

**HIT Standards Committee
Implementation Workgroup
Transcript
February 11, 2013**

Presentation

MacKenzie Robertson – Office of the National Coordinator

Thank you. Good morning everybody; this is MacKenzie Robertson in the Office of the National Coordinator. This is a meeting of the HIT Standards Committee's Implementation Workgroup. This is a public call and there is time for public comment on the agenda. The call is also being recorded so please make sure to identify yourself when speaking. I'll now go through the roll call. Liz Johnson?

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

I'm here.

MacKenzie Robertson – Office of the National Coordinator

Thanks Liz. Cris Ross?

Christopher Ross – Mayo Clinic – Chief Information Officer

I'm present.

MacKenzie Robertson – Office of the National Coordinator

Thanks Cris. Anne Castro? John Derr?

John Derr, RPh – Golden Living, LLC – Health Information Technology Strategy Consultant

John Derr is here.

MacKenzie Robertson – Office of the National Coordinator

Thanks John. Timothy Gutshall? Joe Heyman? David Kates?

David Kates – NaviNet – Senior Vice President, Clinical Strategy

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks David. Tim Morris? Stephen Palmer? Sudha Puvvadi? Wes Rishel?

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks Wes. Ken Tarkoff? John Travis?

John Travis – Cerner Corporation

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks John. Micky Tripathi? Gary Wietecha? Rob Anthony? Kevin Brady? Tim Cromwell? And Nancy Orvis? And any ONC staff members that are on the line; if you could identify yourself.

Scott Purnell-Saunders – Office of the National Coordinator

Scott Purnell-Saunders.

MacKenzie Robertson – Office of the National Coordinator

Thanks Scott. Okay, with that I'll turn it back to you Liz and Cris.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Great. I think we're going to – what we're going to do this morning is go back through the presentation that I think Scott has indicated also included some input from the public. And then toward the end, if we're...about fifteen minutes before the hour, we want to talk to you about an email that we got from John Halamka and Alicia from CCHIT about a testing issue that we'd like to talk to the workgroup about. But we'll start with Scott. And Scott, I don't know if we shared the Wes slides with others, did we not do that?

Scott Purnell-Saunders – Office of the National Coordinator

I didn't just forward those out to the group because I wasn't sure how we wanted to handle that.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

My goal with the approach was to just, like I said, integrate Wes' principles into the slides and I'll explain which slide and where the inference came from, where the changes are.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay. So, we did have some insights from Wes, and thank you Wes for that help. And we'll just look now to see how we've integrated those as well as if you'll identify where we had input from the outside as well. So, if you'll – Cris, would you like to add anything to that?

Christopher Ross – Mayo Clinic – Chief Information Officer

No Liz, I'm in a noisy spot for the next fifteen or twenty minutes, so thank you for leading.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay. All right, Scott would you go ahead and take the reins then.

Scott Purnell-Saunders – Office of the National Coordinator

Certainly. Let's pull up the slide deck.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay, Caitlin did you hear? Scott would like us to pull up the deck.

Caitlin Collins – Altarum Institute

We're loading it up right now; it's taking just a minute. I'm sorry for the delay.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Not a problem, just wanted to make sure you heard it. We are up but we have a – there it is, perfect. Okay, Scott.

Scott Purnell-Saunders – Office of the National Coordinator

Yes ma'am. So, starting here I'll skip down, like we did the revision as updated on Friday. I'll continue to the next slide. The slide deck's contents were increased just a little bit, given the additional slides we added, so I will skip past the content slide. The purpose of the scenario-based testing slide stayed the same, with the inference on the data across systems versus data within the system. We certainly received, like on the call last week, some clarification about how to talk about this in further detail and we have some other options in the works with these, and this principle, if need be. But the goal was to try to include the other reference is to try to make the workflow a bit more consistent and easy to follow.

