



**HIT Standards Committee
Architecture Services & APIs Workgroup
Final Transcript
March 12, 2015**

Presentation

Operator

All lines bridged with the public.

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

Good morning.

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

Good afternoon.

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

Hi, David. David Waltman? Gajen Sunthara?

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

Here.

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

Hello. George Cole?

George Cole – Principal Scientist, Community Solutions – Allscripts

I'm here.

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

Hi, George.

George Cole – Principal Scientist, Community Solutions – Allscripts

Hello.

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

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. Josh Mandel?

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

Hello.

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

Hi, Josh and from ONC do we have Debbie Bucci?

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

I’m here.

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

Hi, Debbie. Anyone else from ONC on the line? Okay with that I’ll turn it back to you Arien and David.

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

All right. So, this is the exciting, which meeting is this one? Why don’t we go to the next slide. This is the exciting fourth meeting, oh, third meeting of the Architecture, Services and APIs Workgroup dealing with the interoperability roadmap.

And we actually now have a surprise ask, not a surprise ask, a well-deserved ask to present some of our interim work at the next Standards Committee meeting and so we are both engaging, we’re going to dual track, both engaging in our comment on the interoperability roadmap where I think we’ve appropriately put together our framing for the Architecture, Services and APIs world and then using that framework to appropriately comment on the interoperability roadmap but we’re going to do a little bit of dual work first looking at what we want to present at the Standards Committee meeting and then looking at more of the detailed comments on the roadmap. So, maybe next slide. Yeah, next slide. We fixed the “and” and ecosystem now it says an ecosystem.

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

So, just...so this is David, just to be clear I think what Arien said hopefully makes sense, but what we'd like to do is to get comfort that the slides we're going to go through here in the next "x" minutes are the ones that we would show and the content that we would show to the Standards Committee as a snapshot of where we stand with the development of this framework.

So, you know, be thinking of these slides as presentation material to the broader Standards Committee as our snapshot and if you see stuff that you're not comfortable with or you want to clarify think of it in those terms because these will be, you know, publically presented by the two of us next Wednesday. Hopefully that makes sense.

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

And having said that most of what we're talking about in these slides are exactly the same slides that we reviewed I believe last meeting so they should come as no surprise. We've attempted to respond to most of the feedback that we received in the last meeting.

So, hopefully this should just be a skip, yeah, we've seen that, we've seen that slide, we've seen that slide and then we'll spend more time on the content that we edited based on your feedback and looking overall from the frame of we're presenting this as interim work back to the Standards Committee next week looking at these slides from that frame.

So, the first slide I think is content everyone has seen before, go to the next one. We dropped in...I just wanted to give a little context for what drives the hourglass, you know, what drove the original hourglass to IP, what drives the hourglass to using HTTP now as the universal transport and what are the evolutionary pressures that drive hourglass behavior, because I think it's useful to look at those same evolutionary pressures with regard to the application of the Internet hourglass to the healthcare architecture, but this is again a repeat slide from content that we've seen before. Next slide.

Again, a repeat slide, just providing our frame to what the Internet hourglass is for healthcare. Next slide. Again, we've seen this slide before providing our example to the composable API era of what the hourglass would look like with HTTPS on the bottom, profiled FHIR, OAuth 2, OpenID Connect and HTML5 as the core composable and then the key point here is that with some fairly small or lean orchestration patterns we can drive a large number of interoperability use cases.

I think we'll say that we've made a lot of progress on defining the App orchestration pattern, the ones below peer-to-peer, brokered trust and pub-sub are slightly more speculative, although we do have an example of applications mixing peer-to-peer and App later on.

And then, you know, built on top of the App orchestration pattern there is a whole set of use cases that you can drive which I think we detail on the next slide.

Janet Campbell – Software Developer – EPIC Systems

Hey, Arien?

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

Yes?

Janet Campbell – Software Developer – EPIC Systems

Before you go to the next slide, I was thinking about what this would look to somebody who hasn't been in on all of the conversations and one of the things I think might help a little bit, on your slide before this you are showing sort of the top half of the hourglass, I don't know if it makes sense to just sort of have a little dotted line at the bottom that's pretty much, you know, here be dragons or whatever that that's up to the individual EHR to implement, but just kind of...

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

EHR Health IT, right.

Janet Campbell – Software Developer – EPIC Systems

But just kind of if you draw that...

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

Yes.

Janet Campbell – Software Developer – EPIC Systems

Line of, you know, where the individual system comes into play. Does that make sense?

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

Yeah, I think that does. We previously had some slides that look above the line and below the line and we might want to think about putting one of those below the line slides...

Janet Campbell – Software Developer – EPIC Systems

And I don't know that we necessarily want to...

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

Down here, yeah.

Janet Campbell – Software Developer – EPIC Systems

Get like too much into what's happening below the line because that's not necessarily important for our purposes.

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

That's right.

Janet Campbell – Software Developer – EPIC Systems

But maybe just sort of a shaded in, we're not going to talk about this, but this is general...

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

Yeah, that's right.

Janet Campbell – Software Developer – EPIC Systems

Okay.

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

That's right.

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

This is Josh can you just clarify exactly where you see the line as going? I missed it, is it on the slides that’s on the screen right now?

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

It’s below the Internet, below the Internet is a bunch of HIT systems that are built in beyond rails and mumps and C-SHARP, and go and what have you.

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

Gotcha.

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

And the point is just as nobody on the Internet knows that you’re a dog nobody on the Internet knows that your application is written in whatever.

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

Okay, that’s great.

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

Yeah, we’ll make that addition. I think it’s a good suggestion.

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

Yes.

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

And I think that’s a...it’s a good metaphor for ways to think about this we’ve looked at these slides so many times you probably see them in your dreams, but the people we’ll be showing them to haven’t seen them ever. So, if its stuff like that make sure we think about it. And we’ll do some obviously more verbal explanations when we present it Wednesday than we’re doing today but Janet’s point is a good one.

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

Yes, that’s great.

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

So, next slide. So, this is one example of an orchestration that we’ve worked through the last couple of meetings, the...we’re just sort of genericizing it to be pluggable Apps, but it’s the SMART platform more or less.

And I think we will work through this with a little bit of detail in the presentation on Wednesday just so people understand what we mean by the notion of an orchestration how this weaves together the core building blocks and maybe mention some of the use cases, although what I’m going to show you in a few minutes may make me want to come back and tweak this list of use cases a little bit. So, why don’t we go to the next slide.

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

Yeah and I think the key point here that we want to, particularly in the Standards Committee discussion, is to comment that in for example the standards and interoperability framework these things that are below the line tend to...sorry these things that are potentially use cases we've seen a lot of them, we've had an approach in healthcare often of stove piping use cases and the big change here is the notion that by doing a good job on the core composable and the common orchestrations a lot of these specific applications that fit the use cases are in many ways, this is one of David's favorite words but, don't cares from an EHR implementer's perspective that in EPIC or a Cerner, or a McKesson, or an Allscripts or what have you can implement the core composable and the orchestration and it's the provider organization's choice which of those use cases they want to do. And I think that's one of those things that no matter how many times you repeat it, it bears repeating again.

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

So, let's...I think we can come back and make some more comments on that subject when we pitch this new idea compared to what we've talked about before so keep that thought in mind. And as I say, there are many potential use cases. I may swizzle this a little bit when I show you what I'm going to show you and see if it's getting too complicated and too detailed or whether it's actually useful to help address the questions that will come into people's minds. So, let's go to the next slide.

