couldn't look up a patient with your API?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Well, so, David I think what you said is right...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, but...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

But there's another way to implementation...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

What is the definition of look up a patient and maybe that's an interesting area to ask ONC for clarification is their idea for look up a patient demographic-based query, is it...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, they make...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

...sorry.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

They make it pretty clear that you get a token or a term I think they used a token that could be used to drive the discrete query. So, you're getting an ID. You're getting...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

That's the output of a lookup process is something that can tell you an ID.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I thought they were pretty clear about that.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I'll have to go look at it.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

It depends on where the inputs are, but David I agree with you...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, they...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

A perfectly good way to implement the patient selection feature would be with a FHIR, you know, patient end point that allowed you do a search. I don't think that's quite the same as saying that the discrete data requests...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Encompass this requirement.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Sorry, I'm looking at this and yes, so the API would need to include a means for the application of query for an ID or other token of a patient record.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Query what?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

The patient lookup functional requirement.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

By what, yeah, I read it to say, right, something like do you know any patients named Josh who were born in 1982...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

It's not specified here.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

You're assuming demographic query.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes, I'm assuming that kind of stuff, yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But, yes, but isn't that a nicely generic functional requirement you could do that by, you know, facial recognition and that would pass, you know, do whatever you want.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Would offering one identifier and getting back another identifier pass?

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

For looking up a patient. I mean...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

We're calling for less...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That's right and so...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

We're calling for more genericity less specificity this seems pretty damn generic.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

So, we would want to comment then that...we would want to comment then that here are some examples of queries that we believe would meet the functional requirements and here's why those things are good and here's how they map to for example existing standards, one ID traded for another ID would like a PIX query, one demographics traded for an ID might look like a PDQ or a FHIR query, or an XCPD query, facial recognition tied back to a patient might look like something we haven't seen before or look like, you know, some of the CommonWell biometrics that we do. So, we just want to make sure that we give examples of functional tests that we believe would meet the intent of this.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, that raises an interesting generic question that I've never thought about in this context. Given that most of our concern here is about the unnecessary complexity of certification how do we address that? Can we make specific recommendations about how this should be certified is that a valid...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Sure, why not.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

I don't know there is all sorts of rules we have to follow.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

The HIT Standards Committee is the Standards Committee that is responsible for advising the National Coordinator on standards implementation guidance and certification criteria. That's written in the legislation.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, so I like that...in the spirit of it's better to propose something constructive than to tear down something you don't like is if we propose what we thought would be a range of appropriate certification tests that would pass this functional spec along with whatever clarifications we think are warranted in the functional spec that would be a very...I think a positive move. So, okay, I'm slow to the party but I like that idea.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

I mean, when I...again, I'm just assuming things, when I read this document the picture I have in my head of what the likely certification test would be for it is the testing body says to the vendor "show me what it looks like for you to do a query for a patient." The vendor waves the mouse around and says "I just did a query" and the tester says "okay, check." Are we proposing something that would be more rigorous than that?

**Janet Campbell – Software Developer – EPIC Systems**

I don't think we can propose anything that is not...that's not clear.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, Arien was just suggesting enumerating a whole list of things like, you know, PIX interfaces and the like and I'm trying to...so I'm probing how deep we go in that. I like...I think the intent here is to just...waving your hand around and saying "see the API works" is the intent of what they're trying to capture here, because they've basically said, we're not ready to do FHIR yet but that's where we're going in the meantime get busy building an API. But do we get real concrete about the testability of it?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

That's what I'm struggling to understand so as commentary language sure saying you could do this with PIX or PDQ, or FHIR, you know, those all sound good, but are you suggesting that in the actual certification testing process you would test implementations of those three standards?

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

No, no, no, no what I'm trying to avoid against is that a certification body reading this assumes for example that it must be a demographic query and somebody comes in another means and has to go build demographic query even though it's no relevance to their business.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Okay, so just to be clear the advice that you, Arien, would be considering giving to NIST when they put together these testing programs, the advice would be basically the test looks like, ask the vendor how they do a query, have them show it to you and that's it.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That's right and here's a range of options for example that are as common...as regulatory context and commentary that would meet the intent of the requirement not as alternative means of meeting the requirement but a range of options that are non-exhaustive, examples...non-exhaustive examples, informative.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Okay, I think I follow you perfectly.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, now I'm getting nervous as soon as you start stringing together a list of "or's" you know somebody out there is going to read it as "oh, you've got to show me all of those." But, I mean, I...if it's worded properly that's clearly not the...that's not the outcome, but we get all tripped up on "or's" and "and's." I mean, you know, the less said the better in some sense that seems how we started the conversation.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

And that's what you're saying is anything goes if those are the words then maybe it helps to say it if that's what we mean.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, so, Janet you said you had some other concerns, we're probably going to...we just need to...let's cover the waterfront here we've only got 17 minutes.

