Office of the National Coordinator for Health IT
Federal Health Architecture
Provider Directory Workshop
Draft Transcript
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Good morning everyone, once again, this is the Office of the National Coordinator for Health IT and the Federal Health Architecture Provider Directory Workshop. My name is Dan Chaput I am from ONC, the Office of Standards and Technology. We are broadcasting this by a webinar and we are live here in McLean, Virginia. Please note that today's webinar is being recorded. The recording is being used to help in the preparation of meeting notes and will be made available for public access.

For webinar participants your phones are currently all muted. If you need to send a question you will find a question box and go to webinar and an organizer will respond. We have Stacey standing by taking all your questions they have been coming in the last half hour; we appreciate that, thank you.

You may also raise your hand and an organizer will respond. If you wish to speak and join the discussion during Q&A we can unmute you, it is best to be dialed in by phone that usually has the fewest technical difficulties but you will need to have dialed in using your PIN. If you have forgotten your PIN we can send that to you. If you are on a headset with a microphone any technical issues you run into are entirely your own, we might not be able to help you if you are having headset issues.

Also, for webinar participants we're trying to be inclusive of you. I will be updating slides and pictures you have the link on your screens on the webinar. In room participants, is there anyone who is new, who was not here yesterday?

Okay, really quickly, bathrooms, two locations out the back and over to the side. We have coffee available over here. As you may have already noted your visitor pass does not necessarily allow you to wander throughout the building unaccompanied. Your "no escort required" badges do not deputize you as an escort so you cannot start bringing around people who have an "escort required" you need an official MITRE person.

Again, the same as yesterday, we'll move en masse to lunch so there will be folks there. There is a room over here to your left that can be used for breakout meetings should we need a breakout meeting, bags and coats I believe are over to that side. Telephone conversations can also take place in there. Do not go out the door out of this side room, I made that mistake yesterday. If you do go outside to leave the building and you are coming back please remember to leave your badge at the front.

All the conversations here today are for market research only. There are no procurement implications based on those conversations. So any discussions that federal employees are making here include no procurement implications, market research only. Note that federal agencies have many, many moving parts and folks cannot speak for an entire agency. So, as individuals here in the room who are federal employees that are engaging in conversation so it is limited to their scope and could include some personal opinion in a conversation so it is not official policy that you are hearing during these conversations. Did I miss anything on that Gail or Steve, anything else to say in that regard? Okay.

We do have Steve Posnack in the room; raise your hand, Steve. Larry, OST, the Director of OST. We have folks from the Office of Programs and Engagement, Larry Jessup is here. I do not think John Rancourt is here today, but there are folks who have interest in provider directory from a larger scope than just the technology standards that we are actually pivoting on today. Matt Rahn is in the room who, with John, did a lot of work on the HPD standard. Matt are you here for people who don't know you, Matt went off to get tea.

So, the WiFi password…can folks see the WiFi password somewhere? It is the same as yesterday if anyone needs it. There are power stations around the back if you are needing anything and I think that is it and we can go ahead. Rim Cothren will continue.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, today should be an interesting day, yeah. About 50 people on line. So, thank you everybody that came back today I take that at least as partially a good sign that you were not so upset with yesterday that you stayed home today. So, I do appreciate people coming back.

Today is going to be an interesting day. It is going to be a little bit of a challenge. We do want to try to keep people online, engaged with what we are talking about today so that means I am going to be running around with microphones and we need to try to use the microphone to the extent that we can, but I do want this to be a conversation. There are no speakers today. There are no slides today so that means that it is us to add content to talk about the issues, etcetera.

We are also going to deviate a little bit from the agenda and it is because there are things on the agenda that I didn't hear anybody want to talk about yesterday and some things that are missing from the agenda that it sounded like people wanted to talk about. So, I'd like to make sure that we are flexible today in what our topics are.

We are going to spend a little bit of time this morning trying to answer some of the questions that we skipped over yesterday. We purposefully went through yesterday's presentations quickly so that you could get a flavor for all of the stuff that is going on and I'll tell you right now there were people who wanted to be presenting some of their own work that we just couldn't fit into the time. There is a lot of stuff going on and we thought that was important but it meant that some of the questions did not get answered and we will spend a little bit of time with that today.

Part of this morning's exercise is people have been doing a great job putting more stuff on the wall. I was very happy we had a sheet and a half over here when I walked in this morning and there are five now and more coming in from our remote participants. So, that's good.

What we are going to do is we're going to talk a little bit about questions and then we're going to break again and I want people to go through read everything that's on the board and mark what you think the high priorities are and that may drive some of our discussion during the morning.

So, we don't have sticky dots or anything but we do have colored markers. So, what I'd like everybody to do, and this is honor system don't go marking everything, but to choose what you think are the top three priorities on both use cases and on scope, what you think are the top three and mark them with a green dot. I think we have green markers. Mark them with a green dot. If we have a whole lot of green dots then let's make sure that we talk about that.

There may be some places where there are a few that are surprising and we'll talk about why a lot of people didn't choose those or why some people did. I'd also like people to…now don't be nasty here, but to take a red marker and mark one that you think we shouldn't be considering right now, something that we should not be doing as part of scope, because I think that will also be interesting for people in the room to be thinking about things that somebody thought that this was important but there is some consensus in the room that we are not ready for that yet and I want to talk about those things too. Now that may not drive what everybody goes home and does next week, but I think there will be some interesting things for us to do.

So, that will be where we are going to break and ask everybody to do that. Three, green, your top priorities, one red, if you think we should do everything and don't want to mark anything red that's fine go ahead and do that. All right.

The other thing that I'd like to ask everybody to do is to think a little bit during the break time, one of the things that happened with me just last night, we went out for attitude adjustment and networking and somebody turned to me and said "so, Rim, if you won the lottery tomorrow and you decided you weren't going to do this anymore, so before you went off to the Bahama's you were to give one piece of advice, what would you do on provider directories?" I thought it was an interesting question, because to be honest with you I couldn't tell you for sure.

And I'd like to challenge everybody to think, if there was just one thing that you thought was important what would that be? I think it's an interesting thought experiment if you only had one thing that you could pass on. So, I'd suggest that you think about that a little bit this morning too because it ought to be driving some of your thoughts and your participation in this morning's conversation.

All right, this afternoon, what it says on the agenda is "panels." Well you are our panel, okay; I'm not pulling people from the audience and saying "you're going to talk about these topics." And we're also going to deviate a little bit from the topics that are there. For instance, I think one of the topics that is on there is scalability, well, let's face it there are IT people that are going to solve the scalability problem and I'm not sure that we know enough about how we're implementing things to have a useful conversation about scalability.

But we did talk yesterday about sustainability in some ways. I think it was David that said that when he is polling his users they don't want to pay even a little bit of money for this information. This is something that should be maybe a public service or something that it is critical to them but they don't want to pay money for it. So, how do we sustain something? How do we deal with that fact and so at least I would like to talk a little bit about sustainability this afternoon?

But the truth is whatever we talk about this afternoon is going to come from what people here in the room want to talk about. If I choose a topic and nobody says anything then we'll move onto a different topic and if you think that there is something that we're missing then I would really encourage people in the room to shift things.

