HIT Standards Committee
Architecture, Services & Application Program Interfaces Workgroup
Final Transcript
May 7, 2015

Presentation

Operator
All lines bridged with the public.

Michelle Consolazio, MPH – FACA Lead/Policy Analyst – Office of the National Coordinator for Health Information Technology
Thank you. Good afternoon everyone, this is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Standards Committee's Architecture, Services & API Workgroup. This is a public call and there will be time for public comment at the end of the call. As a reminder, please state your name before speaking as this meeting is being transcribed and recorded. Also as a reminder, if you're following along using the webinar and you place a public comment, we may share that public comment at the end of today's meeting. With that, I will 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. Al 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
George Cole? Hi, Gajen.

George Cole – Principal Scientist, Community Solutions – Allscripts
Yes, George is 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, I'm here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Janet. Jeff Gunther? And Josh Mandel? From ONC do we have Debbie Bucci?

Debbie Bucci – Office of Standards and Interoperability – Office of the National Coordinator for Health Information Technology
Debbie's here.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hi, Debbie. Anyone else from ONC on the line? Okay, I'll turn it back to you David and Arien.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
All right, so I guess we had a pretty productive hour-long meeting; this is the one where we have an hour and a half just to finish up all our comments. And I think we've got one more before the Standards Committee, is that right or do I have that wrong?

Debbie Bucci – Office of Standards and Interoperability – Office of the National Coordinator for Health Information Technology
This is Debbie, yes we do; we have one more.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay, so we'll get together all of our comments and then put together a draft transmittal and then review that in the last meeting prior to the Standards Committee meeting, which is the…will be the NPRM connect…Comment-A-Thon. Commentapalooza, is that what we call it?

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So today I believe, I'm having a hard time getting the slides together, but I believe we want to talk about XDM packaging and HPD; I believe those are the last items on our slate.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I think that's right.

Debbie Bucci – Office of Standards and Interoperability – Office of the National Coordinator for Health Information Technology
That's correct.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm having some trouble connecting to certain parts of the Internet externally, so I may just have to, David, have you drive the slide stuff.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I wonder if somebody would send me the slides offline. I think you already sent them, I'll go look at them.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I think they're right…basically the same as…they're pretty close to the same as what we had bef…last time, just with more focus, but yeah. So, this is our workgroup; we know who we are; next slide. Our meeting today, May 7; we have another one to finalize, as Arien just described, on May 19, the day before the May 20 meeting…Standards Committee meeting in DC. So next slide. That's our to-do list; we're almost done. Next slide.

Okay, XDM packaging; you don't have the full text here, but the gist of it is a requirement that anyone who implements an SMTP based Edge would have to demonstrate the ability to accept and process an XDM package it receives, which would include extracting relevant metadata and documents. Interesting, I didn't notice that it's just accept and process, is there no requirement to be able to generate and XDM package?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
The only reason you'd generate an XDM package is if you're an XDR receiver.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That was my…so this is for, so if you remember, there's an or…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…in the certification approach. It's, I believe, 315 H1 and H2, I think that's right.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
H1 is SMTP and H2 is XDR and XDR requires the XDR XDM package repackage implementation guide. So this is specific to H1 and the…my understanding of the intent here is that an H1 SMTP receiver could well receive an XDM package. And I think there's been…we certainly went through, in my own experience, in our own experience we went through a period where lots of XDM packages would hit, they'd get sent on to the EHR and the EHR user would have no idea what to do with the XDM package. It was…even to the extent that in many cases the virus rules would not allow you to use a zip package, because they're often vectors for attacks, and then even in cases where zip packages were allowed, the labor of opening the thing, extracting it, going to the right directory to find the content was too burdensome for providers.

And so a number of us in the wild implemented the ability to unwrap that XDM package and send it on with the appropriate documents to the end receiver, in order to mitigate against the user…the poor user experience that that generated. And my interpretation of this is that it's requiring that that unwrapping be performed.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah…this is David; that's how I read it as well but what has occurred to me is are we assuming that there's no value in XDM independent of this particular impedance mismatch? In other words, if someone is sending data out of a non-XDR based system, they could certainly package the data that they're sending as XDM…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
They could, I don't…there's no…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…if they thought there was value in the metadata.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…but there's no requirement to do so.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well, should there be? Does it make any…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No.

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

Janet Campbell – Software Developer – EPIC Systems
You get that one then I get to say no later.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I mean, it's just an odd asymmetry, right, that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Well, I don't actually think it's an asymmetry, I think it's a good reflection of Postel's law that receivers need to be flexible, but senders are sending plain old standards based SMTP with Internet message format documents and properly formatted multi-part MIME attachments. Why don't we…why don't I stop talking and see what George and Janet think. You all both have the XDR only Edge so, this may be an I don't care for you; but with your policy hat on.

Janet Campbell – Software Developer – EPIC Systems
We're not an XDR only Edge, I think we just didn't really have an op…a strong opinion on this one.