And I'm not going to walk through this obviously with the Standards Committee other than to illustrate that these orchestrations what they do is they weave together interactions from a variety of different players, in this case the EHR, the SMART App, the authorization service and the provider of the EHR's data which presumably is the same as the EHR but it doesn't have to be, and just use that as...what we mean by an orchestration is a specification for this kind of complex handshake.

And then on the next slide what...I just went out on a limb and I don't know if it's as valuable or not but just let me try it out on you, is to say that one of the things that we've got today is a couple of orchestrations that are coming to be fairly well understood and I would say the SMART App model is in process with the work from the Argonauts and, you know, many of us individually, Josh the leader of, contributing to fleshing that model out.

But that there are other orchestrations which we really ought to start thinking through that could address a broader range of use cases than just the what I call the, you know, conversational plug in App, SMART App, and so this was one I just sketched together based on a number of conversations recently with third-party content providers who want to integrate with our EHR and are in the process I'm sure of integrating with your EHRs as well, to think is there a general pattern here or an orchestration that you might call remote, conversational, clinical decision support.

And what I'm trying to capture here is a little bit of something based on our core model that was attempted with the Health eDecisions, I believe it was their use case too and the idea would be that could we come up with a general purpose pattern that would allow an EHR to invoke a remote clinical decision support service with an option for dropping into conversational mode if the clinical decision support service basically says, hey, I've got something to say but I need to talk to you about it. I need more data from you before I can give you my recommendation.

So, the notion here is it's a little bit of a combination of the simple peer-to-peer orchestration which normally would not have a user experience melded together with the SMART App orchestration which typically has and is completely contained around the user experience.

So, this would be, you know, kind of an aggregate orchestration that would start with the EHR using whatever its proprietary tools are to detect a triggering event that warrants invocation of the remote CDS service. Then authenticating with the peer-to-peer orchestration model with that remote CDS service. Then sending whatever has been pre-arranged as the profiled FHIR to that remote service.

The remote service evaluates the data and determines whether or not a conversation is needed. If a conversation is needed then using some mechanism to be defined, but roughly I'm saying here it sends the URL of the SMART App back to the originating EHR which would then invoke the SMART App using that orchestration to have a conversation where additional data could be captured perhaps the remote service needs to ask some questions as to why you're justifying the use of this expensive medication or this expensive procedure.

And then the remote service generates whatever appropriate responses the use case expects in term of maybe suggested orders, suggested problems with a problem list, documentation that could be eventually pushed into the EHR to capture the essence of the decision that got made and returns that data using a profiled FHIR resource.

And, you know, the thought here is to show that more complex orchestrations could be envisioned that are building blocks on top of the simpler orchestration, I don't want to add another layer to our hourglass, but, you know, that's the way the well thought out architecture ought to work. They should be composable at many layers and levels.

And then this allows for a variety of use cases some of which were actually listed under the SMART App use cases on the other slide and so I might want to repetition that feed.

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

Yeah and David listening to you go through this the worry that I have on the Standards Committee is that we're going to get drawn into the details and I think the point you're making is that, again, it's similar to the previous point that there are...once we get the core composable and the orchestrations well thought through there are a number of things that want to get done that are exercises left to the reader and this is an example of how something that looks really hard ends up being an exercise left to the reader.

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

Well, yeah...

Janet Campbell – Software Developer – EPIC Systems

One thing...

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

And I'm going through it in some detail to explain to you guys whether or not this is even a remotely interesting and feasible candidate, I wouldn't go through with that much detail in the broader presentation but I would suggest that enumerating these things could be a focus of the standards organizations and/or Standards Committee and/or S&I wherever this lies in the future. So, figuring out whether this is valid and turning it into concreteness is something that needs to get done.

Janet Campbell – Software Developer – EPIC Systems

One thing...

George Cole – Principal Scientist, Community Solutions – Allscripts

So, David...sorry.

Janet Campbell – Software Developer – EPIC Systems

Okay, just real quick, you know, looking at this I don't know if it's because we've talked to the same vendors or what, but this is...we do it slightly differently and there are different pieces there but in general this takes that same approach that we've done with our system. So, that's really promising.

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

Yeah.

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

Yeah and...

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah and its George...

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

I think we are talking to the same people although that was certainly not the intent wasn't to drive from that it was just it keeps coming up and I'm going like, gee this is an instance of one of these orchestrations that we ought to add to our list. So, good, Janet, thanks for that. George go ahead, I've cut you off twice now.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah, so actually I love this example and we don't talk to the same vendors necessarily all the time, but this was the subject of long conversations at the last IHE discussions. The radiology domain is very concerned and this is one of their primary use cases and as you can well imagine they're driven by the financial model where in 2017 this will be a requirement for reimbursement for imaging orders.

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

Yeah, yeah.

George Cole – Principal Scientist, Community Solutions – Allscripts

A conversational discussion with CDF it's a great example.

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

Good, good to hear.

Janet Campbell – Software Developer – EPIC Systems

And I...

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

Because, I...

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

So, this is Josh.

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

Josh is in a wind storm.

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

I want to echo on George’s comment and then I’ll turn it over to you. The appropriateness screening was the initial thing that triggered this thought in my head is I went to John Halamka when that appropriateness screening recommendation or requirement from CMS came out and said, is this a purview of the Standards Committee and, you know, CMS and ONC scratched their head and said, no it’s not because it’s not part of one of the programs that’s been handed to the Standards Committee. So, I said, too bad because we could address this with a SMART plug in and a little bit of orchestration. And John, you know, basically said, good idea work on it. So, that’s what...that was the actual driver for thinking this through.

George Cole – Principal Scientist, Community Solutions – Allscripts

Excellent.

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

Now, whether it has the right thought and we got the details right or not I don’t want to claim that, but Josh I suspect you can tell us whether we’ve got it right or not.

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

Josh, come in from the wind tunnel.

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

Yeah, well how is my wind doing right now.

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

Good.

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

I think you’re okay now.

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

Okay, great, all right, so, yeah at a high-level I really like the example of this kind of use case. I think I would try to steer away from describing too many details. I might abstract it a little bit more and describe it as sort of automated server to server decision support, you know, with the ability to hook into a user conversation downstream if it’s needed.

Just as an example of one of the kinds of details that I’m not so sure about, I think in general it’s really hard to expect an EHR to bundle up all the information that a decision support service is going to need and send it over. I wouldn’t necessarily want to bake that into the pattern.

I think another very good pattern is telling the decision support service, hey, here's the URL where you can go to, to fetch exactly what you need about the patient and if next week your risk score gets updated to include three new lab observations you can go and fetch them and we don't have to sit down and negotiate again about what we'll send you in that request pick load. So, I would try to abstract it a little bit in that dimension.

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

Yeah.

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

But overall I like it a lot. It's something that we've thought about quite a bit in terms of when there is a user interface or a user facing App that might be appropriate for a patient how do we dynamically determine, you know, at run time in the context of a clinical session whether an App is appropriate or whether it should be offered.

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

Right and Josh you're interaction is just a left out step, that's absolutely in my head when I wrote these down I just left that step out and I appreciate the call. If you want to suggest a different wording for this I'd be, you know, happy to listen. You have a knack for proper level of abstraction so feel free to shoot us a slide.