Okay, so now that means that we're going to have a little bit of semi-organized chaos today and yeah we are, hopefully it is semi-organized, but it is because I think that yesterday we heard presentations about what people are doing. Today I'd like to really talk about problems and see if we can at least start to reap some consensus on what the important problems are. We probably won't solve them all today but if you can also make some connections in the room with people that might be able to solve them so that you know who you are going to work with next week and next month to try to deal with some of these things. And so I think that ought to be one of the outcomes. So, if there is an important problem that we do not address this afternoon than it is all of our failures so I really want to make sure that people speak up.

The last thing that I will say on that topic is that I still looked at yesterday's conversation and it is interesting, I think that the representation in the room is hard on the side of people that are worried and working on interoperability in health information exchange and so there was some representation in conversations yesterday that did not come up and I would encourage people to think about some of those outliers and some of them are on the charts here and I think that's good. But there are stakeholders that may be under represented here in the room and I would encourage people to speak up and let's at least voice some of the other stakeholders to the extent that we can.

For instance, are there any providers in the room? And so we have one provider and we're getting a provider perspective through surrogate. So, I think we need to be cognizant of that fact. Are there any consumer advocates in the room? One, okay, but consumers should be part of all of this too maybe and so I think that we need to be thinking about that a little bit. Are there any plans in the room? So, we have two plans, so, there are some other people and I would encourage you to speak up today.

One of the questions I got yesterday was "am I in the wrong meeting because my constituency doesn't seem to be talking here?" And I would say that for today the answer to that is "no" no matter who you are, you are not in the wrong meeting, we need to be starting to think about what some of these edges are.

Even if I go home, to California, tomorrow, well, Friday, and start working on things there and I'm still going to be concentrating, if I am still concentrating on providing provider information to providers to enable health information exchange, which is my narrow use case, but I know that next year I need to be providing provider information to consumers that will change how I implement it next week. And so I need to be thinking about those other things and I think we need to make sure that they come up in the room.

All right, Dan, are we going to talk about some of the questions from yesterday? Do we have a printout for me to go through from yesterday's questions? Okay, all right, so apparently I get to stall for a few minutes. Maybe I'll ask the audience real quick, does anybody else have thoughts from yesterday? Thoughts on things that they would like to make sure happen today? Bob?

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services
Dierterle, yesterday was an interesting set of presentations. We saw everything from directories being used to identify provider relationships to health plans and work that is going on in that space; to at the far other extreme directories that only have listings of individuals that have Direct addresses.

I think it would be useful today to establish our use cases not at that level of detail but the top five or six broad use cases that we saw represented yesterday. Example, are we here to go in provider directories to discover electronic service information? If the answer is "yes" great.

Are we here to provide a directory to discover a provider whether they have it or not? If the answer is "yes" great.

Are we to go on provider directories that has other information, credentialing for example? Okay, if the answer is "yes" that's great too.

But at some point we need to go and lay out those high-level use cases summarizing this and then ask if we're trying to solve one or more, or look for the common elements, because yesterday was a very broad representation of approaches of using directories in the industry but I do not think it led itself to coming up with a solution that can be implemented either in one place nationally or across the country.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Any other?

Kevin Joseph – Technical Services - EPIC
This is Kevin from EPIC; I would like to echo that. I think there are a lot of different use cases that we talked about and we need to find the common ground for all those use cases and decide how to accomplish at least that common ground.

From my perspective we all need to share provider demographic information, we all need to identify providers across directories, organizational affiliations seems like a very important piece of data. So, how do we accomplish sharing all that data among all of us and then we can all take a bite out of that pie to solve plans and HIE, and all those other specific use cases building on top of that kind of core set of data.

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems
My Alex Izaguirre, I'm from Apprenda Systems and I think what is really interesting about the conversation we're having now is that yesterday's conversations or presentations actually underscores the complexity of the problem. I definitely agree that every use case has a particular amount of effort and focus that needs to be given to it but I think what we really should be cognizant of is that there are two problems we're solving here.

One is, how it is that these directories or the information that we require from providers is going to play out and how it is going to be addressed and the other is more of a platform issue, because the same data that you need for directories is partially what you need for credentialing, is partially what you need for an HR record, is partially what you need for a variety of different systems. And I think the complexity of what we're dealing with is how do we address all those needs yet properly address the business need in any particular context.

I think Rim you mentioned yesterday that context is very important. I want to make sure I'm speaking accurately.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
At least I did, yes.

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems
And I agree context is very important but I think that is where the organization is approaching it from, this what I need the data for, I need the data for this that's the context. But on the flip side the frustration that the providers are having is that "I've already given you that data in every single one of those context."

So, unless we start looking at the problem from both sides, I think we need both sides inevitably, we can't just look at one and we can't piecemeal it because it's a platform issue. It is an issue that we need the same data in a variety of different contexts.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, one of the things that I heard from a number of people this morning was that, yes, we made it clear that this was a complex problem but we need to figure out how to make things simple. If we try to boil the ocean today will we ever get there and I think that is a reasonable question for us to be asking and what

can we do to simplify things so that we make some good progress. And so I would challenge the room to think about that a little bit today too.

Nona Hall – Chief, Standards Adoption Monitoring & Reporting Division – DoD/VA Interagency Program Office
Nona Hall here, I am part of the DoD/VA IPO but I currently am detailed at the ONC and one of the things that I get the opportunity to work on is the Interoperability Standards Advisory and I'm not sure how many are aware of that, but I have it here if you want to look at it and I just happened to look at what we have in there for providers directory so it does in fact endorse the HPD and FHIR. And so I would just encourage folks to use this form as a way to get behind that or advocate for that, but it is one of the…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Or disagree with it.

Nona Hall – Chief, Standards Adoption Monitoring & Reporting Division – DoD/VA Interagency Program Office
Yes.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
And get things changed.

Nona Hall – Chief, Standards Adoption Monitoring & Reporting Division – DoD/VA Interagency Program Office
It also captures preconditions, dependencies and so it is a good resource to actually record what a group like this would also want to advocate for. So, if you are aware of it, great, if you would like to see it I brought it today as well.

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
Jeff Livesay from Michigan; absolutely agree that the dialogue around directories and what they do and how they work and interoperate should be use case-driven. The states that we are working with are very much use case focused with electronic exchange of the information.

However, one of the things I've observed, just yesterday and even today, is that we in this room don't even mean the same thing all of the time when we say use cases. And I use that only as an example because it is a central concept for us to find agreement around what are the priority use cases but we have to agree on some of our language and our terms.

So, I think a way to get to that and to some common understanding is, I've suggested this to Dan and Rim, an inventory that starts with a survey that basically for the provider directories that you have, that each of us have or know of, that the inventory would determine things such as your data velocity. How often do the providers or how often do you update the data. What APIs do you support? What is your platform in your stack? How many providers? Do you have ESI or are you focusing on other, what are the purposes of your directory?

And to assemble that information so that we can work toward the intersection of how we use different terms and concepts and to try to begin to standardize the dialogue and to work towards the other standards that Nona mentioned and also to determine the opportunities for federation and interoperability.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
We have a lot of hands. I was hoping that we would warm up the room a little bit here. Go ahead John?