**Janet Campbell – Software Developer – EPIC Systems**

Keep going I think I just jumped ahead too quickly.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

No, no go ahead what were your thoughts your concerns, just take us to the next question?

**Janet Campbell – Software Developer – EPIC Systems**

One of the questions I had was actually around the documentation which I think was on the next slide coming up, sorry, someone stole my computer, but I think it's that session three, oh, I lost my network connection so now I can't see for sure what it is but, there were two points on the documentation, there is one point that someone else had about having to provide a sandbox and then there was a point I made about documentation that I think accidentally got filed under VDT.

And my point about documentation was asking if you did chose to use a standard that's documented elsewhere are you required or does ONC intend for you to duplicate the documentation that already exists? And I assume not so I think that should be clarified.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I assume not as well. Who put the note in that the documentation should be...it should be clarified that the documentation must be publically available no NDA required, should include...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Oh, that was Josh.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Request and responses. Boy you're getting prescriptive.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

Yeah, yeah I do think there are areas where it is worth being prescriptive. I may not find a lot of sympathy in this group but I figured I would put it out there.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

So, I just wanted to follow up on Janet's previous comment, this is Arien, and just make sure I understand if for example you implemented the letter of the Argonaut smart on FHIR spec and you said...documentation as the Argonauts might on smart on FHIR spec, you'd like to just be able to point to that and say, that's what we do and not actually duplicate that text because you have to for certification.

**Janet Campbell – Software Developer – EPIC Systems**

Exactly or at least to...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Okay.

**Janet Campbell – Software Developer – EPIC Systems**

Augment the existing text without duplicating it.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, okay.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, we are comfortable...I think I am, we're comfortable that a URL to the documentation even if it was authored by a standards body is appropriate...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Or standards process of some kind is that what you're saying Janet that should be adequate?

**Janet Campbell – Software Developer – EPIC Systems**

Yes.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yes.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital**

And this is Josh, I think that linking to that should be certainly okay as one part of documenting your product but you probably have some other things that you need to say like, you know, what are the API end points, how do you register users in your system, all the stuff that a standard doesn't cover but that your users would need to know in order to actually use the API. So, the actual, how does the resource work absolutely, point to FHIR, point to DAF, point to Argonaut, but that probably can't just be, you know, EPIC submits a link to the argonautproject.org as its documentation.

**Janet Campbell – Software Developer – EPIC Systems**

Oh that's an interesting question that you bring up around specifically the end points and for me that came up around the terms of use as well, is that in this case, you know, we don't own that data and for us there is not a single end point that would address every evidence database out there so I don't know that...I mean, we could document the final I guess branch of the end point but not the roots.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah, it might be, here’s how you interact with your EHR to learn what your end point is for your local install but some instructions that the end user could follow so then they would know how to connect.

**Janet Campbell – Software Developer – EPIC Systems**

But we wouldn’t give that to the public would we? Because I mean the way that that’s set up is not the public’s concern because they can’t get to it. Do you know what I mean? I’m just trying to think of making sure that this turns into the right documentation for the right people and that it doesn’t end up confusing a third-party or having us document something that maybe is better done within system tutorials for example.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well, could it...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Sure, I mean...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Could we zoom out and basically say that if were in the mode of...and Josh you may want to be more specific, but at a minimum say something that documentation should be sufficient to enable a developer to make Meaningful Use, oops, to make use of the APIs?

I mean, obviously, the goal of the documentation is to get people to be able to use it constrained by whatever other issues there may be but at least the documentation isn’t the barrier to use.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah, that’s certainly necessary, I’m not sure if it’s sufficient but I don’t think anyone would disagree with that.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But, I’m trying to address Janet’s concern that there may be things that it’s not...there is not much point in being overly precise in terms of what we require because the different vendors are going to handle that end point concern differently some are going to use a single cloud point and branch internally, some are going to do it at the client level, God knows what, you know, everyone will do.