But I agree totally that this should be a headless interaction until such point as the service says, hey, I've got to talk to you and then the orchestration detail would be, how the heck does it indicate that that's not a FHIR resource that's something else, so you may want to...

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

And then my request...

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

Specify how that happens.

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

My request in the context of the Standards Committee meeting with the let's use this as an example and David I love the radiology decision support example, you know, let's use this as, again, as an example of how getting good at defining the orchestration patterns will help us solve a whole bunch of use cases at the heterogeneity layer.

Janet Campbell – Software Developer – EPIC Systems

And again, I mean, this is how ACR Select and Medi-Cal do it today at least with us.

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

Now again the specifics on the details are a little bit different but the patterns, the interaction patterns are the same.

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

Yes.

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

Yeah and I mean I think it is such a common pattern because it's the way all of our CDS services work, there is a back end conversation that doesn't bother the doctor if you don't need to but if it needs to it bothers the doctor. So, agreed.

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

And we're all doing it custom, right?

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

But, we'll take a couple of whacks at simplifying this and maybe I'll specifically illustrate it with the appropriateness screening use case like George suggested because that's work that everybody is going to have to do here pretty soon. Other suggestions?

Do we have a better name for it, remote conversational CDS, I was kind of struggling for a, you know, cool moniker like SMART but I couldn't come up with anything.

Janet Campbell – Software Developer – EPIC Systems

The interactive incentive conversation.

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

Okay.

Janet Campbell – Software Developer – EPIC Systems

I don't know if that's much better.

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

Well, I think the key aspect of this pattern is that it's automated and server to server and it happens in the back end unless something needs to pop up to the user and so it actually might not be conversational, it might not be interactive when everything goes well in the sort of happy path it might just happen all automatically.

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

Yeah that's certainly intended if the language doesn't express that and then it's the fault of the language but that was the intent.

Janet Campbell – Software Developer – EPIC Systems

If you called it remote optionally interactive decision support then the shorthand would be ROIDS.

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

Oh, goodness.

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

I like it.

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

Value added from the Workgroup.

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

Yeah, ROIDS, ROID rage. Okay, so...and then I think I might...let's go back two slides, okay, this one right there, number eight, so that many potential use cases fit this pattern I think a couple of these use cases actually would be better fit for this new pattern, our ROID pattern.

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

Yes.

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

And so I'll prune this list down and maybe move some of those choices to the latter pattern. And, you know, I guess the point I'm trying to make, you know, the message to the Standards Committee is, from my point-of-view the message is, this is a very powerful approach that can leverage these building blocks without a huge amount of start from scratch effort to open the door to a remarkable number of interesting use cases because we've layered them the right way. And if we're not...

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

This is why getting...

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

These are the actual use cases or orchestrations but that this pattern or this model is what should be followed going forward.

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

This is why thinking about architecture first is a really good approach for interoperability and to our friends at the ONC why we make the recommendations that we make later on.

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

Yeah and hopefully that comes across as a good thing and not arrogant architects like us.

Janet Campbell – Software Developer – EPIC Systems

I mean, honestly though, I think if you went...you could just go up there and say Cerner, EPIC, Allscripts and McKesson agree that this makes pretty much sense and then you could just drop the mic and walk away.

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

You know Janet, I will absolutely be sure to say that. I mean, I'm going to...this work is the output of, you know, people that actually figure out how this stuff gets down.

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

Thank God for Josh because then otherwise the ASA Workgroup would be the Evil Vendor Workgroup.

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

Yeah, right and I'll save Josh's name for last because that will just be our magic imprimatur of authority.

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

Somehow...

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

Now I’m in trouble.

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

Just for the record for everyone who is listening and for the transcript we’ve had the bad luck that everybody else that we invited to this Workgroup to drive additional balance of interest just couldn’t stick to the course.

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

Yeah, they’re not crazy enough.

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

That’s right.

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

But we are working to identify more people, right?

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

But we’re working to identify more.

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

Okay.

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 and I will commit to...I’ll commit for us both that between now and our Wednesday presentation we’ll capture some of these changes and circulate them out to you along with whatever else we talk about in the rest of our meeting, but for sure this is great feedback and I think it will make the presentation much better. I may not go with ROIDS however...okay, Arien, hand it back to you.

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

All right, let’s go to the next slide. This next one and the next one. So, then we move to I think what we need to reframe as draft recommendations for a...we probably should do a transitional slide here because now I’m thinking about framing this appropriately for the Standards Committee what we’re talking about here is based on this framework we...and based on our mandate to look at the roadmap before we engaged in individual question/comments we wanted to provide a high-level framework back to ONC to think about this transition and glide path, and what you’re about to see are draft recommendations. So, I’m stating what I think needs to be in that transitional slide. What you’re about to see are draft recommendations related to what we believe the transitional path is or could be.

So, then we go to this slide, which are draft general recommendations and what we’re saying here is that this combination of core composites for transport, security and content, as well as common orchestration allows for modular creation of a lot of the things that we’ve historically done based on stovepipe use cases and we’ve given you some examples of the power of that approach.

We therefore recommend adopting a deliberate policy of rebalancing the standards portfolio towards this parsimonious approach, the word parsimony is in there just for John Halamka. We believe that the roadmap should give...should allow sufficient time to develop, adopt and use to allow for success during the rebalancing period and in general we would avoid use of generic terms like SOA and REST in speaking about this transitional path.

Janet Campbell – Software Developer – EPIC Systems

So, Arien, just wanted...

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

And one of these is not like the other. Anyway, go on, sorry.

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

I was just going to say just a small suggestion on this one, because you're going to have probably the "eh, eh" person in the crowd who has to say something.

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

I would make it, you know, at least as you're talking, to mention that FHIR does deal with sort of the semantic interoperability because somebody is going to bring up terminology and code sets even though that's not even the point you're trying to make here.

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

That's right.

Janet Campbell – Software Developer – EPIC Systems

But just because it's not mentioned.

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

Fair point, so content, terminology, yes, thank you.

Janet Campbell – Software Developer – EPIC Systems

That would do it, yeah.

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

Content and terminology.

George Cole – Principal Scientist, Community Solutions – Allscripts

It's...

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

Yeah?

George Cole – Principal Scientist, Community Solutions – Allscripts

And David or Arien, this is George, I know that John understands this use of the word parsimony but is that something HIT Standards Committee...

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

For John...

George Cole – Principal Scientist, Community Solutions – Allscripts

Is there any thought here they might misunderstand the way this is used or the meaning of this?

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

I think we've heard John say it so many times.

George Cole – Principal Scientist, Community Solutions – Allscripts

Okay.

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

But I can gloss it while I'm talking about it because it's really the same, you know, maybe we call it modularity I don't know.

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

You could use my favorite word "orthogonal."

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

Yeah, we talk about the smallest spanning set.

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

Yes.

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

Better use, that will be helpful.

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

Unfortunately...

George Cole – Principal Scientist, Community Solutions – Allscripts

Maximal simplistic approach or something? I mean, we want to make sure it's not construed as miserly or little spending, you know, those funny definitions.

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

Yeah, this is about the...yeah, this is about...maybe we just call it the hourglass model. I don't know. I think I could gloss the parsimony point.

George Cole – Principal Scientist, Community Solutions – Allscripts

Sure.

