

**NwHIN Power Team  
Draft Transcript  
August 9, 2012**

**Presentation**

**Operator**

Ms. Robertson, all lines are bridged.

**MacKenzie Robertson – Office of the National Coordinator**

Thank you. Good afternoon, everyone. This is MacKenzie Robertson in the Office of the National Coordinator. This is a meeting of the HIT Standards Committee, Nationwide Health Information Network Power Team. This is a public call, and there will be time for public comment at the end, and the call's also being transcribed so please make sure you identify yourself before speaking. I'll now take role. Dixie Baker?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I'm here.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Dixie. Tim Cromwell? Floyd Eisenberg?

**Floyd Eisenberg – Independent Health IT Consultant**

Present.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Floyd. Ollie Gray? David Grove? Arien Malec?

**Arien Malec – RelayHealth**

Hello.

**MacKenzie Robertson – Office of the National Coordinator**

Hi. Thanks, Arien. David McCallie? Nancy Orvis? Marc Overhage? Wes Rishel? And Cris Ross? And is there any staff on the line?

**Todd Parnell – 5am Solutions**

This is Todd Parnell.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Todd.

**Matthew Rahn – Office of the National Coordinator**

This is Mathew Rahn, ONC.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, Matt.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Hi, Matt.

**MacKenzie Robertson – Office of the National Coordinator**

Dixie, I will turn it to you.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Well, thank you all for dialing in. As Todd mentioned, this is this is the last meeting of our Power Team for the second go round; um, second go round being our assignment of developing metrics for, um, evaluating and classifying specifications with respect to their readiness for—uh, to become national standards.

So, um, the agenda you see in front of you there. Uh, we're going to start with Todd, and, and I will just briefly go through the changes that were made pursuant to our last meeting. Um, there were just a couple, wasn't signfi—weren't significant but we did want to highlight those changes. Um, then, I'd like to go into a, um, a general discussion of your, of your, um, experiences in attempting to use the, um, to use the assessment worksheet, individual worksheet in assessing the Infobutton specification. Of course, this was a, a test, you know, an exercise to really, um, see how well our, our metrics work out. It wasn't a, an—it wasn't intended to be an official evaluation of the Infobutton, um, specification, but rather just a, an experiment to see how well it—how well the worksheet and the metrics would work out.

So we want to start with just some general impressions and then discussion of the scores, um, that I—I distributed those to you last night. The three people who did use the worksheet and score the, the, um to score the specification are Floyd and David McCallie, who I told you would not be able to join us today, and myself. And Arien, did you get a chance to, to go through and, and, and, um, score the specification?

**Arien Malec – RelayHealth**

I did not.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. If, if you have—I just ask you because if you had we would just add your scores to the, to the ones that we have. Uh, I did send you the individual scores last night primarily so that you could see the comments that people—that people had, um, in, in doing the scoring because those comments weren't—uh, weren't trans-transferred on to the, um, on to the Team's score sheet.

So with that, Todd, um, let's bring up the individual scoring sheet please, whomever is driving. Okay. Todd, why don't we just go over the, the changes that were made? There was one that we meant to make that we didn't make.

**Todd Parnell – 5am Solutions**

Which one?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Right here. Um, we intended to remove this line that says, "Continuity" there, and we need to—we need to do that.

**Todd Parnell – 5am Solutions**

Yes. It was removed from the detailed metrics but not from the scoring worksheet and I have that in a note.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. Okay. So, um, the second change here was the addition of this one line, Voluntary Consensus Standards Body Context, and then, we added the metric to the end of the score sheet, and let's see—who's in charge of—can I—can you turn over the control of this to me?

**W**

Absolutely.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

So I can just kinda—thank you. Thank you. So this voluntary consensus standards body context we added.

**Todd Parnell – 5am Solutions**

It used to be—uh, Dixie this is Todd. It used to say “SDO context” and so it was a change from that.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Okay. And I don't think there were any changes in underlying technology score sheet, score sheet. Am I right?

**Todd Parnell – 5am Solutions**

That is correct. The only one at this level that was a change was the SDO.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

And the continuity we—that we—

**Todd Parnell – 5am Solutions**

Well, the missed one, yes.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. The missed one, yeah. And, um, moving down to the appendix, which is at the—has the detailed metrics let's see we did delete the continuity here but we just forgot to delete it up there. And this, this voluntary consensus standard body context—want to go over that one, Todd?

**Todd Parnell – 5am Solutions**

Absolutely. So this used to say, as I said, SDO context for Standards Development Organization, and in response to the meeting last time—I think it was July 26<sup>th</sup> or 27<sup>th</sup>—uh, the recommendation was to, to change the, the language here to voluntary consensus standards body based upon OMB Circular A119. So what we did here is we did not want to directly force the language of the standard. But we, we have this footnote at the bottom which describes the, the two terms of ... voluntary consensus body and voluntary consensus standard and tried to align low, moderate, and high to the, the stages of adoption, which are referenced in that document. So at high standard is a voluntary consensus standard and, um, moderate would be under review by a consensus body, and then, low would be not part of the discussion at a national/international voluntary consensus standards body.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

And the other thing we didn't want to do is to, is to perfor—uh, is to commit one of the errors that we've identified as a bad thing to do, is refer—reference an external document from within our metrics, but rather we wanted to really make the metric itself pretty clear on what we meant. So although we have the, the reference here we didn't want to just say, “This you know, is under review as a voluntary consensus standard as defined here.” We wanted to actually, you know, include some definitions there so we hope we've done that.

I think that's, um—are there others? I don't think there are other changes right, Todd?

**Todd Parnell – 5am Solutions**

The other one that comes to mind, but I don't know whether it was a change this time or last was, um complex—not complexity. Just a sec, that's the only one I have highlighted.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Okay. Okay. Yeah. I think that's the only other, other one.

**Todd Parnell – 5am Solutions**

Oh, I'm sorry, degree of optionality under metrics for ease of implementation deployment.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Let's see, degree of optionality—I think it's before this one.

**Todd Parnell – 5am Solutions**

It would be the last one under ease of implementation deployment.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh, it's down farther. Yeah. This is maturity, there's market reduction—

**Todd Parnell – 5am Solutions**

Yep. A little bit further down there's a bunch of NISA particular access, and here we go.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

It goes to two of 'em. Okay.

**Todd Parnell – 5am Solutions**

So, so these, um, we did, we did modify. It would be the low and high. Uh, it's the first bullet points in each one so the new language tries to capture what we talked about in-in the last meeting, which is, um, the, the distinction of good optionality versus bad optionality, which we've discussed several times now and what we came to here is for high interoperability use cases met by implementations that ignore at run time or do not implement at design time optional elements. So this is trying to capture the, the discussion around a implementation which does the minimum required elements and ignores the optional elements in the specification will still achieve interoperability with other specifications.

And then, also in high, optional elements for compatibility with earlier or later versions so this is upwards and downwards compatibility; those are the changes in high; and then moving all the way over to low, um, standard requires implementer to choose from among alternatives to meet interoperability use cases. So this was, um, what—uh this, this is the distillation of bad optionality where, um, the authors of the specification could not come to a single conclusion, and therefore they left options open and in implementation would be free to choose among multiple alternatives, and in order to achieve interoperability you had to choose one of them.

