

Information Exchange Workgroup
Subgroup #2: Care Coordination and Patient/Family Engagement
Draft Transcript
July 23, 2012

Presentation

Operator

All lines are now bridged.

MacKenzie Robertson – Office of the National Coordinator

Thank you. Good morning, everyone. This is MacKenzie Robertson in the Office of the National Coordinator. This is a meeting of the HIT Policy Committee's Information Exchange Workgroup Subgroup #2. This is a public call, and there will be time for public comment at the end, and the call is also being transcribed so please make sure you identify yourself before speaking. I'll now take roll. Larry Garber?

Lawrence Garber – Reliant Medical Group

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Larry. Jeff Donnell?

Jeff Donnell – No More Clipboard – President

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Jeff. Peter DeVault?

Peter DeVault – Epic Systems – Director of Interoperability

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Peter. Jonah Frohlich? Arien Malec?

Arien Malec – RelayHealth

Here.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Arien. Are there any workgroup members on the line?

Seth Foldy – Centers for Disease Control and Prevention

Seth Foldy.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Seth. And is there any staff on the line?

Michelle Nelson – Office of the National Coordinator

Michelle Nelson, ONC.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Michelle.

Kory Mertz – Office of the National Coordinator

Kory Mertz, ONC.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Kory.

Tari Owi – Office of the National Coordinator

Tari Owi, ONC.

MacKenzie Robertson – Office of the National Coordinator

Thanks, Tari. Okay, Larry. I'll turn it back over to you.

Lawrence Garber – Reliant Medical Group

Excellent. Thank you. So thanks for joining us this morning. And so, can we bring up to the, uh, the document that we talked about, the IEWG Care Coordination and Patient Engagement Stage Three discussion document?

Caitlin Collins – Altarum Institute

One moment.

Lawrence Garber – Reliant Medical Group

Excellent. And what we're going to do is I'm—we're going to work through this document. I'm hoping that we can get, um, you know, in the first 45 minutes or so, get through all of the transitions of care and maybe then longitudinal coordination of care stuff because I want to make sure that we save enough time, uh, for Jeff's work on patient engagement. So—so, I'm going to try to shoot by 11:15 Eastern Time to shift over to that, and in all likelihood, we will be meeting again tomorrow to finish things up.

So, I took the work that we had done at our last meeting, uh, where we talked about transitions of care both planned and unplanned, and I broke them down a little bit differently into first identifying problems and then the solutions, which is sort of what we were—how we—how we did it, um, but I thought it was very clear—I thought it was clearer to specifically say, these are the problems that we're addressing, and as—as I, you know, as opposed to just thinking of cool ideas of things we can do. Um, and, uh, when I did it that way, um, I did, uh, find that there are actually other problems that we should be addressing. So, and—and so what I've done is anything in yellow is stuff that we hadn't actually talked about yet.

So, um, so let's start at—let's start from the top. So, planned care transitions we're talking about in referrals or consultation reports coming back or discharges from the hospital, these are all planned transitions. So, things can be pushed. Um, and, uh, we talked about the current problem already that, you know, when we're talking about involvement of nursing homes, home health agencies, their data needs far exceed what currently is being sent, and I actually had counted, and there are about 175 data elements in the CCD and we've already identified over 300 data elements needed by the long-term post-acute care community.

Um, there's a sort of corollary to that and that's the next thing here, which is that when you're, uh, sending bi—asking a hospital for instance to send so many data elements, um, so much more detail than what's currently going out in the CCDs, it would be really hard for them to do this if they weren't reusing data that perhaps they would have received from the primary care physician. You know, I'm a PCP, and I—you know, I've got months or years to gather this data before I have to send it for the first time to an emergency room or a specialist. So, it's not as onerous for me to build up those 300 data elements, you know, about advanced directives and patient preferences and things like that. And when I send the patient to the hospital, I presumably am going to be sending that or it'll get queried and so, it—I—and then, in the ideal world, we would want the hospital to be able to reuse some of my data and currently, they can't do that.

Arien Malec – RelayHealth

Larry, just a question on that, um, even though this is—this is the Information Exchange Workgroup, there's a policy, uh, I think there's a policy issue here as well, which is that the regulation around the MDS gives, uh, LTPAC facilities an incentive to update the MDS, for CMS, but oftentimes that data is not available for transitions. So, I'm wondering whether there's a policy recommendation to CMS, that they align, uh, the MDS with the—with structured documents, A, and then B, that's, there's some incentive for keeping the MDS up to date for transitions as well as for submission to CMS.

Seth Foldy – Centers for Disease Control and Prevention

Seth Foldy with a quick question. MDS stands for what?

Arien Malec – RelayHealth

Minimum Data Set. It's a required, uh, used to be form. Now, it's an electronic data set that, uh, that LTPAC facilities are required to keep up to date.

Lawrence Garber – Reliant Medical Group

That's excellent. And the equivalent for home health is the oasis form.

M

Um-hmm.

Lawrence Garber – Reliant Medical Group

And then, the inpatient rehab facilities use something they call earth pie, um, which—which I think there's some proprietary issues regarding that, but it's the same—same idea. So, that's—that's an excellent point. Um, so, that's really another problem as you pointed out, that they're not being kept up to date and that they're not, you know, in a form that's necessarily reusable.

Um, uh, also, uh, you know, one of the other—one of the other things that—that occurred to me with our current system of—of pushing, you know, as we set up Direct, uh, and, uh, IHE, uh, profiles, uh, around the country, at least for the Direct aspect, is that there's no, you know, clear, single, this is how you're going to set up a provider directory, uh, that can be automatically updated or that, you know, these—this is exactly the protocol you're going to use for querying it. Um, it—it's—Arien, were you working on the—were you involved in the New York, um, multistate, multivendor initiative?

Arien Malec – RelayHealth

Tangentially I was.

Lawrence Garber – Reliant Medical Group

And since, okay—I know that they had come up with a proposal, and I don't know if that's been accepted as a standard. I—I—I—

Arien Malec – RelayHealth

Well, they—they based it right. So, what they did was they created effectively, uh, skinnied-down version of the IHE, uh, I forget what they called it, uh, Peter, do you remember?

Peter DeVault – Epic Systems – Director of Interoperability

HPD.

Arien Malec – RelayHealth

HPD, yes.

Lawrence Garber – Reliant Medical Group

HPD plus, is that what—....

Arien Malec – RelayHealth

It's called HPD plus minus because it's a skinned-down version of it, and it doesn't require the LDAP, uh, data structures.

Lawrence Garber – Reliant Medical Group

Is it your impression that pretty much every state's doing what they feel like?

Arien Malec – RelayHealth

It's both my impression that every state's doing what they feel like and, um, I have—I have, if we assume that states will always maintain the authoritative provider directory, um, I don't—I don't believe there's enough, uh, money, uh, and will to do that. So I would be—I would be really worried about an assumption that there's one for every state and, you know, territory and that there's one authoritative place to query for provider information. So, I—so, I put that as a concern as well. If you're—if you're believing—

Lawrence Garber – Reliant Medical Group

Sure.

Arien Malec – RelayHealth

—that you have a provider directory, um, uh, you'd have to also assume that there are going to be multiple actors who were involved in—in, uh, being the authoritative source. And then, you—then you've got the problem of who—how you discover who holds the authoritative information for giving organization.

Peter DeVault – Epic Systems – Director of Interoperability

So, Arien, I do agree that assuming that states are going to hold that information today or even tomorrow is a problematic assumption. On the other hand, I can also imagine, uh, private entities developing those kinds of services.

Arien Malec – RelayHealth

Exactly right. And that's why I was—that's why I was saying prob—the other problem is how—I need to also discover who holds the authoritative information for the entity that I'm trying to, uh, to reach. And so, uh, you know, we solved this in Direct using the DNS, um, as the authoritative place to look up, who holds the DNS or LDAP certificate, uh, directory for a given provider. We may need to look at the same kind of approach for this problem as well.

Lawrence Garber – Reliant Medical Group

So, I think that's—I mean, it sounds like this is a rapidly failing marketplace. Uh, and—and—and so, at least that's—so, I've got—I've recorded those—those issues and, um, so that's excellent.

Arien Malec – RelayHealth

Well, it's still, I put a little spin on the, on the failing marketplace, which is that—which is that even if market actors have an incentive to provide information, there's no good standard support for anybody else knowing where that is.