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

I think...

George Cole – Principal Scientist, Community Solutions – Allscripts

I haven't been in enough of those meetings to know how that goes over.

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

If you've got suggestions for other ways of saying it that the word length constraint...

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah.

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

Because it's really...this is really in reference to our previous discussion, I'm saying the words out loud just to make sure I've got them, this is really in reference to the previous discussion that says with appropriate selection of core composable and common orchestrations a large number of example use cases fit on top and so the parsimony we're talking about is related to getting the common orchestrations and the core composable right.

George Cole – Principal Scientist, Community Solutions – Allscripts

Or you might, as you hit the hourglass slide, you have the word there and so here you can just say, as reflected in the hourglass.

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

As reflected in the hourglass slide, yes.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah.

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

All right, so now we go to the next slide, so this is now our roadmap recommendations, draft roadmap recommendations, we need to put the word "draft" in here, 2015-2017 creating the glide path and so our recommendation is supporting SDO and public/private work to define core composable, API services and profiles to support SDOs and public/private work to define orchestrations and related security components, support future work to define other high value orchestrations and security components, for example the peer-to-peer record access that we talked about.

And support priority use case work to be implemented in terms of core and orchestration patterns. So, this refocusing of when we have a use case need making sure that we're refocusing that work to be implemented in terms of the core and orchestration patterns. So, that's set of recommendations number one, set of recommendations number two...

Janet Campbell – Software Developer – EPIC Systems

Arien?

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

Yeah, go ahead?

Janet Campbell – Software Developer – EPIC Systems

Just a quick question, by supporting there it sounds like we're saying that we're recommending that ONC supports this and are we talking about like emotional support or more directed support?

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

I'm now like...

Janet Campbell – Software Developer – EPIC Systems

Or do we want to be safe about it?

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

I'm sort of balancing in my head between the other presentation that I'm doing which is the Standards Interoperability Framework recommendations that better define what kind of support we'd recommend. So, I...

Janet Campbell – Software Developer – EPIC Systems

I think it...

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

I think it's better to be general and say support...

Janet Campbell – Software Developer – EPIC Systems

That's fine.

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

Unless you've got a better suggestion for what kind of support we're looking for.

Janet Campbell – Software Developer – EPIC Systems

I think I'm good with the vaguely there.

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

It just...it seems like again if I was looking at this as an outsider that might be a question that you'll be asked and so saying, you know, we're still contemplating that is probably fine.

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

Yeah.

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

But, I think if you were to answer it with concrete examples it could be quite a number of things ranging from, you know, funding of pilots to adding appropriately vetted output to the list of best available, etcetera.

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

Yeah, this one is...

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

In other words there are a lot of things they can do that would all fall under the general notion of support.

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

This will have come after the Standards Interoperability Framework Task Force recommendations. So, either it will all be clear or all that work could be torn up, so it's one of the two.

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

Yeah. I mean, I think it's a good discussion to have, but we probably should get the recommendations of what we think ought to happen and then figure out how it could be supported best.

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

That's right. All right, so next slide. And this one has been heavily changed based on the feedback, so reduce friction and distraction to adopters and implementers by minimizing certification requirements overall allowing ample time to pilot, adopt and refine core and orchestrations, ensuring the government incentives can be met using the newer approaches even if not formally adopted into certified HIT.

Continue to support production, adopted standards not based on core while minimizing changes and new uses and avoid endorsing new standards that are not based on core and seek alternatives that are based on core. So, I'm going to pause here and George, I tried to clean up the language to make it clear what we're trying to say, so I want to make sure that we've gotten some level of that done.

George Cole – Principal Scientist, Community Solutions – Allscripts

I wish my webcam was on you'd see a big smile.

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

Oh, good, okay.

George Cole – Principal Scientist, Community Solutions – Allscripts

Thank you.

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

Yes.

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

So, this is Josh, one thing that's not entirely clear to me...I think I understand it but let me just check, in the second bullet when you talk about technologies that might not be formally adopted into certified health information technology, if I understand right somebody might actually make a certified EHR that also does some extra stuff to meet these requirements and that's fine, what you're really saying is they don't have to be formally adopted into the certification program is that right?

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

Yes, so sometimes in the past the attestation requirements for Meaningful Use have also required using not just certified health information technology, formally known as certified EHRs or certified EHR technology...

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

Yes.

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

But also using the certified methods. So, that can sometimes be an interesting forcing function to force people to both implement and adopt and use but it can also be a disincentive to create new and innovative ways of achieving the same function and I think what we're saying here is on balance because we're working some of this stuff out we would prefer a policy stance that allows for new and innovative ways of doing the same function.

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

So, you know, to give a concrete example if the incentive is to exchange transitions of care and you use Direct because that's the certified standard that is the minimum required to be able to do an exchange of transitions of care that's fine but you shouldn't be penalized if you come up with a better way to do that exchange of transitions of care, you know, maybe as part of a closed loop referral or something that doesn't use Direct natively.

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

And where this is also incredibly important is as ONC and CMS might well be using certified health information technology in a wider variety of programs and programmatics the possibility of unintentional pinning to a primitive level becomes even more problematic so if I can't meet my ACO MSSP requirement unless I use certified EHR technology in exactly the way that has been predefined then it makes it hard for people to do innovative orchestrations.

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

I wonder if...

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

So, I just...I was going to say I understand the intent and that's makes a lot of sense, for me it would be clearer to write something like, ensure that these incentives can be met using the newer technologies without requiring that they be adopted into certified HIT, would that change your intended meaning?

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

No I don't think so. So, I'll have to think about those words.

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

The other phrase...

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

It's not that we object...

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

That we could use...

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

Yeah, it's not that we object to these methods being adopted in certified health information technology it's that we object to stove piping particular incentives or particular outcomes to the use of particular standards.

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

Yeah so that’s very clear when you say it that way. I think, you know, it’s just hard to be complete in a concise slide.

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

That’s right.

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

If the thing that described works for you, you know, I would prefer it but I don’t feel strongly about it.

Janet Campbell – Software Developer – EPIC Systems

Is stove piping...

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

The other phrase...

Janet Campbell – Software Developer – EPIC Systems

Do people know that means?

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

Which Janet?

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

I do.

Janet Campbell – Software Developer – EPIC Systems

Stove piping, yeah, I don’t know what it means.

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

It’s a term of art apparently in intelligent services, stovepipe things so that nobody else can see them.

Janet Campbell – Software Developer – EPIC Systems

Oh.

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

Stovepipes are like silos.

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

Stovepipes are like silos.

Janet Campbell – Software Developer – EPIC Systems

That makes sense.

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

They can be silos.

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

Arien I wonder if, and maybe it doesn't help, but, you know, the phrase that we keep using in these discussions about the roadmap is set the floor not the ceiling.

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

Yes.

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

Is, you know, that's what this bullet point two is really about.

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

Yeah.

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

The certification defines the floor but you shouldn't put a cap on the ceiling, let the incentive be met by the best available technique.

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

Yes, we'll take some actions to better words than that. Okie doke. Next slide. So, for 2018, 2024 which now actually reads 2018-2024 instead of 2027, 2018-2020 refine and extend core composable services, profiles and orchestration patterns, expand the number of piloted use cases based on core, address the needs for national scale services, address the needs for network bridging, consider mature APIs, orchestrations and use cases as candidates for addition to certified HIT and begin transition from non-core orchestration standards and APIs we had a slide on that. And then 2021 to 2024 as above plus more spelt M-O-A-R.