And the second bullet point of no or limited optionality support compatibility with earlier or later versions, this is the upward and bac—uh, upwards and backwards compatibility, and then moderate is language to try to capture between those two extremes.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

So do we think that that's pretty much captured what we want, wanted to capture there? As you'll recall that this, this topic was brought up at the last Standards Meeting. Sounds like it. Okay. Let's move into general comments about use of the—use of the work sheet. Whoops, this is going crazy here. Uh, one, one general comment I had is that a number of these are—you know we—you'll recall that we struggled early on with, um—we used to have deployment complexity and we changed it to ease of deployment so that low would actually mean low ease would be a bad thing and high would be a good thing. And we wanted it consistently to be that low would be a bad thing and high would be a good thing, and I think we did that at the, um, criteria level and the attribute level, but I think that we have not done that at the metrics level and we need to go back and make sure we do that.

And I'll give you—an example is in the, um, licensing, you know, um, like low accessibility and fees, which actually should be given a high you know, and you naturally would think—and I'm not sure that all of us even responded to this in the right way because like openness, you know, low openness, um—or actually openness is a pretty good one. But accessibility and fees if you, if you have high fees you'd think well it would be a high but actually it would be a low. So we need to make sure that our words are consistent so that low—a low score is always a bad thing and a high score is always a good thing. See what I'm talking about?

**Floyd Eisenberg – Independent Health IT Consultant**

This is Floyd. I think that makes a lot of sense. It was a little confusing.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. It creates confusion. Patent, high for patent you think, “Oh, they have a lot of patents.” Well, actually if they’re not many constraining patents then it would be a low and not a high. So, um, you know that was, that was one of the examples. Let me see, um, deployment complexity too in the—in the adoption criteria, ease of implementation deployment. We have deployment complexity where a low complexity score—you know, if it’s not very complex it actually should be assigned an H and not an L. So we need to—we need to be—we need to fix that, Todd, so that it’s always a—you know, so that we’re consistent that L is a bad thing and H is a good thing. And I think words in the metrics that are, are right on but I think the titles of the attributes need to be aligned better.

**Todd Parnell – 5am Solutions**

Yes.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

You know what I’m saying?

**Todd Parnell – 5am Solutions**

Yes. I-I-I do see what you’re saying. Um, I-I’m just kind of thinking how I’m going to change them and it’s just wordsmithing but I-I’ve captured that as a note and will make that modification.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Good. Um, Floyd, do you have any general comments?

**Floyd Eisenberg – Independent Health IT Consultant**

Uh, well, the, the one comment was I-I had trouble finding continuity which you’ve resolved nicely, um, and it, it—the question I had is, um, in doing the evaluation as an individual there are some things you know about it and some things you don’t know about the standard as far as how many are using it. So it sounds like it’s, in a sense, more of a team approach than necessarily an individual, um, because some may be able to vote on some of the options and not on others.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Yeah. That, that was one of the things, um—you know, I did a couple of evaluations for ONC that I don’t want to provide too much detail about but, but they, um—in both cases they, um, they had team members go and do individual scorings of things, and then, the team came together and through discussions reached consensus. Um, so it wasn’t like we had five different voters and we took a, um, an average and we came up with a, you know, an average score from among five voters. Because different people have different degrees of exposure to different attributes, you know, like how, how widely a specification is actually implemented.

And in the process of coming to consensus and a team consensus vote I think that’s really important because you’re able to, to share your knowledge and no one person has to be the, you know, not—well, every single team member doesn’t have to be the expert in every single, you know, every single attribute and every single criterion. And I think that that’s really important because I think some in general—well, I think if you really did an evaluation first of all you’d take more time than we have. I mean we just did this to test our instrument and our metrics. Um, you take more time and you might have more time to send people out and actually collect real data, but you also would, um, would hopefully have some people with more experience in the actual deployment of the standard.

What do you think Arien?

**Arien Malec – RelayHealth**

Um, I agree. Um, I also—one of the things that I—that I saw when I looked at the responses is, um, in the—in areas where there is uncertainty it seems like there's a difference in biasing towards high versus biasing toward .... For example, if there was a—if I didn't know whether Infobutton has high breadth or medium breadth I would bias towards high, and I think there needs to be either clarity that if there's lack of knowledge you don't score, um, or in areas where you should know and you don't that that be treated as a bias towards the lower category that you're uncertain about.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. That's a, that's a good point. You notice that in the, in the team assessment form when I was recording the scores I just—I realized that, um, some of the, some of the team members actually assigned either N/A as not, not applicable or they assigned unknown, and I-I agree. I think that the, the team members should be given the option of saying unknown if they don't know rather than take a wild guess at it. So I, I think that that's another enhancement that we should make, Todd.

**Arien Malec – RelayHealth**

Right. And, and I guess the only addition to that is that if we have competent reviewers that is reviewers who, who should have good knowledge of the area in which they're reviewing, and we see unknowns we need to, we need to explicitly decide how to treat those whether to bias towards, uh—again, whether to bias towards low or non-existent in the areas where competent reviewers don't know the answer to a question.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. So reviewers that actually you would expect to know the answer and they don't.

**Arien Malec – RelayHealth**

Right. Right. So obviously if we're, if we're assigning reviewers who have never heard of Infobutton, um, in this case, and they assign n/a they're just—that's just an example of them being the wrong, the wrong reviewer, um, and their opinion shouldn't count for much. If we know reviewers who have wide knowledge in an area, um, and should be expected to know if it were, if it were, for example had expressed support and didn't that should be treated as evidence for a low maturity rating, for example.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. And I-I think that that would come out in the consensus discussion. You know, if in discussing the scores, you know, I think it would be brought up that okay so why don't we know this, you know. I don't know. I-I think it—

**Arien Malec – RelayHealth**

Okay. So, so what you're proposing is that re—individual reviewers if they don't know just they don't know, and then in the consensus scoring if all of our competent reviewers don't know then that's treated as ... evidence for low.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. Yeah. Yeah. I-I don't think that we should put in—suggest an algorithm, you know, but I think that we should, we should mention that that would be the expectation is in the, you know—in, in cases where information is not known that the consensus discussion should decide among the reviewers, you know, what exactly what score to assign.

**Todd Parnell – 5am Solutions**

So, Dixie, this is Todd. Um, there were three different, um, variations that, that I found in the individual scoring. I saw a single XXX, a question mark, and N/A, and I just want to distinguish based upon this discussion, between unknown and not applicable because I-I-I'm a little concerned about the, the use of not applicable for these. I'm very comfortable with unknown, um, based upon the preceding conversation, but what, what should we do about the, the scores of N/A?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. The XXS—XXX I use just to say that that row should be deleted so it has—

**Todd Parnell – 5am Solutions**

Oh, okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Um, I think I used an N/A someplace. Oh, tw—oh, the comparison of targeted scale of deployment to actual scale deployed, um, I assigned N/A there because I didn't think there was a targeted scale of deployment. Um, probably the N/A should—in the next row really should be an unknown, but we should define these and unknown should be if the individual reviewer doesn't know the answer, you know, but there might be some n/a's. Like, like this particular specification—here's a, here's a good example. This specification had no functionality specified. It was an information model, right, and some of our metrics refer to the functionality specified. So to me—and this is just my opinion—to me that's an example where you, you would have an N/A because there's no, there's no functionality in the specifications. It's a model instead.

**Arien Malec – RelayHealth**

Okay. Although—yeah. Although in, in the case of targeted deployment, um, one would suspect that if the model were intended to be helpful it would also be widely deployed for, for relevant n/a's; for example that patient education content, for example, um, would widely use the information on it or widely map their content information on it.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

A-and this, and this also borders on this other question that was brought up is, um—David initially brought it up in an email to me where, um, are we reviewing a specification or an implementation guide, and I, I think that that's an important topic for us to discuss as well. Because in this particular case there's only one implementation guide, but suppose we had a specification that had a whole bunch of implementation guid—uh, different ways of implementing it. Um, would we expect that the specification, this file that's given to the team to evaluate would it—should it include at least one implementation guide? Should it include however many there are? You know, should the evaluation be on specification alone or should it also be at least one implementation guide? You know, what, what's the expectation there?