George Cole – Principal Scientist, Community Solutions – Allscripts
I'd say the same thing; we're not XD only…XDR only either and so, it's sort of, this is, yeah.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
And this is Josh, I don't actually have anything to say about this, but I just wanted to say during roll call I tried to speak and somehow was on a muted line; so I've called back in and I am here.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yay…

George Cole – Principal Scientist, Community Solutions – Allscripts
All right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
We didn't think you were…we assumed you were somewhere over the Atlantic on the way to Paris…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
No.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…but maybe you're already in Paris.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
…that's in a couple of hours.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah. Hopefully you'll be on the plane with Peter, who's doing that flight. Anyway…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So, let's assume for the sake of discussion, that it is SMTP receivers only who receive an XDM package and need to be able to do something with it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So, as a vendor who does have SMTP only Edges, I think this…you've got to do this.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I'm not going to object to it. My only question is whether we should raise the bar…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Right, I hear your…as…and I would never willingly invite more regulation than we need, so, but I…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
If I were to raise the bar, I'd want to raise the bar relative to FHIR-based Edge, and I don't think…or FHIR-based packaging. I…XDM is a re…was a good solution at the time, it made sense at the time, but I don't…I'm not sure that maybe there are some XDM advocates out there, but I'm not sure that anybody would take a look at it and say, this is so great we should do more of it. But it does what it does, it's useful, it is possible to extract the documents; but I'm not sure that we should be in the position of essentially making XDM universal.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
When we make something universal, I think we should make something that's more of a FHIR-based Edge universal.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well you mean a FHIR-based bundle…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, exactly.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…or do you mean…yeah, FHIR-based bundles. Yeah. Well I won't argue about it but I do think it's reasonable to be able to process them because they do exist and otherwise you've just defeated the whole purpose and they're not going to go away, so I don't have any objections to this.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay, so understanding it, is it clear enough what it means to accept and process an XDM package? So it says, extract the relevant metadata and document; it doesn't, I'll say what we do. David, maybe you can say what you all do. But what we do is we extract the metadata, use the metadata to figure out what documents to extract. We extract the documents and then we've got a simple API where we throw the documents in the API and send it to the end rece…fully integrated end receiver and that's kind of it.

So, assuming that would meet the test of extracting relevant metadata and documents, then check. But I'm not exactly sure what extracting relevant metadata and documents is intended to mean. So I think we need better specificity in terms of…I think the intent is to be able to make sure that the receiver

receives the documents that are in the XDM package in a way that's appropriate for the end receiving systems user experience and that the certification criteria should be relevant to, I sent you documents and you received those documents and you received them appropriately in workflow. But if anything more is intended, I don't exactly know what to react to.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I mean practically what we do, and I'm not completely sure of the details, but the gist of it is we unpack the demographic data and launch a patient match…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…/lookup conversation so that the person who's reading the message can figure out which chart to put it in, to put the documents in. So extracting the metadata versus actually using it to trigger a match, that…maybe it's just left unsaid that you should be able to go and use that metadata to match it to your patient somehow, but not to specify exactly how you do that.

George Cole – Principal Scientist, Community Solutions – Allscripts
This is George. I'm not sure we want to go further than just say extract the relevant metadata and documents. I do think there's benefit in passing the metadata along, and I know from other experience that sometimes triggering the patient matching or using the metadata properties to perform the patient matching is significantly easier than trying to handle content that could be any of a number of different formats across the set of documents, right? There's no guarantee there's a CDA-based document in that document set.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
In terms of saying something concrete, would it be worth saying if there is a CDA inside of that XDM packaging, the EHR should be able to process it in the same kind of way that it would handle a transition of care document for an incoming transition of care?

Janet Campbell – Software Developer – EPIC Systems
I would assume that was implied, but I guess you're right, it's…the way it's worded, it might not be.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yup, that's a good point.

Janet Campbell – Software Developer – EPIC Systems
You know though, one thing I was thinking as I was looking at this, I don't…I agree that we don't want to say what should be done with the metadata. One thing that looks like it would be the case, just looking at the way this is written, is that the way that they will test it is that you will have an activity that shows that you can read the metadata and nobody will ever use that activity, but that's the only way that they're going to be able to show that you have processed relevant…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's what I was trying to get at in making sure that the certification criteria were worded in a way where you're not jumping through some bizarre, artificial hoops that are actually secondary to what you're doing.

George Cole – Principal Scientist, Community Solutions – Allscripts
Right.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So, I was sort of intentionally saying that the intent of this is that a receiver who receives an XDM document receives, in fact, the underlying embedded document, as they would if they were receiving it via a non-XDM package, a plain old Internet message format…apart.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Right, it…David; that makes sense to me, but I'm leaning towards not defining what you do with it other than that you can extract it, recognize it…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, but to Janet's point, if you don't…if you aren't explicit about what the certification criteria might look like, you may end up with a certification criterion that says, oh, you got to extract the metadata, so where's your metadata? And then you fail your test or you've got to create some artificial, go look at the metadata…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…thing that…ehh.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But, I mean, how do you get more precise?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Well that's where I was going in saying that the intent…we should comment that the intent of the rule or the intent of the function is to make sure that receivers can actually receive the underlying documents and certification criteria relevant to extraction should test the end…workflow and not require specific behavior of the metadata, including the ability to view it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Okay, you lost me on that and there was some noise; you want to try that…say that one more time Arien, please.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, so what I'm saying is that the intent of this is that a receiver who receives an XDM package should be in the same boat as that same receiver who receives plain old SMTP Internet message format and multi-part. That is, that they should…they're experience should be to receive the underlying documents that metadata that's extracted may be used for processing by the machinery, but that we…the intent of the certification criteria is not to require something specifically be done with that certif…metadata, including there's no intent to have the end user need to view the metadata to pass the certification criteria.

Janet Campbell – Software Developer – EPIC Systems
I can live with that.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But how do you…
George Cole – Principal Scientist, Community Solutions – Allscripts
Those are good clarifications, yeah.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So how do you…so what would be tested there, that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
The test would be…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…how do you demonstrate that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…let's say I send you a Consolidated CDA and a note that explains what's in the Consolidated CDA and a Word document, for example. And the sender sends via XDR XDM packaging and it ends up as an XDM bundle. The receiver receives a Consolidated CDA, which they process per Josh's point, the way that they process Consolidated CDAs. They see some explanatory text and they see any other attachments that might be there.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Hey Arien, it's Michelle, are you on a headset by any chance?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I am…

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
It's hard to hear you.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay, is this better?