Lawrence Garber – Reliant Medical Group

Right.

Arien Malec – RelayHealth

So, there's no—there's no enablement for a strong and effective market.

Lawrence Garber – Reliant Medical Group

Excellent point. Okay. So, that's another, clearly another problem that we're heading towards with—with, you know, with our—with our push scenarios. Uh, we talked about, let's see another is, um, you know, that—that one of the things that—that we're realizing is that, you know, when—when we send a document, there are really no, uh, requirements that if—if my—if I, as a sender of the source document, ah, then go in and update or, you know, correct a mistake or make an amendment to that document, there's no requirement to actually send an update to the person I originally sent it to. So, there—my source system will have corrected information, but, um, you know, the—whoever I've already released this information to may not know—know about those corrections.

Arien Malec – RelayHealth

There's no—there's no requirement and there's also no standard support, the document-based, um, uh, approaches right now don't handle versioning that well. Uh, and this is—this is a—this is a central problem we're looking at the—the next cluster of problems around, uh, coordinating, uh, team-based care.

Lawrence Garber – Reliant Medical Group

Right.

Arien Malec – RelayHealth

Um, but even—even in the case that you mentioned where, uh, where I send information and then I send updated information, um, or if we looked at the—look at the closed-loop case, I send information and then—and then you send back your updates to the patient's status, there's no really good way of capturing the versioning. So, not—not only is there a policy issue of I don't have any incentive to keep the information up, there's also a standards issue and that the—the versioning stuff doesn't work.

Lawrence Garber – Reliant Medical Group

And there's—and there's a corollary or closely related problem to this as well, which is, you know, if I'm a hospital and I've sent someone, uh, to a nursing home, and then, you know, and then there are results that come back af-, that are finalized after discharge, there's no, you know, requirement or standard necessarily to send updates, you know, just that, you know, this is a result that came in after discharge. Um, and—and that's an area where there's a huge patient safety problem.

Let's see. We've already talked about, um, the—the issues of data portability, uh, the fact that there are some problems related to that and, uh, but I won't get so—we jumped down into solutions then. Um, so, we talked, uh—

Arien Malec – RelayHealth

One thing that we—you didn't mention here in under the problems is the closed-loop. Um, so, do we know right now how to, uh, send, uh, a referral and a consult note, um, or send an admittant and discharge, uh, summary, uh, that is structured and, um, makes it clear that one is being sent in response to the other or is an update to the other?

Lawrence Garber – Reliant Medical Group

Oh, so sort of linking of the original—

Arien Malec – RelayHealth

Correct.

Lawrence Garber – Reliant Medical Group

Okay. Interesting. Okay, yep. There's no closed-loop support that a response is linked to an original order or request or referral. Okay, excellent. Are there other problems, you know, with the push? Okay. So, in terms of just—

M

I just have a minor parenthetical, I believe, that as public health care looking at the consolidated CDA as a possible vehicle for public health reporting. There, uh, are also some additional data elements that are lacking from the current version I suspect that are similar to those recognized by long-term care. In fact, in some cases, it may be the same data element. But to, no, it's not entirely clear if—if the consolidated CDA will become the preferred mechanism for public health report messaging document sending, but if it does, it may also need to be ... for that purpose. I think that's a

Lawrence Garber – Reliant Medical Group

Okay. Alright, got it. Any others? Okay. Now, in terms of—in terms of solutions, uh, we talked about the fact that, you know, that the data sets need to be expanded.

Um, next is that, you know, I think one of the issues is that even—even some of the—the buckets that are in the CCD right now, um, that, uh, that—that they—that a lot of the data may be coming across as—as pretext and not necessarily, um, as discrete enough data elements, uh, to be reusable, um, in the scenario where the PCP is passing information to the hospital and then you're expecting the hospital to import it into their EHR and then re-export it to the next, uh, person in care. So, I think, you know, they're, you know, Meaningful Use Stage 2 is starting to push more towards the standard vocabularies, um, and I'm—I'm not sure if there's any extra constraining that we need to do to be requiring people to take advantage of these. Isn't there a fair amount of optionality in terms of whether you're using, uh, free text versus discrete data on some of these?

Arien Malec – RelayHealth

I don't believe that's true for the core data elements because the—the NPRM at least names both content and vocabulary.

Lawrence Garber – Reliant Medical Group

So, it's probably more the peripheral stuff, like there is this little spot you could stick goals, but it's just—

Arien Malec – RelayHealth

Correct. Exactly. There's no structure for goals—for instructions and goals—

Lawrence Garber – Reliant Medical Group

Right.

Arien Malec – RelayHealth

Beyond just—beyond just text. Um, there's no way for a plan of care, uh, to indicate follow-up testing in a structured way. Um, yeah, as you say, the core, uh, problems, meds, uh, med allergies, although there is an issue with regards to environmental, allergies, environmental and food allergies, uh, from med allergies, problems, procedures, results, there are names, vocabulary sets.

Lawrence Garber – Reliant Medical Group

Okay. So, I'll extend to say that's really beyond the core data elements, with possibly the exception of med allergies that that's where our problem areas are. Let's see, um, and then, this gets—the next one gets into really, you know, where Arien was going, which is the need to be able to map the, um, terminologies from the OASIS, the MDS that are tied, um, to, uh, to be part of the documents that we send around. And I—and I know that, you know, some of this work is going on right now I—SB under HHS, uh, has done the mapping for the MDS to, um, to, uh, the consolo—well, to CDA architecture and that's being actually in the process of being validated, um, or will be shortly, and the same thing needs to be done for OASIS and ... possible.

Arien Malec – RelayHealth

So, you said CDA architecture ... consolidated CDA, it would be a....

Lawrence Garber – Reliant Medical Group

Well, there's a debate going on as we speak about whether this, you know, as much as possible, it's supposed to match templates that are in the consolidated CDA. However, there are some, uh, template elements that would need to be created that are not currently in there, and what's being debated as to whether in—in the structured documents workgroup of HL7, they're debating about whether to directly add that to the consolidated CDA document or whether to put them in a separate document, uh, for, you know, for ..., for piloting and then when it's felt that these are carved in stone, then move them over into the consolidated CDA.

Arien Malec – RelayHealth

Okay.

Lawrence Garber – Reliant Medical Group

Um, so they would—they would be, you know, CDA structured. They follow the CDA structure but not necessarily be incorporated immediately into the consolidated CDA document. So, it's already 500 pages and they—they want to make sure things are—are well vetted before they get in there.

Um, now, the other aspect of an order to—for reusability in order to take advantage of this is that the—the—the data really needs to get incorporated into the EHRs. Um, so, you know, so there are some—there are some issues surrounding that, um, you know, some of it has to do with the discreteness of the data that, that we talked about. Uh, some of it is making sure that when the documents are received, that they're presented to the right person to manage it.

Um, you know one of the things that we've found in our organization is that, you know, uh, candy is good. Too much candy will make you sick. So, you know, we love getting information from our hospital now that we've gotten interfaced to it, you know, that we readmit our patients but if every single piece of information was sent to my in-basket, I would—I would quit and I would not be able to find the important things. So, um, we, you know, we for instance make decisions about how—route informations what, you know, what's shown to a physician, what's shown to a nurse and what do we just file into our EHR for future reference. And so, I think there needs to be, um, the appropriate level of information sent with this, uh, to help make those decisions.

You know, is this—is this coming as, you know, is—was the patient inpatient at the time, outpatient at the time, um, you know, who ordered this, uh, things like that, um, that—that help with the appropriate routing. Another thing is that, you know, some information, you know, needs to be clearly reconciled, you know, there—there's lots of debate about, you know, what truly is the med list, what truly is the problem list and no one's going to want to automatically import those into their EHR. There's going to be some human, or in—and maybe, uh, assisted by decision support that has to sit there and reconcile the list and say okay, so this is really what your problems are.

But there are some absolute truths that come across, you know, that—that are—you know, if this is the consult note, it's the consult note. You know, it's the text that that consultant made. If the patient got immunization, they got immunization, you know, and in most cases, if this is their cholesterol, this is their cholesterol. And these are absolute truths. And other than mapping issues, um, they should, you know, they should be file-able. And we should try to encourage that as much as possible. Thoughts on that?

Peter DeVault – Epic Systems – Director of Interoperability

I worry because of conversations that I've had with, uh, many of our customers about exactly this kind of thing, that automatic filing of the huge amount of results that you might get from outside sources, especially if it's unsolicited, uh, that that would be acceptable.