**Arien Malec – RelayHealth**

Uh, and it, it depends because there are cases where the specification is intended to stand alone; so for example, HTP is intended to be an implementation guide or, or a specification that is implementable, um, whereas HL7/ORU by itself is not an implementable specification. So I, I don't think—my bias would be that it, it would be too confusing to review an un-implementable specification, um, that you would want to review something that is intended to be to be implemented whether the specification itself was implementable in the case of HTP or whether it—the specification calls for an implementation guide in the case of, of ORU.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

So, so your bias would be whatever is handed to the team must be implementable.

**Arien Malec – RelayHealth**

Correct.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah there, there are a lot of these metrics that you wouldn't even have an answer to unless it's implementable so yeah. So in some cases, yeah it, it could be a specification that's implementable but if it's not, if it's a, you know, if it's a data model, for example, then we would expect it to have—to be accompanied with at least one implementation guide. Right?

**Arien Malec – RelayHealth**

That would be my opinion.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. That's ex—uh, I think that's a good—I think that's good, should be implementable yeah, good. I'm making a note here.

**Todd Parnell – 5am Solutions**

I'm actually wondering, um, at the risk of creating extra work, um, Dixie, whether, um, that is—that, um, whether it's an implementable spec is itself a not an access, a potential metric or I'm, I'm sorry a potential attribute.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, I think that I, I agree with Arien. I, I think that whatever is given to this team to evaluate should be implementable.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I think it's, you know, just it's actually very similar to need, you know, how we, we ultimately came to the conclusion that ONC would determine it's a need or else they wouldn't give the thing to evaluate.

**Todd Parnell – 5am Solutions**

Um-hmm.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I think it also sh—we also should be assumed—should be able to assume that whatever they give to evaluate is implementable.

**Arien Malec – RelayHealth**

Or at least intended to be implementable.

**Todd Parnell – 5am Solutions**

Correct.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah is intended to be. Yeah. Yeah. Yeah. Yeah. Good that's—yeah, I'm making notes. Now the other, other general comment maybe this is—

**Todd Parnell – 5am Solutions**

Uh, D-Dixie, can we just go back real quick? I just want to make sure that I, that I capture it correctly. In, in addition to low, medium, high we are going to have unknown and not applicable.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

And we should define those.

**Todd Parnell – 5am Solutions**

I will create a little table at the, the top which describes what each of those means.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah because, you know, we don't want to force people to make up something, you know.

**Todd Parnell – 5am Solutions**

Um-hmm.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

If they really don't know it they should just be able to—yeah, we don't have the XXX though, don't need, don't need that one. Okay. Um, I don't think I had any more general comments. Oh, this might be a general comment actually. The—this see this voluntary consensus standards body context, when I actually got to reviewing this particular, um, criterion, maturity sp—this one the FDO one seems very similar to breadth of support. Let me show you. I know we just added that FDO one but I, I don't think we've sufficiently—see here's breadth of support, no contributing community or without activity one organization supporting authorship, um, strong community, numerous—to me these attribute—these metrics here are very similar to the FDO metrics.

**Arien Malec – RelayHealth**

They're the only—and, and I think you can probably combine them. I think the only additional piece that the FDO or voluntary consensus body criterion gives you is there are cases where there are industry specific specifications, um, that don't go through an external organization. So for example Microsoft created a quite nice specification for data that would satisfy a lot of these criteria, um, but was maintained and managed by, by Microsoft.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes.

**Arien Malec – RelayHealth**

Um, so maybe a passage to combine the voluntary consensus with the breadth of support, um, such that you can't score high by definition if there is no voluntary consensus organ—uh, standards organization or voluntary consensus organization that's supporting maintenance in—of the, of the standard.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah, that's not exactly—that's combining the concept without just putting the bullets over there, in other words.

**Arien Malec – RelayHealth**

Right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. So instead of using all this word from OMB Circular blah, blah, blah—well we'd still use the word action because we'd say breadth of support that there's no—um, I wish I could split the screen here. Um, no community—well, what—or would you just take these words and move it up there; standard not a formal dis—informal discussion by national/international voluntary consensus standard by—? How would you combine it?

**Arien Malec – RelayHealth**

Yeah. I think you'd want to—I can't see the other—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I know it's—

**Arien Malec – RelayHealth**

Yeah. But I think you'd want to combine them in the breadth of support, um, one would also include no voluntary consensus standard body moderate would include—yeah I think you, I think you would—I think you could just put these as bullets in the breadth of support, um, area. ... for this one, and I apologize for the the off-topic comment, but I thought we agreed that supporting authorship that good standards often have one, one primary author, um, but may have a strong set of reviewers or a strong set of organizations that are, um, that are providing comments. So I, I'm just wondering whether you interpret this as more authors is better, um—?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh, I see, we've got it in the third bullet on the high, multiple organizations providing support services.

**Arien Malec – RelayHealth**

Or, you know, is this—this was strong con—yeah, strong community, the indu—yeah, the contributors advocate is the supporting authorship where I'm not sure what that means. In some cases a single author standard with a strong standards or voluntary consensus body with a lot of feedback is a better model. Certainly what we, what we found in your ... that multiple authors made the specification harder to read, um, and I had to go back and put a single authorial voice but there was tons of comments and tons of input.

**Todd Parnell – 5am Solutions**

If we were to change it to say authorship and/or review ...?

**Arien Malec – RelayHealth**

Yeah.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah, that would be good.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. So we make that change and then we eliminate the FDO line but we move the bullets up here. Yeah, I think that's good. Okay. Are there any—anybody else have other general comments? Floyd?

**Floyd Eisenberg – Independent Health IT Consultant**

Uh, one general comment I had and, um, um, it's kind of silly but when, when rating one section if there's some moderates and lows and they're about equal and then putting in a, a grade for, for the full section, um, I, I guess it's, it's kind of an estimate of which is, which is greater. Can we put low-to-moderate, moderate-to-high or does it require just one of the three?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, David and I both put low-to-moderate, moderate-to-high and I would say also in our exercise we did last summer we also put—allowed range and what we meant was it's kind of on the border. Um, I, I think that would make sense. Um—

**Floyd Eisenberg – Independent Health IT Consultant**

I think it looks better that way that's why I asked.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Um, other comments? Okay. Let's switch over to our specific rate ratings that we assigned, um, to—I, I don't think I can do that but whoever—yeah, thank you. Thank you. Okay. Um, so here we have our grades for, um, the maturity of the specifications. Now, um, I'll represent since David isn't here some of his comments. They—uh, I, I would refer—I think all of you have his comments so if you just look at his, his comments and we won't bring them up but, um, his justification. Now I thought that breadth of, um—where is it? Let's see maturity of specs you know, there are places in this spec that are—just have no content at all so, um—oh, I see, the only place they got H is really the FDO question. Yeah. So when I was assign—assigning grades that was a big influence to me was that some of 'em—some of the areas just didn't even—hadn't even been finished so—but then again, you know, there are specs that have been around for a long time that have, you know, placeholders in 'em so I don't know exactly how—Arien, um, you, you know, you're an independent viewer or reviewer. How would you rate the maturity of the specification?