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Oh my gosh, so much better.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay, sorry about that.

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

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So Arien, my only question is how do we make sure that…I think the regulatory intent here, certification intent is to make sure that the metadata is used in some meaningful way.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's what I'm not…that's what I'm actually trying to avoid is…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well what...why would you no…are you assuming that all the rest of the content has the same metadata in it, which I don't think is the case?

Janet Campbell – Software Developer – EPIC Systems
I'm guessing that it's not so much that any system worth its salt wouldn't use the metadata, it's more, is that something that we need to certify…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Ask in certification criteria; that's correct, it's absolutely correct.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well, how is…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Because otherwise you're basically saying, you know, so I guess I would feel differently if there was an enumerated set of…so we're in an NPRM phase. We've got to react to something; I don't know what the processing rules that we'll be certified against will be and I'm not sure what meaningfully we can say. We can give guidance that the metadata shall be used to…should be used to match patients, but how…what's your test for that, now you go down the, I've got a certification criterion, I've got to attest that I use the metadata to match patients. Now I've got a patient ma…now I'm…I started with a certification criteria to receive XDM packages, now I've actually got a patient matching certification criterion.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Okay, but…

George Cole – Principal Scientist, Community Solutions – Allscripts
It's George; yeah, that's troubling. And you could go towards saying, well, you used the metadata to discover the documents in the document set because in the XDM package, there could be other attachments, which…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

George Cole – Principal Scientist, Community Solutions – Allscripts
…are actually not a part of the document set; but I don't know that we want to go there either.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's where I was going in the end-to-end test; so I really want to see an integration test that says an XDR receiver sends three documents or four documents or five documents or whatever. The…sorry, XDM sender sends four documents, the receiver, the SMTP receiver receives an XDM package and that package contains those four documents and at the end of the processing, the EHR user gets a message that has four documents in it.

Janet Campbell – Software Developer – EPIC Systems
Well, it depends on what the documents are, right? I don't think there's a requirement that you have to be able to accept any arbitrary documents.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Correct, that's right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Right and…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Or appropriately processes those four documents, correct; because it could be that you have virus scanning rules and other kinds of rules that say, you can't accept executables.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah but, you know, you've just…why even bother, I mean, if you're not going to require that the re…that the existence of that XDM be testable in any way, why even bother requiring that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
The test is that I sent as four documents and I received as four documents appropriate to the EHR rules in terms of what documents they display; what would fail the test would be I receive an XDM package.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
What if I receive…

George Cole – Principal Scientist, Community Solutions – Allscripts
So…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
I would rather receive an XDM package than nothing might be one way I could claim that I had succeeded, if I just say, the way that my EHR decides to handle this is by stripping the attachment, looking through the metadata and throwing it on the floor. Is that acceptable?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Sure, if they…as long as I receive four documents and appropriately process four documents.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
No, no, sorry, what I mean is, look through the metadata and then throw all the content, including the documents, on the floor.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right, so that would not…that's what I'm saying would fail the te…there are two things that would fail the test; number one is, I just don't receive it and number two is, I receive it as an X…as a zip attachment.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Why would zip…

George Cole – Principal Scientist, Community Solutions – Allscripts
So what if this proposed just…what if we dropped the word relevant metadata out of…include extracting the document…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
The documents, yup.

George Cole – Principal Scientist, Community Solutions – Allscripts
…drop out metadata.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yup. That would work for me as well.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But isn't it the case that with XDM you can send documents that have no metadata in them, no patient identifying data?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No.

George Cole – Principal Scientist, Community Solutions – Allscripts
Yes you can, absolutely.

Janet Campbell – Software Developer – EPIC Systems
Yes you can.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Oh you can?

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
A text file or…something.

Janet Campbell – Software Developer – EPIC Systems
Yup.

George Cole – Principal Scientist, Community Solutions – Allscripts
Oh absolute…you could send a PDF and, I mean…

Janet Campbell – Software Developer – EPIC Systems
Because that's my…point.

George Cole – Principal Scientist, Community Solutions – Allscripts
….there's data in it.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, oh, I see what you're saying, yes, you absolutely can. I'm not saying that receivers shouldn't use the metadata, I'm saying that if you go down the path of requiring specific metadata handling, be prepared that there's going to be a certification criteria that requires you to use patient attributes to do appropriate patient matching and you're going to have to prove that you matched the patient. Or that if you're looking at hashes, that you've done a hash compare and that if there's a hash invalidation that you fail that test, right? So all these things…

George Cole – Principal Scientist, Community Solutions – Allscripts
That's right.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…are going to…all these things are going to turn into certification tests that may or may not be relevant and may or may not fit the EHR workflow. What I'm suggesting is an end-to-end user experience oriented test that says, I sent four documents, I received four documents. And to Janet's point, receiving four documents may be saying, I'm not displaying this document because its executable and you're not allowed to see executables.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But you just made the assessment much more complex specifying which documents you have to be able to process, which ones you don't, whether they do or don't include metadata. I mean, it seems like the intent of XDM is to be able to, in a structured way, associate metadata with documents that might not have metadata in them, comma, and also to deal with the fact that the XDR legacy handled…moved data around this way.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So we're going to have systems that are sending inbound material that cannot be matched to a patient, creating all sorts of patient safety issues, unless that metadata can be processed.