Next slide. So this was the first slide, we took inference from what Wes sent forward, one of his main key slides was the single unit testing idea. So essentially, we had some confusion on the past couple of calls concerning what individual set-up was needed. So there's input into the test with the set-up, which is green, the data which is included, which is the triangle, which you'll see consistently throughout the next few slides. The unit test that happens independently of everything else and then the yellow circle, which is the Unit Test B Results. So this is the testing as it currently exists in the certification program, and what was required for the 2011 and 2014 rules and in the testing certification programs. So this is what currently happens in all processes. So for each individual test, there's always a set-up, there's always data that goes in and then there are testing results that come out that are auditable and recorded.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Um, okay. So, unfortunately everybody can't see a different diagram that was suggested Scott, but frankly, it's a little easier to understand than this is. I'm not – I'm sorry, I don't have my slide deck from last time. How have you changed this?

Scott Purnell-Saunders – Office of the National Coordinator

So in the slide deck previously, there was no call out for a single unit test, we just literally had test A, B, C and D, as individual pieces and didn't call out what happened in each individualized test. We showed them strung together and then showed where data was input and then where results were, but there was no indication of a set-up. So per Wes' recommendation, we added the set-up box which shows that additional pieces are needed for each individual unit test, and as we string them together in a scenario, the set-up is not required for each individual test, and it's less – it will just show with the scenarios there's less work involved to set them up and execute.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Wes, do you have any input?

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Well, I think I – I can't find the deck that was sent out, so I'm watching on the screen. I think we need to see how it carries forward. I'd say this slide is substantially the same as my very first slide, which ... except that I simply put a single unit test, I didn't put it in the middle of a sequence.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right. And that would be the only recommendation I would have for you, Scott. The second recommendation I would have would be that ... in looking at – a different way to look at this, one of the things that was easier to understand was when you showed the set-up and then you showed the data coming in after the set-up, it makes more sense. So, if you'll take that into consideration. We'll move forward with this and I think what you're trying to show here is a single test out of a series maybe we accomplished that. Let's just keep going and we'll come back to this if need to be.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. The next slide basically shows what the scenario testing would be. So the difference between the previous slide and this one is that we included three tests strung together, so test A, test B and test C. The first blocks below shows the call out for test A and what's happening in that particular test and the sequence. So you'll see the green box that says set-up, which is indicated and parallel from the first test, data A which goes into test A and then data B which comes out of test A. Then you continue through the series, there are some operations that occur in test B and then when you get to test C, you'll notice that data C, which is indicated by the red triangle, is a lot larger, indicating that data's been added from test A and test B. The additional data below, indicated by a smaller triangle, would be any additional data that was acquired to execute test C in the sequence. The white box is test C and then the scenario results are the yellow circle that comes out, reflecting what we saw in individualized unit tests, but with the included added information out of test A and test B.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

So, your representation here indicates that in a scenario test, there is no examination of the output until you've completed test C.

Scott Purnell-Saunders – Office of the National Coordinator

For this particular piece, yes.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

No ...

Scott Purnell-Saunders – Office of the National Coordinator

For the scenario.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... I gave you – what I read this to say is that when there's a scenario test, at the completion of step A, you don't look at the output, end of story, no "if," "maybes," or anything else. Scenario test, a test A there is no circle describing results.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. We'll add that. That wasn't the indication...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

But no, I'm ... I'm not asking you to add it, I'm asking, is that what you intended to say, because I didn't say that. I said – I assumed that each test had its specific results that in fact it was important in terms of the methodology to identify the results for each test, and that the time savings came by not having to re-enter data into subsequent tests, since it was carried forward. So, you guys have got the rule makers there, I'm asking you to tell us what the rule makers say about this issue.

Scott Purnell-Saunders – Office of the National Coordinator

So the idea with scenario testing is so that the results can be looked at in each individualized test, not necessarily called out individually. So, it may not – the requirement is that each test shows the results and it can be checked. But the idea for our – the scenario would save time in that the test data can be added and carried from test A through test B to test C and the overall result reflects what was required. If need be, for test A ...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Now you just lost me.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Yeah, me too.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

All right. It seems like you said first that the test data would be checked at the end of each test and then maybe three sentences later you said no, we'll check it all at the end.

Scott Purnell-Saunders – Office of the National Coordinator

No, I'm saying that all the test data is checked at the end, and the ability to check the result at each test needs to be built-in.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So you're saying both, is that right Scott?