### **Arien Malec – RelayHealth**

Um, so I would claim a degree of ignorance here because I haven't reviewed it in depth. Um, what I have heard is that—there, there's two data points, um, where I can, I can provide opinion first of all is that we manage and maintain a patient, um patient content and we refill that content to a variety of EHR developers. Um, and we have never prioritized Infobutton support highly, um, as a required feature, so and, and we've not been requested or asked by our EHR partners to do that. So I would rate adoption specification low. Um, I've also heard but not directly experienced that the URI version of it gets very complicated very fast to the extent that you have to support—this was the mark over ... uh, comment—to the extent that you have to support multiple search terms you end up with, with quite large URIs, um, that end up being a, a bandwidth limitation. I'm not sure I—exactly where that goes in terms of in terms of this set of criteria that it's more of implementability of it. Um, so those would be two data points that I have to offer and I would rate it given the criteria that we have I would agree with the rating low-to-medium.

### **Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

The other, the other point that, um, I would say with respect to the maturity of the spec is that the it says that, um, you know, the URL implementation guide—well, URL based implementation guide is the only one that exists, but both the spec and that implementation guide say that they recognize that that's sort of an interim step towards what they want it ultimately to be is a ... based implementation. So even the implementation guide acknowledges that it's sort of an interim step towards a different approach so I, I think it's something that, that just blatantly acknowledges that isn't very mature. Now the—with respect to the, um, the complexity of search terms and all that, that may relate to a comment that, that David made on maturity of the underlying technology and the fact that it relies on the, um, .... So let me see, where are we on the—

### **Todd Parnell – 5am Solutions**

D-Dixie, can I just real quick, um, we're looking at the screen here with maturity specs and I just wanted to, to comment on one that had the most diversity of opinion, which was the degree of interoperability among independent non-coordinated implementations. Um, David went moderate/high and you had low, everything else is, you know, within one rating of each other and that's the only one. I just—is that worth talking about at all there about how we had one person very high and you low?

### **Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. I think it is, yeah. Oh, I gave it a low because I don't—you know going back to Arien's comment, you know way back when, when we were considering Infobutton in the Standards body right, um, I think it was Wes asked me whether I knew of any, anybody who'd implemented Infobutton. And I actually went out to all of our implementers at FAOC and literally nobody had, had implemented Infobutton so it's not widely implemented so that's why I gave it an L there because it said degree of interoperability, but then again the topic is maturity of the specifications.

### **Arien Malec – RelayHealth**

Right. So there's, there's no evidence. I, I say that if you have a, a spec that doesn't have a wide breadth of support or wide usage it's hard to generate evidence for interoperability of independent non-coordinated implementation. You still could do it if you had, I don't know, four independently done implementations and verified that you can mix and swap them. I'm not aware of anybody who's done that. I'm not—

### **Todd Parnell – 5am Solutions**

Yeah. David—this is Todd. David's comments on his scoring worksheet, his comment is I believe there are at least five trial implementations with a question mark.

### **Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. But a trial one—see, I—it sounds to me like—let's go to the, um—I know I don't have it up there now but degree of interoperability by independent non-coordinated implementation. What is this doing in the maturity of specification?

**Arien Malec – RelayHealth**

It I think we had looked at it as a degree of goodness of the specification that a mature specification would be one that people could independent, independently implement and have a, a high degree that they would generate interoperability. So to the extent that, for example I could implement an HTP server as a, as a trial project and have an expectation that I could hit it with a browser, um, and get the results that I'm looking for would be, uh—it's a, it's a, it's a weird one 'cause it's a goodness of specification measure.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Which we took out. I think we should take this out too. We, we took this out so that this one was just maturity of specifications and the goodness of the specifications we moved to implementability.

**Arien Malec – RelayHealth**

Implementability, right. I agree with that.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

This row we really should take out of maturity of the specification.

**Floyd Eisenberg – Independent Health IT Consultant**

This is Floyd. I, I think I would agree and, and part of the reason for my median was for interoperability there's systematic issue of I think the same issue that Arien was bringing up from Marc Overhage's comment about the many turnkeys needed.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. We're getting—yeah. We just—this was—we must have done that before we—

**Todd Parnell – 5am Solutions**

So D-Dixie, this is Todd. If we strike it from here, um, I was just—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I think it's already in the implementability.

**Todd Parnell – 5am Solutions**

That's what I— I'm looking through them right now and I'm trying to identify which one captures this.

**Arien Malec – RelayHealth**

Quality and clarity of specification, this would be a goodness of measure for quality and clarity of specifications I would, I would suspect.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

We have a—um, yeah that's right. Right there we have quality and clarity of specification, yep.

**Todd Parnell – 5am Solutions**

So should I, should I move the—are you recommending that I add it in under quality and clarity?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. I don't think we already have it there.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Do you?

**Arien Malec – RelayHealth**

That, that's what it's intended to measure is the potential at which I can take the specification, implement it, and have a high degree of confidence in interoperable, somebody else has done the same thing.

**Todd Parnell – 5am Solutions**

Um-hmm.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

And here it has semantics, quality and clarity of specification—hmm. Yeah we have semantics not well-defined and no evidence of interoperability so it goes right after that I think because it still is addressing interoperability. Yeah, that would be good. So given that we have, um, breadth of support, stability—so we'll have three things here, breadth of support, stability, and adoption of specification. That's pretty good actually 'cause we'd move that last one into breadth of support and we move another one into—so if, if all of the scores are just those three rows what score do we have as a consensus? Breadth of support's consensus M, ... ability and adoption so we've got something like an L to M or—Now, Floyd do you have adoption of specification as M? Do you know where it's been adopted?

**Floyd Eisenberg – Independent Health IT Consultant**

Well, the, the only place that I was able to, um, find—and I'm not sure how detailed the adoption is—was in the knowledge center ... which seems to refer to it quite a bit. Um, I, I don't have specific knowledge of their implementation but I could easily be persuaded to a low, a low to medium.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I'm ... so I have this. So if we take this one out, let's see move that one—so you would change your adoption to low-to-medium? So, um—

**Floyd Eisenberg – Independent Health IT Consultant**

And I think it's based on, as, as David said, some pilots but, um, I, I'm not familiar with any detailed implementation. I know it's been implemented in test sites like the Public Health Information Network site in 2010 at the, at the meeting and was able—there were able to use that, um, with at least one or two vendors but I don't know how more detailed it's been.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. So what did we come up as our consensus here overall rating would then be what, L to M right?

**Floyd Eisenberg – Independent Health IT Consultant**

Inaudible.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Now moving down to the next one is maturity of the underlying technology, did we have any issues here? Let's see we have—oh, oh, I can testify I gave an H because URL is just about as mature as anything I know about. Um, that's sum, sum total of my assessment. So looking at—well, Floyd?

**Floyd Eisenberg – Independent Health IT Consultant**

Um, I can't remember exactly but I think I'm, I'm fine changing.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, you and, you and David had very similar—I was the outlier; not you guys. You had very similar assignments I see.

**Floyd Eisenberg – Independent Health IT Consultant**

Yeah. Uh, you were talking about adoption and I'm sorry I was looking at, uh—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

The maturity of the underlying technology.

**Floyd Eisenberg – Independent Health IT Consultant**

Yeah. Uh, I, I guess I, I, I haven't been—I wasn't that sure that it was all that frequently—that implemented and I guess that's what I was referring to with my low.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

We probably should make it clear what we mean by underlying technology, I guess. Now, David, this is where David cited the HL7 v3. Um, yeah, in considering v3, yeah, I would have trouble assigning it an H either because it's not widely deployed. That's why he gave it medium; I see.