Janet Campbell – Software Developer – EPIC Systems
Hey, I had thought that the metadata that they're referring to though is actually in the XDM envelope.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It is in the XDM envelope.

Janet Campbell – Software Developer – EPIC Systems
…would…so.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
It is. It is and that's what they mean by metadata I assume here is that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm…David, I'm asking you to be careful what you wish for cause you'll get it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well what's wrong with the language that there is now, extract relevant metadata and documents. And you could demonstrate that in any number of ways, show that the documents landed in the right chart would show it…that you'd processed it. Show that you could pop up a demographic search with that metadata in it, which would satisfy it. Show that it dumps it out on the…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
You're looking just at the demographic metadata; there's more metadata that's there that may or may not be relevant. For example, do you require folders and sub-folders? And do you require appropriate folder handling? Do you require as I said, you know, do we have an explicit pass/fail on hash checking? It's a good thing to do; do you want a certification test that tests that? Do you test that…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So I want…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Wait, hold on. Do you test the receiver looks at the format, the MIME code, the type code and the…help me George…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Okay, Arien. Arien, I get it. The point is, we want…we put a lot of work into Direct, we want it to be useful.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
This is the kind of place it fails, right? That's why this requirement is in here, because it failed…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…people didn't go the extra mile to do the work necessary to make it a usable system. So I want a certification criteria that increases the likelihood that it's useful and works in the real world.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I certainly don't want to overdo it and invite unnecessary nitpicking, but at the same time, it failed; the vendor community demonstrated they didn't get it, right? This wouldn't be here if it weren't for the fact that the vendor community, as a whole failed. No any ones of us maybe, but as a whole we failed.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So, so, but I guess what I'm saying is that if we're going down that path, we need to make sure that the certification requirement is relevant that there's a way to do the certification test.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And if you're…it sounds like what you're looking for is matching, and then my question is, great, so we require that the…at least we're requiring the metadata be parsed to figure out what documents are there, that's pretty clear.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I'm not requiring matching, I'm just saying that metadata is there to identify the patient, at a minimum, and that that may be relevant, depending upon what's in the packet and you should be able to demonstrate that you can, in fact, see that patient data, that identifying data, that safety-relevant, identifying data and use it in a mode that is appropriate to the intended use of the message, which could range from transition of care to just a golf date invitation, for all we know.

George Cole – Principal Scientist, Community Solutions – Allscripts
So David, so "see," I think is the operative issue here because if this happens machine to machine processing, the only way you "see" that that got use is if there's logging or transactional content that could only have gotten data out of the metadata that is used. And I mean, there may not be any way users ever are actually involved in this inbound processing. The "seeing" part might not…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I would…

George Cole – Principal Scientist, Community Solutions – Allscripts
…users may see documents but not metadata.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I would be happy if the certification test included the ability to extract the patient identifier and use it to match to a local patient identifier, if available. But otherwise you're inventing certifica…you're basically bleeding certification through to do, for example, demographic matching, for which there isn't a certification criterion. And then, as I said, there's a whole ton more XDS metadata that I think people should be able to differentiate based on how well they use that.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So here's a wrinkle. I just looked finally at the reg itself, page 105, and it says, additionally, because we expect XDM packaging to be created in accordance with specification included in the IHE IT Infrastructure Technical Framework, Volume 2B, we propose to adopt this as the standard for assessing whether the XDM package was successfully processed.

George Cole – Principal Scientist, Community Solutions – Allscripts
Oh, so that means hash checking is in effect…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So they're calling out Volume 2B.

George Cole – Principal Scientist, Community Solutions – Allscripts
…I'm pretty sure that…yup.
David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So my guess is that we're going to have to argue at that level.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
2B? This is ITI, 2B or not to be…my Internet's gone down.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
It looks like…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I mean, if I recall that, I don't know that hash checking is required. If I recall that, it just describes the layout, it describes the naming conventions; that is, you call it XDM/1.0 or whatever it is, you don't call it…you've got a specific layout that you adhere to with a specific directory structure; you go to this place to find upper case metadata.XML. It tells you where to point to in the document; I don't believe it says that you have to use hash checking but…

George Cole – Principal Scientist, Community Solutions – Allscripts
I'm looking…

Janet Campbell – Software Developer – EPIC Systems
Umm…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Why are we worried about hash checking…

George Cole – Principal Scientist, Community Solutions – Allscripts
…as fast as I can look.

Janet Campbell – Software Developer – EPIC Systems
It looks like a lot of the "shalls" are around the creation of the…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Why are you worried about hash checking Arien, in particular?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It's not that hash checking is a bad thing; it's that suddenly you've got a certification test that tests that good hashes bad hashes.

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

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Honestly Arien that seems like one of the more testable things in this space, I mean, if you're…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Sure.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
…implementing hash checking, you've either done it right or done it wrong and if you've done it right, why is it so bad to have a test of that fact.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Fair point, but…so I'm just asking for specificity in terms of if you say XDM metadata, which metadata are you looking for?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well and they said…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
So this goes back…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…it's the things defined in this particular spec, which unfortunately I don't know well enough to react to.

Janet Campbell – Software Developer – EPIC Systems
Well actually the spec itself, the spec itself points to ITI TF-3 4.3.1.2.2 for the XDM metadata, at least.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Yeah, I'm not, unfortunately familiar enough with IHE specs to cite chapter and verse, but just looking through the document that the ONC NPRM refers to, it says, a submission shall be rejected if the hash is included in the submission and its value doesn't match the hash of the received document. That kind of language is in here.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm okay with hash checking; I'm okay with…

George Cole – Principal Scientist, Community Solutions – Allscripts
You have hash checking, you know, ISO use for file names, capitalization of metadata; it's pretty…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, that's on the sender.