John Donnelly – President – InterPro Solutions
Hi, it's John Donnelly with InterPro, what I took away from yesterday was, besides the complexity of the provider directory topic, the idea that there is a lot of use cases, some of which we've identified and some of which we may not know yet. So, for me maybe what we need to do is besides identifying the solution for a provider directory but rather think about it as a provider directory framework or I think I heard platform mentioned I don't know whether they are synonymous there but something that looks at a way to get at provider data out of a directory service and that can be extensible as we go forward and we learn more and we understand the variety of use cases that it might be used for.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
All right.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
This is Dave Marotz from Surescripts, I just wanted to second what Jeff said regarding use cases and the disconnect of what do we mean by a use case, in particular, I try to look at this through the framing of "what is the purpose of the data we're trying to retrieve?" In our world we think about it from the context of ePrescribing, I need to find a doctor to send a refill or a renewal request. So, I need to look at 697,000 doctors that are available to receive a refill or renewal and in that situation doctor within a practitioner context is very critical as well as of course knowing what type of message they support, they support refills, they support change messages each of those lenses of appeal.

The same thing in the clinical or sorry in Direct messaging, am I looking for someone or do I just need to get this into their clinical context so some worker can look at this at some point or am I looking for a consult where I want a back and forth dialogue with someone, both of those situations really determine what question I'm asking, who I want to see, who do I want to communicate with and whether or not once all that information comes back can I or does my system support it, all those pieces need to be in place, I found the doctor, I can talk to them across the right transport, they support the messaging format that I can communicate in all those pieces have to be in place across each of those use cases to make certain communication can happen.

Linda Van Horn, MBA – President and Chief Executive Officer – iShare Medical
I kind of want to follow-up on pretty much I think what you are saying which I think what thread runs across all the use cases, by the way this is Linda Van Horn, iShare Medical, I think the thread that runs across the use cases is that we know whoever is in the directory is somebody we can trust. And I know that with PKI and DirectTrust we can interrogate the certificate and know the level of assurance it was issued at, but sometimes other methods may not have that level of assurance.

So, one of the things I would want to have in the directory would be knowing what was the methodology that was used and what level of assurance or if it's a token what level of ID proofing was done on that directory entry to know that the person is who they are supposed to be, that they have been ID proofed and we know that they are really a provider. If we are going to exchange PHI we need to know for sure who we're sending it to.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

I think that there is an interesting topic that comes up here is that we are talking about moving provider information around, this isn't PHI, but there are decisions that are going to be made about the exchange of PHI and maybe other things and so there is a need for something perhaps to be part of the directory that we haven't always thought about whether it be identity proofing, whether it be…Eric brought up consent yesterday and whether consent needs to be part…I think we ought to be asking those questions and I'm expecting that some of those are going to get some real good disagreement in the room today, but I think we need to be thinking about them because some of the standards we're talking about do not necessarily support those things today. So, is there something missing there I think is a good question. Go ahead?

Brett Marquard – DoD/VA Interagency Program Office
My name is Brett Marquard, I'm from the DoD/VA IPO but doing work on the Argonaut Guide for Provider Directory and it is funny that…I had no idea how many use cases there were for provider directory and I go back to the statement about what's the core and how do we develop a standard that meets that core and then let folks build on top of that.

And so from my perspective today, I guess, big questions for me are, continue to develop out and support HPD or transition, I do not necessarily think we will come to a final solution here, but that is something that is on my mind.

And then also, trying to set that foundation of what the kind of core small use cases are, core data elements are which unfortunately in Oregon and some of these other places you are so far advanced beyond what that core is that it may not initially help you but will grow up into something that will help you and so that is kind of what I keep coming back to as I listen to the conversation.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Thank you.

Gail Kalbfleisch, MA – Director Federal Health Architecture – US Department of Health & Human Services
This is Gail Kalbfleisch from FHA and thank you for that lead in along with some of the other comments. I don't think that we're going to get necessarily finished today, I would be surprised. Doing something on the core would be great.

I would kind of like to know how many people would be willing to share their use cases, their ideas and their, dare I say, architecture for their concepts moving forward and work as a group to actually, I don't know, maybe capture that information in a consistent, repeatable, reliable, authoritative way so that we can have a picture of where we're going moving forward. Who is willing to share their work? Who is willing to actually help do it?

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, I think it is encouraging how many hands went up in the room and this is one of the things that I keep hearing is that there is a request…this is great, people are arguing over the microphone which is wonderful. Let's not get bloody about this we still have a FHIR versus HPD fight coming up.

But I do think that there are a lot of questions that I have gotten that I know, am I willing to publish my API, well, yes, I do publish my API but none of you people know where to find it or ask Jeff, are you willing to tell me what you're doing in FHIR. Well, he has published that too but nobody knows where to find it and I think there are a lot of people in the room that are interested in sharing and we need to come up with a decent way to share that information because there are a lot of people that believe that through that sharing that we'll make better progress. I think that's good. There is a microphone over here someplace.

Carl Leitner, PhD – Associate Director – IntraHealth International
Carl Leitner with IntraHealth, and just a little bit about my background we work in global health so, thank you for yesterday, I learned a lot about the domestic context that I did not know. We supported health worker registries which is the term for provider directories in the global health context in seven countries.

There is a lot of overlap between the global health context and the domestic context. I fear that we're not sharing resources here. There is also a lot of federal government investment in health worker registries abroad that we're not leveraging here particularly CDC and USAID.

Just to give some specifics and to add to the FHIR versus HPD fight, we did try HPD in Zimbabwe and it failed. The data model wasn't rich enough, it wasn't able to deal with integration needs that we had from the various health workforce information systems. Largely out of that we went to IHE ITI Committee and developed the care services discovery standard and that's gotten a lot of legs, it's very integral to PEPAR'S new global reporting system. So PEPAR is the President's Emergency Plan for AIDS Relief and they are operating at 55 countries and doing massive data integration and data collection. So, I want to add that in. I am a co-author of Care Services Discovery so you can take that with a grain of salt, but we have done a lot with that and I think there is a lot of commonality.

Another thing that we can look at that's not Care Services Discovery is the WHO has a minimum dataset for health worker registries, it's part of their plan for these national health workforce accounts where they are trying to figure out what are the providers across multiple countries. I think that would also be a good starting point to look at in the domestic context with flow in terms of what is the data model…the base data dictionary to look at to support multiple use cases. Thank you.

Ron Urwongse, MBA – Senior Project Manager – CAQH
Hi, I'm Ron Urwongse with CAQH. Just wanted to piggyback off of the discussion around use cases a little bit more. I know that from the provider perspective knowledge of the use cases of their data is incredibly important. So, if a provider knows that the data is going to be used for credentialing or for publishing within a provider directory or for enrollment or other things they are going to be looking at their data in a slightly different way even though you are asking the same questions. That is something that we have seen as we have transitioned from kind of a purely credentialing model to other use cases or health plans who are utilizing the data for us. If you just ask the question a slightly different way or frame it providers will exercise an incredible amount, more scrutiny on certain aspects of the data. So, I think that's incredibly important to.

As we are collecting data from providers in multiple places and then using it for primary, secondary and tertiary use cases that we are making it very clear to the providers or their surrogates what that data is being used for.

And then secondly, I just wanted to piggyback off of yesterday's discussion and I know there is a lot of discussion around federation concepts and I wanted to explore a little bit more about kind of the challenges around federation and I wanted to see if there is still any debate around single source of truth versus federation or if that was kind of a bygone conclusion that federation is the preferred model from the industry.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, let's not have that argument right here yet.

Ron Urwongse, MBA – Senior Project Manager – CAQH
No not right now, yes, just wanted to put it out there.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Part of our discussion today I think we should be thinking this is meant to start to explore some of the technical as well as just the business and operational ideas about how to deal with provider directories so we should be asking some of those questions too.