Scott Purnell-Saunders – Office of the National Coordinator

Yes. Yes.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Well no – well, I'd like to know what, I'd like to know what that means. You're saying that in the normal flow of things, forget the ... you need a slide without test B being taken out, but, you're saying in the normal flow of things, there is no verification of the results at the end of test A or test B, even though there is a document, a test plan, a scenario, whatever you want to call it, that would allow that to be tested. And I assume even though those results, although unviewed, go in to some audit log.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Okay. All right, now I need to see what follows this slide to understand...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay, so before we do that, and we're with you but explain to me how that saves time.

Scott Purnell-Saunders – Office of the National Coordinator

So, in a single unit test data is input, you actually get the test data's output and record it ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

Scott Purnell-Saunders – Office of the National Coordinator

... because that individual record needs to be viewed. That exists only in a unit test and exists exactly as that test was built and designed. With the scenario, the timesavings would be the data that's carried forward. So a tester would look at the results, like view the output of test A, ensure that output happens, as expected, and then send that forward to test B and then would send that combined output forward to test C. The idea with the data set, the data sets, excuse me that are designed for the scenarios are different than the data that would be designed for an individualized unit test. For example, for test B, there's expected data that had to come out of test A, as well as any additional that would have to be added for expected results to occur in test C. The savings would be you don't have to view the individualized results from A, and then view the individualized results for B and then individualized results from C to show the combination. You'd look at the scenario results based on the test, the expected results from the test data set, to ensure that the tests were passing information properly and executed all three. But for the sake of, because this is not required by rule or statute, the individual tests still must maintain their isolated nature to be – you know, to pass statute. So the data must be secure in another location, which would be the audit log or through some other secure data source, to show what the results of each individualized test were.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

So, so far we have, I have the following suggestions. Going back a slide, I suggest – the slide somehow implies that what's different ... that what happens to test B is different than what happens to test A and test C. I think that's a mistake. I think the slide is intended to say that the detail for any unit test is what's in the rounded box ...

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

All right, so you need to take test B out of the rounded box and run three arrows up from the rounded box to A, B and C, to show that it's the same in all three. I suggest further that it's worth labeling the brown triangle as input data and labeling the green square as set-up data, just because I think that helps people understand why there are two different inputs.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Now, just in terms of how we are introducing it...I don't know what restrictions you work on number of slides, but just in terms of how we are introducing ideas. I think that you need a version of the slide that's on page 3 that shows all three tests, and shows data B triangle from the first test going to set-up...where set-up B would be for test B and then the equivalent output triangle for that going to where the set-up would be for test C. And then you need a different slide to say if test B is not applicable, that it shows what happens. Now what I believe has to happen there, unless you're saying it in the next slide – you're not. So what I believe has to happen there is that there has to be incremental input added to test C – incremental set-up added to test C if test B is not run, and that incremental input constitutes what would have been the output of test B if it had been run.

Scott Purnell-Saunders – Office of the National Coordinator

So that, hold on for a second, the output indicated by the small triangle here that's labeled additional data.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

But you also have test data that will be inputted as a normal part of C, you've replaced that triangle now with – you've made that triangle go away, so there's no more testing data that you put in as part of running the test.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Yeah, Wes is having the same confusion I'm having Scott, based on your diagram.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

I'm...to be honest, I'm not confused, I just...this just doesn't say what I think the process is.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. Our goal was to try to simplify it so we didn't add the second box or a second triangle that would be the other additional data that was necessary. But, we can...if it would be more clear if we added a second...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

I think it would be more clear and it would be more clear if you showed how, I can't even read – what does it say below update B there? Let me make the screen bigger here – test A output for tests B, C. So that means test A output to go – yeah. I think if you – given I couldn't even read that little label there, but, given that, if you simply had all three boxes on the screen, maybe even went so far as to draw little dashed line from data B, test A output to the big data B triangle in the new box you're going to create, new rounded box. Then it makes sense. I also think if your point is, you need to save the scenario results at all three, and then you need to have a round box on all three that says scenario results.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Is that your point, Scott?

Scott Purnell-Saunders – Office of the National Coordinator

Yes.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

But it's to try to show that that's not a ... it's required by the statute but it would be, it's something that isn't always, it's not done to the level of detail that would be done in the unit test, it's just simply saving ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

But ...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

It's required by the regulation, right. I mean ...