**Arien Malec – RelayHealth**

Right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah, he's right. Yeah. If we were in a consensus discussion I would agree with him, yep. He would, he, he would have medium to high, high stability, med—inter—degree of interoperability among a number of independent non—again, we've got this in—this third line should be deleted again because that's implementability not maturity. I guess this is what we get when we do these things over a period of time.

**Todd Parnell – 5am Solutions**

Yeah. Dixie, it's exactly the same uh, criteria as the previous one and so I will strike it from here completely.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Except for the FDO wouldn't this be—we have maturity of technology, the last row is different, maturity of technology lifecycle.

**Todd Parnell – 5am Solutions**

So metrics for underlying technology it should be breadth of support, stability, degree of interoperability but just as—we'll strike adoption platform support and maturity within the lifecycle, yeah.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Let's see, other of David's comments almost all are about v3 and he's, yeah, he's right. Um, if v3—yeah, I guess it's mature in its lifecycle. Yeah. So if I were in a consensus discussion with David I'd give him—I'd change all my scores to what he has. He's right, so we would have consensus.

**Floyd Eisenberg – Independent Health IT Consultant**

And from the v3 perspective I would agree with both of you.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

But you know I wonder, um, if we did a real evaluation would you want to—well I guess you, you'd rely on your people to identify what those are and I just didn't, uh—yeah. Yeah. Okay. Let's go to, let's see, okay the third one, um, is market adoption. Whoa, we all agreed on this one. Let's see so that one's pretty—so medium .... Now, how did we all come up with all lows and—oh, that's the ma—the consensus maturity rating is, is across all the, all the attributes, okay. Okay. Moving on to adoptability n-now we move to adoptability. Okay. Now here he—David had question marks on specification, modularity, and separation of concerns and his comments were modularity he said, "Not sure how to rate this. The v3 messaging is well-layered but seems like it, it is unnecessary, thus the standard should be made much less complicated." Um, separation of concern is the same question.

**Arien Malec – RelayHealth**

Yeah. It seems like he, he's—there's an over modularity, right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Arien Malec – RelayHealth**

So, so which tends to show up as high-complexity, um, so I think he's questioning how do you, how do you handle a specification that is, that is overly modular?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. Now he's already given it—deemed it in row two on deployment complexity for the very same thing. Um, well, do we have anything in our deployment complexity—whoops, let's see—that, um, this, this layering that, that says it's overly layered or too much modular—? Here it is, specification modularity aligns well to the business problem, parts are unambiguously identified, modularity unamb—so maybe we should, um, add something that could accommodate too much, which is what he's saying too—well layered but seems unnecessary. Like if we had a specification that's overly layered, um, um—

**Arien Malec – RelayHealth**

Yeah. So, the issue, the issue is, you know, if it's, if it's overly layered and thus highly complex, do the two of those things automatically cancel out and you get medium, um, when—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Arien Malec – RelayHealth**

So there's no way that's what you want.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Plus he's—we already have this other row that says complexity of the specification, so it's like double, double—

**Arien Malec – RelayHealth**

Double digging.

**Todd Parnell – 5am Solutions**

Yeah. Dixie, the other thing though is perhaps, um, this actually points to the fact that HL7 v3's, um, business problem broadly speaking is, is extremely wide and therefore it is complex but it's because its domain is very large. Um, and so when you look at Infobutton and then you bring in all of HL7 v3 under that in order to get there you start to say, "Wow, that was, that was a lot of work to, to get the small spec at the end."

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. That's really what David's saying; that it's too much.

**Arien Malec – RelayHealth**

That's right. So what, what about this degree to which specification needs this familiar term to describe real world context where, Dixie, both you and David rated it high and Floyd rated it low, and I would expect they ... the comments on HL7 v3 ... that this would also—that you would both really rate it as low to the extent that you've got to use a medical vocabulary to describe ....

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Infobutton is, is really intended—it's really intended for consumer kind of applications, right, but it could be for—there could be cases where you'd use Infobutton to integrate, you know, highly granular information, right, so in which case you would want the whole RIM.

**Todd Parnell – 5am Solutions**

Actually I think it's more than for consumer. I think it's also for clinicians.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. So in a clinician's case it's not inappropriate to have the whole RIM there, right?

**Todd Parnell – 5am Solutions**

Right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Hmm, what does he say? He says, “Heavy reliance on v3 in this simple use case.” So he was—I think he was thinking of a simple use case of a consumer.

**Arien Malec – RelayHealth**

But that, that shouldn’t be the standard; it should be for implementers, not for end users. You could have a highly complex specification and deliver a great user experience. Those two things should be shouldn’t have any relationship to each other.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah, but that really relates to the specification modularity too I think because if it’s a simple implementation it should be easy to see what modules you would implement. You shouldn’t have to bring in the entire RIM for a consumer. I think that’s what—yeah. So I think his comments are really addressed at that modularity. So the question for us is, is are our attributes, you know, are they, are they mut—are we double dipping and do they all, you know, or do they cancel each other out or—?

**Arien Malec – RelayHealth**

Right. Are there—are they orthogonal? Uh—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes, and in separation of concerns he seems to think—hmm. And we had a long discussion, Todd, about separ—uh, specification modularity versus separation of concerns, right?

**Todd Parnell – 5am Solutions**

Uh, yes. I think we’ve, I think we’ve had long discussions about all of them, but yes.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

What the difference between the two? I don’t remember.

**Todd Parnell – 5am Solutions**

Uh, so—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

That was a business problem.

**Todd Parnell – 5am Solutions**

So separation of concerns is about, um, alternative standards that may exist, um, or reference standards. So if you include a standard and it does part of what you’re doing then you have poor separation of concerns between the standard under evaluation and the reference standard. Specification modularity is, um, it, it would be related but the, the idea is that does the spec, um, you know, does the spec modularize or does it, um, does it defer out. Um—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. I see, yeah they are—they are two different things, yeah. So we all agree—we all agreed on an M as the overall rating. Oh, I see, runtime coupling, um, David had a N/A question mark. So what’s his comment on that one?

**Todd Parnell – 5am Solutions**

He has no comment.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh, okay.

**Todd Parnell – 5am Solutions**

Any question mark without a comment in his—this may be a case where, um, I wondered if he—if you read runtime coupling and gave it a low because it's lowly coupled but the intent is that high equals good.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. I bet you you're right. I, I had trouble with in that place. Yeah, where I'd have to change them because I realized I was thinking in the wrong direction. Um, I don't have any comments. I bet you're right, yep. Yeah, that should be an H. Yeah. Um, and the optionality I did rate that one low in optionality because there, there really is no optionality there. It's just kind of, um, you know, it's an information model. Okay. I don't think we need to adjust any of our criteria on this, you, your attributes. Do you guys see any need to? And I think in the discussion of, um, of these scores I think that the team would, would reach consensus they would talk through. Um, are there, are there things that you guys think we should change on here? Problem areas? Okay. Let's move on. The next one is ease of operations. I got it all wrong there. He has two N/A question marks.

**Arien Malec – RelayHealth**

This is where if Infobutton is an implementable standard, um, or even if it's an information model I would expect that if it was useful it would be used by all or most patient content or physician content solution, DVM solution, and I would rate it low on that ground.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

But is that a, um—hmm.

**Arien Malec – RelayHealth**

And I'm wondering whether this is, again, a double counting one where this is really adoption, not ease of operations.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. What you're talking about is adoption and ease of operations is scale of deployment. It's really intended to be widely very, very scaly, scalable. Um—

**Arien Malec – RelayHealth**

Oh, I, I can ....