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

...

Janet Campbell – Software Developer – EPIC Systems

I think this makes sense the only thing that I could see being maybe more of a question is the national scale services and the need to address them in 2018 depending on where we're at we might want to contemplate those earlier based on the use cases that we come up with and then say address in 2018, you know, but sort of introduce the concept earlier so at least nobody is looking at this and saying, oh, my God we have to wait three years until we can go nationally.

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

Yes, it's absolutely a fair point and this is a discussion in the Interoperability Workgroup as well. We can probably make this, put it earlier.

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

And I think this is a related question, this is Josh, the final line on this slide is it talking about new orchestrations...

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

No this is a point...

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

Otherwise it seems like we’re...

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

This is my point that says that, you know, we’re talking about a 10-year roadmap and if you’re not talking about a 10-year roadmap and already thinking about and planning that you need transition, you know, this is my frequent example that by 2024 FHIR will be no more and we’ll have, you know, quantum dot semantic interoperability.

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

Find, meld.

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

Yeah so I hope that is true, I do, I’m just saying in the language it almost looks like a contemplation, first with the transitioning and then contemplating transition.

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

Yes, so we’re talking about new/new, yes.

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

Yeah, so just something, put newer or yet new, or something to indicate that it’s different.

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

And yet unimagined that’s right.

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

Yes, great, exactly.

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

That it’s yet unimagined, yeah.

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

Okay.

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

How about emerging or...

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

No it needs to be stronger to really get across that we’re talking about by 2024 something we don’t even know right now.

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

This is actually one of the few cases where we can use emergent correctly, but it might throw everybody off.

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

They'll call a Code Blue if we do that. Okay, let's go onto the next slide. So, here we created a discussion only example of what a transition path might be and there is a lot of commonality between these two. So, some of the key points are that there is some investment we're making in all of these activities that are foundational like interoperable trust, elegant EHR workflows that are, to use David's favorite word, orthogonal to the standards that are being chosen.

And there might be some work that we take on in the next couple of years and some work that we take on in the subsequent three years to slowly transition and appropriately transition, so in the Direct example continue working interoperable trust in the EHR workflow work that is orthogonal. Start thinking about FHIR-based content packaging and edge APIs, 2018 adopt FHIR-based content packaging and edge APIs and begin to pilot and adopt native FHIR-based directed exchange. So, you know, rather than SMTP and S/MIME you might just have FHIR-based messaging calls all the way end-to-end.

And then XCA and XDS continue interoperable trust and EHR workflow, start using MHDv2 in parallel with XDS and XCA-based document exchange, and pilot use of FHIR for discrete data exchange along with MHDv2, and then potentially depending on how MHDv2 goes start preferring MHDv2 for new go lives, adopt discrete data exchange and start to phase over.

So, I want to pause here and see if this makes sense. And again these are just examples only of things that are up and running and worked and, you know, there is no reason to go muck with them in the short-term because they're workingish.

George Cole – Principal Scientist, Community Solutions – Allscripts

Arien, this is George, so I think the slides don't say this but it's also...these are things that up and working but these are things that we don't want to put more time and effort into changing and refining because we have a glide path.

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

Right and that was the previous point three slides ago or two slides ago.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yes.

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

Maybe we just to reference the...re-reference the previous discussion to provide better context.

George Cole – Principal Scientist, Community Solutions – Allscripts

Well, I think here you're actually doing, this is your transition.

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

Right.

George Cole – Principal Scientist, Community Solutions – Allscripts

So, this is a great slide for talking about the transitions and you just might need to remind people and, oh, by the way since we have this pathway, remember the previous discussion.

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

Yes.

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

Yeah, I like that point.

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

And I do think...

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

So, this is Josh...

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

Go ahead, sorry.

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

I want to see whether I really do understand the context here. When we say that these are examples of transition paths, you know, are we saying for example that we want to sit down and work out the details about how to send structured clinical data using FHIR documents attached to Direct messages and start building protocols on top of that?

It sounds like to me that isn’t necessarily where we want to spend our time even as a transition path but I maybe misunderstanding the context.

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

So, three slides ago or four slides ago we raised the notion that in order to limit friction we want to make sure that things that are live and already working continue to be live and already work but that we minimize the amount of new development or new requirements that go into them while we come up with adopt, use and pilot new ways of doing the same job.

And maybe Josh what you’re saying is with respect to directed exchange that the job isn’t needed anymore but I would argue that for example coordinated referrals or transitions you still need the ability to push something from one person to another and that it would be good to create a new way to push something from one organization to the other that where the content structuring and orchestrations are aligned with the overall architecture and I think that’s what I’m trying to say here. You may disagree with the premise in which case you disagree with the conclusion.

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

No, I don’t disagree with the premise actually what I’m trying to figure out is, you know, what is the role for standardization, you know, and certification criteria around that sort of transitional path if we’re already telling people that, you know, that this is just a floor and not a ceiling do we need to build in things like certification for those kinds of approaches?

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

I see, I'm not intending this to be...that's a great point, I'm not intending this discussion to say and certify all this stuff, I'm intending this discussion to be part of a conversation that, as the ONC term of art for the roadmap is coordinated governance, as a conversation that we all have with respect to how we would affect this transition regardless of whether the transition is effected through, and I do mean effected, through regulation or through coordinated action by providers and developers. Does that make sense?

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

It does, I don't know how much of that you could possibly hope to convey on the slide but if you can convey that while you describe the slide that would help.

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

Okay, great.

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

Yeah, I think the notion here is, again, this would be legitimate activity for standards groups, HIT Standards Committee, whatever takes the place of S&I Framework when Arien reveals what they've come up with, to go and figure out what this transition strategy ought to look like getting sufficient buy-in from vendors so that it is, you know, parsimonious of effort while, you know, increasing power and simplicity and so forth, but it's a little bit of Wes's, you know, bilateral asynchronous crossover, you need a way to get from here to there and there probably are going to be some stepping stones that are somewhat, you know, I don't want to use the word "ugly" but somewhat you wouldn't design the stepping stone in the first place it's only there to get you from A to B.

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

Yes and it doesn't happen by magic, right, without thinking about it.

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

Yeah, yeah and I don't know if the FHIR content packaging makes sense in Direct or not, I mean, I was the one who put that in there and it just seems to me that we will all get better and better at producing and consuming isolated FHIR resources and that if there is a very specific need to move something from point A to point B and you can't guarantee that point B has anything other than Direct available then maybe it's not a bad idea to enable that as opposed to creating yet a new CDA template and all that stuff.

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

Yeah, this is Josh, I don't disagree with the approach I was just trying to figure out whether we thought it was something that would merit standardization and certification, and testing.

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

Oh, yeah.

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

And I think the answer there was not really.

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

Yeah, great point.

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

Great, okay, I think that's the last slide. Can we go to the next one?

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

I think that's it.

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

Yes.

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

...

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

So that material is what we intend to present in our current 45 minute slot at the HIT Standards Committee next week as an interim draft statement of where we're going to provide some strategic feedback or to allow for some strategic feedback from the overall Standards Committee.

Janet Campbell – Software Developer – EPIC Systems

Does...