Okay, so I've got five people in the room that have asked for the microphone that do not yet have it in their hands. We are going to call it quits after that. The message from that is you need to be urgent and get your hand in the air or else I'm just going to pass on. But I do want to come to some of the questions that we got from the audience yesterday then we'll move to voting. If you do not get the microphone in the next five minutes hold those ideas and make sure that they come back. David?

David C. Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor – American Academy of Family Physicians
David Kibbe, DirectTrust; first of all I would like to say that it is a real pleasure to get all these opinions, I'm listening very carefully. I think everybody's voice here is well heard. I think one of the issues here is the value of these data that we're talking about. We do not have a NASA system in every state. We have a countrywide NASA state. We have a program for space exploration that's in our country. I think if we had a single payer system this problem would be solved almost overnight.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Is that what you are advocating for now?

David C. Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor – American Academy of Family Physicians
Well, I think…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
We'll never get to FHIR.

David C. Kibbe, MD, MBA – President & CEO – DirectTrust.org, Inc.; Senior Advisor – American Academy of Family Physicians
One of the reasons people are building these directories over and over again is because this information is extremely valuable to their business models or their social models, or the combination of both and we wouldn't be doing this if we had a unified healthcare system or we had the federal government willing to come forward and say "this information is so valuable to so many constituencies that we're going to create an NPPES that is really kept up-to-date all the time and people could federate off of that." So, I think that is one of the issues that we are confronting is that we have a very fractionated fragmented healthcare system and we are a symptom of that we are not the problem.

Fred Trotter – Founder and Healthcare Data Journalist – Not Only Dev
So, one of the quotes that I love from Economist…oh, my name is Fred Trotter. One of the quotes that I love from the Economist is that the law of unintended consequences is the greatest force in the universe. In general, no political decisions that get made at meetings like this for health IT in the past have resulted in typical with a reduction of patient access to digital records.

If we have to choose between doing nothing or very little, or doing something which is going to damage the ability of patients to get their digital records we should do nothing or very little. There are at least two ideas, one is having provider directories where the digital end points to allow patients to get access to doctors is not accessible to patients and then also treating level of assurance as though it is a platonic ideal which is totally exclusive to the notion of trust that is established between a doctor and a provider.

Very soon I am going to have a meeting with my doctor and he is going to do very inappropriate things to my prostate and the notion that I need to have some third-party come in and say that I am trustworthy to him or that he is trustworthy to me is insane.

So, both of those two ideas, the notion that digital end points should be hidden from patients or that level of assurance is something that should be applying to patients interferes with the patient's ability to get digital copies of the records. In general though I think the attitude of us really deeply considering the consequences of our decisions to how patients have access to the digital should be the top priority if that's at all possible.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, I think that there are some good things that you're bringing up there and we do not have an HIE meeting today. However, we are talking about something here that is supposed to be enabling of the exchange and access to health information and so I do think that we have to consider these issues very carefully and that they are a trade-off between security and access that really need to be voiced and we need to deal with this. Bob?

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services
Yes, Bob Dieterle again, a couple of things we might want to consider as we discuss today our approaches, we have to ask ourselves how often are we going to ask a provider to provide their information and how often are we going to validate that information. It is one thing to talk federation for the sake of workflow; it is a very different thing to talk about federation to accumulate the base reference record. So, we need to literally think about what we're trying to implement.

The other thing, we also need to do when we think about things like HPD is separate what we use as a data model for exchange of information from what we use as a data model for implementation of workflow. The problem we have is we tend to think of it both, HPD is a data exchange model, it is also an implementation model. If we break it apart and say it is a basis for exchange you implement what you need for your workflow which is typically far more complex than maybe we can start to address the topics independently of each other, worry about interoperability and not worry about what is inside the black box for workflow.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Thank you. Can I just ask one real quick question in the room? How many people in the room know what MITA is? That is more than I would have thought, that's good. One of the things that is important to the whole concept…for those that do not know Medicaid Information Technology Architecture, and one of the things that is important about MITA that it makes a big deal about is that you start with a business architecture and then you move to a data architecture and then to a technical architecture from that and I think that one of the things that we need…we are going to fight about standards today, we just are.

But one of the things that I do think that we need to do is bear in mind what are not just the use cases but the business processes and make sure that what we are doing deals with those and to some extent it gets to what Bob is talking about too. If we are looking at the ways to move information around should we be dictating architecture and other things and I think that is a reasonable thing to be thinking.

This is the last time the microphone is going out. This time we are going to turn to some questions and then we will come back around.

M
So, I think some of the points being made by CAQH and Fred Trotter, I think it is really important to think about the context of the data and separate that from the mechanisms by which we you were saying. I think you were kind of saying that as well.

So, if you look at it from the perspective of someone asking you, do you smoke, that question is a very loaded question depending on who is asking it. You might sit there and say, okay, well, you know, I'm a female and someone is worried about my child that I might be pregnant. I could be having an advocacy group that is trying to say, hey, you know what we're just trying to help people that are trying to stop smoking or you could be in an insurance plan where I am kind of worried whether my insurance rates are going to go higher. There are a number of reasons why something may be asked of you. So, it is really important actually when we think about building a framework to segregate the use case from the data architecture that is going to provide that data to the groups.

As a CIO, a former CIO, I think we need to be very cognizant of that because what we tend to do is kind of bring together the use case with the technology and then we find that technology is not flexible enough to address all the different use cases. So, if we can abstract the framework of technology from the actual use cases and let all the organizations work their use cases out through whatever technology they want to build but API back into a source of data that is true and clean, I think that is a better approach.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Thank you. Last one.

Andrew Kobylinski – Head of Platform - BetterDoctor, Inc.
All right, hi, it is Andrew from BetterDoctor. So, I'm hearing a lot of great conversation, for me this has been a new use case and the kind of data interchange from medical records is a great one, but day in and day out our company has been living kind of a use case where people are trying to have really great data for referrals in telemedicine. A doctor in one region trying to refer to a doctor in another region and getting all that data. And the problem I run into every single day is that I hear about great efforts, people working in provider groups and building a new dataset, a new state-based x, y and z, but you know what you just created another golden gem buried underground that no one in this world has access to and I can't get it out to the doctors, I can't get it out to the folks that are trying to build new referral Apps.

So, there is I think an overall theme that we also need to talk about that is where there is some protection and like CAQH model making sure that a provider authoritatively approves every single instance, at the same time those organizations are blasting out network files to reputation.com and Yext and just desperately trying to get the correct data out into the marketplace.

So, we do have a conflict in that we're very protectionist sometimes in areas that are really silly. When those organizations we are trying to protect at the same time are trying to block their data out to ecosystems and when they block it out there is no resemblance or understanding of what is good there. So, it is hard to work with.

So, as a theme, I would like to also, as you think about your project think about making it user accessible. So, if you create a golden nugget let everyone consume that. Let's not hide that.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
And I think those are good comments to close this on because I think that we do need to be cognizant of what we can do to share information when it is appropriate and protect information that really only needs to be protected and that is going to be difficult because there are legal and regulatory issues associated with protection but there is also the perception that this is sensitive or private information to me that we have to at least consider. So, it is a difficult topic and let's make sure that we talk about that one today.

All right, I really appreciate all of the discussion. I am already concerned this is my third cup of coffee today that this is going to be interesting. I do want to turn to a few questions. What we are doing is we are writing down the use cases that are coming in from the rest of the room. We are already behind schedule but it is behind schedule for I think good reasons and Dan has not yelled or started throwing things at me yet.