A URL is a URL or whatever, but, how you get to that you URL may be vendor specific. So, the documentation needs to be sufficient to enable use of the API by appropriately qualified developers. But I think that’s what it says already. Josh you just want to go further and describe what good documentation should look like?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Well, yes, and also how it should be accessible to a community who is trying to figure out, a community of software developers, you know, think about a startup that’s trying to figure out what EHRs can they integrate with. Today they basically have no way to answer that question other than talking with a bunch of hospitals, making a lot of friends and then liking sneaking documents over e-mail, you know, I know a guy over there and he sent me a copy of this thing from EPIC and that thing from Cerner, and then I have them on my hard drive for a while and it would be really nice if people who were in that position had access to the documentation and could read it and say this sounds like a good investment of my time to integrate here or no this seems pretty non-standard and given the market share it’s not worthwhile.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

For anybody that thinks that Josh is joking that’s exactly the way it does work.

**Janet Campbell – Software Developer – EPIC Systems**

I don’t know our documentation of our public end points is on line and it’s behind an open ID click through.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

So, there’s lots of good stuff on EPIC that’s on the open EPIC website but I don’t think you would say that, you know, all of your internal interfaces are documented there, certainly the most interesting documentation that I may or may not have seen on EPIC products did not...on open.epic.

**Janet Campbell – Software Developer – EPIC Systems**

That’s correct, yes, we reserve stuff for our customers.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah and so the requirements here are not about the documentation of the entire vendor’s products...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Right...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

It’s about...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

It’s the APIs.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

A particular API. So, would you say Josh...well, I don’t want to be vendor specific, but I think Janet’s answer is pretty clear it is open, is that...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Oh, I think EPIC has done a really great job, probably one of the best jobs of openly documenting how the API works and if everybody basically did what EPIC has done for their open APIs we would be well on the way to meeting the criterion that I proposed here.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Okay, and I would agree, I thought you were calling for something more than that though.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

No, I don’t think in what I’ve written here I’m calling for something more, I’m just saying that there is documentation some of which is open for some vendors and some of which is not. What I would like to do is created a baseline expectation that the documentation for the APIs that you need to meet these certification criteria should be openly available and people shouldn’t have to pay or sign an NDA to see them.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well that’s an...let me ask NDA question in the context of the way this is currently structured which is would allow for proprietary APIs in this functional stage to be eventually replaced by a standards-based API. Do you think we would suggest no NDA even in the functional stage of this?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah, that’s my goal is if...somebody can build a clever proprietary API and the implementation details of that API maybe quite private and closely held, but the documentation for how it works should be there for anyone to read about the web that’s what I’m saying and you guys may push back very hard, but I at least want to make my position clear.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah. I hadn’t thought about it in this phase were some vendors may choose to meet...could choose to meet this requirement via and existing proprietary API that may currently be protected in ways that are different from what you’re asking for, might not but might be.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

This is Arien, just to make sure I understand, Josh, if you had to register for a developer token to access that, if a developer token required you to sign a terms of use to access it that it had for example indemnity and other kinds of charges or language...is an NDA the only thing that you would find onerous? Are there other things you’d find onerous? I’m just wondering what the intent is of your...I’m trying to figure out how far your proposed criterion would go?

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah, it’s exactly the right set of questions to ask and I don’t have it nuanced enough to have responses to say like “yes this is the piece that’s okay” and “no this is the piece that’s not.”

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

If a vendor protected their content via a copyright and forbade you, there is no NDA, but it’s protected by copyrights and you can’t duplicate it would that meet the...I’m just trying to figure out...

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yes, yes and generally speaking what you just said sounds fine, but, right, I don’t think that I am going to be able to draw a precise line that’s going to give us total clarity on this question.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Your functional intent rather than meeting specific terms, your functional intent is that ordinary Joe or Jane programmer should be able to, without significant amounts of coordination or paying unreasonable access fees, and unreasonable defined in terms of ordinary Joe and Jane startup developer should be able to access documentation sufficient to develop and test against the API and get running.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Yeah and in particular with respect to fees I think the answer is probably that it’s no cost.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, so, I’m just thinking of real existing App models like the Apple App Model where, you know, you’ve got to be an Apple developer member, you’ve got to get a certificate, you know, there are certain things that you’ve got to do in order to get up and running and your proposed criteria would just allow an App store like Model even though the developer fees and other kinds of terms of use would be non-discriminatory and not an obstacle to a startup developer.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

So, I won’t push too hard down this road but I think you could have an App store like Model where you had to pay, you know, when you actually wanted to use the APIs or, you know, put your App into production or something rather than pay up front just to see the documentation and then the world would go on, but, sure I think the first thing you said, Arien, basically captures the spirit of what I’m looking for and in my ideal there wouldn’t be a cost just to see the documentation.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, there’s an...