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

So, I want to thank everyone for working through the dry run with us. Sorry, Janet, go ahead.

Janet Campbell – Software Developer – EPIC Systems

Oh, one thing I was thinking is do you know yet when in the agenda you're going to go for that, like in case we wanted to call in and listen?

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

Yeah, it's going to be late in the agenda. Michelle you just sent me the agenda itself but I wonder if you can...you know it faster than I do. Oh, wait, I can tell you.

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

I've got it here, it says...

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

It's tentatively planned for 1:00 o'clock, it likely will be after lunch, but there might be a change it's not final/final yet but 1:00 o'clock is the time right now.

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

So...

Janet Campbell – Software Developer – EPIC Systems

One thing, if we remember, once it's finalized I'll try to remember to look at the schedule, but Michelle if you just happen to know like once it's finalized if you could send an e-mail out that would be awesome.

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

Sure.

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

Janet are you telling me you don't listen to every word of the Standards Committee meeting?

Janet Campbell – Software Developer – EPIC Systems

Oh, God.

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

And every time that there is a topic that either David or I, or both have a question you don't listen anxiously for what we're going to say?

Janet Campbell – Software Developer – EPIC Systems

And yelling at the muted phone, nah.

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

Yeah, okay, now we know, it's all been in vain.

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

All right so now we're going to...so we'll make some changes based on the feedback we've gotten here, send out a draft of those changes to this full group and the next half an hourish modulo public comment period we'll be working through the detailed questions that we provided as homework and, you know, we've established chair's prerogative of making sure that we're not unduly biasing anybody by providing our comments, so we'll hold our comments to the end...we didn't do our own homework. Anyway, can we go onto the next slide, and the next one, and the next one, and the next one.

Okay, the first question, does the roadmap advance toward the architectural and architectural patterns identified by the Architecture Standards and APIs Workgroup, and I think both Janet and George are saying the same thing which is kind of but it needs to be more coordinated.

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

So, and Janet's comment is an implicit mention of the hourglass model and I think maybe a formal answer would say, you know, with reference to our framework based on the Internet hourglass, and then answer the question.

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

I just want to, just from a high-level, I want to make sure that both George and Janet are saying, we would recommend a more coordinated...we would recommend a more coordinated approach because I think both of you used the C word.

George Cole – Principal Scientist, Community Solutions – Allscripts

This is George; I think that's fair especially if it considers the work that we've talked about today.

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

Yes.

George Cole – Principal Scientist, Community Solutions – Allscripts

It's not exactly in alignment with what we've talked about but you could shift it in that direction with a little work.

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

Yes.

Janet Campbell – Software Developer – EPIC Systems

And maybe this is what you're calling stove piping, Arien, but the point I was trying to make was that obviously we'd have the biggest if we keep the waste as foolproof as possible because then everything builds on top of that it sounds like.

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

That's right, exactly, yes, okay. Josh, anything more that we need to capture from you?

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

No nothing else for me.

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

All right now we've got a fun one, do the standards selected in the standards advisory advance toward the same, Janet, yes, George, no.

Janet Campbell – Software Developer – EPIC Systems

I don't feel strongly about this and I didn't read the standards advisory probably as deeply as I read this, which also wasn't all that deeply, so if George thinks that they're not there yet I yield to George on this.

George Cole – Principal Scientist, Community Solutions – Allscripts

My thought about this, it's George, so the standards advisory is a catalog of what currently exists and as I understand it it's meant to be produced annually and so we should have seen this one in December I think for the 2015 calendar year and as such it has...so to be real specific FHIR is mentioned, yes indeed it is, but most of the rest of the catalog is full of the tried and true things that we think may not stand the long-term test of time here. So, that's kind of what I think it doesn't really reflect the forward thinking of the roadmap.

Janet Campbell – Software Developer – EPIC Systems

And I think maybe that makes a lot of sense George and I might have read this question wrong. I think when I was saying, yeah, actually it sounds okay, I was thinking more along the lines of, you know, there wasn't anything like...I guess the idea that assuming that the standards advisory would continue to be published that this would continue to advance this goal might have been sort of what I was thinking or not maybe I just wasn't paying attention, but the way you explained it makes a lot of sense.

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

Okay, so I think...

George Cole – Principal Scientist, Community Solutions – Allscripts

Well, let's add to our answer then, we want to see it continue to evolve, to reflect what the roadmap is...I think that would be a good addition to the answer.

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

So, what I'm hearing is the comment here is that because the standards advisory is inherently in many ways backward looking it would be unfair for it to reflect the roadmap.

Janet Campbell – Software Developer – EPIC Systems

Or inappropriate...go ahead.

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

Yeah.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah.

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

But we would expect that in subsequent years it will reflect the coordinated transition path that we described.

Janet Campbell – Software Developer – EPIC Systems

The only thing that I might change about that a little bit is that I don't think that necessarily the standards advisory should be backwards looking and maybe George's point is that, you know, that it needs to be just a little bit more forward looking...

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

Yes.

Janet Campbell – Software Developer – EPIC Systems

And if they considered that to be forward looking then they're not looking forward enough...

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

Yes.

Janet Campbell – Software Developer – EPIC Systems

Which is probably fair.

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

Okay, great point.

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

And, this is David, my concern with it is it falls prey to the sort of notion of all controversies deserve equal time in a newscast no matter how stupid the controversy in that, you know, this is the listing of every single standard no matter how stupid the standard and, you know, just because something is a balloted standard it makes it on that list that doesn't mean it's useful for anything or should ever be used in our industry and so I find it hard to even understand what the purpose of the darn thing is.

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

There are some highly egregious examples probably the most egregious is that of HIEM which is I think on there because it was at one time adopted by eHealth Exchange but I could be wrong but I don't believe it's actually used.

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

Yeah...

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

And then the other...

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

Yeah, there's a bunch of stuff like that just...

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

Yeah, the other egregious one is...anyway it's probably not appropriate for us to...

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

But, so thinking of it more positively, which I try to do, is maybe we could suggest that as core standards are agreed upon and orchestration patterns emerge that the standards advisory focus on clarifying what patterns exist, what's available...

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

Yes.

Janet Campbell – Software Developer – EPIC Systems

I...

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

So, that people know where to look and figure out.

Janet Campbell – Software Developer – EPIC Systems

And maybe one of the things it could do as well, I mean, as an advisory, right, you know, you've got the 1-3 day weather and then the 5-7, you know...

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

Yeah.

Janet Campbell – Software Developer – EPIC Systems

Like cloudy with a chance of REST or whatever, we could basically use this section to...

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

That made my day.

Janet Campbell – Software Developer – EPIC Systems

Well, but using this question to sort of say, hey, this is what we think the standards advisory should be and I like the way that you put it David to have that be, you know...to tie that back to the overall message that we're trying to send.

George Cole – Principal Scientist, Community Solutions – Allscripts

It's George again...

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

Yeah...

George Cole – Principal Scientist, Community Solutions – Allscripts

One of the things I took from the advisory was it’s our responsibility to clearly call out those items in the list that are either immature or inappropriate or not used we should, as reviewers of that advisory, make the effort to get them removed from the final list that gets published. So, then where the standards advisory...if that’s my understanding of what’s really happening here where it falls short is it by its very nature can’t have and will not have a forward looking section of what’s emerging and what’s coming.

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

Yes.

