

**HIT Standards Committee
Implementation Workgroup
Transcript
March 18, 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 for Health IT. This is a meeting of the HIT Standards Committee's Implementation Workgroup. This is a public call, and there is time for public comment built into the agenda, and the call is also being recorded, so please make sure you identify yourself when speaking. I'll now go through the roll call. Liz Johnson?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I'm here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Liz. Chris Ross? Anne Castro?

Anne Castro – BlueCross BlueShield of South Carolina

I'm here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Ann. John Derr?

John Derr – Golden Living, LLC

I'm here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, John. Tim Gutshall? Joe Heyman? David Kates?

David Kates – NAVINET

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, David. Tim Morris? Steven Palmer? Sudha Puvvadi? Wes Rishel? Ken Tarkoff? John Travis? Micky Tripathi? Gary Wietecha? Rob Anthony? Kevin Brady? Tim Cromwell? Nancy Orvis? And any ONC staff members on the line?

Scott Purnell-Saunders – Office of the National Coordinator

Good morning. This is Scott Purnell-Saunders – Office of the National Coordinator.

MacKenzie Robertson – Office of the National Coordinator

Good morning, Scott. Okay. And with that, I'll turn it back to you, Liz.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. So this morning our agenda is really just twofold. One is to get final approval from this workgroup of the scenario PowerPoint, and then to formalize our request to MacKenzie to go ahead and present that to the workgroup for their final – I mean, to the – pardon me, to the Standards Committee for their final input and approval. And so like I said, our thought is that we would complete the work today, and then as Wes is not able to join us, unless he joins us before the end of the call, we'll also send it to him, as he had significant input into it, for any final comments before presentation.

The work – we are working on – MacKenzie is working on the chairs of all the workgroups getting together and looking at the work plan so that we can have assignments. If that meeting takes place between now and next Monday, we will discuss our assignments next Monday. If it does not, and we complete this power plan, we will not have a meeting next Monday. We will wait until we have assignments, which would probably be the following week. So any questions about today's agenda or about either the presentation for the Standards Committee or our upcoming work? All right. Scott, would you take it, and let's go through and hopefully do our final round through the presentation?

Scott Purnell-Saunders – Office of the National Coordinator

Great. So thank you for pulling up the presentation. It was emailed Friday, for those of us who are not able to look at the AdobeConnect screen. So it should have been sent about Friday, about 5:00 or 5:30 or so, so you can pull that up. Next slide, please. Thanks.

So this is just the updated contents slide, indicating where we are. As you can see, it did increase in size a little bit, so we're at 17 pages. Next slide.

This is the updated unit-based testing slide, so with feedback from the workgroup, I'll try to make it as, you know, clear as possible that this does reflect what's currently employed for the current edition of the 2014 test procedures, and the 20 – it was used in 2011 as well, and this is the required testing for both 2011 and 2014, as we sit currently.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So I think in essence, Scott, this is – for the group, this is just simply a very simple pictorial of a unit test as a standalone test to look at specific functionality. That's what it is.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Correct?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

All right.

Scott Purnell-Saunders – Office of the National Coordinator

Next slide.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

And if you'll just pause behind each slide just to make sure if people have comments.

Scott Purnell-Saunders – Office of the National Coordinator

Got it.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Thank you.

Scott Purnell-Saunders – Office of the National Coordinator

Not a problem. Any questions or comments here? Great. Next slide? So this is the representation of what that unit test looks like and how that is actually done in testing. So if we start on the left with the green rectangle that says set program to initial state, you then move left to right. At the top, you'll see a data, you know, document, and that's any data that's integral in the particular test. And at the bottom of the unit test, that's any data that's verified during the test, whether on screen or while reviewing interoperable output. And to the right, there's a larger arrow indicating that, you know, the end state of the test that came out, the test results, and then the data that's released or finished from the test. This basically shows what happens during a single unit test, and exactly what happens here in our testing program, and how it's been done since 2011. We are going to see some efficiency improvements with some of these same graphics being removed in the next couple of slides, but this just gives you a baseline of what to see looking forward. Any questions?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

The only question I had is on the description, you also said includes data that was not verified during the part of the test. So does that – as far as that, we put a data set through – the entire data set through the test – unit test, regardless of whether it's needed for testing or not?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct. So there's some baseline data requirements for every test, and not every test procedure requires that all of that data is verified in the particular test, just certain pieces.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

John Derr – Golden Living, LLC

And that bottom data square, that could be used on another test as actually the entering data, right? Because it doesn't show it goes anywhere, but it could be used later on.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct. And then the unit – in the scenario testing, some of that data is used again, but just for the single unit test, for example, if the test requires that a tester – that a test proctor look at something on the screen, that's where that – that's what that arrow's representing on that particular piece, because that's not something that comes out of the test. It's just something that's looked at during the testing process.