Arien Malec – RelayHealth

Yeah, and—and for test results, uh, I wonder if there's a backdoor CLIA issue here?

Lawrence Garber – Reliant Medical Group

What do you mean by that?

Arien Malec – RelayHealth

So, uh—

Lawrence Garber – Reliant Medical Group

I should be clear. When I said direct filing, I didn't necessarily mean without showing it to anybody, but I— but I meant that, you know, you can file it and still send it to their—an in-basket.

Arien Malec – RelayHealth

Yeah. So, no. I agree. I agree that I should be able to take it to import for example, the A1C, uh, that I get from somebody else so that I can create a—a—a longitudinal record and trends A1C over time. Um, I've seen some cases where people want to use the CDA as a backdoor for, uh, system of record results, uh, where it ends up being ... around—around CLIA, and I also have the same, uh, usability issue, um, and a—there's a—there's sometimes a liability issue that people—people raise related to this and—and so there's a tension between the workload of the practice and the need to maintain a longitudinal record.

Jeff Donnell – No More Clipboard – President

Yeah. This is—this is Jeff. We hear the liability concern all the time now whether it's valid or not I don't know, but—

M

Exactly.

Peter DeVault – Epic Systems – Director of Interoperability

And I think we also have to keep in mind that if we are really thinking about more than single transactions, so I—I receive information from somebody and I re-release that when I send the patient somewhere else, unless we design a—unless we engineer a really complex system, there's no way to really prevent getting that data just going in a circle.

Arien Malec – RelayHealth

Right. That's for the reconciliation issue where and—and the versioning issue that I was reme—I was mentioning. We just don't—we don't have that right now.

Peter DeVault – Epic Systems – Director of Interoperability

Right.

Lawrence Garber – Reliant Medical Group

Interesting. I mean, we've—we've done, um, we've done things where we, uh, basically create, you know, have unique codes to, uh, identify the source of this. So most of the organizations when they send, you know, because we're connected to several hospitals, you know, and they—each hospital has an accession number, uh, for a particular tests and then we—tend to that a, um, an organization number, um, and actually we do go one step further and, um, append to that a year, because we have found that some organizations will—will change their EHR vendor or lab vendor or whatever and start re—reusing, um, accession numbers, so you—you typically need that combination of three things in order to identify something as unique. And that actually works quite well.

Arien Malec – RelayHealth

Yep. And I agree with you and we do similar stuff in terms of identifying provenance data and—and creating our—our summary of longitudinal record. The issue is if you do it at scale, you know, so—so if you've got a few people who worked this out in kind of a lab environment, um, that's good and at least provides a proved case that it's possible. Um, if you want to look at what's required to do it at scale on a nationwide basis, I don't—I think we've got some more work to do in terms of taking those lessons that you've learned and standardizing them and providing the appropriate guidance that everybody can do it in a consistent way.

Peter DeVault – Epic Systems – Director of Interoperability

I agree. I think this is a great example of where we should try to solve the base case and in an expandable way and do it well and not try to overcomplicate it.

Lawrence Garber – Reliant Medical Group

So, I—and that’s—and that will be probably what we’re doing tomorrow is identifying, you know, what are we—what are we suggesting for fall of 2015, what are we suggesting for fall of 2016 and what are we putting on our wish list after that for—for Meaningful Use Stage 4? So, okay. Any other comments about that? Okay. Just making sure I got the minutes updated here. Okay, good.

You know, we talked about the provider directory, so and, so this is just the “solution” to address that is that, you know, we need to—and I think this is—you need to have a directory or directories was the other thing that was pointed out, um, so that you know where to find the source of truth. Was that where you were going with that, Arien?

Arien Malec – RelayHealth

Yep, that’s right. You ... directory, directory should be the DNS that was there, but editorial comment.

Lawrence Garber – Reliant Medical Group

Okay. I have that. All right, and then—and then, getting back to the versioning issue if we could come up with a—if there is a versioning solution, um, then, when there are amendments or corrections to a document that an EHR knows that in a sense, um, that it—that it has a process for sending an update, um, to whoever it had originally been sent to, um, and then, similarly, uh, if there are results that were from that episode or encounter or hospitalization, um, that are finalized after the summary was sent, that those are—are sent as well. And so, you know, clearly, there’s, you know, there are a lot of—there’s a lot of standards work that needs to be done behind these, um, and that’ll certainly impact the do-ability, you know, in the time-, in the different timeframes. But I think these would be valuable things to shoot for in terms of proving the health care system and safety of it.

Now, data portability actually can—I’m sorry of MacKenzie or whoever is managing the—looking at the—whoever is managing the—the WebEx, could you scroll down, um, a little bit further to the bottom of—there you go—data portability. You know, we had—so we talked about—we’ve thrown out there the idea that when a—a practice or a physician has an EHR and they want to get rid of it and replace it with another, um, or when there’s a patient who moves from the east coast to the west coast and wants to bring not just a summary but their whole darn record with them, um, you know, in the paper world, you print it out volumes. In the electronic world, there’s no clear easy way to do that, you know, and what do we—is there anything that we should be proposing or suggesting for data portability solutions?

Peter DeVault – Epic Systems – Director of Interoperability

Well, I—I think without offering a solution at all, we need to be careful when we talk about something like the whole record. I don’t want to give false impressions to people that are looking at what we’re working on because I—I think that notion is actually a really thorny one about what are the boundaries of the record, um, if the

Arien Malec – RelayHealth

The core record might be a better term.

Peter DeVault – Epic Systems – Director of Interoperability

Right. Right. I’d be happy with that.

Arien Malec – RelayHealth

Yep. And—and there’s—there’s not just the data elements but there’s—there’s the billing and—and there’s the billing history and all that stuff that potentially goes along with it, but if you want the core clinical records, there might be—maybe the right term is the core clinical record.

Lawrence Garber – Reliant Medical Group

So, one of the issues is, you know, if—so, they're—they're—we're talking about two different portabilities. So, one is the cross country one and certainly you're not going to send the billing history as you talked about and—and you don't need to send audit trails that are—are behind it, you know, other metadata that's sort of behind the scenes, but, you know, from a hal—I mean I look at myself, right, you know, before I installed, you know, our—our EHR, we, you know, had a homegrown system and we needed to not just support the data and the billing history, which came across, but also the, um, our audit trail needed to be saved somehow so that for medical, legal purposes, if I got sued about something that happened in our old system, I needed to be able to show, you know, who looked at what when and, you know, to some degree that does—that is part of the data portability when you're talking about upgrading from one EHR to another. You know, and I know there are a lot of physicians and organizations out there that have complained about this issue and I, you know, I don't know how much we can support that depth beyond the core clinical record.

Arien Malec – RelayHealth

Right. So, I guess what I'm suggesting is that—that we can in the work that we're doing or that's aligned with all the work that we're doing here, we can support the portability of the core clinical record with—with recognition that there are other portability issues that are—that are encountered when you switch from system to system.

Peter DeVault – Epic Systems – Director of Interoperability

I agree with that, Arien, and I also think we just have to be explicit in recognizing that different EHRs have different depths and, uh, we're going to have to have some agreed upon level of extraction and synthesis, uh, you know, if we're talking about what we mean by the record.

Lawrence Garber – Reliant Medical Group

So, if, you know, if you picture, you know, three, four years from now when you've had these discussions and all the EHR vendors are getting together talking about, you know, what they could define as their clinical record and—and what, you know, format would it be transformed into to be, uh, portable, um, you know, di—di—would it be a, uh, would there be some massive batch file or, you know, single data file that would be handed over for each patient? Is that—is that what you're envisioning?

Arien Malec – RelayHealth

It occurs to me that the problem of getting the population of core clinical records for importing to another system, looks very similar to the problem of doing data analytics on a population of patients. Right? So if—if I'm looking at what's—what's going to be required in ACO for me to do, uh, advanced data analytics on, uh, patient populations for better management of patients with, uh, chronic conditions, um, that problem defining a population, uh, getting the extracts, uh, for that population in some sense is keeping that extract, uh, that extract up to date, looks a little bit like, if you squint hard enough, looks a little bit like the data portability of the population of core clinical records from one EHR to another.