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

And this is Josh just to point out in the advisory itself, the sections appear to be labeled all as the best available standards for each of the relevant categories.

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

Yeah.

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

But it’s not really clear what curation process led to the determination that those are the best.

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

This is Michelle, I don’t want you all to spend too much time because the current plan is for us, ONC, to gather the feedback from public comments on the standards advisory and then we’re thinking of forming a Task Force to then, once ONC has the opportunity to synthesize the feedback from the public to then have a Task Force under the Standards Committee go back and do some more work around the standards advisory. So, just so you all know you might get tapped in to do more work.

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

So, it might be useful for us to...

George Cole – Principal Scientist, Community Solutions – Allscripts

I would...

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

To, you know, bullet point a couple of things that we think it ought to become rather than commenting on what it is.

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

That’s right.

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

Is that what you’re sort of saying?

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

I think that's absolutely fair, I think that's great.

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

By the way I tweeted your comment Janet but I edited it, so, I made you say, sunny with a chance of FHIR.

Janet Campbell – Software Developer – EPIC Systems

Oh, even better.

George Cole – Principal Scientist, Community Solutions – Allscripts

How do you mark something that's re-tweeted but edited?

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

Well...which wasn't even re-tweeted, so...

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

I missed that solution.

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

Okie doke, let's keep going. Change the roadmap, I think I reconciled these...Janet was writing a novel.

Janet Campbell – Software Developer – EPIC Systems

I do that.

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

And it's nice, it's well written. I like vibrant and multi-use case ecosystem that can flourish on a foundation of uniformity.

Janet Campbell – Software Developer – EPIC Systems

Yeah, I drink wine when I do public comments, oh, wait, this is on public record too, I guess I can't ask for that to be struck from the record. Yeah, my point was this though, I think that the job of naming standards should be the job of the standards advisory and if the standards advisory isn't forward looking enough or isn't quite structure to meet that need then we should fix that problem versus putting the standards in the interoperability roadmap was my point.

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

Yes and I think you're also saying that you're doubling down on the parsimony point.

Janet Campbell – Software Developer – EPIC Systems

Right.

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

Yes and then George is noting that we need to also include a change from certification to useful testing.

George Cole – Principal Scientist, Community Solutions – Allscripts

Testing and testing tools, yeah.

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

Yeah which a parallels a rant that I had last Standards Committee meeting so I heartedly approve. So, maybe we should just consolidate those two together. Josh anything more you want to add there?

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

No, I’ll chime in.

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

Okay. And let’s go to the next slide. Through the coordinated governance process Health IT developers, SDOs, ONC and others should implement a coordinated approach for developing standardizing a targeted set of public APIs for nationwide interoperability. Comments, we got this covered, shorter Janet, we’ve got this covered, focus on the narrow waste. George, maintenance versioning and I don’t know how this could work.

George Cole – Principal Scientist, Community Solutions – Allscripts

Basically, sorry, but that’s...I don’t...

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

I think you’re saying the same thing that Janet is which is support the coordinated approaches that do exist and do so on the highest return activities at the narrow waste.

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

And only after we figure out what support means.

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

And only after we figure out what support means, correct.

George Cole – Principal Scientist, Community Solutions – Allscripts

Sure.

Janet Campbell – Software Developer – EPIC Systems

And that support should probably consider the maintenance versioning and testing.

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

Yes. And I think every Workgroup that I’ve been involved in that’s noted the use of coordinated governance doesn’t know what coordinated governance means. I don’t think we’d be off the mark for saying we don’t know what coordinated governance means.

HIT developers and SDOs should develop public APIs for, i.e., sending, receiving and finding.

Janet Campbell – Software Developer – EPIC Systems

My point there was just that...

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

We’ve got it.

Janet Campbell – Software Developer – EPIC Systems

Yes. Also, I don't know if there is a word missing but it definitely says, should develop public guides for...

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

Yeah, well I think that's probably if you translate the i.e., into Latin and then into English there is a double for, for that is I guess, for, yeah...

Janet Campbell – Software Developer – EPIC Systems

Yeah, you're right if you eliminate for that fixes it.

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

It shouldn't be i.e., it should be e.g.

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

...

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

Yeah.

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

Yeah, the only comment I would make here is, right, this really should be examples, it starts to feel a little bit parochial for the roadmap to say, you know, between a receiving API, you know, and a this API and a that API.

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

Michelle, let the record state that we criticized the ONC's use of the Latin abbreviations.

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

Noted.

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

But otherwise the question is really well posed, not.

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

Sorry. All right so I think what we're saying here is this work already exists, it should be supported and augmented, and this example should be but an example because there are many and multiple activities that are underway.

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

And this is David, if we find a way to include our framework in our answer I think this would naturally reflect back into the framework...

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

Yeah.

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

And saying, we believe that these and many other use cases can be addressed by careful orchestration of the core public API.

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

That's right.

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

And so the answer is, yes, follow the model that we've outlined for new standards emerging going forward.

Janet Campbell – Software Developer – EPIC Systems

Part of the point I was trying to make here and I'm not sure, this is Janet, if there is a good way of making it honestly, but that it feels like a lot of the calls right now for public APIs don't necessarily consider that there do exist standards-based ways of retrieving information or sending information to an EHR and like, oh, we have a new word and the word is APIs and so that will solve our problems because we didn't have APIs before and the point I'm trying to make is that this is not...this isn't wildly different than what we already have.

So, if the thought is that what we have is not working then calling them APIs now probably won't fix it either. Does that make sense? I don't know if you guys see that too?

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

Yeah, it does.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yes.

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

Yeah, I think what we would...what I might say and I think we had this conversation with Sean in one of our early meetings is that the difference perhaps is the nature of the composability and modularity of some of the emerging APIs compared to the bespoke nature of the older APIs.

So, yes APIs exist but some of them aren't very composable and some of the newer ones are more likely to lend themselves to this Internet hourglass style approach of composability and so the transition is worth making as long as we do it carefully and after thorough piloting and all of the other caveats that we've been raising. So, to me the only difference is composability.

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

Yeah and this is Josh, maybe just to pile on that, so Janet I totally agree with your point but it's not like the old things were APIs and the new things are APIs and that's why they're good, but what we need are usable APIs that meet certain design sensibilities and that's what the focus needs to be about...

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

Yes.

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

But whether it is or is not an API isn't really the point.

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

It's the architecture in which those APIs exist and how that architecture is composed to create the compelling use cases and emerging use cases that we're looking for.

Janet Campbell – Software Developer – EPIC Systems

Right that makes sense.

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

Okay, cool. Okie doke let's go onto the next slide. Certification bodies including ONC, although ONC is not a certification body, should develop certification approaches to encourage adoption of specific or consistently functioning APIs so as to reduce switching costs but that does not prevent the adoption of innovative new APIs. You can tell I never read that question.

So, shorter Janet, it's not clear that certification actually reduces the switching costs sometimes quite the opposite nor is it clear that APIs reduce switching costs and...

Janet Campbell – Software Developer – EPIC Systems

This one was...really interesting, like what does switching costs mean in this context? Switching costs of what and how will APIs help that?

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

Yeah. This is one where I'm not even sure I can comment.

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

I mean...

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

...this is Josh, on two issues, one is, as Janet raised maybe the switching costs between EHRs but another is the third-party functionality that it runs on top of EHRs and, you know, both...