John Derr – Golden Living, LLC

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Any other questions or comments here? Next slide. So here's where we get into the purpose of the scenario-based testing. We had some discussion at the last comment – several comments from the workgroup wanted to change the term plausible to clinically relevant. We had some discussions here with the folks at ONC, and plausible was the word choice that we decided to go with here, even after the discussion we had. We just wanted to make sure we pointed that out to the group. Essentially, the ability to use the data across systems and the ability to be able to use data within a system are big gains that we're gaining with scenario-based testing, as we talked about earlier, increasing the value of testing and improves efficiency, such that testing can be done in sequence, and you don't have the repetition of setting up testing each time.

And then ideally, the main goal is to try to make this consistent and replicable, since we received information from some test labs that they're currently employing some sort of scenario-based testing where tests are essentially strung together, and we're trying to make – develop standards for that, so they can be done in the exact same way across all test labs. Any questions here?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

None here.

Scott Purnell-Saunders – Office of the National Coordinator

Great. Next slide? So here's where we get into the more of a definition or description or scenario-based testing. As we showed or stated initially, it is an alternative to unit-based testing. It is not required by rule and statute as we talked through, but essentially they are dependent tests, so test data that links unit tests with dependent inputs and outputs such that information must pass from one particular test to be continued and taken through another. The test data output from one test can be used as input for the other. The important thing is that – the word can instead of must, because in some cases, we're developing methodology so that all – some unit tests may in fact – can be removed out of a sequence if need be for the development of our scenarios in the future. And as we talked about again, scenario-based testing is optional for the 2014 edition testing program.

We talked about clinical plausibility and that, you know, it represents one clinical – one possible clinical workflow that can link tests, and it can't represent all of the particular scenarios that happen in a clinical environment. And they're going to be trying to test all the capabilities of the criteria in a scenario and allow EHR technology to be tested in a plausible way, but they don't employ any requirements that – they don't employ any requirements about how providers should use EHR technology to attest to meaningful use, meaning that they – it basically aligns directly with what the rule and the statute states. So we're not adding additional rigor or additional requirements into the testing scenario that are not stated in the rule and statute. Any questions here?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

No. I think it – I just think your second bullet under scenario-based test procedures is interesting. I understand why it's there. I'm – I think. Let me interpret that to say that the clinical scenarios that we put together are going to be relevant for testing. It's just that – it's back to your comment that we could pull a component out and add it to another scenario and have it be reusable.

Scott Purnell-Saunders – Office of the National Coordinator

Right.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

All right.

Scott Purnell-Saunders – Office of the National Coordinator

Next slide. Great. So this basically shows what we represented earlier with the single unit test, and these are two unit tests being done in succession as is currently happening in the testing program. So it shows what happens between one unit test, so the single – test one happens on the left, as we described earlier, and then the unit test one results are indicated by the red arrow coming out of test one. And that bundle of information that's indicated by dotted, rounded square shows all the contents that come – that came out of the test one results.

In test two, you see again the unit test – excuse me, the test has been set to initial program state, and the test is executed. The idea is that in the example below, the post-test programs taking their test one would not be used for setting up the initial program in test two, and the efficiencies that we talked about gaining in scenario-based testing will be seen to show that that information is carried forward in the second test as we move forward.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So is this – in this depiction, define the word program for me.

Scott Purnell-Saunders – Office of the National Coordinator

So setting program, so essentially the unit test is an actual execution or executed program. It's setting that test to its initial state so it can receive input to then operate or test that particular feature or function.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So why do we use the word program instead of test?

Scott Purnell-Saunders – Office of the National Coordinator

I think because we're using test a lot in other places.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Is everybody else – is that clear to everybody else?

Anne Castro – BlueCross BlueShield of South Carolina

I agree. I would just drop it.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I – it feels like something else. John, what did you think? Or David?

John Derr – Golden Living, LLC

I was on mute. I agree with what you guys did.

David Kates – NAVINET

Yeah. And I added my vote of –

John Derr – Golden Living, LLC

It makes it – makes it – makes it more than what it is.

David Kates – NAVINET

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. We're unanimous.

Scott Purnell-Saunders – Office of the National Coordinator

Got it. Not a problem. Great. So I'll put in that –

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah, we understand your reasoning, but I think it just – it actually ends – it tends to add confusion.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Thanks a lot. So here's where we get into the scenario-based testing sequence. So it shows the exact same depiction we did in the last slide, where there's the combination of test one and test two. In this case, they're done – being done in succession in this scenario. So what you see is that there's a red X over the, you know, post-test program state, and that information – and red X over the set program to initial state, indicating that the test results from test one are then carried into test two as the inputs for test two.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. The only question I would have here, Scott, is on the X below the line, not the one – is that – does that X over that whole – all three of those parts?