Lawrence Garber – Reliant Medical Group

Cause you're really—you're defining all the types of data elements that you're going to need. You're talking about transforming into

Arien Malec – RelayHealth

Right. You're defining a population and then you're defining for each member of that population, uh, a portable record that can be used, uh, to transfer it from—from one system to another. Um, I guess this might be a good way to—to kill or to look at killing two birds with one stone because I suspect that at some point, um, when we—when we do ACO enough, we're going to be—we're going to be—right now, we're doing a lot of this work on claims data. Um, we're going to be wanting to do this work on, uh, clinical data and we're going to want to figure out a good way, uh, to get individual records.

Peter DeVault – Epic Systems – Director of Interoperability

You know, what's occurring to me right now is that although this is an important problem to solve just because it is, that it might actually fall outside of the boundary of meaningful use and what we can measure as meaningful use requirements. It—it may re—it may create a set of certification requirements for vendor systems, but it doesn't seem like this is a measurable meaningful use requirement that we're heading towards.

Lawrence Garber – Reliant Medical Group

That's an excellent, excellent point.

Arien Malec – RelayHealth

Well, yes. So—so, there is a—I guess there's somebody else, one of the other subgroups is looking at population health and looking at, uh, public health as well, right? Then, the ... subworking group mandate issue.

Lawrence Garber – Reliant Medical Group

True. And so, I guess what you're saying is that as a byproduct of their work, this problem might get solved, but it's not true like a meaningful use, uh, scope item.

Arien Malec – RelayHealth

Population health might be.

Lawrence Garber – Reliant Medical Group

Right. Population health would be because you could actually, you know, argue that you'd meaningful use your EHR to query populations, uh, but, um, for be part of population queries.

Arien Malec – RelayHealth

Right.

Lawrence Garber – Reliant Medical Group

But the certification to, you know, of your EHR that makes it portable probably is not, you know, something that the physician would be responsible for as a meaningful user.

M

Exactly.

M

And I, um—

W

This is—sorry.

Micky Tripathi – Massachusetts eHealth Collaborative – President & Chief Executive Officer

This is Micky. I just had a question about just in terms of the practicality of this and you're really asking those folks on the phone who are much more technical than I to just sort of, you know, to answer the question wi—and then, the qui—the concert I have about portability as, again, as a layperson, but it seems to me that the individual EHRs are built on a certain sort of conceptual framework that each of those vendors has made about, you know, the way data ought to be organized and it's brought in from mul—in multiple pathways from multiple sources and they spend a fair amount of time thinking about, you know, sort of the underlying schemas and how all of that is organized, and what we've been doing is pushing, um, certain, um, abilities to, um, take that data however it's organized and export it in certain ways and then also moving toward the ability to take data from other places and bring it in but incorporate it in whatever way makes sense, by, and whatever way makes sense to that individual vendor who has, you know, created really sort of this knowledge eco system within their—within their application. So, I guess I'm just wondering whether it's really, um, really directly analogous to say that everything that we're talking about with respect to, you know, sort of analytics and, um, and CCD type of exchange of information from one to the other, if it's really analogous that if we're talking about saying, you know, I want to move from one platform to another, there's really a fundamental layer of knowledge that's, um, that—that's really baked into the way data is structured in one EHR that would be completely lost if we just had just generate ten gazillion CCDs and send them over to another platform and they'll incorporate them and you will actually be able to assemble them in a way that still makes sense.

Lawrence Garber – Reliant Medical Group

I mean, I can tell you, that—that's an excellent point really. You're really, you're transforming one clinical model to another clinical model or, you know, data architecture, and I can, I mean we did it, but it's only, you know, with Epic as one vendor. I mean, we basically disassembled, um, all of the data that we had in one and then sent them in through interfaces, as is if they were happening real time, you know, in—in Epic and reassembled all of these, uh, encounters, you know, into their system, um, so in theory, it can be done, whether that's, you know, that was just one epi—you know, one case, I don't know if, you know, whether you're dealing with AllScripts or NextGen or Siemens or anybody else, whether that can be done.

Peter DeVault – Epic Systems – Director of Interoperability

I mean, what we're talking about here, what you have to do is kind of flatten the data structure, right? So, when the—and it's a lot like the CCD is today when you export the data from one system, it has to basically have all traces removed from it that it came from a particular kind of system. It has to be completely flattened. So, a problem list has to look like a problem list like a problem list, and that has to be the case for any of the data that you might hope to incorporate into some general other endpoints.

Arien Malec – RelayHealth

Yes, it's so I'd say that anything that is standards based has the issues that Micky just mentioned which is, uh, which is that you're—you really are filing all the edges off in order to make this thing work.

M

But it's always a lofty process.

Arien Malec – RelayHealth

That's right. So, if your—if your expectation is standards-based portability, you need to accept that you're going to get a core rounded clinical record. Um, and if you have an expectation that you're going to match the—the underlying data structures and the way that each EHR does business and preserve, uh, the audit trail and preserve, you know, all of the information in a way that—that preserves exactly the way the EHR does, you can't just—you just can't do that in the standards—the standards-based way.

Micky Tripathi – Massachusetts eHealth Collaborative – President & Chief Executive Officer

Right. So, I guess that just raises for me just the question of, um, practicality, you know, what would really—if we were going to even think about this being a Stage 3 objective, how far could we really get, um,

Arien Malec – RelayHealth

Again, that's why I'm—that's why I'm trying to—to use this term the core clinical record, um, to at least signal what you're getting into.

Micky Tripathi – Massachusetts eHealth Collaborative – President & Chief Executive Officer

Yep.

Arien Malec – RelayHealth

And you may decide that that's an appropriate thing to get into. You just need to know the limits of—of what it is that you're—you're embarking on.

Lawrence Garber – Reliant Medical Group

Okay. So, uh, time check. In just a few minutes, I wanted to get over—jump—jump down to patient engagement and I was thinking—

Arien Malec – RelayHealth

We haven't actually—we haven't gotten at the team-based care.

Lawrence Garber – Reliant Medical Group

Right. So, that's—right. So, there are two—there's the care coordination, um, issue, which I have further down. So, the two—the two other issues for transitions that we haven't—haven't talked about today is one of the unplanned ones, um, and—and Peter's got a good document for that, um, and the other is—is the care coordination that gets into the team-based care. Um, Jeff, would you be okay if we—if we at least touched the—the unplanned, uh, solution that—that—that—that Peter has developed, um, regarding sort of a core model and then, um, and then jump into patient engagement, and then after that, we'd go back to coordination and team-based care.

Jeff Donnell – No More Clipboard – President

Yes, absolutely. I'm—I'm good with that.

Lawrence Garber – Reliant Medical Group

Okay. So, um, so the second—the second mod—general model for our transitions, um, is the unplanned one, and, uh, that's generally thought of as the pull or subscription or whatever. And so, and they're generally, uh, the—the problem is that there's no clear, well, I mean, there is in the record locator service model. But we're looking for other alternatives that might be able to use is, um, you know, something that's simpler that we could—could, uh, push out more gen-, more generalizably. And so, one—some of the—we talked about the fact that some would require master-patient index and some don't. Obviously, the ones that are in MPI are much harder to implement and prescribe. So, the ones without an MPI, Master Patient Index, would be much more likely to be usable by people, uh, on, you know, earlier, and potentially could be part of MU 3.

So, uh, we talked about the—the ability to, you know, actually instead of doing a query, which you—you need to actually get an authorization signed and, um, and the way that could work is that I could, in my organization as a requestor, fill out an authorization and send it to wherever I want and have them send me the records. Um, this really does become problematic when you're talking about cross states because each state has a different, uh, requirement for, uh, what, you know, what authorization's required and—and each organization has different levels of comfort and what they want to see signed, um, in order to, uh, release their information. So, um, you know, Peter's got a—a solution where, uh, instead of—instead of the req—the authorization form being mined as requestors, it's actually the authorization form of the person who's doing their release, and that also, by doing that, that also ensures that the releasing organization has the capability to release, uh, what's being requested whether it's in terms of data segmentation or—or, you know, actually having whatever it is. So, um, so, actually, can we bring up the document that—that Peter had sent around ...

M

Authorization for release of information.

Lawrence Garber – Reliant Medical Group

Yep. Authorization for release of information. And I'll let—Peter, do you want to take—pick this up?