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I can see why it's N/A because it's not widely deployed so how can you answer that if it's not widely deployed. Yeah, it might be double counting. Um, how does he resolve that? I guess that's where we put an n/a. Number of operational issues, all most of these, um, both of those, comparison of targeted scale and number of operational issues, um, if they're—if it's not widely deployed no matter what specification it is you're going to end up with an n/a there.

**Arien Malec – RelayHealth**

So I'm wondering whether some of these criteria belong—whether we should just merge this criteria, this whole category with adoptability for adoption.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, all of these are part of adoptability; this whole set of criteria are adoptability. I think—see this criterion we were supposed to get into once you have it implemented how hard is it to really keep it operating. That's what we're trying to get to.

**Arien Malec – RelayHealth**

Yeah.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um, and, yeah, and I, I think, I think the criteria are probably pretty good for this topic. It's just the problem is if you're, if you're evaluating a spec that's not widely—that's not really operational, those are not going to be applicable and this is a relatively new specification.

**Arien Malec – RelayHealth**

Right and so we'll get a—it will get an N/A and it won't be counted for the final rating and the final rating will be based on its actual adoption.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Yeah.

**Arien Malec – RelayHealth**

Makes sense.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah, but you, you might even if a, even if a spec is not widely adopted you might identify that there, there will be a lot of peer coordination will be necessary, you know, by reading spec you might be able to pick that up anyway. So the last two you still might be able to—operational scalability though if, you know, that one's—well, no, you could tell that by the spec I think 'cause like in this case it's just a information model so of course it's scalable, I think. Why would you answer that one unknown, Floyd?

**Floyd Eisenberg – Independent Health IT Consultant**

Um, I answered unknown because I, I just didn't have information enough to understand it.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Hmm, okay. Are there other comments about this topic? Are there any needs to, uh—do we need to adjust anything here? I guess that's the bottom line.

**Arien Malec – RelayHealth**

Yeah. I mean I think that so, so adding a single node—so this would be operational scalability would, would in the case of this spec be if I add in more content would it search appropriately?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. If you add or, or if you add it here I think it would be—

**Arien Malec – RelayHealth**

Yeah. I had a chance—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

—another source. Right?

**Arien Malec – RelayHealth**

So it would do that, so like if I tried to hardwire linkage into various content if I had more content the stuff should just work its design.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes.

**Arien Malec – RelayHealth**

And I think that's the basis on which you're, you're rating these high.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. You know when I rated it high I actually was, was thinking about, you know, you have a single source and you add another ... that, that queries that source, um, but it could also be if you had another source and how well would it scale if you—if instead of just going to a single mid-line, you know, you added another source that it had to go to. I don't know. I don't know how well it would scale.

**Todd Parnell – 5am Solutions**

Dixie, Dixie, I think you just hit on something really important that I had not previously considered is under operational scalability we used to say it was from the—there's two perspectives here. There's the perspective of the implementer and then there's the perspective of the client, um, and I, I'm not sure that we capture that, at least explicitly, and I hadn't thought of it before just now. So if I'm a client and there's some standard which allows me to go to one central place and do this Infobutton query and it goes out to all of the data sources. Then from the client's perspective they still go to one place, but now of course that central node has, um, quite a bit of work to do. Compare that with Infobutton where, um, I know that every provider has, has an Infobutton service and I want to go as a provider and find out, um, information on my new patient. Now the addition of a new provider means that I'm making another query into this gigantic, um, list of, of providers who have Infobutton services. So I don't think—I, I think it does warrant a little bit of change to operational scalability to at least put a note in that says, "Consider both the implementer and the client runtime perspective."

**Arien Malec – RelayHealth**

Right. So if we think of HTDP and HTML as the operational scalable—operationally scalable approaches par excellence, if I, if I as an implementer add a new, uh—if I, if I implement a web browser I don't need to do anything when people add content. Um, if I want to host content I just by a server stick some content on it and register myself at the DMS and everybody can find me and I don't need to tell anybody, um, or have anybody update their web browser.

**Todd Parnell – 5am Solutions**

Um-hmm.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

But if you were using info—info, Infobutton would not be used to discover patient information.

**Arien Malec – RelayHealth**

Right. Right. So I'm, I'm thinking the, the analog to that, you know, in an Infobutton case is if I add new kinds of content or if I add, you know, if, if I add content on a new disease, a new condition a new lab test et cetera, do I need to change anything about the clients who are using Infobutton in order to accommodate that initial content?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Or, or the server either one, you know.

**Arien Malec – RelayHealth**

Sure, or the server, right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I mean if you, for example, added a content source that was video, you know, or, you know, was really lengthy bandwidth hog kind of thing, yeah, you would have to make some adjustments.

**Arien Malec – RelayHealth**

That's not a standards issue. That's a—

**Floyd Eisenberg – Independent Health IT Consultant**

... To suggest for, um, the semantics interoperability issue, um, to make sure that you're using—uh, you're supplying terms or, or concepts that others would be sending requests for.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

If what? That others would be what?

**Floyd Eisenberg – Independent Health IT Consultant**

So in other words if I'm sending out a request on a patient ... relating to the specific condition, um, and a specific imaging study and I went to a new, um, a new node to find that information there would have to be some semantic interoperability to understand so they knew what I was asking for and—

**Arien Malec – RelayHealth**

Sure.

**Floyd Eisenberg – Independent Health IT Consultant**

—I'd be assured of that. I think that's part of my unknown that I wasn't sure how easily that would work.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. You'd know the—from the RIM you'd know what you're searching for but you wouldn't know the nature of the content you'd find.

**Floyd Eisenberg – Independent Health IT Consultant**

Right and it's supposed to be content sensitive.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Hmm. Yeah. I, I agree with you, Floyd. I think this is a U.

**Floyd Eisenberg – Independent Health IT Consultant**

Well, that's why I made it a U now that I think back because I, I wasn't sure. It's not just asking to have access, but it's asking specific contextual information.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Let me see, what does it say here? Defining these things here, operational scalability addition of nodes creates exponential—this is where we talked about the big O thing.

**Todd Parnell – 5am Solutions**

Yes. It used to have that.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. When you're talking about discovering and delivering content, yeah, the nature of the content and the semantics interoperability is gonna, is going to come in to play there. Hmm. Um, so I think when we evaluate it we would end up with Us here right?

**Floyd Eisenberg – Independent Health IT Consultant**

That was my thought, yes.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

And, Todd, you think somewhere on this criterion we should indicate that—probably in the metrics right that they should include both the client impacts and the server impacts.

**Todd Parnell – 5am Solutions**

Right. Both the implement—yeah, I was going to phrase it as both the implementer impact and the—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

User.

**Todd Parnell – 5am Solutions**

Yeah, and the, yes, the user impact or the client impact.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. I think that we should in—that we should specify that, yeah.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um, but I still don't know how, you know, how we would answer it. It would be—

**Todd Parnell – 5am Solutions**

I, I think based upon this I think you might give it a moderate because each new node in the worst case each new node has their own vocabulary in which, in, in which case the client in order to do the query has to know about that new semantic, and so that would give it a moderate. And then, from the perspective of the implementer they don't actually have to care about any other implementers, right, so, um, that would be a high and, you know, you play with them both. I would, I personally I would give it a medium, a moderate.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Yeah. So we end up with—so, so this is an, this is an interesting—oh, and then fit to purpose, um, I have a high but I guess I didn't know what the purpose was so. I thought the purpose was for consumers, um, but it sounds to me like it's way, it's way more than that. Uh, what did David say? He probably gave it a—

**Floyd Eisenberg – Independent Health IT Consultant**

It is for consumers, but it's also for, for providers' right?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

He said it needs—it seems more complicated than it needs to be. I think he was thinking about this as for consumers as well; um, EHR and content vendors, yeah.