Scott Purnell-Saunders – Office of the National Coordinator

It does.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. So that X needs to be larger.

Anne Castro – BlueCross BlueShield of South Carolina

And Scott, on the wording, there's that that. I think it needs to be than that, on the first bullet.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. Good catch, Ann.

Anne Castro – BlueCross BlueShield of South Carolina

I can provide some help. I'm so tickled.

[Laughter]

Scott Purnell-Saunders – Office of the National Coordinator

Not a problem. Yeah. It's just –

Anne Castro – BlueCross BlueShield of South Carolina

My clinically deficient brain.

Scott Purnell-Saunders – Office of the National Coordinator

Hey, as many times as we went through revisions here, I do appreciate the catch, because –

[Crosstalk]

Scott Purnell-Saunders – Office of the National Coordinator

– something like that was – you know, we've gone through this a number of times. So yeah, we'll change the first bullet to than that. That is the indication there.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Besides, there's nothing like putting this up in front of the Standards Committee and having that there, that that.

Scott Purnell-Saunders – Office of the National Coordinator

Right. I appreciate that.

[Crosstalk]

John Derr – Golden Living, LLC

And the word would is capitalized, just –

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Is that intentional for emphasis, or –

Scott Purnell-Saunders – Office of the National Coordinator

It was intentional for emphasis. We'll just bold it.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. That'd be better. So while we're nitpicking you, I think after – it's for certification, comma, we verify that the expected outcome can occur, from a grammatical perspective.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. And then obviously, we're assuming that every place you've got – you're going to put test instead of program, right?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Great.

Scott Purnell-Saunders – Office of the National Coordinator

Yeah, that's the first big change we're going to make. So – because the graphics are – any change you make on one, we'll make sure it's reflected later.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Excellent. Other comments? This has really come a long way, Scott. It looks real – it's starting to look – it's really, really improved. So thank you for all your hard work.

Scott Purnell-Saunders – Office of the National Coordinator

Thank you, guys, for your input. Next slide. So here's where we get to a multi-test scenario. It basically reflects the same diagram that we showed in the last test, with removal of the post-test program state, or setting the initial program to initial state, as we talked through. So it shows the stringing of four tests together with a – all the data verification needed for each individual test being represented by the data boxes below, the data entered during the initial test being added above, and you'll see for test two, three, and four there's a indication of incremental data entered. Ideally, it change – we're depicting it as incremental, because there's less need for data to be entered in the scenario-based testing than there would be in your standard unit test, so you don't have to do as much work, but there still are some cases where additional data may need to be entered for each individual test as they're being input through the scenarios. And you'll see at the end the post-test program state being set again, once all four tests in this particular scenario are completed.

And the box at the bottom just indicates that, you know, there are two testing scripts for test two, three, and four. One shows the test – one instructs tester to enter all of the data, and one instructs the tester to enter only the incremental data that's needed. That box was added just to show consistency with what we're going to talk through in the future, indicating that there are some indications or times where one individual unit test in this multi-test scenario could be removed or skipped, and if that was done, additional data would be required to show the data that was not entered in that particular test, to have the scenario complete as was designed.

John Derr – Golden Living, LLC

This is John. Is this also, Scott, sort of like workflow?

Scott Purnell-Saunders – Office of the National Coordinator

Yes.

John Derr – Golden Living, LLC

You know, test performance, and then it ... work flows and different tests come into play?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

John Derr – Golden Living, LLC

Okay.

Anne Castro – BlueCross BlueShield of South Carolina

Do we have a problem with the word program here?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I think throughout the entire presentation he's going to put – Scott's going to put test in front of the word program, so it would say test program. Is that right. Scott?

Scott Purnell-Saunders – Office of the National Coordinator

Yes. Or would just setting test to initial state be easier? Would that be better?

Anne Castro – BlueCross BlueShield of South Carolina

I think that would be easier.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I do, too.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

John Derr – Golden Living, LLC

If we use the word program, it means so much more than –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

Got it. Any questions about design or layout here?

John Derr – Golden Living, LLC

No. It's really getting simple compared to the first time we went through this.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Oh, yeah.

Scott Purnell-Saunders – Office of the National Coordinator

That's music to my ears. Next slide. So here's where we get into the optional tests, and we've come to talk about and set the stage for. So in this case, the same first two tests occur, where we're setting the tests to their initial state, inputs done for test one and then test two, and then at test three it's optional, in that you can either go around the top run that's indicated by the black arrow, and execute through test three, or operate through test three, as was designed and depicted in the previous slide, or you can go around the bottom red arrow, where test three is skipped. In the test – in the optional route, doing test three, additional data would be required so that test four can execute as planned, but, you know, we're showing both of those options as being possible. And the depiction at the bottom, so the work – the flow-through data includes not information that would otherwise be reentered during subsequent tests, but also other data, indicated in the parentheses, incremental data, that might influence the quality of the unit test, showing that if a test is skipped, you're going to have to input more incremental data than you would otherwise.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So a couple of things. On your black line, you need two arrows going into unit test four, because it's not – are you – they can – it's not clear.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