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... it's not required by statute. Okay, well, I mean I think that with some work these boxes can represent the same thing that I said. I do think that as – the point of my slides was really not to infer so much in each step, to call out the information, give people time to absorb it, before going to the next step. And I think slide 3 still has the difficulty, I mean its improvement, but it still has the difficulty of creating too big a leap for the reader to figure out what's going on.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So we're suggesting an incremental slide and then this slide.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. We'll be sure to build it up a bit better so it's not as big a jump.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Scott. So are we hearing each other that we're going to do one additional slide so that we – or this slide is divided in half so that we can show a build-up?

Scott Purnell-Saunders – Office of the National Coordinator

It's probably going to be two slides, so ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That's fine.

Scott Purnell-Saunders – Office of the National Coordinator

... the indication would be – well, two slides including the last one. So taking this slide, because our in ... our goal with this was to essentially show Unit Test A in one location by itself, Unit Test B and Unit Test C. So we'll adjust this slide so that essentially we'll bring it up as one time unit test, whatever the letter is will be indicated by the data input and process as shown similarly in the Unit Test B call out. That would then reflect that all unit tests have the same exact process.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

When you say this slide, are you talking about slide 2 now?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

All right.

Scott Purnell-Saunders – Office of the National Coordinator

So the first recommendation was to split slide 2 to show one single unit test and not in a series. So we're not trying to show a sequence, we're just going to show one. And then we can show how that single example for Unit Test B is exactly the same for every single unit test.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Okay, so let me say back what I think I heard you say. Slide 2 is going...just going to describe a generic unit test ...

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... not going to describe A, B and C.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Okay. And it will define the difference between what is set-up data and what is input data.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

And what the round ...

Scott Purnell-Saunders – Office of the National Coordinator

Results.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... round represents. All right. Okay then slide 3 is going to show three unit tests in sequence and slide 4 is going to show ... slide 3 is going to show a scenario comprised of three unit tests and slide 4, the new slide, is going to show the scenario with Unit Test B eliminated so it's an alternative scenario for a A, C.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

All right. Now I have to tell you that after going through creating the slides and developing my own understanding of the processes, I think the analytics for leaving out a unit test in a scenario are pretty complicated.

Scott Purnell-Saunders – Office of the National Coordinator

We agree.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

And I – there may have been a call that I wasn't on ... ah, blissful sleep ... there may have been a call that I wasn't on that, where we told you that that was a requirement. Not having been on the call, I'm not getting into the discussion but, if you were to push back to me and say, you know, we can do scenarios and we can do unit tests, but we can't do scenarios with optional unit tests, I would tend to support that.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Ahhh, so, I follow your logic Wes and I understand that regulatory piece of this, I thought ... and so maybe this is logic that's faulty, I thought the idea, Scott, we didn't ask you to take out unit test. What we said is, if there is a portion of testing that's not required to meet the singular measure that a vendor is trying to get to, they would not be required to do that, because the product they're putting forward does not need to be certified for that functionality. That's where we were trying to get.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

And the way that that was depicted is for a particular product, if it only needs to be certified to meet say two or three, say three or four – three of the four requirements for a particular unit test as was designed, that that particular piece could be removed so that product could still pass through a scenario and be certified to the three that it would then be certified for, and not be put through the fourth test that it would not qualify for.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Well I would say that the exception to the rule that the analysis is very complex is, if you have a scenario of tests and you stop somewhere in the middle, and look at the outputs that otherwise would just be saved for audit purposes, that's not difficult. What's difficult is to omit a test in the middle. And it's difficult for two reasons, one is that it requires an analyst sitting down and reviewing the original unit test specification, in this case for the unit test ... C versus the specifications for B and the specifications for A, to figure out what has to be re-entered. And it further suffers from testing, from the possibility that there's data that bleeds through that isn't ever identified. So the question becomes, if we were to trade a simplified view of scenario testing that said a scenario can optionally end early, but it can't skip steps in the middle, then would that give enough flexibility to deal with the cases that Liz is describing?