Peter DeVault – Epic Systems – Director of Interoperability

Sure. Um, alright, so, basically what we're doing here and this is what we do between Epic sites, um, we're expanding on the usual IHCXCA transaction model, which is what underpins NWHIN exchange as well. Where the—the first conversation between entities up at the top is between, uh, the point of care, so the patient happens to be, let's say in the emergency department of one organization and the other entity is, uh, the place where the patient has a record. Um, so the first query that goes out from the point of care to the record holder is do you know about this patient that I have with this set of demographics, so that's a traditional patient demographics query and ideally, that returns, uh, a single unique, uh, positive match. And, uh, it comes back with the patient's identifier that can be used in any subsequent transactions between these two organizations for that patient.

And then, the typical second, uh, question that's asked from A to B is what documents do you have available. And then, the record holder responds back with a list of documents, uh, one of which hopefully is the CCD but it could also include, uh, encounter summaries, anything else. And then, the point of care organization will ask from that list, uh, for specific documents and those documents have identifiers associated with them that usually is hidden behind the scenes from the user but, um, in the case where the—the emergency position wanted to see the CCD, uh, that's the item from the list that it would pick, and then, the record holding organization would send that over so it could be rendered within the electronic medical record.

So, that's the, uh, basic sort of XCA framework that we can expand upon with a couple of assumptions about the environment. One, and Larry was already getting to that, which is that each entity, so health care organization, record locator service, whatever it might be, is responsible for knowing the rules around brand authorization as required from the patient to release information. That might be a matter of policy, state law, uh, comfort with electronic exchange. So, they'll decide, uh, when and to—and—and for what purposes authorization is required.

To give you an example of how that plays out in the real world, uh, we have another—a number of organizations who have turned off authorization requirements for our interoperability platform because it is only used for the purposes of treatment and it's only used between covered entities. So, there's those simplified assumptions that might allow them to turn off the requirement entirely, and then in other cases like in Colorado, we have organizations who have set up their systems so that when the que—the request is coming from Colorado, authorization is not required but if it does come from out of state then they do want authorization collected. Secondly the entity is also responsible for knowing what the authorization language is that a patient would have to sign in order for them to be able to release the record. That might be, uh, a state, uh, standard. It might be something that they've developed in cooperation with other organizations. It could eventually be a national standard, uh, but in any case, they're responsible for determining what that language should be.

Arien Malec – RelayHealth

Can I ask you a question about that?

Peter DeVault – Epic Systems – Director of Interoperability

Yes.

Arien Malec – RelayHealth

Is the—is the assumption that it is a—it's a set of language so that it's effectively text, um, that, that requires only uh, signature, um?

Peter DeVault – Epic Systems – Director of Interoperability

It might require more than that. So, in that—

Arien Malec – RelayHealth

That's what I'm trying to get is—is—are there additional information that needs to be, you know, is it—is it—

Peter DeVault – Epic Systems – Director of Interoperability

... yeah

Arien Malec – RelayHealth

And additional information.

Peter DeVault – Epic Systems – Director of Interoperability

In the simplest possible case, it's just a signature on whatever the—the core data set is—is. Um, so but they understand what the coordinator set is, and it will be transferred. It could also include things like how long is this authorization good for or, um, are there other places that it's okay to re-disclose this information to, you know, down the road, we might get into document based, uh, segmentation so you can send CCD but not my encounter summaries. So, the possibilities to extend it are there, but in the simplest case, it is just text.

Arien Malec – RelayHealth

Okay. And—and I like, you know, text plus, plus dates, text plus structured field. It's—it gets a little—it gets a little hairy when it's—it's arbitrary.

Peter DeVault – Epic Systems – Director of Interoperability

Absolutely, and I can't imagine a world in which this would actually be processable and arbitrary—

Arien Malec – RelayHealth

Sure.

Peter DeVault – Epic Systems – Director of Interoperability

Okay. So, uh, the record holding organization does have the option of prospectively collecting the authorization in the usual sense. So, uh, perhaps, at discharge or the patient's leaving the office, would you like us to be able to send your records upon request to downstream care providers. And—and so, that prospective authorization could be documented in the system. It would be used to process requests subsequently.

Alternatively, uh, authorization is not collected at the, uh, the record holding institution and we wait until the patient arrives at, uh, at a point of care, an arbitrary point of care. And then, the, uh, and then we can amend the set of transactions that we had in the—in the typical XCA case to look like, uh, it does at the bottom of the page here. So, first of all, do you know about a patient with these demographics? And then the response is—is potentially more complex than it was in the first case where, uh, the—the, uh, patient is known and here's their identifier, but you can't find any additional information out about this patient until we have authorization from—from that patient.

Lawrence Garber – Reliant Medical Group

MacKenzie, could you scroll up a little bit, please?

Arien Malec – RelayHealth

Peter, can I—one more question.

Peter DeVault – Epic Systems – Director of Interoperability

Yeah.

Arien Malec – RelayHealth

Here, which is—is the response back, um, a claim that I have locally captured your authorization, that is—is there a—is the requestor looking back for a, you know, an image of the web signature which is—which is more complex, or are they looking back for a signed transaction that says yep I captured your authorization?

Peter DeVault – Epic Systems – Director of Interoperability

So, in this very first transaction, the, uh, the record holding organization is saying a couple of different things, a couple of independent things. Yes or no, I know about the patient.

M

Yep.

Peter DeVault – Epic Systems – Director of Interoperability

And if yes,

Lawrence Garber – Reliant Medical Group

... scroll down.

Peter DeVault – Epic Systems – Director of Interoperability

If yes, then yes or no, we've already got authorization from the patient that you can have access to their records. So, that would be prospective authorization and in the case that prospective authorization has not been obtained, then the response is yes, we know about the patient and you need to get authorization from the patient before we can send you anything about them.

Lawrence Garber – Reliant Medical Group

Yep. And my concern—my concern at this point, this is Larry, is that, you know, if—if I am querying, you know, mental health hospital, a Betty Ford Clinic, and, you know, and I say has—do you have a record on this patient, you know, and they say yes, they've already released, you know, PHI at that moment and I haven't gotten any authorization from the patient yet.

Peter DeVault – Epic Systems – Director of Interoperability

And—and that might be something that we handle slightly different than we do—we have in our own network, uh, had those concerns and we've done some additional kinds of transactions or, you know, subversions of these kinds of transactions to handle such cases where you don't actually if it's Betty Ford respond back positively that you know about the patient. You might respond back something like if we did have this patient, you would need this authorization form, uh, in order to get any information from us.

M

You—you—exactly right. You could do the query based on do you have a patient with this identity and—and they could say you need authorization even for that request.

Peter DeVault – Epic Systems – Director of Interoperability

Right.

Lawrence Garber – Reliant Medical Group

Another approach might be that if you be—because, you know, they're nice—the nice thing we'd be able to—to query is within a region, you know, within a county or an area to—you know, where health care is likely to have taken place, um, to say a hundred organizations and all I really, you know, I mean, I'm wondering if all I need to know is, you know, yes, they're—there are of these hundred organizations, you know, which may have some mental health hospitals, may have, uh, walk-in clinic if there are records out there. Not saying, you know, who they are or whatever, and then just present you with what needs to be, uh, signed, again, not saying who you're going to be getting this information from. I wonder if that would enable you to sort of do this efficiently, um, without having too much going back and forth.

Peter DeVault – Epic Systems – Director of Interoperability

You know, the—the one difficulty that can arise in that kind of scheme is that, um, you might be having a patient sign a dozen different authorization forms without, right, without necessarily having a record at those organizations.

Lawrence Garber – Reliant Medical Group

Well, I wonder if—then, I wonder if there's a way that you could say that, you know, as part of this schema, that while the EHR can know that something exists at Betty Ford Clinic that they cannot present that information to the, you know, to the users, that—that ...

Peter DeVault – Epic Systems – Director of Interoperability

I'm not sure—I'm not sure that that's going to make Betty Ford Clinic feel better about it actually.

Lawrence Garber – Reliant Medical Group

Yeah, you're probably right.

Peter DeVault – Epic Systems – Director of Interoperability

But, you know, I've had this conversation with every one of the 125 organizations that's currently using, um, the Epic interoperability platform under the conditions that are on this paper, and I think most of the time, we come to the conclusion that it's actually an edge case and that for most of day-to-day health care transactions, we don't need to solve that completely, um, and that's its probably, you know, for the Betty Fords or mental health organizations that are—that purely do that kind of work for patients that we need a slightly different variation on this set of transactions. But why don't I continue through this here?