George Cole – Principal Scientist, Community Solutions – Allscripts
It's on the sender, yup.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
There's a name for the subject line and the subject line has to read something /XDM/1.0.

Janet Campbell – Software Developer – EPIC Systems
Yeah, there's also stuff around like the presence of a readme.txt and things like that.

George Cole – Principal Scientist, Community Solutions – Allscripts
Yeah, that's right.

Janet Campbell – Software Developer – EPIC Systems
I'd also say that in general, like the reason I'm agreeing with Arien, David, is that my general feeling is that if it doesn't have to go through testing and regulation, should it? So I'm always going to be a little bit conservative on this. I can see why this one is not…it's not the most burdensome one out there to do, it's something that we already do today. But I think that's sort of my feeling on it that let's keep it as simple as possible because already the certification rule is just out of control.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Well and again, there's a lot more metadata so I'm just saying, if we talk about metadata, let's be very specific about what metadata we expect and don't expect to be processed.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Could I ask a really basic question…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Um hmm.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
…just about the EHR workflow? Can somebody give me a sense of what's the most common scenario by which one of these XDM messages is authored? Like what's the end-user experience that results in one of these messages being sent?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Typically it would just be a referral or a…

George Cole – Principal Scientist, Community Solutions – Allscripts
Being sent could be a referral, yeah.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…discharge. Yeah, it would be a discharge and usually you're just generating the Consolidated CDA and sending it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But you could include files, you could include a note or a PDF or whatever.

George Cole – Principal Scientist, Community Solutions – Allscripts
Right.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
And are there other systems that just implement that using an inbox directly rather than an…sorry, just using SMTP as the outbound system as opposed…

George Cole – Principal Scientist, Community Solutions – Allscripts
Probably.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
…to an XDM?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
They'd see it as…they'd see it as a zip file and they unzip it, I think, if you exchange…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
I'm just wondering if we know how common it is for one of these referrals to be send over XDM versus just a Direct message coming out of somebody's outbox.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No, it's very typical, so there are a number of EHRs including EPIC and Allscripts where a very typical configuration is to couple the EHR with a HISP that's capable of doing XDR XDM interchange and so the EHR sends via XDR, that XDR is triggered by the referral or discharge workflow. It contains…everything that typically would be bundled in that referral or discharge workflow; it just happens to be sent over XDR and ends up as an XDM package.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Okay. So you think that's probably…

George Cole – Principal Scientist, Community Solutions – Allscripts
Not out of the EHR, though; the typical thing out of the EHR is just a plain XDS SOAP connection with…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Right.

George Cole – Principal Scientist, Community Solutions – Allscripts
…the HISP.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

George Cole – Principal Scientist, Community Solutions – Allscripts
So the bundling happens within the HISP typically before it transforms the content and sends it out a different…usually a different protocol.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
And so in that scenario, George, there's a SOAP connection between the EHR and the HISP.

George Cole – Principal Scientist, Community Solutions – Allscripts
Yeah.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
And then the HISP sends out an XDM message and there's no XDR in that loop? I'm just trying to figure out how common these things are.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…connection is XDR.
George Cole – Principal Scientist, Community Solutions – Allscripts
So XDR is a receiver actually really, right? XDR is…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Oh, that's right.

George Cole – Principal Scientist, Community Solutions – Allscripts
…a recipient, it's an endpoint that receives inbound content. The metadata and all of the documents that we'd call a submission set can be put together and sent by way of SOAP or they can be put together and put into a zip file that's XDM format; it's the same metadata and the same set of documents; the construct is a little different whether it's zipped with XDM or its SOAP, but it's the same content. Providers should never know what happened, whether it's going one way or the other. I hope to gosh they never see all of that mess.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That's right.

George Cole – Principal Scientist, Community Solutions – Allscripts
And then…

Janet Campbell – Software Developer – EPIC Systems
Just regulation and…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Do we know of any implementations? Sorry, go ahead.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Oh sure, there are plenty of implementations.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
No, no, what I was going to say, do we know of any implementations where the end user on the sending side just has a Direct outbox, creates a new Direct message to Dr. Jones at referral center and attaches a C-CDA? Is that…does anybody have a system that works that way?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
There are people who've got very simple web clients and yeah, they're a web client and they add an attachment and they send it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, yeah…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I don't think it's…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…you can do that even without a simple web client; you don't have to put it in XDM.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Ri…in the example I was just giving, there was no XDM, it was just a C-CDA.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So we do, by we I mean RelayHealth and Paragon; we have a simple API in between Paragon and the embedded HISP and we send natively SMTP. We don't do any XDR or XDS. So when we receive an XDM package, we do stuff, I don't even know what stuff we do…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…and we pull up a document and we put it back in. Going back to the question at hand, because we're 40 minutes into this; if there's specific metadata that we recommend specifically using, and I would limit it to hash checking an…so you clearly need to extract the documents that are in the metadata, read the submission set to extract the document objects to figure out what documents are referring to, number 1. Number 2, hash check them. And I'm okay with number 3 of if there's a pa…use a patient identifier and match that to the local patient identifier as the minimum metadata extraction requirements. Not okay with pull the demographics and do a demographic check because then you're in the middle of a demographic check certification criteria, not a metadata extraction certification criteria.