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That's an excellent question.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

And, I think it would take – it's possible that that question can be answered just looking at the existing testing scenarios. I had thought, and this is an assumption, that a given modular capability of an EHR would be represented by more than one scenario. That is, certainly a modular capability has to include more than one unit test, right. So I would have thought that in order to be qualified as CPOE, there ... I guess it has to agree, I guess it's a trade-off between how much we save in the testing process versus how much we accomplish.

So I think ... I can see where in the ideal we had one long scenario and it had some sort of, let's say that that scenario tested five modular options, it would be 2 to the fifth is 32, take away none of the options just so ... because you don't test, so 31 possible sub-scenarios. You know, it has option A, but not B, C, D and E. It has options A and C, but no B, D and E and so forth. It's possible that in reality that's simpler, but I think we ought to be able to strike a compromise between maximizing the savings of time and the complexity of the analysis for the test. I agree that it doesn't make sense; in fact, it's counterproductive to force a product if it is not qualifying for say order entry, to go through a scenario of order entry. It's impossible. But I don't think that that means we have to go to this full state of we have one long scenario with no duplicated data entry, but a system that doesn't do order entry has to behave afterwards like it did do order entry by our putting in extra data. I mean, that doesn't make sense to me.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay ...

Christopher Ross – Mayo Clinic – Chief Information Officer

This is Cris. I guess I have a ... I didn't want to interrupt you when you're on a roll, Wes. But I have one question which would be – all your comments about the sequence of unit tests and the removability of them all makes sense under the assumption that each test requires some sort of shared or cascading data from one to another. And I wonder if – I'm having a hard time coming up with exactly what the examples would be, but could there be an example in which you might have a set of unit tests that are connected to each other in some fashion, but data is not transmitted from one stage to another?

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So let me give you an example that might work.

Christopher Ross – Mayo Clinic – Chief Information Officer

Yeah.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So let's say that I've got a product and all I'm going to do is track your immunizations, but I'm not going to do the transmittal. Would that work for your scenario? So I'm coming in, I want a certified product that – now I don't know if it would be certified – it would only be certified to track your immunizations, it would not meet the full measure, because the full measure says, it's not just to track, but to also transmit. But we've had a lot of vendors come forward and say, wait a minute, what if I only want to do part of this and I'm not certifying that I meet the measure, I'm saying I meet a partial ... piece of the measure. And there's other examples I could ... if I thought about it long enough, I could come up with them.

Christopher Ross – Mayo Clinic – Chief Information Officer

Yeah.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

That's a great example, Liz.

Christopher Ross – Mayo Clinic – Chief Information Officer

Yes, yeah, yeah.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

And it gets back to our ability to define what is needed to meet a measure.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

So for example, we could have two test scenarios – well, let me make it simple, at least to start. We could have two tests, one of which comprises everything that is necessary to track immunizations. So at the end of that test, presumably the output is verified by printing a report or viewing a summary screen that shows all of the information for all of the immunizations that were entered as test data. Then we could have a second test that ... and he ... this is difficult, if it doesn't track immunizations how did the immunizations get in there? All right. So we could have a scenario ... no, I don't, I'm, I guess ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So Wes, what if the data input was the list or status of the immunizations and then we unit test for transmission?

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Okay, so we have two tests, one of which accepts immunizations, does any ... detects any specific data element ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... that we need and so forth, and is verified by an output that can be reviewed by a tester, it could be a screen, it could be a report. And we have another test where the input is the data and the output is the transmission according to the right protocols of that data.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

And those could be performed as a scenario or they could be performed individually. I don't know what the... I don't know how we, during testing, I don't know how we tell vendors enter this set-up data. Maybe we give them a table and they have to type it in before we begin the test or something like that. But, that would meet... that would be doable, I think, all right. So in that case, the output from test A is exactly the input to test B...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Exactly.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Right. And we could offer three tests, if you will, two of them are unit tests and one of them, the third, is a composite test or a scenario.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right. That's what I've been thinking.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Okay. That makes sense. So if in fact there is some testable measure that involves four, that involves leaving out a test in the middle, rather than leaving out a test at the end. You see – see, the three we described were one test that started at the beginning ... one scenario and you can start it at the beginning or you could start at the middle and go to the end, but, it didn't skip a test in the middle. I think that... to me, that's the characteristic that's hardest to deal with analytically. And it's – even that, it's not that hard if it's the rare occurrence.