Lawrence Garber – Reliant Medical Group

Excellent.

Peter DeVault – Epic Systems – Director of Interoperability

So, basically, if authorization is required and the point of care organization asks the record holder organization for the authorization, uh, that would be appropriate. So, that's their curated authorization language. Um, that's rendered in some form for the patient to sign. It might be printed off or what signature it might be, uh, on the screen for an electronic signature and after that's signed, then the notification's sent to the record-holding organization indicating that and at that point information is opened up.

Arien Malec – RelayHealth

And again, that was the question that I was asking is, um, what we're talking about here is—is an assertion that the authorization was signed; not the, you know, not the actual, uh, image of or, you know, document that has the—the image of the web signature.

Peter DeVault – Epic Systems – Director of Interoperability

And I can imagine in the future doing it, uh, with an image electronic or—

Arien Malec – RelayHealth

I like, I think it's simpler if you—if what you're trading back are assertions that the authorization was signed.

Peter DeVault – Epic Systems – Director of Interoperability

And that's—that's what we, uh, do currently today.

Arien Malec – RelayHealth

And—and what's nice about this is—is this—the assertion that X were signed if you have a unique identifier for your authorization language, um, handles a bunch of cases. It can say, uh, I signed this, you know, patient signed this national, uh, authorization language, uh, they've signed your authorization language, and you can locally maintain a list of—

Peter DeVault – Epic Systems – Director of Interoperability

A registry of

M

A registry of authorization language you support.

Peter DeVault – Epic Systems – Director of Interoperability

Yeah.

Lawrence Garber – Reliant Medical Group

What I also like about that approach is that in theory, when someone shows up in the emergency room and you know that they've been to ten different, you know, provider organizations in the area, which is not at all uncommon around here, um, that if there were some, you know, a standard set of, you know, potential authorization languages and data elements that need to be collected, um, that, you know, that in theory, the patient may only need to sign once instead of, you know, on a dozen different documents.

Arien Malec – RelayHealth

So, Peter, can this—is this—is this leverageable with, um, I forget whether it's EPPC or what—whatever it is that as one of the IHE standards that effectively has a unique identifier for consent language and then, um, and then, a basic set of—of—of opt-ins, um, I don't know if you can layer that on top. Is this layered on top of that standard or is this—

Peter DeVault – Epic Systems – Director of Interoperability

It is not. We rolled—kind of rolled our own before that was around, but we do think that, um, it's basically analogous to—to the transactions in that.

Arien Malec – RelayHealth

Because that does result—resolve down to a unique identifier for X and then a—an assertion with respect to X.

Peter DeVault – Epic Systems – Director of Interoperability

Right. I—I think their way of handling it is a little bit more complicated, but it—

Arien Malec – RelayHealth

Yeah. No, there's a simpler—a simpler approach to that or—or use of a subset of that standard.

Peter DeVault – Epic Systems – Director of Interoperability

Right. Right.

Lawrence Garber – Reliant Medical Group

Do you think there's any hope that there would be some, uh, you know, a handful of templates for standard authorization language on the national level.

Peter DeVault – Epic Systems – Director of Interoperability

Um, what—what I—what I like about this approach is that it's—it's extendable upwards and you can get started with the—everyone maintains their own authorization language and then has something to hook into to say, uh, hey, let's agree on, you know, ... standard and you can use it or you cannot, but, um, if—if you support it, you can use it.

Lawrence Garber – Reliant Medical Group

Nice. Any other comments or suggestions? This sounds really great. Okay. Then in our—in our last half hour then, let's jump over to, um, our, uh, patient engagement pieces, um, and so that goes back to my original document.

Arien Malec – RelayHealth

I apologize. I'm going to drop for ten minutes and then get back in because I need to—I need to drive to work.

Lawrence Garber – Reliant Medical Group

Okay. Thanks.

Arien Malec – RelayHealth

Thanks a lot.

Lawrence Garber – Reliant Medical Group

And can you stroll down to number three, which is communication from patients to families, from patients' families, one more, uh, yep, there we go. And—and Jeff, do you want to take over?

Jeff Donnell – No More Clipboard – President

Sure. Um, yes, so—so focusing a little bit on—on patient and family engagement, and, uh, you know, what I—what I looked at is—is sort of two areas communication from patients and families and—and some additions to communication to patients and families but starting with communication from, um, one of the—one of the big problems, I know we run into quite a bit and I'm sure—I'm sure Arien would—would—would support this from—from his work is that—that patients are frustrated at their inability to submit electronic, uh, data to health care providers and—and it manifests itself several ways. There's the necessity perhaps you use multiple patient portals with different provider EHRs. So, if you—if you have a provider who has an EHR with a tethered portal and then the—there's a lot of value there without question, but if you're seeing multiple specialists, multiple doctors and you have to have multiple different, uh, PHRs or portals, uh, it's—it's extremely challenging and frustrating from a patient point of view.

Um, and, you know, what we hear is that patients would be able to—would like to be able to sub—submit data from a, you know, from—from any, uh, PHR patient portal application, uh, to any certified EHR, um, and—and along with that, they want to see that—that providers are—are, you know, ready, willing and able, uh, to incorporate, uh, patient generated data, uh, and/or data that the patient has—has aggregated from a variety of sources into one spot. Um, so, in fact, I know we—we just got done doing some—some research with our—with our user base, and this was clearly at the top of their, you know, their—their wish list in terms of what they'd like to see and in terms of future capability and one of the things that really frustrates them today. Um, so, in terms of a—a proposed solution, uh, it would be that the patient or family is able to push patient generated, uh, or—or patient aggregated data in a standard format like a consolidated C—CDA, uh, from—from any PHR or portal to a provider EHR. And, you know, you can—you can certainly do that via direct or other means.

Um, and then, further that that certified EHR would be able to—to consume and then ideally be able to reconcile that data submitted by the patient into the EHR. Um, and then I—I did add a little question here, which would be, um, in addition to the data coming over, should that include the data providence so that we—so that we know, uh, the source of their data, whether it was, you know, patient self-entered or whether it came from, uh, from a—from a clinical source. So before we—before we move onto the—to the next one, any comments or thoughts on this particular idea?

Peter DeVault – Epic Systems – Director of Interoperability

Uh, in our experience, the data isn't acceptable to a downstream clinician unless it has the provenance associated with it. Otherwise, it's just considered patient important.

Lawrence Garber – Reliant Medical Group

I agree. I'd want to see the provenance.

Jeff Donnell – No More Clipboard – President

.... Any other—any other thoughts on that one? If not, we can move ahead.

Lawrence Garber – Reliant Medical Group

I think it's excellent.

Jeff Donnell – No More Clipboard – President

Great. Uh, the next one and this was—this was brought up in one of our earlier meetings, um, and if you could scroll down just a little bit, please, uh, but we have patients, uh, that's good, thank you, patients that are increasingly using devices, whether it's home monitoring devices, portable devices, you know, devices in ... uh, that hook to an iPhone, whatever it might be, uh, to monitor and manage health information, um, and, uh, you know, this is, uh, this is becoming increasingly prevalent. Um, so, you know, one thing we might consider is, uh, you know, should the patient or family be able to push data, um, from—from a device or from a—another source like a PHR, patient portal or platform, um, that aggregates device data, uh, again to a, uh, certified provider EHR, uh, with the, uh, the—the EHR then being able to consume that—that, uh, device data that's submitted by the patient.

Um, you know, a couple of thoughts or questions there, you know, in terms of doing this, um, you know, if—if we want to go down this path, should we specify, uh, you know, perhaps the most common or—or valuable devices, you know, things like electronic scales and blood glucose meters and—and blood pressure monitors, uh, you know, should—should we—should we try to, uh, limit that especially up front. Uh, do we focus on devices that are tied to—to certain targeted conditions or just users that we know, uh, are getting a lot of focus like diabetes and COPD and those sorts of things, um, and then also as part of this should we be harmonizing, um, with—with standards and protocols from—for example, Continua, who—who I know's done a lot of work in terms of—in terms of the integration of device data. Um, and then, another thing that occurs to me then, uh, based on the last set of comments is that, uh, our data provenance ought to—ought to also, uh, be part of this as well. Um—

M

Could you talk a little bit more about the Continua's standard and, you know, who's involved and where it is and level of acceptability, things like that, what it does?