And then the second thing is on your second bullet, for instance, a scenario can be made setting specific by adding or removing setting specific tests, isn't – it runs together. I'm not – there's either an extra word or something.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. For instance, a scenario can be made setting specific by adding or removing setting specific tests. Should there be an additional comma there, or it's just not –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I don't know –

[Crosstalk]

Anne Castro – BlueCross BlueShield of South Carolina

You know, I read it like four times, and then finally had to prompt myself on when to pause.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Anne Castro – BlueCross BlueShield of South Carolina

It's just – it's just complex. I don't think – maybe a comma or something.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Where would you put the comma, though? Because I – yeah.

John Derr – Golden Living, LLC

Or a dash.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Anne Castro – BlueCross BlueShield of South Carolina

Maybe after specific? A scenario can be made specific, dash, by adding or removing setting specific tests? I think the problem is you're using setting specific –

Scott Purnell-Saunders – Office of the National Coordinator

Twice.

Anne Castro – BlueCross BlueShield of South Carolina

– twice. Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

Got it. Okay. We'll change that so it flows a little bit easier, because it might be just – might need to just be reordered.

Anne Castro – BlueCross BlueShield of South Carolina

No, I think getting rid of that setting specific, the second one, you know, at the end.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. By adding or removing specific tests?

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. That would work.

Scott Purnell-Saunders – Office of the National Coordinator

Great. Great. Next slide? So here's where we talk about the quick facts. So we changed this to kind of reflect some of the input we got during the last couple of calls to show essentially the four main areas, the components, the scope, specificity, and documentation. This lays the groundwork for the other documents that are going to – that have been included in our test scenario package. So in the components, you'll have the 2014 edition test method and a consistent and threaded data, which is what is required for the test scenario procedure to actually operate.

We need to develop data sets that can actually work in a scenario, and those have been – are in the process of being developed for the additional scenarios we're working on. The scope is a lot more focused, and the clinically plausible workflow is reflected here again. The specificity, so it's not setting or test data specific. Ideally, we're trying to make this as adaptable as possible so that we don't have one ... is limited to one particular setting or type of environment.

This reflects back to what we talked about in that setting is not determined by the unit test, and the scenario details are determined by the patient test data set, you know, ideally pediatric or geriatric. So we're not going to limit those as well.

[Crosstalk]

David Kates – NAVINET

Up to the group, I guess. I'm wondering, these – this – those quick facts are really helpful to sort of summarize what the intent of this was. I mean, for those of – those in the group, like the standards group that isn't as deeply wedded in this stuff as us, I don't know whether as you present or in a slide, if at the beginning we should really explain what the – you know, level set in terms of what we're trying to accomplish and what some of the feedback was. I think it's weaved in there, but at least to highlight –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I agree with you, David. There were two pieces. One was this, which is the quick facts, and the other was why are we doing this, which is – oh, it's right there, it's purpose of scenario-based. Now I know we did unit test first. That was sort of the background. So it's sort of like this is – the purpose was this. The facts are these. And then the background was first we have to do unit tests and then scenarios. Is it a reordering, you think?

David Kates – NAVINET

Maybe. I mean, when you step back from it just, you know, in terms of, you know, a audience member who's not deeply wedded in it, I – the reason it comes to mind is when I was at HIMSS, Judy was sitting next to me, and some of the – and some of the NextGen people were sitting around with me, and explaining in super-passionate terms how time-consuming like the four-day testing that NextGen went through –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah.

David Kates – NAVINET

And just, you know, sort of anecdotally, even if it's in the slide, or in a slide towards the beginning, just saying, this is some of what we ran into in the first round, and the feedback we got, and here's what – this is why we are laying this out, because in and of itself, it's sort of pedestrian and not – I mean, it's powerful, but it's not clear why we're going to all this pain to redefine the testing approach.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Anne Castro – BlueCross BlueShield of South Carolina

I have an observation. I don't – I don't recognize documentation. I recognize the first three, because we went through screens or pages that addressed them specifically.

Scott Purnell-Saunders – Office of the National Coordinator

Right. The documentation that's included here is a part of the actual package that is the testing scenario procedure, which we'll get into in the next couple of slides. So we'll see – like we've looked at the workflow, and that's defined as a test scenario diagram.

Anne Castro – BlueCross BlueShield of South Carolina

So why don't you put this at the end and call it a recap?

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Anne Castro – BlueCross BlueShield of South Carolina

Because it's just out of place here. I recognize the first three –

David Kates – NAVINET

Yeah. That's why I raised my point –

[Crosstalk]

Anne Castro – BlueCross BlueShield of South Carolina

I don't even understand the fourth.