George Cole – Principal Scientist, Community Solutions – Allscripts
Umm.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
And nobody's asking for that, certainly I'm not asking for that.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Likewise for reading file types and using them to automatically associate with LOINC codes or what have you…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Right, and I don't think any…none of that's in that IHE document.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
(Indiscernible)

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Oh it's in the metadata.

George Cole – Principal Scientist, Community Solutions – Allscripts
I wouldn't even go to the patient identifier level; I think that's just…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So is this a philosophical argument about certification?
Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It's basically saying if you're going to say you're going to…so what the certi…what the reg text reads, and again its 105, is that right?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Page 105.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It's not the reg text, it's…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Page 105 is the…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Page 105 is the…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…we propose…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Preamble, yeah, whatever they call it.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…is…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
§170.205(p)(1) is the…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It says, its ability to accept and process and XDM package it receives which include extracting relevant metadata and documents. And so I'm okay with extracting documents, let's be very rigorous about what extracting relevant metadata means…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But what…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…and I would propose that to say, clearly you need to read the metadata to figure out what documents you're referring to, number 1. Number 2 is hash checking and number 3 is extracting a patient identifier for the purposes of, if the receiving system has that patient identifier for automating patient matching, and I would limit it to that.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I…and your concern about just leaving it as extracting relevant metadata is that that's too open-ended?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Somebody's going to create a certification criteria and say, what does it mean to extract?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well, they…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And what does it…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…a proposed criteria is that IHE doc…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No, that's additionally…that's additional.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
We propose to adopt it as the standard for assessing whether the package was successfully processed, specific…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm not even sure that makes sense because that's actually a spec for how the XDM gets generated.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
I think it's both sides, but it's a giant spec and it said lots of things and…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah. Yeah, I mean…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
…yeah, 400 pages.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…I'm philosophically sensitive to creating…to avoiding the creation of certification that is make work and doesn't advance the common good. But I'm also sensitive to the failures of Direct because of inadequate constraints.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm with you, so…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…that's a net negative for all of us that hurts.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So what…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
How do we get past that? That's what they're trying to solve for here.

George Cole – Principal Scientist, Community Solutions – Allscripts
So…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And by the way, if you look at the spec for how an XDM gets produced, it requires all kinds of things that people don't use like multipart documents with sub-directories. It has some specific language relating to use of disposition that actually conflicts with the Direct spec. Umm…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Is there…let me take a different angle. Is there an existing test suite that any of us are aware of that we could suggest be deemed, if that's the right word, adequate to certify that you've…you're handling it properly? I know there's been a lot of work on this, has anybody got one that works? Did the Connect-A-Thons have a test suite for this? Does AGIS or…

Janet Campbell – Software Developer – EPIC Systems
I think…

George Cole – Principal Scientist, Community Solutions – Allscripts
A test suite for XDM, they have that.

Janet Campbell – Software Developer – EPIC Systems
Yeah. I mean this is more a function of what you do when you get it, not how…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Not how you…whether it's valid to create. And that's the other thing is this spec is actually how you create it.

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

Janet Campbell – Software Developer – EPIC Systems
And I guess you can test as a document consumer or whatever the heck it's called in this particular stack. They probably do have something for that, but I doubt that IHE testing would be robust enough for this.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
But we're trying to make it less robust, so…right? I mean…

Janet Campbell – Software Developer – EPIC Systems
…comes around and looks at your system and nods his head.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, we want it to work seamlessly but to be real easy to pass.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay, here's the expected action. The portable media importer shall verify the integrity of the media by comparing their size and hash with the value of the corresponding entries in the metadata to XML, so hash checking. Mismatched documents shall be indicated to the user, media fault shall be indicated to the user; is that…they don't…do they refer to a…to 3.32.4.1.4, because that's where that text is. If it's the whole of 3.32.4, there's a whole bunch of other stuff in it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
The preamble…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
So what you just…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…text doesn't say anything, it just footnotes the package, doesn't give a…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, there's actually a reg text that defines what §170.205.p.1 is.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I don't have that. Is that buried in here maybe? I don't know where…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It's going to be somewhere. Let's see…

George Cole – Principal Scientist, Community Solutions – Allscripts
So Arien, in the way that IHE documents are written that section that you used about expected actions is where you would believe someone writing the test would go to find out any other expected metadata requirement processing requirements.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm okay actually with pointing at 3.32.4.1.4; because again what it says is, that it…integrity check, figure out what documents are in there, indicate any mismatched document and indicate any corrupted documents.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
That would certainly be a better reference than the whole thing.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Well maybe that's our recommendation?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yup.

George Cole – Principal Scientist, Community Solutions – Allscripts
I'd support that.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I mean, I think the other thing, Arien, and this is something for debate at the Standards Committee is this…we had a little bit of a debate about it last time is this notion of a, I forget what the phrase is, it's not deeming but it's where you could essentially have yourself certified by a real-world implementer that counts for the certification test. So if you pass the, I don't know, CommonWell CDA certification test, that counts.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Or DirectTrust or whatever.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
(Indiscernible)

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
By the way, I'm looking at the actual reference, the (p) whatever it was, 205(p) is the entire volume, IHE ITI TF-2B.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Okay, so let's…so, it sounds like at a minimum we would say it should identify the specific paragraph in the document that should drive the assessment, is that…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And we would suggest that it is 2.32.4.1.4 expected actions.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Say that number again; 2.32...

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
2.32.4.1.4.

George Cole – Principal Scientist, Community Solutions – Allscripts
3 dot…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
3.32.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
3.34…3.32.4.1.4; thank you.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Yes, just rolls off the tongue.