Jeff Donnell – No More Clipboard – President

Yeah, and—and I haven't been, uh, tremendously involved with Continua, but—but my understanding is—is it's a group that was originally created, um, you know, it—sort of with the growth of these—these—these, uh, portable and at-home devices, uh, to start to build some standards around, uh, you know, uh, how—how data is—is collected, transmitted, shared, consumed. Um, and I—I do know that Continua has, um, has—has kind of joined forces with, um, with ... integrating the health care enterprise around—around specific use cases.

So I know quite a bit of, uh, of work has been done there. I know our organization has, you know, has, uh, done at least, you know, at things like hinging on operability events. You know, we shared some data using Continua alliance standards. But, you know, beyond that, I don't know a great deal more and, you know, this is one of those—this is one of those areas that for me on the one hand, I see tremendous value here, but it also, it also strikes me that this is still sort of a market area that's in its infancy. And that doesn't mean we shouldn't get out ahead of it especially when you see the, you know, the—the proliferation of mobile devices. But I also know it's—it's brought with, uh, it's brought with a lot of peril in my opinion because for example, you've got the, uh, you know, the FDA taking a really hard look at this in terms of, you know, being—at what point do mobile applications cross over the line and become medic—medical devices that need to be regulated where you have to have ... device approval? Um, so, you know, I throw it out to the group, I know this is something I'd be a—I heard on some earlier calls and some people talked about, but I'm not sure if this is something we want to try to take on at this juncture or not. So, we'd love to hear people's thoughts.

Lawrence Garber – Reliant Medical Group

Well I think—I think that it's the Standards Committee that would specify the—which standard is followed. Um, so I think we—all we have to do is specify as a policy that, you know, that it needs to be able to do this and conform to standards and then—and then, let the Standards Committee decide which standard's appropriate. Does that—does that sound right?

Jeff Donnell – No More Clipboard – President

Yeah, I think—I think you're correct there.

M

Yeah. Yeah, I think that's right.

Lawrence Garber – Reliant Medical Group

Okay. I think it's good to see—and I was just taking a look at the Continua side and it looks like they continue to be active with press releases. As of last month, there is one. Um, it just got the Department of Defense to join. They do have Microsoft. They do have a lot of the—the whole bunch of big players, so, at, you know, 200. So, it looks like, you know, this is good and that when we prioritize things, it looks like there is a standard that's, you know, being developed or—or is exists that we—that the Standards Committee will be able to touch on. So, this is—can be reality.

One thing that I've, you know, one thing that we dealt with because we just connected, um, Epic to, uh, to Microsoft HealthVault, so that we can do home-monitoring devices and one of the issues that we came up with is how do we authenticate, um, how do we make sure that we've got the link correct so that, you know, we're linking the right health vault account with the right patient record in their EHR with the right patient's authorization, um, and, you know, I'm not sure that there are standards out there, uh, that—that support this, you know, uh, specifically. I don't know if anyone of you know of—of standards, I mean, we—what we did is we basically, uh, followed a model that—that Epic already uses, which is, you know, for their online portal signup, which is, you know, print—printing out a—a key, uh, number out of the EHR and giving that to the patient and then when they go online, they have to enter that, um, along with the demographic data so that we know that it's the right—right account, the right person. Um, and—is anyone aware of—of standard approaches, um, you know, or the need to set up a standard approach to facilitate this?

Jeff Donnell – No More Clipboard – President

Yeah, no. I know we've done the same sort of—sort of thing where you're, you know, you're providing the patient with a—with a key or a, you know, an authentication code, um, and then—and then we've got a, you know, a—a set of, uh, uh, demographic elements that are required along with that, um, and—and I know we took a—a pretty hard look at what, um, you know, there was a—as part of the ONC privacy and Security Tiger Team, there was a—there was a workgroup that really focused on patient ID off match, um, so—so I know we used, um, looking at their work, we used first name, last name, date of birth, gender and last four digits of the social security number, and, you know, we found that when you—when you do that, um, you know, you've got a—you've got an incredibly high confidence level for a match.

Lawrence Garber – Reliant Medical Group

Do you think that that should be, uh, perhaps part of this that we, you know, say specifically that there is, you know, appropriate authorization and then let the Standards Committee figure out what that is?

Jeff Donnell – No More Clipboard – President

Yeah. I would believe so.

Peter DeVault – Epic Systems – Director of Interoperability

Okay.

Jeff Donnell – No More Clipboard – President

What—what about the concept of, you know, um, of sort of starting off with I guess the low-hanging fruit because the—it's one of the challenges. I can see it, but from an EHR vendor perspective, is, um, if you—if you basically say device data, you know, that opens it up to anything and everything that's out there. Um, and—and again, depending on how far you extend the definition of a, of, you know, of a device or an application, uh, you know, there are literally tens of thousands of iPhone health and wellness apps out there. Um, and, you know, I think we want, we have to be careful not to, uh, not to create a—a—requirement ... ridiculously burdensome here.

Peter DeVault – Epic Systems – Director of Interoperability

I also—and I think this is—you're headed in the same direction that—that I'm thinking in which is that this is similar to some of the problems we've faced just within the health care organization because we don't through Meaningful Use control the ancillary system. So, we can't, uh, specify for example, that lab systems have to report results using LOINC. We don't have a lever around or underneath, uh, these un-tethered PHRs as part of Meaningful Use. And so, it's going to be hard for us to dictate either policy or standards to them or to have reasonable expectations that there will be some conformance to those.

Arien Malec – RelayHealth

So, I, yeah, this is Arien. Sorry, I agree with the former part of that. Um, my experience is that the un-tethered PHRs have a significant interest in supporting various standards.

Jeff Donnell – No More Clipboard – President

Yes. I would—I would agree with that that—that, you know, market forces are going to, I—I believe for the most part will take care of that.

Peter DeVault – Epic Systems – Director of Interoperability

That may be, and that would be lovely, but we have to keep that in mind as we're creating measurable objectives for providers to meet.

Jeff Donnell – No More Clipboard – President

Well, again, this is where I guess I would look at it is—and again, thinking of the incremental approach here, you know, do you again start with, um, you know, start with kind of the obvious and, um, you know, the obvious kind of device data that is going to apply to, you know, to the most possible situations and also the ones where you're going to have a low variability. So, for example, if you can look at things like, um, you know, weight, blood pressure, blood glucose, you know, where there's—and—and again, I know even within some of those measures, there can be some variability in terms of how it's recorded, but it's—it's not going to be quite as, uh, you know, quite as, uh, as bad as some of the more esoteric lab tests that you're going to see.

Lawrence Garber – Reliant Medical Group

I think it's, you know, one of the approaches that's been used with meaningful use is this idea, as long as—if you can do one, you can do a million and, um, as long as you can show that you can do the first one and I don't know if we even need to necessarily specify that it's a, you know, a peak flow meter or a blood pressure monitor or whatever as long as we, you know, classify it as some, you know, home monitoring device, you know, and that could be a smart phone as long as you get the way to figure out how to connect to that for one, you know, using standards, then, um, then, you know, then it'll probably work for thousands of different devices. Is that—do you think that that's fair to assume?

Arien Malec – RelayHealth

I think that—this is Arien, is correct, and I think this probably results down to most of this data is just results data, um, with a slightly different spin, and so, you have the transport and security and authorization identification components to make sure you're actually connecting to the device that you think you are and then the content specification which, uh, which I think is actually pretty easy.

Lawrence Garber – Reliant Medical Group

The other piece that would be required to make this work and it adds considerably to the scope, and that's why I want to bring it up, is that you need a reconciliation process within the EHR for the provider to accept the data. You can't simply have it file all of the pieces of data that might come through.

Arien Malec – RelayHealth

So Peter, how does that differ from, I'm asking this as a question not as a, not as a Socratic question, how does that differ from the need to reconcile data that comes in from, uh, a provider for example or transition of care. That is a—

Peter DeVault – Epic Systems – Director of Interoperability

It's very similar. Um—

Arien Malec – RelayHealth

Yeah.

Peter DeVault – Epic Systems – Director of Interoperability

Although we've talked about widening the scope considerably from problems, meds and allergies to arbitrary device data at this point.

Arien Malec – RelayHealth

Right. Right.