David Kates – NAVINET

– at this point, because this seems like the end, and then it seems like something's missing at the beginning. But we should go through the rest.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. The other thing is, Scott – well, two things. One is under setting, second bullet, you need a closed parentheses.

Scott Purnell-Saunders – Office of the National Coordinator

Got it.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

And then the second – I think setting – I'm just – I'm verifying. Setting in this context means clinical care location?

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Ambulatory and patient – well, hospital or ambulatory.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. That's why I said clinical care – okay. I just – because setting can be confusing.

Scott Purnell-Saunders – Office of the National Coordinator

Right. And, I mean, would it be better if it said care setting?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah, I think it would. What do y'all think?

Anne Castro – BlueCross BlueShield of South Carolina

Yeah, just because it's away from that other screen, or the other page.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

Scott Purnell-Saunders – Office of the National Coordinator

So we'll update – because we've added setting in a couple of other places. We'll make sure it's depicted and says care setting.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. It's not like setting up for a test. It's like an environment or location.

Scott Purnell-Saunders – Office of the National Coordinator

Right.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. Or – is care delivery setting better, or is care setting okay?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I don't – what does the group think? I wrote clinical care location, but I don't care if it says – what do y'all think, clinical care setting?

Anne Castro – BlueCross BlueShield of South Carolina

Care setting is fine.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Got it.

David Kates – NAVINET

I'd actually go with your location, just because setting is used –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So much.

David Kates – NAVINET

– in a couple of different contexts.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. Clinical location determined by unit test?

Scott Purnell-Saunders – Office of the National Coordinator

Okay. Just give me a second.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So Scott, we'll all have to read through this next Monday. So much for not reading through it before we do it.

Scott Purnell-Saunders – Office of the National Coordinator

No worries. Once we get an updated version out, you'll have it in your inboxes, nice and large. Great. Next slide? So here's where we talk about the specific EHR interoperability test scenario procedure that we've developed. This talks about all the different pieces that are included in the materials. There are highlights and links in this slide that actually direct you to the website where they're currently posted. So the draft test scenario, the link goes directly to the home – the webpage, where it's stated or hosted currently.

The draft test scenario procedure links directly to the procedure itself, where you can download that version of the procedure that we talked about, probably about a month ago, and it shows or depicts what criterion being tested are included in this scenario procedure, (a)(4) problem list, (a)(5) med list, (a)(6) med allergy list, (b)(4), the clinical information reconciliation, and then (b)(1), the transitions of care. And it indicates that the draft test scenario procedure includes all the capabilities tested in all five of these included here, and again, included in the draft test scenario procedures included there as well, there's a 60-page document. And then the overview materials, which this deck is going to be rolled into, as well as the narrative that we will update based – the updates to this deck are included there as well.

And the ... at the bottom just indicates that the next three slides will go through the test scenario diagram and the procedure in more detail.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Next slide. So here's the, you know, clinically plausible workflow that we talked through, again. Basically, I indicate this slide as well as the one following it will have a lot of the similar information. We just depicted it in a couple of different ways to try to ensure that folks understand what's actually happening. So you'll see indicated on the left or upper left hand corner there's a start A, and the lower left hand corner a start B.

So you essentially would start at your start A portion, the patient is seen by a provider, where it's ambulatory, or admitted to a hospital, in an inpatient care setting. During the particular visit, patient data, including your meds list, your med allergy list, and problem list, is recorded, changed, and accessed in the EHR, and that's indicated by the yellow bullet or yellow rounded boxes for the med list, med allergy list, and problem list.

That information is then, you know, come – it's stored inside the EHR by the black arrow coming down to the computer on the right hand side of the screen. Under start B, you know, a patient is referred to a provider upon discharge from a hospital, with ambulatory, or directly admitted to a hospital in an inpatient setting ... during the transition of care referral summary or C-CDA is received, displayed, and incorporated into the receiving EHR. In the lower right hand corner you see 1d, the arrows pointing that transition of care is input into that, and that's then output in C-CDA format into the EHR, into the computer system that was described in step one.

And in the middle, you have for step two the clinical information reconciliation actually occurs, where the C-CDA is combined between the med list, med allergy list, and problem list, and then stored in the EHR, and all those are combined and contained in the C-CDA, and all the reconciled data, which is indicated by the black arrow out of that box, is then stored back in the patient or hospital's EHR.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I think – I think this works. Others, please – I think the only question I have is on the workflow, on the first box, for testing purposes, we have to record change and access. For real life it could be more. Is the and there because it's a test? Although the or implies that you have to test for all three. What I'm saying here is you may not change it.