I do want to turn to a few questions that we got off of the remote participants yesterday because I think that there are some good questions here that are useful. The first one is to Britteny; see that is what happens if you come back is that people ask you questions.

I would be curious how you are coordinating with other states many health plans participate in multiple Medicaid programs, is Oregon working with other states to come up with a single solution?

Britteny Matero – Director - CareAccord
So, I would say that Oregon is involved in many conversations around that but we have not hit on a single solution but we are very interested in how we might coordinate and partner with other states to make our data interchangeable and to exchange that and be able to provide that out to those who are within Oregon.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay.

Britteny Matero – Director - CareAccord
Does that answer that question?

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
If that is your answer. The question was asked to Britteny but it is probably worthwhile to ask the other states that presented. So, are there things that are going on in Rhode Island to try to…

W
…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay. How about Michigan are you doing things across state to coordinate what you are doing with provider directories explicitly, maybe with some of the neighboring states?

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services

A little we have done things with snowbird states like Florida to exchange direct addresses... and we are also working to implement in other states like New Jersey. We do not have a lot of crossover with New York…

W
…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
No you gave me the microphone back.

Britteny Matero – Director - CareAccord
This is Britteny Matero again, I would also say that this has been stakeholder driven as well for us. We have had a lot of requests from those that we work with to be able to have that cross referral and so we have done a lot of reaching out to our border states to initiate those conversations and have them.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay.

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
We do have an unusual situation in that health information exchange that is physically in Indiana called INHIN often confused with MiHIN is the Michiana Health Information Network and they belong to our network but they serve South Central Michigan and Indiana where there is a lot of crossover.

One of our HIEs, Great Lakes Health Connect, has addressed the crossover with Ohio and then our Upper Peninsular HIE called, UPHIE, has addressed the exchange with Minnesota and Wisconsin. We have not done anything with exchange with Windsor which is south of Detroit but that is worth looking into in the future.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
The next two questions are for you. First of all…well the next two questions are we going to have places on the agenda to talk about consumer access? And the place on the agenda to talk about consumer access is going to be today because it was not on the agenda anyplace yesterday and if people want to, and at least some of the people on the phone yesterday did, and I think that there are some people in the room that want to talk about that also. So, let’s make sure that we do discuss that some.

The next two questions are for Jeff and I’ll just ask them both here because they are somewhat related. How do providers in Michigan enter their data and where, and how do you motivate providers to give you data on a monthly basis?

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
I wish I could say they were all using FHIR APIs but they are not. Today the providers, the physician organizations submit a file to us monthly, which is actually a spreadsheet and we call it the Active Care Relationship Service File and it contains the information about the providers, that is that great, current free, accurate information but it also has a panel for each provider, their patient panel so that each provider is attributed to all of their patients and that is how we do the care coordination use cases.

So, why would they do this? Why would they send this to us monthly? Well, at first kicking and screaming they refused and so then the major health plans like Blue Cross Blue Shield of Michigan, which is 70% of the commercial insurers of Michigan, that's about 4 million members, plus state Medicaid said "well, if you don't you won't get your incentives." So, they started sending the files.

So, every year the blues have, they have a thing called the PGIP, the Physicians Group Incentive Plan, the have another incentive plan for hospitals and they said, if you don't send these…files to MiHIN to participate in the service you won't get your millions of dollars that we hand out to you each year and so that carrot that could have become a stick was part of getting it kick started.

But then when they realized that if you get an ADT for one of your patients and you call them within 7-14 days, depending on certain situations or call them within two days of discharge and get them into the clinic within 7-14 days, for example in the Detroit area for Medicaid or the Blues you would get an additional $300.00 just for doing that in addition to preventing re-admissions the physicians said "wow, I can make a tremendous amount of additional money just by participating, I want to get accurate data to MiHIN so I get all the notifications of discharge for my patients."

One small physician organization has told the entire PGIP that means an extra $40,000.00 in revenue for their PO of about 400 physicians per month. And so now it is beyond the payer incentives it is we are getting better outcomes for our patients because we are changing bandages after discharge and reconciling medication and removing stitches, and preventing infections and re-admission and we are getting paid more.

So, it is self-incentivizing now, it is a feedback loop. So, that is why they want to give us the current data so they get the coordination of care messages.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
There were a number of questions about how does the information get updated and what is the motivation for that? Britteny do you want to talk about what you are doing in Oregon?

Britteny Matero – Director - CareAccord
Absolutely, well, again, our solution right now is very basic and in-elegant, very manual. We do ours on a monthly basis as well and it came back to the fact that what is reasonable for the organizations that we are working with to really have to do this manual type of work and everyone felt that it was reasonable to do that once a month and that anything that was a little bit sooner than that was more burden than it was help and so we do that piece on a monthly basis in Oregon.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay, thank you. Do you have something?

Elaine Fontaine – Director, Data Quality & Analysis - Rhode Island Quality Care Institute
Elaine Fontaine from Rhode Island, we are also getting monthly provider files in that exceptional Excel format from the hospital organizations. We are also, because of the state SIM, are getting data from the health insurance exchange and our all payer claims database, those data are coming also monthly. So, we have a variety of sources.

Additionally, we have the folks who previously were part of our Regional Extension Center are out in the community and so we have our own internal sales force database that is updated on a quite routine basis. So, there is a variety of sources not simply from the providers.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay.

Brian Postlethwaite – Senior Solutions Architect – Telstra Health
Brian Postlethwaite from Telstra Health in Australia. I guess I'm really appreciative to hear how you are experiencing trying to get people to update your content and yes it is a problem down south as well. One of the things that we have found that really gets people actually putting their own content in is it's about "what do I get out of it" and so that is if you are getting something out of it you will make sure your data is right. So, a lot of our cases people start getting in when they are getting stuff out of it.

So, the real detail we get out of it is if organizations are getting lots of electronic referrals coming in and it is giving atomized data that they do not have rekey and it is really improving the internal workflows they really have a definite interest in it.

If the system goes down and they are not getting their referrals they know about it instantly. They want to be up and running. So with a lot of that we are getting those electronic inputs. If you are waiting a month to actually get that new end point, to actually start sharing your lab results or sharing those referrals that's a lot of time to be waiting to start receiving those messages. So, we find that in those sorts of cases people are really saying "I want to get those end points in straight away so I can start really getting value out of it."

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
This is Dave Marotz from Surescripts I just want to give an example from our ePrescribing workflow. We have integration it is not the end all be all but having integration into 700 EHRs does help. We have a requirement in the ePrescribing world that within 24 hours, at most 48 hours, when doctors move locations to make an update, that doesn't necessarily always equate to an update coming back into our system via our APIs, but when those doctors are seeing more faxes there tends to be a reporting and self-correcting that perspective.

I will say also, additionally, because of some of our systems and their complexity in saying "well, I've got 1000 doctors at 100 locations and I have no idea where they are going to be at any point in time" we are implementing a process whereby we will be looking at newer transactions and if those doctors are interested in receiving refills, hence, wanting to receive communication coming back into them, learning from that activity on the network to improve and augment our information to get that more timely information since a lot of other sources are looking at payer information that might be at best days, potentially weeks behind and may only represent a location of business not necessarily a location of care.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Thank you. We will do one more but one of the things that I want to make sure that we talk about this afternoon when we talk about data quality or these processes, because that is what is important and it is not just what motivates things, obviously there has to be value or we are not going to get people to participate but there are also barriers and I do not see Sarah here but one of the things that I do know is part of the AHIP Pilot is providers getting pounded on from multiple people for the same information. How do you deal with that because eventually despite the value you are going to get people no longer participating in that process because they are just tired of it and "I just gave that information yesterday."