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

Yeah, this is about API versioning? Maybe this is about API versioning.

Janet Campbell – Software Developer – EPIC Systems

Well, actually I think Josh's interpretation certainly makes more sense and the only reason I wasn't sure that was what they meant was just because to this point they don't seem to have concerned themselves with functionality that they can't certify or that they don't want to be...unless they think they're going to be able to certify it in the future like with long-term care and mental health. So, that was why...

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

Yeah, so we could interpret this question as in the way that, you know, we interpret this question as being concerned with API versioning and transitioning to a more modular-based approach in which case we applaud it and agree with it. It's not clear on how you can certify it but...

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

This is David, that's kind of how I interpreted it albeit with the scratching of my head at the same time that this might be that point we talked about a couple of slides earlier in the framework around a ceiling not floor or a floor not ceiling...

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

Yes.

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

Is allow, you know, the migration to better approaches without penalizing that effort, in other words, don't penalize a vendor who wants to try...

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

Yeah.

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

To do a better job than the current approved certified floor.

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

And then I think...so maybe the approach that we do is interpret this in a way that makes sense to us and then endorse it although question whether certification is the appropriate mechanism per George or whether we're looking...should be looking at testing.

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

That's interesting.

George Cole – Principal Scientist, Community Solutions – Allscripts

I have to admit I read the very first part of this fairly strictly I think about should develop approaches to encourage the adoption of specific or consistently functioning APIs and I probably ignored the "as to reduce switching costs" thinking that was added as somebody had to put something in about cost or why, but I really...I was afraid that this was just another thrust about continuing with the certification or a certification program at a national or nationwide level.

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

Yeah.

George Cole – Principal Scientist, Community Solutions – Allscripts

And I don't think certification encourages adoption. I actually think certification encourages studying for the test.

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

Check the box, yes.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yes.

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

So, what I'd move here is that we interpret this question as a laudable move towards thinking about versioning and forward looking so that we do not impede progress as such we applaud the direction, we believe that certification maybe the inappropriate mechanism and would focus on the use of better testing and testing tools to meet the same aim. Makes sense?

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

It sounds good to me, sorry, I was on mute.

Janet Campbell – Software Developer – EPIC Systems

I was pacing around the table and I was too far from the knees up. I just got a new Fitbit I've got to get my steps in.

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

Yeah, good, I've got a treadmill desk so I just stand on these conference calls and it's all good to me. SDOs should advance and accelerate the development of standardized RESTful APIs and I think no comment or anti-comment.

And I think we just go back to our previous point that, SOA and REST are generic let's point back to our healthcare interoperability hourglass and reframe in terms of accelerate the adopt and reframe towards accelerating the move towards a modular parsimonious, etcetera, architecture.

And Health IT developers should work with SDOs to develop standards for interoperable electronic health records, opposed, for interoperable health devices. Janet, I can just read the irony in Janet's words.

Janet Campbell – Software Developer – EPIC Systems

Well, you know...

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

Sure, yeah?

George Cole – Principal Scientist, Community Solutions – Allscripts

I found this just to be a funny comment or a funny line item placed in the section in where it exists. I just thought it was a little out of place.

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

Right.

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

I didn't understand it either.

George Cole – Principal Scientist, Community Solutions – Allscripts

I mean it's not about APIs; it's not about anything else really that I thought this section was about.

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

I don't think we're opposed to the concept of HIT developers working with SDOs and electronic health device manufacturers to improve interoperability.

George Cole – Principal Scientist, Community Solutions – Allscripts

No we're not.

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

Yeah.

George Cole – Principal Scientist, Community Solutions – Allscripts

I don't know that...maybe there is something more...I don't know...maybe electronic health devices is really broad, I just...I was a little concerned this was a statement about current popular platforms and not so much about...

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

Yeah.

George Cole – Principal Scientist, Community Solutions – Allscripts

Continuing to evolve technologies.

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

Anyway I just move that we say, yeah, sure.

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

Yeah, sure.

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

Okay.

George Cole – Principal Scientist, Community Solutions – Allscripts

Yeah, sure.

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

All right, we have four minutes left so I think at this point we need to pause and open it up for les commentaire populaire.

Public Comment

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

Lonnie or Caitlin, 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. 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

This is always the point at which you learn how many people are anxiously waiting on our words and eagerly waiting to comment.

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

We're trying to leave a little more time for comment. So if there is a lot of dead silence I'm sorry.

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

Good, always...

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

While we wait though you'll be very busy next week Arien.

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

That's right; I'll be like...yeah.

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

And partly it's your fault you volunteered to take on more.

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

I did, true, I'm aware of that.

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

Oh, we do have a public comment; see that's why we wait.

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

Yay.

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

David Tao, as a reminder you have three minutes, please go ahead, David.

Janet Campbell – Software Developer – EPIC Systems

Hi, David.

David Tao, MS, DSc – Technical Advisor – ICSA Labs

Thanks, it will be real brief, I have no life, regarding the content recommendations that you made, early slide, since FHIR is intended as an international standard allows for optionality and extensions to meet local needs I suggest that your recommendation include more explicit wording than just profiled FHIR, multiple incompatible FHIR profiles for similar purposes could be created which would not be interoperable. So, I think it's insufficient to say just profiled FHIR. Perhaps language like standardized FHIR profiles should be used instead. Thanks a lot.

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

Thanks, David and I think that's exactly what we meant by profiled FHIR and if you, of all people, read that differently we need to check the wording. Thank you.

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

On the other hand, this is David, I will, as we called out in the JASON Task Force remember that you have the core FHIR for which I agree there should be standardized at least, you know, a realm of specific profiles but we would not preclude the emergence of new profiles to address new use cases that go beyond what's in core and I think part of the point of this architecture is there is a clean way to do that which doesn't break the code it just lets you move different data around for new use cases as they emerge.

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

All right, so I think with that we are concluded.

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

I think we got some actions to send out, maybe a revised version of our Standards Committee deck and then Janet will be anxiously dialing in for the Standards Committee to hear how it goes and we'll reconvene when we reconvene given some of the feedback that we got.

Janet Campbell – Software Developer – EPIC Systems

Sounds good.

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

Thank you everyone.

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

Thanks, all.

George Cole – Principal Scientist, Community Solutions – Allscripts

Thank you.

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

Thanks.

Public Comment Received During the Meeting

1. Interactive cds?
2. For those of us unfamiliar with the terms "orchestration" and "parsimony", perhaps a visual marker next to the term could alert the viewer that the word is a "term of art"? Perhaps routinely referencing a standard glossary would be helpful.
3. Something like "Set a simple floor, but allow guided transformational development of the unknown innovations to come."
4. Regardless of whether I make this comment on the phone, here it is for the public record:
"Regarding the content recommendations: since FHIR is intended as an international standard that allows for optionality and extensions to meet local needs, I suggest that the recommendation include more explicit wording than "Profiled FHIR." Multiple incompatible FHIR profiles for similar purposes could be created, which would not be interoperable so it's not sufficient to say only "profiled FHIR." Perhaps language like "STANDARDIZED profiled FHIR" should be used instead."
5. Can an SDO ballot to replace "parsimony" with "elegant" i.e. (of scientific, technical, or mathematical theories, solutions, etc.) gracefully concise and simple; admirably succinct? Parsimony is a simple and cheap but elegant is simple and pretty too. haha