Scott Purnell-Saunders – Office of the National Coordinator

Understood. And is required for testing. So all three of those must be represented for testing, and I think changing the “and” to the “or” lessens the strength of the statement.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

It – but it –

David Kates – NAVINET

Yeah. I mean, in general, if it's a or in the requirement, then it's an and from a testing standpoint, because the certified –

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right. And that's ... we're trying to depict here, Scott, is the testing – if this is supposed to be clinically plausible, then it shouldn't say and, it should say or.

Scott Purnell-Saunders – Office of the National Coordinator

No, no, no. I think and is right here. I mean, we can take it offline, but, I mean ...

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah, I understand your point.

Scott Purnell-Saunders – Office of the National Coordinator

Yeah. I mean, from the test that the product supports the or condition, the test needs to test all of them. You know, so and – but I'm not a English major, so –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right. No. I understand. I think what you're – but what we're depicting here, we're not going to change – but we're saying it's a clinical plausible workflow test, not a clinically plausible workflow.

Scott Purnell-Saunders – Office of the National Coordinator

I hear you. Yeah.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I don't think –

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Go ahead, John.

John Derr – Golden Living, LLC

Well, I was going to ask another question. If you had something, finish what you were just talking –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

No. No, that's okay.

John Derr – Golden Living, LLC

On the bottom, on start B, patient is referred to provider upon discharge from hospital, paren, ambulatory. What does – I thought hospital was inpatient, but is hospital also ambulatory?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

No.

Scott Purnell-Saunders – Office of the National Coordinator

Well, no. We're saying it's referred to a provider upon discharge from hospital in an ambulatory setting.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So the ambulatory should follow the provider, not the hospital.

John Derr – Golden Living, LLC

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

John Derr – Golden Living, LLC

I – you know, Scott, I keep looking at this to see that one day we'll include, you know, long-term post-acute care. So – and we'll do test scenarios and all that, and use cases that will include home care and nursing homes. That's why I keep looking at it.

Scott Purnell-Saunders – Office of the National Coordinator

I understand.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah, Scott, I would say on the start B, either the words need to – the parenthetical words just need to be left off, because either place you put them, they don't make sense to me.

John Derr – Golden Living, LLC

Right.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

John Derr – Golden Living, LLC

Because we've got a provider that's an inpatient and a hospital that's ambulatory, and that's usually not the way we –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right. It just doesn't – I don't think it adds to clarity. In fact, I think it adds confusion. I think your diagram works.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. We'll take those parenthetical references out.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

Next slide? So this is just the test scenario diagram, which represents the exact same workflow we just worked through, but in more of a condensed format, showing how all the five test scenario – I mean, testing criteria would link. So you'll show – you basically see 1a, 1b, and 1c at the top, and all the information that is then, you know, sent in and out of those, and then 1d at the bottom, which was represented by the start B in the previous slide. And we've added the detail here with the complete expansion of the testing criteria notation. So it shows, for example, 170.314(a)(6) as being the med list, and the information coming out of the med list into the clinical info rec, same thing happening for (a)(7), and then (a)(5).

And then the information that – once the clinical information reconciliation occurs, all the reconciled information going back into those individual units. So the reconciled list going back into (a)(6), the reconciled med list going – sorry, allergy list going back into (a)(7), and then the reconciled problem list going back into (a)(5). And you'll see on the right hand side we have a small key. The orange boxes are the, you know, test – unit test procedure. The arrow indicates data, direction of data movement, ideally, you know, if it's coming out of something, it is going away from that. If it's going in, it's being input.

And then we said in the notes section based on feedback we received before, tests 1a through 1d can be done in any order, but 2 – and clinical – clinical information reconciliation tests test interoperability. So the idea that step 2 uses all those in combination to ensure the information can be passed back and forth effectively.

John Derr – Golden Living, LLC

I have a nit on the box at the bottom, right above it is C-CDA, but no dash or that like it is in every other place.

Scott Purnell-Saunders – Office of the National Coordinator

Got you.

[Laughter]

Scott Purnell-Saunders – Office of the National Coordinator

Not a problem. Got it. We'll add the dash there. Any other questions?

John Derr – Golden Living, LLC

In your explanation, you said something about a 1d. Did you, or – oh, I see it down below. Okay. Good.

Scott Purnell-Saunders – Office of the National Coordinator

So we tried to do in the workflow diagram before, was to use the same letters and numbers to kind of represent where information would be coming from, so that we kind of build on that. And next slide. Any other questions here?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I don't think so.

Scott Purnell-Saunders – Office of the National Coordinator

Great. Next slide. So this slide basically goes through the same scenario we talked through, just in a narrative format, and kind of explains what is done in each and every step. Nothing new was added here. We just basically condensed it into a version – so for example, we understand that some people have a better understanding of workflow diagrams. It's just, you know, letters and numbers, some have a better understanding of narrative. So we tried to present it in each way to ensure that folks understood where we were trying to get to with it.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So the –

John Derr – Golden Living, LLC

Would it be better to put this one in front of the diagram, if our intention is to, you know, get people to – because it – then you – I think the diagram is easier to read if you have the little narrative. And that might just be me.