You think about you and your clipboard every time you show up to the doctor, well that is happening to providers too and so we need to do something about that. One more.

Kevin Joseph – Technical Services - EPIC
This is Kevin from EPIC; as one of the EHR vendors that are generating those magical Excel files I just wanted to comment, make sure people understand how healthcare organizations actually generate those files. So, they are already tracking that information all the time. They need to know where doctors work that drives clinical workflows, the tools that are available to them at particular departments. Doctors or administrators are already collecting that data for doctors. So the monthly Excel file is obviously not great but it is pretty easy to produce for us and ideally we want to move to something more real-time and more automated.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
All right.

W
…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
All right.

W
For those that we have exchanged with that have different EHRs the process is very different for each one of them and it might be easy for them to extract their spreadsheet or their information to us, but to then…there is a lot of manipulation that they have to do currently in order to get the information back in. So, they might have to filter out and take out the addresses that do not have NPIs associated with them. They might not know how to put them back in if they have a facility level address versus an individual address.

So, it might be easy to do the extraction but there is work when it comes to how do they get that information back into their system. That is at least what we have noticed.

W
I decided to grab the mic to just say that we are also finding that we are getting a lot of data from the hospitals actually not from the hospital EHR systems but from the credentialing systems which help us to understand the physician to organization relationship which may not be so clearly identified in that end-to-end point of the organizational NIP sort of data.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So that complexity is coming back just again not only is it a complex set of data that we are trying to move around but a lot of different sources of that information some of them potentially conflicting and how to you deal with that. Okay, we are going to come back to talking about that. Let’s see we are 24 minutes behind already. But I actually do not feel too bad about that because we are already touching on some of the topics that I am expecting us to get more into this afternoon it gives us some flavor of what people want to talk about.

We are going to stop here for a second and do our exercise for the morning and people have been very good about writing up on the sheets up here use cases and scope and their opinions about what we should be considering.

So, I am going to ask everybody to identify their highest priorities now and again take…do we have a green and a red marker over here? So, take the…okay on this side of the room there is apparently only one green marker, so over here do blue and red, everybody knows what red is. So, identify three of your top priorities in blue and if you really feel strongly that something is out of scope and should not be considered mark it in red and over there, there is a green and a red one on the floor and mark those.

We have added some on the wall over there that came in from the audience. Are we posting these for the audience?

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology
For those of you attending virtually if you update the images page you will find all of the sticky posters from the wall and you will find them numbered, yes the numbers are not sequential that was a mistake, so if you put the number of the page you are looking at and just a brief description of what it is and you can send us, via chat, your blue dots and red dots.

I also have a take away from that first session there. There was a discussion where there is room for market research to gather information about systems that are out there. If anybody wants to talk with me briefly off line about the attributes that we should be collecting, for example the name of the system or who the contact person would be, what use cases your system addresses, what APIs it exposes, any URL where we can get other information, standards you invoke if people want to join with me just to make sure we are capturing the right attributes as we are asking for information that would be great. Thanks.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
All right, thank you. So we are going to take 20 minutes to mark priorities. So, please do that quickly. I am sure that there will be some conversation and we do have people crowded into two different places in the room so it is going to take a little time as you move back to your seats and we will talk about what people's priorities are and discuss that a little bit more.

The other thing, just because I will forget later on, people participating remotely have been raising concerns that they cannot always hear and we have been passing the microphone around so just make sure that you actually speak into the microphone so people that are online can hear you as well. All right, so 20 minutes back and we will review what people are marking. Thank you. Threeish green and oneish red.

Break to mark priorities

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay, so I am not going to be exhaustive here, because I cannot be, but what I do want to do is at least touch on some of the things that seem to get some consensus here in the room and some of the things I think we probably are not going to be surprising because we have heard them over the past few days, but some of them might be and what I am hoping is that people that voted for or against some of these things are willing to talk about why because I think that that's part of the conversation that we should have.

In theory we have also marked on the board what people have been voting for remotely so hopefully those are up there as well. So, if we turn to the use cases, just right off the bat, one of the things that is marked clearly with the most number of dots is define ESI. I think that this probably reflects, at least to some extent, the people that we have here in the room we have been talking about health information exchange a lot and I would like to just say that this is a given unless somebody wants to talk more about that one. It clearly got the most number votes on any of the charts. Okay, so we can move beyond that one.

W
…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
I cannot hear myself. Let's see, what else do we have up here? We have provider organizations and locations and add services got a lot. So, demographic information but I think at least part of that was making sure that we dealt with not only individuals but organizations, we have talked about that some.

Business drivers tied to use cases. Somebody that voted for that or maybe somebody that wrote that up can you talk about that one a little bit? Oh, come on everybody wanted to talk just a few minutes ago. What it says up here is business drivers tied to use cases and it got seven dots next to it which is quite a few if I look across them. Marty?

Martin Prahl – Health IT Consultant, Accenture - Social Security Administration
So, what I was thinking with this one when I put it up there was it was around not just a use case but how do we tie it to a sustainable way to use it. Jeff mentioned yesterday from MiHIN that he was not getting uptick in the utilization.

M
…

Martin Prahl – Health IT Consultant, Accenture - Social Security Administration
Okay, thanks. That he was not getting an uptick when he provided the provider directory but when he tied it to another driver, which was financial essentially, you got uptick in it.

So, I think as we look at it, and it's the same from our perspective, from SSA's perspective, is the way we get organizations to provide us with their facility list, their provider directory essentially and they share it with us is we show them a value proposition "what's in it for them" from their perspective and it becomes very easy to get that kind of information from them to populate our directory.

So, when you are looking at this I think when you have that kind of tie in from the business side to the use case it becomes a lot easier to push this thing forward and that is what we put it up there for.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, how do we operationalize that?

Martin Prahl – Health IT Consultant, Accenture - Social Security Administration
I think you have to look at each of your use cases and understand what are the business drivers for each of the stakeholders that are participating. What's in it for them and why would they do this. Sometimes it is indirect, just as Jeff indicated, as far as the use case that you described, it is an indirect utilization of the provider directory. It is the same for us, the provider directory is just a means to an end for querying for a medical record but we show that since we pay for that medical record and there is indirect cost recovery here is the step that you have to do. So, it is embedded in the entire use case but you have to kind of show them again what's in it for the stakeholders from a business point-of-view.

M
But I think Marty absolutely nailed that one Rim and you asked how to operationalize it. In the early days we used to start out by writing the use case implementation guide which had all the bits and bytes in it

and the use case agreement which was the legal data sharing agreement for that use case and we did not start out with the business value proposition. So, we changed that, we improved our use case factory and we said we are going to start with a use case summary, which is the document that your grandmother should be able to read in plain English and it has not only the business value proposition of why would a health plan or a health system, or any other stakeholders sign up for this use case, what's the revenue model, who is going to pay for it and what is the cost structure, what are the challenges to implementation, what is the vendor preparedness and so we write these use case summaries to operationalize that business value proposition.

John S. Scott, MD - Program Director, Clinical Informatics Policy, Office of the Assistant Secretary of Defense, Health Affairs - Department of Defense

This is John Scott from Military Health System and first of all I would like to reiterate what was said at the beginning, I'm one voice in the DoD, we are a big organization, etcetera, etcetera.