George Cole – Principal Scientist, Community Solutions – Allscripts
Really.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Is there an OID for that number?

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
It looks like an OID itself.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Could be an OID.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, it could be, it's almost got enough digits.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
All right.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So, all right, let's move on…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Shall we…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Whew, let's move on. That…

George Cole – Principal Scientist, Community Solutions – Allscripts
That was such a good one for no comments received.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, you guys can kick me later, I'm sorry if I made that one too hard, but…

Arien Malec – Vice President Strategy & Product marketing – RelayHealth Corporation
HPD.

Janet Campbell – Software Developer – EPIC Systems
So I have a comment to clarify my comment on this one, which is the first one.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Oh, let's go to the next slide.

Janet Campbell – Software Developer – EPIC Systems
Oh, sorry, yeah, I'm not on the Powe…or on the presentation.

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

Janet Campbell – Software Developer – EPIC Systems
I thought we were moving along.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, we are. We just hadn't caught up. So Janet, you're talking about which, now comment number 1 here?

Janet Campbell – Software Developer – EPIC Systems
Comment number 1 here; I was a little bit imprecise in the way I was referring to it but basically what I was trying to say is that I don't…I think it's premature to certify to HPD; the spec has problems even if it is about to go into final text, and that appears to be the feeling of the implementation group as well. So, I didn't exactly say that as clearly as I could, but that was my meaning.

George Cole – Principal Scientist, Community Solutions – Allscripts
And it's George. I lost track along the way, but, and my query's out to the people that know the answer to this haven't been answered, but my belief is that what was known as HPD Plus, which actually came out of the IWG group, has actually resulted in changes back into IHE and that what's in the IHE profile today as HPD actually embraces all of HPD Plus, what was talked about as HPD Plus. But I can't verify that to date.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
So my comment…this is David; is that it's just…it's immature, like Janet says, or let's say, I think you used the word premature, but it's also overly complex for the use case and that there are far simpler ways to do this and on a going forward basis, we ought to look to things like FHIR-based models that are much easier to…and to implement and to deploy than HPD.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Well yeah…so this is Arien. I think this was one of those cross-over points of when is a…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…in our previous commentary relative to the roadmap we said if a standard is widely used, by no means should you try to replace it with something FHIR-based in the short term, keep using the thing that's well used. There's clearly a cross-over point where something is inching towards ready for primetime, but isn't widely used and the question is, where do you throw the axe? My personal belief is you should put down the…put the axe down on the chopping block at places where there is no wide scale or widespread use.

It's not to say that anybody objects clearly to anybody using HPD Plus in the wild, it's saying that its…we don't have enough produc…we don't have any…I don't know if we have…I shouldn't say we don't have any production usage…we don't have enough sufficient wide scale production usage to know what the issues are and aren't to make certification a reasonable path to…we don't know what to certify on, what not to certify on, to make certification a reasonable path.

Secondarily, even though something is listed as, this is optional from the perspective of Stage 3, it is still listed in an ONC validated set of certification criteria and in fact, is listed as a standard ready for primetime in the best available standards list, which could lead CMS or others to point to the certification criteria and tie it to specific programmatics, which itself would be a mistake and not a good idea…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah and…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…which is a long way of saying no.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, you say no. Yeah, so self-serving note here, I took on a little home-brew project of weekend hacking to just kind of test out the notion that you didn't need HPD to have a fairly robust provider look up capability and just took some off-the-shelf search tools and wove them together and literally a couple of hundred lines of code and it can do all of these requirements and it took a weekend…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That is pretty cool.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…and it's all…stuff. And I just think its way…this is just way overkill. Anybody who wants to play with my little demo, its DavidMcCallie.com/nppes_fhir and its just stupid little hack, not designed to do anything other than meet…just to test out the ideas. But, I satisfied myself that you can take 3.7 million providers and search them in a millisecond for any combination of specialty, address, credentials, state, first name, last name…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Via FHIR-based queries.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
…and it uses FHIR rubric under the covers, yeah to pass the data back and forth. It uses Lucene to store the data but FHIR to expose it. And it works, I think it works…I think the real problem…in the real world the problem is not the search, the real problem is getting the data, who's responsible for creating and curating and exposing the data and energy put towards making that work better might make sense.

Janet Campbell – Software Developer – EPIC Systems
Yeah, we definit…I mean, I think that's really important as well and that's been a bigger concern here is what data's required, what data's not and the code sets that are being used, because you can use whatever code sets you want to, which has problems in implementation, lack of NPI is being required, that kind of thing. What was that web address, by the way?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
DavidMcCallie.com/nppes_fhir.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Its millions of records running on an i-Book apparently.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Ahh, it's an iMac, come on…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
iMac, whatever, yeah, not an iBook, sorry; that would be impressive.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Let me double check that I gave you the right, yeah, nppes_fhir…
Janet Campbell – Software Developer – EPIC Systems
Yup, that worked.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
That works, yeah. And it does wild cards automatically and I didn't put in the code to suppress wild cards because that's trivial and I didn't want to bother. But, you know, see if you can find your doctor in there and I bet you can and I bet it doesn't take very many keystrokes. And you don't have to have LDAP and you don't have to have hierarchical relationships to orgs and all that stuff. You do need somebody to be an authoritative source of the Direct address, which this obviously isn't, these are just made up addresses.