**Todd Parnell – 5am Solutions**

He, he's talking rest.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Um-hmm. Yeah. He is, yeah. Well, that's what it is. You, you are a—it really is rest. The way it's specified right now it's rest. Um, okay, are there, are there changes that—Okay. Let's say we end up with two topics. We have five topics here. We end up with just hypothetically we end up with two of them where we all, everybody on the team, all 12 of us gave it an N/A. Then we've got two things that are N/A and we've got three things that are like M, let's say. Okay. How do you end up resolving that if a couple of them are unknown or, um, or N/A?

**Arien Malec – RelayHealth**

I'd say in this case you'd want to rate it overall. It really depends on what the—how do you weight the topics for which you have knowledge.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yep.

**Arien Malec – RelayHealth**

And it would seem to me in this case you would rate it N/A.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. I think you would, yeah, because you don't know that much about operations. It's not—it hasn't been implemented. Yeah. And you would agree—you would arrive at that through the consensus process. Yeah. I think that's right. Yep. Okay. Now the next one is intellectual property. Um, we have, let's see—I think this is one where people got them flipped myself because—well, let me see what, um, David said. Fee for access is standard but no fee for use to use the standard. It is a fee to use the standard.

**Arien Malec – RelayHealth**

No. The, the fee to—you have to be an HL7 member isn't it?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Arien Malec – RelayHealth**

So you have to be an HL7 member to access or to use the standard, but you don't have to pay for use.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

... Yeah.

**Todd Parnell – 5am Solutions**

Yeah. One time use every hospital doesn't have to be an HL7 member. They could buy it from someone, right?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Right.

**Arien Malec – RelayHealth**

This whole—a, a tricky issue for HL7 but let's assume that's true.

**Todd Parnell – 5am Solutions**

Yeah. Okay. Sorry.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah, that's true. They're still debating that in fact, but he says, "No known issues of copyright." See I think there are issues with, you know, you have to be a member to even first of all to access it, um, but the copyright you have to, you have to be a member to, um, to use it. It's because, that's because of the copyrights. Right? So how are those separate? How are those—how do we separate those? You license the use of the copyright. Right?

**Arien Malec – RelayHealth**

That's right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

So why are those two separate things?

**Arien Malec – RelayHealth**

You could have a, a—you always have—you always license these to the copyright, right, so bought based on copyright law that you own—you have the copyright and you can, you can provide access for use for reproduction for derivative materials, and that, all that's going to come based on how you license the use of your copyright. But you could have a—yeah. How do you, how do you, how do you change fees versus licensing policies may end up being the, may end up being similar things. The only thing I could imagine is in an open content license, for example, you have unconstrained use of that content for derivative work and the like, um, versus a—you may have a, a standard for which license is freely granted per use but not for reproduction, not for derivative materials, and those kinds of things.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, actually in the, in the—if we look at the metrics the, um, copyright is just how many people own the copyright. What we have is that the high is the rights held by a legal entity whom the community trusts like HL7, right. The medium is rights held by a few, and then, low is rights held by numerous individuals. So that's how we made making re-licensing very difficult so that's where we did this copyrights, and so I probably rated this wrong I'm thinking.

**Floyd Eisenberg – Independent Health IT Consultant**

Yeah. No, this is Floyd. I rated it based on just HL7 has the copyright, but add the challenge that often the content that you might want to access may have to deal with multiple copyrights. The standard itself doesn't, but it's when you go for content you may have to get—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh.

**Floyd Eisenberg – Independent Health IT Consultant**

—uh, content from many individuals and many organizations, but I wasn't sure how to deal with that here.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Well, that, Floyd, is exactly the kind of thing that we meant—that we were trying to get to with operational complexity.

**Floyd Eisenberg – Independent Health IT Consultant**

Right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Because that's an operational issue, ease of operations because you had to now—and we didn't. We didn't get that. Now, um, how could we have gotten that because you clearly have to get these licenses with multiple organizations in order to actually use the standard?

**Floyd Eisenberg – Independent Health IT Consultant**

I mean technically you could develop your own, have it available, and have the Infobutton run against your own database for information so you could do that and it's not necessarily a standard, but if you want to go out to multiple knowledge centers and multiple sources it's a potential operational problem.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. That's the operational scalability issue I bet. I think that's where it would come out. Yeah. So under—let me see, back to this one, I the copyright I should have put H here instead of L, but why did I give it a, um—

**Arien Malec – RelayHealth**

So, so what about a case where copyright is held by multiple authors under a permissive license? So for example, I'm thinking in the open source world a, a TPLed piece of software, um, by definition if you were a contributing code you were also licensing it under the original terms, the TPL terms. So you may have multiple copyrights but the license provisions are such that you don't need to obtain multiple licenses, and I'm wondering if these two things are measuring the same thing. That I, I may score something— if it's got an open content license I may score it as oh, I got multiple copyrights, you know, that are, that are held by it but all of them—because it's an open content license, all of them agree that all derivative products are re-licensed under the same terms.

**Todd Parnell – 5am Solutions**

This is, this is Todd. I think that you would immediate—I this is a case where I think you would go low on copyrights, high on licensing, and in discussion if all other things were high you would ignore the, the low on copyright and call it a high.

**Arien Malec – RelayHealth**

Fair enough.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

But the way we define it under copyright is low—uh, the way we define low is rights held by numerous individuals making re-licensing very difficult.

**Arien Malec – RelayHealth**

The reason re-license is easy because the, the terms under which licenses are provided by definition make re-licensing easy.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Todd Parnell – 5am Solutions**

Right. So we'll just, we'll just remove the, the making—the, the subordinate clause there.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

I agree. Yes, that sounds right. That sounds right. Okay. So once I've changed and see copyright I change to H and you don't—you guys think that HL7 licensing policy is easy? Let me see, high is unrestricted for any use, perpetual use licenses, derivative work allowed, unlimited number of users or instances. Clearly it is an unlimited number of users or instances. Um—

**Todd Parnell – 5am Solutions**

You're probably not allowed to create derivative works.

**Arien Malec – RelayHealth**

Right.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. You're not. ... But it's not the medium either though 'cause medium—moderate is restricted only to non-commercial, which is not the case. I think we've got these a little—we, we need some refinement of the licensing policy, um—

**Todd Parnell – 5am Solutions**

Yeah. I mean, this, this is a common one so we better get it right. We better have a standard answer for where HL7s come in—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Todd Parnell – 5am Solutions**

—uh, but, but it feels to me like as written HL7 comes somewhere between moderate and high.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

That's right, as written, but there's a big difference between the moderate restrictive to only non-commercial use—

**Todd Parnell – 5am Solutions**

Um-hmm.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

—and high unrestricted.

**Todd Parnell – 5am Solutions**

Right. Yeah. So I will do something about that.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay.

**Arien Malec – RelayHealth**

Well, business use of the HL7 standards requires a paid organizational membership to HL7.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Do what?

**Arien Malec – RelayHealth**

Business use of the HL7 standards requires a paid organizational membership in HL7.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

That's right, yes, and at a certain level. There is one level, and I can't remember the names of these levels, but there's one level that lets you use—access, you know, access it, and share it within the organization but then you have to have a different level. Uh, and no doubt I'll get emails that says, "Dixie, you're so wrong," but I think it's, it's a different level if you want to actually, um, use the HL7 codes in a product that you deliver to the customer.

**Arien Malec – RelayHealth**

You need the organizational membership in order to distribute excerpts of the standards to customers distribute excerpts standards within the organization.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. In your—yeah. Yes.