But I would echo what is being said here. For us the problem that needs the solution that the provider directory helps provide is with referral management and helping to make sure that our managed care support contractors are able to appropriately connect with us and that we are able to share information. So, I see that as driving the way we would participate would be to facilitate the referral management organization that we already have.

So, it is not necessarily reaching an individual clinician or publishing individual clinician addresses, because that is not how we operate, but tying it to the business need for better ability to share information through our referral management system for us.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Thank you. One of the other items over here that got a lot of dots, let me read out exactly what it says here. It says, identifiers for providers, locations and organizations to uniquely identify them across directories. It is one of the things that I have heard from a number of people both today and yesterday is that we need to make sure…especially if we are going to be sharing information about providers and that there are different sources of information that is authoritative and I need to be matching things. Well, now we are replicating the same patient matching problem that we have in order to do provider matching across various directories except that we have a slightly more controlled environment at least, maybe. How do we do this? What do we do?

It is one of the things that people identified as important, how do we take a look at…how do we identify identifiers, unique identifiers for providers and in theory this ought to be a unique identifier that is system wide. So, we have NPIs now is that sufficient? What is missing? What else do we need to do? Jeff says "no."

Jeff

Well, I say, no, I'm the other Jeff. I say no because a lot of practitioners do not actually have NPIs and so we need something to deal with care coordinators and other kinds of nursing and other people that are part of the care team.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So this at least gets to stakeholders that a larger group of the definition of providers…

Jeff

If NPI could be expanded somehow, but I just do not see that happening.

W

So, on the individual level there is that problem but on the organizational level the problem exists that a hospital for example may have many NPIs and if you go and ask them why they don't know.

M

…

W

I understand, but if you talk to the billing person they do not understand how they ended up with 60 NPIs. One of our large IDNs is actually trying to consolidate them now because they cannot even understand why they have them. So, it is not a unique identifier for an organization and then the other problem that we are running into right now is that there are organizations that are at a hierarchy level that actually are not care providing organizations and do not have an NPI. So, a corporate parent does not have an NPI but to be able to manage the relationship in an organizational hierarchy that data is necessary.

M

I would just add that FHIR has got a person resource which can connect up different particular instances of practitioner and patient because after all physicians can be patients as well and it would be useful sometimes to know that.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

But doesn't that just propagate the problem now. That means that I've got many resources that I can touch on to find a provider, potentially the same provider, and how do I identify that I've got the same one? And I would like to think that we can figure out, yeah, I'm going to ask you a question and then take the microphone away.

I think that one of the things that we have to be thinking about is that we do not want…I mean, I would imagine that everybody here in the room would agree that name, birth date and gender is not working for us on patients. So, if we try to do that for providers do we have any expectation that we are going to make it work there. So, what is that we do? If we do not have an identifier today do we need to create one? Is there a mechanism for creating a small set of identifiers across all of the stakeholders in collection that works? Now, not again, gender and birth date, but if I used NPI and DEA number, and license number, and a couple of other things like that could I get there?

I think that if we are going to solve this then we need to talk a little bit about the how we solve that one too. So, I saw a bunch of hands go up.

M

Well, I can think of two ways to go and one would be to leverage Direct addresses because there is a pretty good level of assurance on that and then also we ought to listen to Aaron Seib talk about his voluntary identifier notions.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, what do you do about providers that have more than one Direct address because I know that happens, does that add ambiguity to the system? How do we deal with that? And yes I took the mic away again.

Kevin Joseph – Technical Services - EPIC

This is Kevin from EPIC; I was just going to say a Direct address is not sufficient because providers can have multiple Direct addresses one for each location, it does not allow you to identify providers across directories. I am going to be blunt when I say the federal government should solve this.

I think there is an opportunity for us to do something distributed for organizations and facilities because really only the organizations that manage that data should be publishing information about those facilities. So, they could self-assign what is called a UUID that is a really long string of numbers that is supposed to be so unlikely that you and somebody else generate that same one that there is basically not chance of collision. That is one idea that I have had for at least uniquely identifying organizations and facilities.

M

A Tax ID is a good way to differentiate an organization above and beyond an NPI but in the NPPES data the Tax ID is treated as PII even though it is technically not but it is not released. But if that were to be released it would make this a lot easier. In terms of trying to…

M

…

M

That would definitely makes things easier, but in terms of representing data the same there is also OEIDs and HPIDs and different types of identifiers beyond NPIs but I guess what you need is sort of one set of or one database where all of the people that can touch the patient can be searched for. So, it could be anybody with a Direct address, but like you said nurses and care coordinators do not have NPIs but you could have a single system.

One thing with FHIR is that if you are searching basically you are searching on a resource type, right? So, you are searching on a practitioner or an organization then you kind of have to search on both of those. It would kind of be if there was almost another resource type, maybe that is not a great idea, but a person, as Jeff said, some way to say "all of these people" or "part of this" could potentially touch the patient and you can hit that one resource and search that one resource.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay, so at least one of the things that we need to be thinking about is when we talk about organization how small of an organization are we talking about? The admitting department of a hospital probably does not have a Tax ID but perhaps it is necessary to identify and can use OIDs or something and can you get people to start…there maybe answers but we are not just talking hospital or physician. I think that it also goes to that there are lots of potential caregivers, there are also lots of potential organizations.

We have a couple from the remote attendees that made some comments, let's get those in real quick.

W

One comes from Rhonda May and she comments, the use of OID enumeration and sub-numbers is a much more logical way to create affiliation.

We have another one coming in from Kathy Meyer, what are the requirements for the identifier? Different constituents will require different levels of granularity, how can those be managed in one ID?

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, that is a really good question. And in my mind we say that there needs to be identifiers but what are we going to be doing with them and what impact does that have on requirements I think is a reasonable question. Bob?

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services

If we open the scope just a little bit and say what if we were to expand a current national resource whether it requires legislative work or not such as NPPES to issue, if you will, an NPI 3 which would be a non-billing provider and now we could potentially touch everyone whether they are touching the patient or they are supporting someone who is touching the patient. The point is we would have a single place where we could actually identify and establish a single number for everyone.

M

Yeah, I think, Rim?

M

…any person can get an get an NPI…

M

Because, no an NPI 1 is still…

M

No, no that's not true, if you actually…

M

…

M

So, if you look at the NPI standards there is actually document that says, who may get an NPI. And a person may get an NPI if they treat patients period.

M

…typically billing.

M

Well, there is a requirement, you have to get one if you bill Medicare or another insurance company because they are HIPAA covered transactions and you also have to get one if you prescribe. But you may get one if you treat patients.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, there may be a path there. Now of course still part of the question then is treating patients is that going to touch on all of the potential use cases. One of the things that I saw up here, and we will get to this in a bit, is the directory should also be covered in social services because that is part of extended care. Well, those are potentially people that cannot get NPIs. Are they caring for patients? I don't know.

M

There is OEID…

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems

Well, but I think the point that the gentleman made…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

We did have a complaint from the people online, people aren't saying their names, that includes me. I'm sorry.

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems

Alex Izaguirre; I agree completely with the gentleman in the front all we need to really do is think about this and say, okay, let's redefine what a provider index should be. Whether it does cover this or doesn't cover that that's irrelevant. Let's just start thinking, okay, if we were going to create the NPI that would address all the issues that we need…we are not going to solve it today, I mean, you are bringing up good points of all the different things that it might need to characterize, maybe it should be formed to developed that standard and then once that standard is created there is some legislature passed to make the new NPI version something that we can address for all our needs.