David Kates – NaviNet – Senior Vice President, Clinical Strategy

And just to get back to the forest for the trees here, is the objective here to streamline the testing or is it to bypass those things that are not relevant for a vendor, based on the modular certification...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

I think it's both Dave.

David Kates – Senior Vice President Clinical Strategy – NaviNet

Okay.

Christopher Ross – Mayo Clinic – Chief Information Officer

Well I think it's both Dave... this is Cris. I think we also have been trying to focus on the fact that we're trying to use scenarios as a way to requi... inject clinical realism into the tests as well.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That's right. So it's relevant, right.

Christopher Ross – Mayo Clinic – Chief Information Officer

Right.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

So in fact, even a single unit test needs to have clinical realism.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That's right.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Right. Yeah. So, I would say that of the three criteria we've identified here, which is not testing a module on a feature it doesn't claim to offer. The second one is clinical realism in the scenarios and the third one is more efficient testing by reducing the re-entry of redundant data. I would say we have to meet all three, although I will say that there are some obvious areas where you do have to test a module for – suppose it's not claiming to be something that accepts demographics. Suppose it's only a pediatric growth scale vendor ...

Scott Purnell-Saunders – Office of the National Coordinator

So Wes, not to cut you off, but in some indications, we'd just use unit testing. The goal with the scenarios to start with, to see if we could build this in such a way that it could be used in place of ...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

... we understand it won't work for every particular product out of the box and it won't work for every – like we can't possibly develop every scenario, like today. I mean that's the goal is to build some that actually work and we can get through them in time. But I think one of the concerns we had internally was that we knew this was a big task at the beginning and you have to decide, you're trying to ask a little child to eat a big birthday cake. I mean, certainly the child could eat it at some point in time if you give him enough time, but asking them to simply decide, I'm just going to take one big bite and get it done is not going to work. So we tried to take the approach where we look at something that's bite-sized, something that we can approach and try to get through it. Conceptually certainly we need to work on making this a little bit more clear, which we're attempting to do week by week, and with your input, has helped us get to a better place and we're thankful for that. But we've just got to get to a place where we think it's doable and testable, and then we'll get feedback, certainly from the test labs as they throw this into some pilots as we move forward, once we get this better baked.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Yeah. So Scott, I think – I can't speak for the group, but I think that the clear understanding that we have is that the baseline is unit testing ...

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

... and scenario represents an opti ... the unit testing has to be clinically relevant.

Scott Purnell-Saunders – Office of the National Coordinator

(Indiscernible)

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Then all scenarios represent optimizations on the unit testing, but there's no direct one-to-one correspondence between scenarios and modules. Some modules may take multiple unit tests that aren't a scenario; some modules may only need one unit test and so forth.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct and that's one of the reasons why this was optional to begin with.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Yeah, all right. And so I think given – if we now, if we just get the deck to where we think other people will understand what we're doing, then the next point in this discussion is to look at a set of unit tests and scenarios that you're troops believe is doable and see how does that feel, does it make sense.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That's right. Because that's the thing, is that when we can get out of the conceptual realm and actually look at it, I think we can give you better input at this point.

Christopher Ross – Mayo Clinic – Chief Information Officer

So, this is Cris. On that point, we went through four scenarios before the rules and test scripts were issued. I think it may be helpful to have some sort of inventory that would say, maybe I'm the only one who needs this, a list of how many unit tests do we think are going to be involved in the typical certification of let's say a complete EHR, and how many of those would be subsumed in the scenarios.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

But even – yeah, we could do that Cris, I think it's a good question and even if a subset of that data, could you tell us next Monday Scott, or I guess we're not doing it next Monday because, I can't remember, it's President's Day, I don't remember what we decided. But regardless, can you even take the one that you've now suggested in this deck as being the scenario we're going to test first and answer Cris' question, with specifics.