Lawrence Garber – Reliant Medical Group

And this

Arien Malec – RelayHealth

I was wondering if whether there's a generic need, uh, to handle and reconcile data that comes in from external sources, whether they be the patient device or another provider or whether each of those bases has specific requirements that need, you know, where you need extra stuff.

M

....

Peter DeVault – Epic Systems – Director of Interoperability

Yeah, I think it's both. There are layers here. So, there's a generic workflow need, uh, and then, each kind of data is potentially a different kind of decision making step, a different kind of liability and different set of patient expectations.

Jeff Donnell – No More Clipboard – President

Yeah, and clearly, that—that same reconciliation requirement is going to, um, you know, to apply to the—to the, you know, the previous, uh, point about, you know, patient-supplied clinical data. So, it's, um, but yeah, I think it's, you know, having that reconciliation tool embedded in an EHR is just going to be absolutely essential going forward whether it's provider-to-provider or patient-to-provider communication.

Lawrence Garber – Reliant Medical Group

And actually too, it's not just reconciliation because it's also the—the routing tool as well. So, that, you know, when the information comes in, you know, who does it actually get sent to for reconciliation? You know, I think that's a key point. Uh, you know, Epic standard functionality is to route to the person who ordered it. Um, we actually, sorry, Peter, we modified it to route to a pool that's related to the person that ordered it. Um, you know, and so that kind of capability, you know, control is important.

Jeff Donnell – No More Clipboard – President

Yep. Good point.

Jeff Donnell – No More Clipboard – President

The other thing just to point out so that you know, there, you know, a blood pressure reading at home is not considered the same data type as a blood pressure reading in the office. It's known that home readings are typically five points lower, and so, they're truly treated differently so that when we show a graph, we don't show graphs of home data mixed with, uh, in-office blood pressure readings.

M

Yep.

M

So, ... matter.

Jeff Donnell – No More Clipboard – President

That provenance becomes—

Arien Malec – RelayHealth

... as well as the LOINC code, right? So, the—there's a—there's a—a LOINC code for, uh, that is specific to that situation.

Jeff Donnell – No More Clipboard – President

Good. Now, let's do a time check. We've got—

Jeff Donnell – No More Clipboard – President

We've got—we've got nine minutes, so—so maybe I should—

M

... last one.

Jeff Donnell – No More Clipboard – President

blast through these last two. Um, so, uh, then we have communication to patients and families, and really here I just, uh, this—this next one really built on the, with all this discussion we're having around transitions in care and, you know, care team, care coordination, uh, just making sure that we—that we consider patients and families as part of that information exchange so that as, um, a provider transitions the patient to another setting of care or refers them, that we could that we make certain that the—the patient that, you know, that any care plans or updated care summaries are made available to the patient upon that transitional referral. Um, one thought there is that, again, if you look at Stage 2, uh, proposed rule-making, you've got this, you know, new download, transmit requirement that's—that's, uh, built in and assuming that that passes muster, then, you know, you could—you could certainly just, you know, build in, uh, an updated care summary or a care plan into part of that. Um—

Arien Malec – RelayHealth

Right. But the auto blue button stuff that we discussed, um, that could—that could essentially be a part of that that is the notion that as a patient I register an address of interest, uh, that will be my reconciliation point that I maintain. And my expectation is any updates to my record get CC'd auto blue buttons to the top place.

Jeff Donnell – No More Clipboard – President

Yep, exactly. So anyway, that, you know, that just, is as I was thinking about this yesterday, that just seems like sort of a logical extension of some of the, you know, the secure transition discussion that we've, uh, that we've been having and—and just sort of a natural extension of that and again, it shouldn't be a really burdensome. It's just A, if you're—if you're already sharing this data with the—with the next provider or the members of the care team, make sure the patient and family is included in that.

Lawrence Garber – Reliant Medical Group

Now, along that line, the, you know, Kaiser's released to the—for public domain there, I think it's Conversion Medical Technology, which, you know, is included the patient friendly vocabulary, and it's being released in stages, but I think over the next few years, it should all be out there and maintained, and so, the question is, you know, should we be requiring the EHR vendors to, you know, use the substitute terminology for the terms in the patient's version.

Arien Malec – RelayHealth

No. I would—I would advocate not, um, that the requirement on the EHR should be to give the structured data, and what's nice about, about CMTs or other based other approaches that they work off the same LOINC code or SNOMED code and map them to, uh, patient-friendlier language. But if you—if you kind of push the problem all the way down to the EHR, you're requiring the EHR to be doing stuff that you should get specialization—you really should be getting specialization around and have—have EHRs be, uh, or patient ... applications take on that work so they can do it a lot better.

Lawrence Garber – Reliant Medical Group

What if what we're really giving the patient is not necessarily electronic but a piece of paper that's coming out of the EHR? I mean, granted, it—if we're giving it—passing it to something electronic that they're going to be using to view it then we could—we could count on that tool to do the translation, but if we're—if—it may be a piece of paper that we're giving to them, and the—and the tools are out there, shouldn't we encourage the EHRs to do that?

Arien Malec – RelayHealth

My belief is that that's again, pushing—I would like a world of modularity and a world where EHRs specialize in physician workflow and not have to take on the entire ecosystem in order to get certified. Um, I'd like a world where we have, uh, you know, we've got people who can specialize in, uh, patient basing technology and maybe they specialize in both print and electronic data, but we're not requiring EHRs to take on every—the burden of every factor in the ecosystem.

Jeff Donnell – No More Clipboard – President

Yeah. I would—I would agree too because at some point, uh, you know, I think we also stifle innovation if—if, you know, if EHRs are required to do everything, then it doesn't leave a lot of room out—out in the marketplace for innovators to come along and say well, hey, I can take that piece and I can do this better.

Arien Malec – RelayHealth

Right. You've got one—you've got one technology stack that does poorly.

Jeff Donnell – No More Clipboard – President

Alright. Well, hey, we've got four minutes. Let me just—

M

Yeah.

M

Real quick hit on this last one. And again, this is just sort of another thought and in fact, there was just a study that was back published last week a—a—about this that's kind of interesting that—and if you scroll down a little bit, this last problem is that, you know, given that certified EHRs are now required to, uh, support specific quality measures, um, could—could the data tied to those quality measures be used to improve patient outcomes. Um, so, you know, the idea would be that as a certified EHR identifies patients that are due for preventative services, screenings, vaccinations or if they're just out of compliance with accepted clinical guidelines, um, do we, then use that functionality to, uh, you know, to trigger, alerts, reminders, warnings and those sorts of things, you know, to a patient. So, again.

Arien Malec – RelayHealth

This is Arien. I've got a different spin on this which is to say when we look at plan of care and structured plan of care, we should be designing structured plan of care, so that it supports two things. First of all, ..., um, as it ... plan of care, and the second is that it's explicitly designed to handle aspects of the plan of care, goals and interventions that are owned by, uh, or goals and tasks that are owned by the patient, um, as a first class citizen in the—in the team-based care.

Lawrence Garber – Reliant Medical Group

That's excellent.

M

That's right.

M

Yep.

Jeff Donnell – No More Clipboard – President

So, those were my thoughts on patient engagement.

Lawrence Garber – Reliant Medical Group

Those are excellent. Other comments before we open this up to the public? Because what we'll do—what we'll—what we'll do, ah, is at our next meeting, which is tomorrow at 4 p.m. Eastern Time, what we'll do is I'm going to sort of take all of this, our minutes and draft this into a sort of a new document that we'll go through so we can talk a little bit about phasing and we'll also talk about, we have to—we'll finish up, uh, care coordination. We'll address that actually first tomorrow, and then, uh, and then we'll talk about how these relate to, um, Meaningful Use Stage 2 recommendations, and see if what we can sort of lay out as objectives and measures and that seems like an awful lot to do in one hour tomorrow, uh, but we'll do it. I guess we'll do what we can. So, uh, MacKenzie, can you open it up?

MacKenzie Robertson – Office of the National Coordinator

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

Public Comment

Caitlin Collins – Altarum Institute

If you are on the phone and would like to make a public comment, please press *1 at this time. If you are listening via your computer speakers you may dial 1-877-705-2976 and press *1 to be placed in the comment queue. We do not have any comments at this time.

Lawrence Garber – Reliant Medical Group

Great. Thanks a lot, everybody.

M

Thank you.

Lawrence Garber – Reliant Medical Group

I'll talk to you tomorrow. Good work.

M

Thanks, everyone.

W

Thanks, everyone.

M

Alright.