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Yeah, and hi, this is Jeff, I just want to say that from Premier’s perspective we agree. I mean, I think, you know, looking at Apple for example, yes you have to pay a small fee in order to actually upload an App to the App Store but in order to access the actual docs themselves what the API does, how it actually functions that’s all available for free.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, this is David, I wanted to make the distinction between the cost that might or might not be associated with seeing and reading the documentation versus the cost associated with actually using it in a vendor hosted setting.

**Janet Campbell – Software Developer – EPIC Systems**

**I would expect that if there was a cost associated with using it that could be easily...I mean, I would call that information blocking.**

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

So, you’re saying there should be no cost in either of those two stages, reading it or using it?

**Janet Campbell – Software Developer – EPIC Systems**

I think it’s something to keep in mind.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

And it maybe...those concerns maybe particularly stronger in the patient facing domain.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Well and then...and it is conceivable that in this stage, this interim stage where we are allowing for purely functional certification which might in fact leverage existing proprietary approaches that this could be more of an objection than when it’s completely standards-based and everybody knows what the documentation dose because it’s a standard.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

That’s right, I think it is a heightened concern in this interim phase.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, yeah. So...but it sounds to me like the consensus is pretty strongly that there should be certainly no fee to read the documentation, no barrier whatsoever to read the documentation.

**Janet Campbell – Software Developer – EPIC Systems**

I mean, I’ll say, like I think that actually getting into any certification around here worries me just because of all the many times that in the middle of this conversation where we’re like, oh, actually I don’t know how that would work, so I’m not going to argue for more I guess...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah, that’s why I was trying to get at the intent of Josh’s statement for which I completely agree the intent of Josh’s statement is that Jane and Joe developer who are in a startup and, you know, ill-funded startup should have no unreasonable, you know, obstacles to developing against the API.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

But what we call for in the JTF was something akin to the FRAND model, you know, Fair and Non-Discriminatory licensing maybe that’s referring more towards the ability to use the API than to read it. Is it adequate to leave it as vague as that? I mean, it’s worked well for the rest of the Internet.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah the issue with FRAND by the way is that it’s R for whom...

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And so you typically have sometimes FRAND defined around licensing for very large organizations but maybe unreasonable for Jane and Joe garage startups self-kind of developer. And that’s why I tried to anchor it to Jane and Joe because, you know, she’s funding this out of her own pocket and she’s got a big dream R for her may not be R for McKesson.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah but that's the...and I usually don't...I usually drop the R and just refer to the non-discriminatory point.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Sure.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

You know and I wish that all sidewalks were moving sidewalks but there are some places where it just doesn't work.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

That's right.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

You can't have everything. This is going to be hard. We've only got two minutes I think we have to do public comment and then...

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

I think it's been a great discussion, I think we got a lot of good stuff out of it. Hopefully, Debbie can help synthesize this and then maybe David and I can do some off line synthesize as well and if we get our act together make this more efficient for the next time. This has been a great discussion.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, I don't know...I mean, I think this is quite efficient, I think these are really thorny, complex issues, you know, bottom line is being a regulator is not an easy job. Okay, so we need to see if there is public comment. I'm right on the time am I not?

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

Yes, you are.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, okay.

**Public Comment**

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

Lonnie, can you please open the lines?

**Lonnie Moore – Meetings Coordinator – Altarum Institute**

Yes, 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.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

And Michelle...

**Lonnie Moore – Meetings Coordinator – Altarum Institute**

If you are on the telephone and would like to make a public comment, please press \*1 at this time.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Sorry about that, Michelle, while we're waiting for public comment, (a) let's make sure that we tell Steve that David just said that. And then (b)...

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

I was thinking that.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

We should make sure we've got assignments for the next go around and I don't think we're going to be able to get them, maybe we should e-mail those immediately after to make sure that we've got appropriate time for people to think about and write up their comments.

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

Okay, I do think that we might want to think about also adding one more meeting before the 20<sup>th</sup>.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yeah.

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

Just seeing how today's conversation went.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Yes, agree.

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

Okay and it looks like we have no public comment. So, thank you all.

**Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation**

Thanks everybody.

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

Have a great day.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Yeah, thanks.

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

Safe travels.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Thank you.

**David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation**

Thank you everybody for an open and useful sharing, this is really great stuff, bye-bye.

**Joshua C. Mandel, MD, SB – Research Scientist – Boston Children’s Hospital**

Bye all.

**George Cole – Principal Scientist, Community Solutions – Allscripts**

Bye.

**Jeff Gunther – Vice President – Foundations at Premier, Inc.**

Bye, guys.