Janet Campbell – Software Developer – EPIC Systems
Well what's also cool, too is that it responds to all wild cards super quickly. But the other thing I was thinking with this is it appears that you're doing this not as sort of a dynamic query, but with the ability to have a download into a system that you then have control over, that Lucene system. And I think that was one of the things that we were concerned about as well, but if they do go forward with this, we'd want to be able to have the ability to load-in these directories in bulk, in batch behind the scenes.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, I mean, this…that's a good point, Janet. I'm just thinking that if their intent is to ensure that an EHR could go talk to a directory, whoever hosts those directories, then I can see why they would require that you support the API. But this is just a bad API to support if the goal is to make it easy for people to go deploy directories. And the FHIR practitioner query is perfectly adequate for the use cases they describe.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I'm not hearing another side of this debate, which leads me to conclude that we're arguing with ourselves.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, yeah, I think we're trying to word our language strongly.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Okay. So I think the simplest way of saying this is to say that we have not observed sufficient wide scale adoption and utilization…

Janet Campbell – Software Developer – EPIC Systems
(Indiscernible)

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…that would be sufficient to understand what the certification criteria actually should be and that therefore certification criteria is premature at this time. We could note that there are promising approaches based on a FHIR-based ecosystem, but I don't…that's not the reason why not; the reason

why not is let's not put certification criteria that aren't associated with wide scale production use where we actually know what we're certifying.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yup. And anybody who wants to see the code for this is out under Dmcallie on GitHub; Josh helped me make it work; thanks Josh.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I…

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
I only helped him complicate it.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
He did do that, he dockerized it.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I have yet, by the way, to figure out, I had to go get my JDK updated so now I can go pull down Lucene, so now I can pull down…

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
…then I can go play with it. I'm in yak shaving mode.

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

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
You should just run it through Docker, it'll be the easiest thing ever, ahem, ahem.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
With root privileges. Anyway…

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
If you have a…anyway. Okay.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Now we know we degenerate into geek humor.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation '
Oh, are we out of…no, we still have…

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
I think we're done.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
I think we may be done, so what we need to do is write these up Arien, you and I, and circulate them back in time for the next meeting so we can…we'll circulate them before the next meeting so that at the next meeting, which is the day before the Standards meeting, we can do any last minute wordsmithing.
Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
By the way, we sent out the text on the transmittal language relative to the APIs, I believe we sent that out; so I'd ask people to…oh, it's the day after, not the day before.

George Cole – Principal Scientist, Community Solutions – Allscripts
I thought we had a meeting scheduled for May 13.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
We have a meeting set up for May 13; we do have a meeting scheduled for May 13; that's right.

George Cole – Principal Scientist, Community Solutions – Allscripts
Okay.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, so our slide was wrong, I guess. Yeah.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah. So, we sent out the draft transmittal text for APIs, I'd ask people to read that and review and provide commentary on it. And then as David mentioned, we'll work in the background to draft all the other stuff we've done comment on, where I think we have consensus, and try to push that out to this group so that we can get comment before May 13.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Sounds good. Yeah, that notion of a meeting on May 19 was wrong, our slides are out of date, that's the problem, it confused us.

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

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
No problem.

George Cole – Principal Scientist, Community Solutions – Allscripts
Do we have one on May 19 also?

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
No.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
No, we have one on May 21.

George Cole – Principal Scientist, Community Solutions – Allscripts
Yes; okay.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, which may be tricky for me meet, but oh, I can do it, I'm okay.

Janet Campbell – Software Developer – EPIC Systems
Yeah…

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Well on May 21 you might need a breather, are you talking about May 13 or May 21?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
We definitely need the meeting on May 13.

David McCallie, Jr., MD – Senior Vice President, Medical Informatics – Cerner Corporation
Yeah, we can keep May 13, but May 21 maybe we, let's see where we…

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Maybe you'll give yourselves a break, you've worked really hard.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
That would be nice. Yeah.

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

Janet Campbell – Software Developer – EPIC Systems
And I won't be there on May 13; so hopefully the meeting will go by a lot more quickly and easily, but I'll review the others in the meantime.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Yeah, review the text and comment.

George Cole – Principal Scientist, Community Solutions – Allscripts
I doubt I'll be on May 13 call either.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
It'll be fast then. Excellent.

Joshua C. Mandel, MD, SB – Research Scientist – Boston Children's Hospital
Ditto for me.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
So why don't we just skip that meeting and then do all of our comment text via email.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And that's just the way it's going to have to do.

George Cole – Principal Scientist, Community Solutions – Allscripts
Okay.

Janet Campbell – Software Developer – EPIC Systems
Yeah.

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

George Cole – Principal Scientist, Community Solutions – Allscripts
Email I can do.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
But it will be shared publically at the Standards Committee meeting, so it will still be in public view.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
And it will be shared…it will still be in public view and all the text that we've already discussed relative to all of the trans…you know, all the stuff that's already in publically available in our rambling comments on the web. And it's just the summary of that, yes.

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

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
We're totally doing this in the open.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
You guys ready for public comment?

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
Let's do it.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
Operator, can you please open the lines?

Public Comment

Lonnie Moore – Meetings Coordinator – Altarum Institute
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. If you are on the telephone and would like to make a public comment, please press *1 at this time.

Michelle Consolazio, MPA – Federal Advisory Committee Program Lead – Office of the National Coordinator for Health Information Technology
We have no public comment.

Arien Malec – Vice President Strategy & Product Marketing – RelayHealth Corporation
All right. So next time at the Standards Committee meeting.

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

Janet Campbell – Software Developer – EPIC Systems
Well, thanks everybody.

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
Thank you everyone.

George Cole – Principal Scientist, Community Solutions – Allscripts
Okay, thank you.

Janet Campbell – Software Developer – EPIC Systems
Bye.

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