Scott Purnell-Saunders – Office of the National Coordinator

So there are – the one that's included in this deck was a combination of I think it was five individual unit tests that covered, that were linked together in the test scenario procedure document that we developed that was to the tune of say sixty pages or so. That's where we were about two weeks ago. So that would cover the med list, med allergy ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

... problem, clinical info, reconciliation ...

Scott Purnell-Saunders – Office of the National Coordinator

Right, clinical info rec as a combined scenario that would work kind of top, not top to bottom, but start to finish. And if we can – so we'll skip past a couple of the conceptual slides to show this is exactly what, this is a better version of the diagram we did last week, kind of showing the patient visit. The information, the patient giving the information to the provider, the information being recorded in the EHR, then being referred to an outside entity. that information is being combined, it all being done in the clinical info reconciliation scenario and then sent back to the EHR. This scenario basically combines five individual unit tests and then would show that complete scenario.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

And we only enter the data once.

Scott Purnell-Saunders – Office of the National Coordinator

You enter the data – the patient will enter the data once in the beginning, at the first visit, say when they speak with their inpatient or if they're seen by a provider ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

No, I'm sorry Scott. I'm talking about for testing purposes. I understand what you're saying, but I'm asking, from a testing perspective, there's one set of data that's run through the scenario.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

And prior to that, would we have entered data at every unit test?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct. In the med list it would be entered and tested, in the allergy list input and tested, problem list input and tested ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

And now there's a singular data set.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct. And part of the diag- ... part of the documents that we put up last week or a week and a half ago, excuse me, included the test data set that was needed for this scenario to be operational.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

When you say you put up, you mean you put it out for the public purview.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct. It's on our HealthIT.gov certification web page under 2014, test method addition, under the testing scenarios page. So it includes the previous version of this slide deck, which was in it Monday, the actual narrative or direct test scenario procedure, which is the sixty-page document we've talked about, and it includes the test data set that is there as well.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

So John Travis, are we making any headway into simplifying this process while keeping it relevant, clinically relevant?

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Well, it's a tough call. I mean for us the leverage of one data from one scenario to the next where it makes sense is going to be the benefit, because honestly, that's going to be the one savings. From a testing perspective, they still bear a lot of resemblance to the unit tests, although I can see where consolidation for like pre-bill in particular ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

John Travis – Cerner Corporation

... is going to be helped. The level of effort during the course of inspection, except for where you might have pre-built data, isn't going to be economized a lot. Because – I get what Scott says, and that's a repeated statement we've heard, certainly from the ONC ACB we work with, that the testing record needs to be complete, the data set needs to be complete ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Well yeah, but – yeah, because you have a – I mean what I'm told, because we've got a certified ... products, is we have to get exactly the result that's expected by the certification body.

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Correct, correct. And the other thing that's a wild card in here, that I don't know gets helped at all, which it's the way the thing's constructed and I respect Scott's kind of limited in what he ... ONC is a bit limited in what they can do, and that is on the measurement side.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Those things stand kind of ... they are, by default, unit tests. They really aren't derived from the testing scenarios at all, because they're trying to create an isolated instance of looking at measurement qualification, not calculation. I mean, yeah, to a degree. But the real point of the unit testing for automated calculated measures and the numerator only aspect of things is to validate qualification for the measure. That's the primary point of the test and then to do some boundary testing that the system can qualify the reporting period flexibly for all the things that they might need support for both 2013 and 2014, to be honest. So, it's – I don't look at, I'll be honest, I look at it and go, I'm, we're ... especially given the timing that a lot of vendors may be in, we're looking at doing unit testing driven certification for whatever's in scope of what we're doing. I think that's just reality, hate to put it that way, but ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

No, I think, and I do need to go to one other subject before we ...

Christopher Ross – Mayo Clinic – Chief Information Officer

Yeah Liz, I wondered if we wanted to raise the issue that had been raised by one of the ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Yeah, I do. I'll tell you what, I'm going to – go ahead Cris, sorry.

Christopher Ross – Mayo Clinic – Chief Information Officer

Liz, I apologize, but I need to drop a few minutes early today.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

I'll bring- ... yeah, and I'll bring up – call and then we'll talk ... go ahead Cris, and I'll email you.