David Kates – NAVINET

Yeah. My bias is the other way, I think, having a picture and following it up with the narrative, but –

[Crosstalk]

Scott Purnell-Saunders – Office of the National Coordinator

Yeah. We went back and forth on that a lot, so it was kind of – you know, we tried to make sure we didn't add or change any information as we went through, so that if folks, you know, don't get one, you know, don't understand one, they can, you know, get a better understanding from the other view.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. The only thing that I would – I don't care which order we put it in, because I think it's right. There'll be some that would prefer it one way and some the other. The only thing that would be helpful is if there were something that just said, this is a narrative representation of the previous Visio on slide X, because you're not sure if you're looking at new information or not, and you're not. It's a re – it's a different representation of the same information. Anybody else feel that way, or is that just me?

John Derr – Golden Living, LLC

Yeah, and in fact, I might add that they know, because we go through the sequence of a PowerPoint, it's always, you know, one, two, three, four.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

John Derr – Golden Living, LLC

And if we knew this followed, somehow that there was two there, there's a narrative and a graphic, so they – if they're a narrative type person, they can go down and then back up again.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I'm just ... text box at the bottom that says, this is a narrative representation of the diagram shown on slide 14.

Scott Purnell-Saunders – Office of the National Coordinator

Say that one more time.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

I would say this is a narrative description of the diagram shown on slide 14.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

David Kates – NAVINET

And then I'd follow John's advice, too, and even on 14 say –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Good idea.

David Kates – NAVINET

Yeah. That – yeah.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

The opposite –

David Kates – NAVINET

The narrative depiction of this diagram follows.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

Scott Purnell-Saunders – Office of the National Coordinator

We'll just add callouts to the –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

– to them being represented – representing the same information.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yep.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

John Derr – Golden Living, LLC

This is going to end up being one of the greatest PowerPoints ever.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

John Derr – Golden Living, LLC

... five years.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

It certainly should.

[Laughter]

Scott Purnell-Saunders – Office of the National Coordinator

We'll let Reddit be a determinant of that.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

We'll go down in the Guinness World Book of how many times did you look at a PowerPoint.

John Derr – Golden Living, LLC

But it's getting very nice and easy to read.

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

It is.

Scott Purnell-Saunders – Office of the National Coordinator

Great. Next slide? So we're coming around the home stretch. So this is the summary slide.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So how does the summary that we saw on slide 11 play into this? The same facts –

Scott Purnell-Saunders – Office of the National Coordinator

A lot of – a lot of the same information is represented in both places, so for example, you know, the clinical plausibility is added. You know, the purpose – so it basically combines the purpose slide that we talked – I think that was slide six or so.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

Scott Purnell-Saunders – Office of the National Coordinator

And then the quick facts slide with this to kind of show kind of in one reasonable bundle what we did and why. So, you know, some language can be changed here if necessary, but the idea was to try to – once we got through all the diagrams and showed where everything came from with the unit-based testing, kind of why we did it, and then what the scenarios actually look like, and then what a test scenario procedure is, here's a summary of everything we did to kind of bring us back around to the beginning.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

No, I think this is a good summary slide. I'm just trying to figure out where number 11 really fits.

Scott Purnell-Saunders – Office of the National Coordinator

You mean slide 11?

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yes.

Scott Purnell-Saunders – Office of the National Coordinator

I don't – it's – and that's – go back to slide 11, if you could for me, please.

John Derr – Golden Living, LLC

Because it sort of breaks up the thing, and plus, I was wondering why you used rectangles here and then you used another graphic on the other one.

Scott Purnell-Saunders – Office of the National Coordinator

Right.

[Crosstalk]

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Oh, yeah, you used chevrons here and you used –

Scott Purnell-Saunders – Office of the National Coordinator

I know. I used rectangles in the other one.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah.

Scott Purnell-Saunders – Office of the National Coordinator

Right. It's representing the same thing, and we'll change those. But I think the idea for putting the quick facts there was to, you know, just pause for a second, understand that we represented a lot of information to folks that hadn't – they may not have had, you know, as close a relationship with this as I or anybody else that's in the workgroup. So certainly if the thought is, you know, to describe the unit test and then to add the quick facts slide earlier, maybe that works. I don't know. But to try to – we didn't want to just keep bombarding people with more diagrams and more test –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Well, then, what I would call – so let me try this on the group. What if we call – on slide 11, what if we called it 2014 test scenarios, dash, either review or something. It's not quick facts. I mean –

John Derr – Golden Living, LLC

I agree, because it breaks it – when we use quick facts, it sort of breaks up the whole presentation, rather than letting it flow.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Well, maybe you say in review?