**Arien Malec – RelayHealth**

And oftentimes if you want to create an implementation guide you need to distribute excerpts to the standard.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah.

**Arien Malec – RelayHealth**

So I would if you—for, for me, for me I try to do this as what's the worst you could score and what's the best you could score, and the worst you could—the best you could score is open content. You could use it, create derivative works, free license it out, anybody could use it, anybody can use the standard. Uh, the worst one would be you've got to pay some IP for every use, and HL7 feels a little more skewed towards the—it's not quite paid for use. You don't have to pay for every implementation that you use but every, everyone who uses an HL7 standard must also be an HL7 member and must pay at the organizational membership level.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah. You know, even if—yeah. If you—yeah. Yeah. Um, so—

**Todd Parnell – 5am Solutions**

So it seems like to—from where I'm sitting it seems like where we're trying to head is that HL7 should fall into moderate.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes.

**Todd Parnell – 5am Solutions**

And we just need the metrics to, to say it clearly so that that's a obvious bucket.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes. Yeah, that's right.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. All right. Now, are there other—let's see, that's the end. Now, of course we didn't come up to consensus votes on each of those but I think we will, um, but the idea is that once we came up with consensus votes on each of them—let me see, what do we have here? Did we come up with consensus votes on each of these? Let's see—this is taking forever. So on the maturity we came up with, um—I don't know where I got this commentary—uh, we came up with—maturity criteria I think we came up with an M, market adoption we came up with an L. So our consensus maturity level ratings were L to M, M, and M so the maturity rating is M, I guess, huh? But, you know, I agree with, with David. In his email he said, "Yeah, I came up with an M but I don't feel like it should be that." Um—

**Arien Malec – RelayHealth**

It's a low M.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

It's a low M, yeah. It's probably L to M so L to M on maturity, and and if we look at the rest of 'em on—let me look at it this way 'cause it's easy. We've got M on ease of implementation. We have an N/A on ease of operations. We have intellectual property we have an M. So we've got an M on adoptability. So if you look at our—look at this it—we would get—adoptability we'd get an M and maturity we'd get an L to M, so we'd get like right here like right about there so it would be ready for pilot. You know what?

**Todd Parnell – 5am Solutions**

D-Dixie, we do not see your mouse as you go over by the way.

**Floyd Eisenberg – Independent Health IT Consultant**

I, I, I'm plotting it though on my side.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

You don't see that little hand on my screen? Oh, uh—

**Todd Parnell – 5am Solutions**

Use your finger. Point at it.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. Yeah, I may as well. Yeah. So the moderate is, you know, centered across the horizontal scale, and it's the first line on the vertical scale, which is right between low and moderate. So it's like, you know, beginning, entry level pilot, which is probably about right.

**Floyd Eisenberg – Independent Health IT Consultant**

Yep.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yeah. So that's—yeah. Good exercise. Good exercise, and I think we came up with some ways to improve our, our metrics and our criteria. Um, so Todd, can you make these changes, and, um, then we'll just report it back to the full committee, run it by the—we'll, we'll run it by the, um, the Power Team members, have them look at it, and then, we'll report it back to the Committee?

**Todd Parnell – 5am Solutions**

Yes, via email. Um, let me just make sure I understand the schedule from here. When is the HITSP meeting?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Let's see it's a vertical—virtual—not vertical—virtual meeting I think the 20—no it's not the 22<sup>nd</sup>.

**MacKenzie Robertson – Office of the National Coordinator**

Sorry. Are you talking about the HIT Standards Committee meeting?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh, it's next Thurs—

**MacKenzie Robertson – Office of the National Coordinator**

It's Wednesday the 15<sup>th</sup>.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Whoa.

**Arien Malec – RelayHealth**

Really?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay.

**Todd Parnell – 5am Solutions**

I am going to personally be hard pressed to turn this around in 24 hours, and if I just kind of look at the, the days of the week coming up I don't know that there's enough time to distribute, receive comments, and then, and then get back. I think ... very close.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

... makes the changes—pardon?

**Todd Parnell – 5am Solutions**

It will be very close. I just, I do worry about the 15<sup>th</sup>.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Uh, the—let's see, just in making these changes you worry about the 15<sup>th</sup>?

**Todd Parnell – 5am Solutions**

I'll, I'll just—I am personally already working through the weekend on another project so, um, I, I may be—like these will—these, these changes will take me an hour or two. I just—when would I need to get these out to the, to the Power Team for comments? If I get them out the morning of the 13<sup>th</sup> is that soon enough?

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

No.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Today's the 9<sup>th</sup>, um, I've taken pretty good notes here but not ideal. Um—

**Todd Parnell – 5am Solutions**

Okay. I will commit to Friday, tomorrow—

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Close of business.

**Todd Parnell – 5am Solutions**

Yeah, close of business tomorrow.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Thank you and just send them to me and I'll run them by my notes and, um, we won't do a whole review. Um, I'll just incorporate them into slides for next week and I'll send those to the Power Team members for review.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Does that sound okay with everybody? We, we've presented this to the, to the Technical Committee or to the Standards Committee a couple times anyway, so I think we'll be fine about this.

**Floyd Eisenberg – Independent Health IT Consultant**

This is Floyd. I just won't be able to respond after about 5:00 tomorrow night so, um, I'll be back on the 20<sup>th</sup>.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Oh, are you going on vacation?

**Floyd Eisenberg – Independent Health IT Consultant**

I am.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Good. That's good. I wish I were. Um, and I'm going to make a change to these team scores and, um, I'll do that part, Todd.

**Todd Parnell – 5am Solutions**

Okay.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

But if you could—I'll do all the stuff on the scores but if you could just change the worksheet, the individual worksheet I've been taking pretty good notes but not as good as you have I, I suspect.

**Todd Parnell – 5am Solutions**

Okay. I will handle definitely the metrics and the individual scored worksheet.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. That would be great. Okay. Any, any other comments, questions? Um, I think we're ready for public comments.

**MacKenzie Robertson – Office of the National Coordinator**

Sure. Before we do that though—this is MacKenzie—Floyd, Arien, and Dixie are—Floyd, are you going to be calling into the Standards Committee Meeting?

**Floyd Eisenberg – Independent Health IT Consultant**

No, I won't.

**MacKenzie Robertson – Office of the National Coordinator**

Arien, are you confirmed to attend also?

**Arien Malec – RelayHealth**

Um, you know, it dropped off my calendar so if you could resend it to me that would be, um, great. I'm, I'm flying I think that day to Chicago, so I'll just have to see what the flight time is.

**MacKenzie Robertson – Office of the National Coordinator**

Okay. And, Dixie, I know you'll be there; you're on the agenda.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Yes.

**MacKenzie Robertson – Office of the National Coordinator**

All right. Operator, could you please open the line for public comment?

## **Public Comment**

**Operator**

Yes. If you would like to make a public comment and you are listening via you computer speakers please dial 877-705-2976 and press \*1 or if you're listening via you telephone you may press \*1 at this time to be entered into the queue. We have no comment at this time.

**Dixie Baker – Science Applications International Corporation – CTO, Health & Life Sciences**

Okay. Well, thank you all for dialing in, for participating in this, um, and, um, Todd and I will do what we can to this to get this all, all of these changes incorporated as quickly as we can. Thank you. Have a good weekend everybody.

**MacKenzie Robertson – Office of the National Coordinator**

Thanks, everyone.

**Arien Malec – RelayHealth**

Bye-bye.

**Floyd Eisenberg – Independent Health IT Consultant**

Bye.

**Todd Parnell – 5am Solutions**

Thank you.