Christopher Ross – Mayo Clinic – Chief Information Officer

Great. Thank you. Bye.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

You bet. MacKenzie – I'm sorry guys to interrupt this conversation; I do need to bring up a request we had from CCHIT. MacKenzie, do we have – I know that next week, next Monday is a holiday, did we move it to Tuesday?

MacKenzie Robertson – Office of the National Coordinator

We did.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay, great. All right, so we can continue this conversation on Tuesday. I do need to bring to the group, before we go to public comment, a request we got. And we're not going to solve it today, but I want to share it with you and then we can determine what we need to do with this information. So, Scott, I don't know if Carol's on the phone or not ...

Scott Purnell-Saunders – Office of the National Coordinator

No, she's not.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

All right. So what happened was, Alisa from ... Ray I believe is her name, from CCHIT, she's the executive director and CEO. She had requested of ONC and then when she hadn't heard, she sent it on to our workgroup for potential consideration, and that the fact that the preload of data for the CQM measures has greatly streamlined the testing. However, and this kind of gets back to what...a little different than scenario, but close to the same subject, related to immunization registries, public health registries, reportable lab tests, cancer registries and electronic tests to ambulatory.

So what you're hearing here is a list of data sets that we're required to test for the ability to actually transmit to public health entities and when you take the four or five that we've listed up here, right now, because the data sets are not combined, it takes seven hours just to load the data. And so what...and we won't be able to get to this today, but I want to put it on your radar and then I will send the group an email and MacKenzie will figure out how we do that. We need to look at, is there a way that we can load this data into a preload where one test, one case, set of data would cover all scenarios. So we're back to the same problem, but I don't think our intent was us, nor certainly as ... only as the advisor, but certainly not ONC or CMS, was that it would take seven hours just to load the data. I don't know if anybody's following me. I know it's very difficult when you don't have it in front of you.

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Liz, I know what you're speaking of, as we've looked at it, you've got the option to the cipher's tool, which I think there's counted somewhere in the mid-thirties maybe thirty-seven's the number I hear, data sets for all the measures ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Right.

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

... what you pick, or you can do manual entry, which would take you hours.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Yeah, right now it's taking seven hours.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Can someone send out to email a description of how the ciphers tool?

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Oh, will you do that John, can you do that for us or Scott, can you tell us how the ciphers tool works.

Scott Purnell-Saunders – Office of the National Coordinator

Yeah, the – I mean the data sets for ciphers are included on the website and they can be automatically consumed, depending on the data format that ...

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

But I would presume that somehow ... well, let's just start, we need to get the public input, I think.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Yup.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

Let – if you could at least send one paragraph about what you were just about to say, Scott, to the folks, and let us ask some questions. I won't be on the call next week because I'll be traveling to the Standards Committee Meeting. So, whatever input I have to give, I have to figure it out in advance and if you would send out that one paragraph description, I think it would get the ball rolling.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

And then John, if you would also send to our workgroup sort of what we're facing here. I mean I think you understand the problem that CCHIT brought ...

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Yeah, I'll ...

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

... forward, that would be very helpful. And then like we said, those who can attend, because John usually can't attend either, John Derr, we can get their input in advance of the meeting.

Wes Rishel – Gartner, Incorporated – Vice President & Distinguished Analyst

John Travis, if you understand the ciphers tool, maybe you could send out a one paragraph description.

John Travis – Senior Director and Solution Strategist, Regulatory Compliance, Cerner Corporation

Yeah, that's what I'll do. I'll type it while it's fresh.

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

That would be great. Okay, MacKenzie, can we go to public please?

Public Comment

MacKenzie Robertson – Office of the National Coordinator

Sure. Operator, can you please open the line for public comment?

Rebecca Armendariz – Altarum Institute

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

Elizabeth Johnson, MS, FHIMMS, CPHIMS, RN-BC – Tenet Healthcare Corporation – Vice President, Applied Clinical Informatics

Okay, thank you. I think we – as frustrating as it is, but I think by getting through the frustration we are definitely getting a better understanding and, Scott, we really look forward to the changes and additions to the slides. And for those who can meet with us next Tuesday, we'll talk to you then or we will see all of us, or a lot of us in Washington on Wednesday. So thanks and have a great week.