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

We could try that and see how that floated with the group. Because it sort of – I think what you're saying is you don't want to use the word summary, because you use the word summary at the end.

Scott Purnell-Saunders – Office of the National Coordinator

Right.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

But what you're saying is we've just been through the components, the scope, the specificity, and the documentation.

Scott Purnell-Saunders – Office of the National Coordinator

Right.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

How does that sound to the group?

John Derr – Golden Living, LLC

I agree.

[Crosstalk]

Anne Castro – BlueCross BlueShield of South Carolina

That's good.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

So I'll add in review there. We'll change that from quick facts to in review and update –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

And that may give it the flow it needs.

Scott Purnell-Saunders – Office of the National Coordinator

Okay.

John Derr – Golden Living, LLC

Otherwise, some people just start all over in their minds and say, okay, I got this – rather than a review. So I think that's cool.

Scott Purnell-Saunders – Office of the National Coordinator

Okay. Great. Let's go back to 16. So we'll keep this as is and leave that there. If it – you know, if the folks kind of go back with this after they would have digested it more and feel like additional information could be added here, just let me know and we'll add, you know, bullets if need be. And then slide 17 is just the – our glossary, definitions. So we've talked – added some clarification here with some of the terms that are used. Ideally, the hope is that by the time folks get to this slide, they have an understanding of it, and maybe, you know, for example, because we've indicated or included a, you know, a table of contents slide, folks who aren't as familiar will be able to kind of reference a glossary during the process if they need to.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So the – you've used the word TSP and TSD. Did we use those anywhere?

Scott Purnell-Saunders – Office of the National Coordinator

Those are just – so we used test scenario data, is essential –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right, I know what they are, but I'm trying to –

[Crosstalk]

Scott Purnell-Saunders – Office of the National Coordinator

We didn't reference TSD as TSD. We didn't reference TSP and a TSP. Those are just acronyms that are used – they're actually used in the – in the documentation that goes along with this. So in the actual test scenario procedure –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

Scott Purnell-Saunders – Office of the National Coordinator

– test scenario data is referred to as TSD.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Oh.

Scott Purnell-Saunders – Office of the National Coordinator

And then the TSP is actually used there.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

So this is a general glossary, not just one for this PowerPoint.

Scott Purnell-Saunders – Office of the National Coordinator

That's correct.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay.

John Derr – Golden Living, LLC

Yeah. We just didn't invent two more acronyms.

Scott Purnell-Saunders – Office of the National Coordinator

No, no, no, no. No. Because TSP means a lot of things to a lot of different people.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Okay. I think we're very, very close.

Scott Purnell-Saunders – Office of the National Coordinator

Got it. Well, this is –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Any final comments for Scott? Because on Monday we have to be done, guys.

John Derr – Golden Living, LLC

Let's just – let's hope that Wes doesn't put his brilliant intellect into this and –

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Well, we'll just have to ask him to put his brilliant intellect in between now and Monday.

John Derr – Golden Living, LLC

And make it simple.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right. Okay. So next week we will meet, go over the final final. We will ask for Wes's input in the interim, as well as any others that weren't able to attend today. And again, we're very close, and so thank you to everybody for all the input. I think we've come, as John had said earlier, a tremendous way, so thanks to Scott for that. And MacKenzie, we are ready for public comment.

[Crosstalk]

Public Comment

MacKenzie Robertson – Office of the National Coordinator

Sorry, Scott. I'm back on. Sorry. 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 star 1, or if you're listening via your telephone, you may press star 1 at this time to be entered into the queue. We have no comment at this time.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Great. So any last comments for the workgroup from either ONC or the workgroup members?

MacKenzie Robertson – Office of the National Coordinator

So this is MacKenzie. I would just say, is there an estimated time that you would think you need to go through this for the Standards Committee agenda? As you know, it's virtual, so it's a little bit easier.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Yeah. I – don't y'all think 30 minutes is plenty? Or not? I'm just worried that if they haven't looked at it ahead of time –

John Derr – Golden Living, LLC

I think 30 is good, because it is, you know, very readable and flows nicely.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Right.

Anne Castro – BlueCross BlueShield of South Carolina

And theoretically, we have Wes on our side.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

That's right.

Scott Purnell-Saunders – Office of the National Coordinator

Theoretically.

[Laughter]

MacKenzie Robertson – Office of the National Coordinator

Okay. I have you guys down for 30 minutes, so I'll just leave it at that.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

That'd be great.

MacKenzie Robertson – Office of the National Coordinator

Okay.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

All right. Talk to everybody –

MacKenzie Robertson – Office of the National Coordinator

Thanks, everybody.

Elizabeth Johnson – Tenet Healthcare – VP, Applied Clinical Informatics

Thank you.

John Derr – Golden Living, LLC

Bye.

Scott Purnell-Saunders – Office of the National Coordinator

Bye bye.