But to come up with different ways to triangulate on information is, in my opinion, kind of not addressing the issue because we are just assuming that we cannot change something that we can change. That is the point of the group here. We are here to make changes that are tough.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

I do think that one of the things that we need to bear in mind is we are not going to solve all of the problems here but at least this is one that sounds like we have a real issue that we need to follow-up on and I am hoping that this is part of what we do today is once we get all real frustrated that we have not solved this problem yet at least we identify something that needs some more work. John?

John Donnelly – President – InterPro Solutions

John Donnelly; I think you made a point earlier about possibly we should not try to have the answer in a single identifier that the identifiers might be related to context for one purpose or another. For instance, if we think about the provider or caregiver being involved with quality measures going forward, we talked about motivators for an individual to want to register their information, they are using, I believe, a combination of Tax ID and NPI to uniquely identify that person in the attestation for quality.

So, I think as we look at the kinds of identifiers that might be used for the different use case we may land on a set of identifiers that maybe under the covers we have something that is totally generic like UUID or some sort of thing like that which might be usable by the systems for their quick access, but from the external parties use it might be a suite of different identifiers.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

All right, thanks.

Ryan Askey – Manager, System Configuration - UPMC

Hi, this is Ryan Askey from UPMC. So, from our perspective we are an IDSS we are both payer and provider and I think something to understand is that providers are tired of all of this, to a certain extent, they were exhausted when we came to them about "hey, everyone needs an NPI by the way." And we badgered them and badgered them and eventually and now we have incredible participation rates. A provider without an NPI is an incredibly rare thing for us, they have to be commercial only, they have to send us paper claims anything short of that you need an NPI. And I think we have a real resource here and a program that even if not every part of their group is participating and has one, they have a familiarity with it. They already have 10,000 identifiers. Every insurance company pulses back to them with "well, here is your identifier with us." So, now they participate in 10 insurance companies and they have a state license number, they have a DEA number. They might have different license numbers in different states.

The more we exhaust them by and large the provider office has not radically changed, it is doctors and an office manager. The office managers are not all of a sudden IT graduates that know how to do any of these things. They are people that need a website that can deliver to them an experience they understand. They do not need to be bogged down by all of these things because the problem is they are barely keeping up with the things that we can throw at them to begin with.

When we have them on our Pay-for-Performance programs they are engaged, they give us data back but those are the people that already have been engaged. We have a footprint out there of providers in rural areas that they may not even have fax machines. So, I think there is a difficulty here with when we get into these solutions that the more we can modify any existing programs like NPIs why not give a type 1 NPI to every Tom, Dick and Jane out there? They can't bill with it but maybe we can store an identifier or let them know "well, you cannot actually bill with this" so you do not want to bill with this.

Providers are exhausted and they do not really have a ton more money to throw at all these things than they did 20 years ago. We have used weapons…well, you cannot send bills to us unless you get an NPI and that has worked well for us, but we are at the point of provider exhaustion of all these things they are going through and we need to drag them forward as best we can but on the other hand they cannot have nothing but anxiety towards all of the technology we are using to improve the experience of them connecting to one another and of them to the number.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, one of the things that I want to make sure that we do this afternoon is come back to the topic about how do we collect this information, get something that is accurate, get participation from providers without exhaustion because I think it is part of the whole data quality thing and I want to make sure that we do get a chance to touch more on that. Carl?

Carl Leitner, PhD – Associate Director – IntraHealth International

This is Carl Leitner from IntraHealth, so I just thought I would read the WHO definition of a health worker, it is all people who are engaged in the promotion, protection and improvement of the health of the population. So, that includes not just the clinical providers but this includes administrative support staff, the mechanic for the ambulance to make sure that your ambulances can run has been an issue in countries that we have, all the way up to the administer of health.

Having that more extensive definition in our experience has eased a lot of conversation. There are a lot more stakeholders that have been brought to the table that do have a say in the overall health system.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, although that does not necessarily figure out how we deal with identifiers it is at least a potential for a way to think very expansively about broadening the definition of who it is that we are talking about and at least try to put together an identification system that addresses them all, maybe.

Jeff Eastman, PhD – Senior Architect – Michigan Health Information Network Shared Services
This Jeff again, Jeff Eastman from Michigan, we are building in conjunction with our master person index a common key service that will allocate a UUID for every person in the state and we are going to use that for physicians as well and everybody on the care team.

Kevin Joseph – Technical Services - EPIC
This is Kevin from EPIC; I know there was a question on the phone about what the requirements are, just to be clear, we have already agreed that provider organizations, facility information can be provided from many different sources. We need to be able to consume all those sources, de-duplicate and identify which are the same providers and which are different to the point of provider exhaustion from a usability perspective we do not want them to search for Dr. Bob and see what looks like five different Dr. Bob's that are actually the same person, that is just not efficient and not good.

And my personal opinion is we already require NPIs for EPIC provider directories we need to require these identifiers in directories so that we have a consistent expectation for all the consumers.

Brian Postlethwaite – Senior Solutions Architect – Telstra Health
Brian from Telstra Health and FHIR if I map back to one of the biggest issues that we put on the board was end point location, so, if I look at just the straight use case of end point locations whatever this identifier that we have been talking about is actually insufficient. So, I cannot use that to actually determine if I want to send a referral into an organization, I cannot just use this identifier we have been talking about because that does not differentiate, is it in the east clinic, is it in the west clinic? The two clinics might be in totally different systems, one might be an EPIC system, one might be a Cerner system, one might be a Telstra Health system. So, just having an identifier is not necessarily going to be enough to make a determination of where I am going to send this thing. So, that is kind of important.

And then just to follow-up with what's in FHIR, I think two others have sort of hinted on it, is we do not have an identifier. We have an identifier's collection. So, from a providers point-of-view I can put in my NPPES, I can put in my state license, I can have my internal systems ID and then from a query point-of-view I can then go and ask for it and say "can I find the practitioner who has this NPI ID" or "do I have this?" And if I cannot find it I can do a search across the name and then match across and see is it someone I know something else about. So, I can do that sort of matching.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Before you give up the mic is there a name that we can put to your first point that an identifier for the organization is not sufficient? Is there a name that we can give that other piece of information that we need as well.

Brian Postlethwaite – Senior Solutions Architect – Telstra Health

Location, so it is that practitioner role, so the practitioner is doing work at a location.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, is location sufficient mapping to role or do we need role there instead?

Brian Postlethwaite – Senior Solutions Architect – Telstra Health

Because the practitioner might do multiple things at those locations as well.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Exactly.

Brian Postlethwaite – Senior Solutions Architect – Telstra Health

So, yes, it is a combination, exactly.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Alan Viars – President - Validity

This is Alan Viars again; I just wanted to point out that in OEID something that I do not think I defined that is another entity identifier that is another type of identifier that is handed out by CMS for people that are not billing for Medicare. The common example is someone…while they are paid in the course of care but they are not a doctor so this could be someone that drives someone to care. That number is a 10 digit number that really follows the same format as the NPPES number but there is no overlap. And the health plan identifier is also a 10 digit number and there is no overlap. So, you could, conceivably, have one system where you type in a 10 digit number and it would uniquely identify your health plan, your other entity identifier and your NPI 1s and your NPI 2s.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Thanks.

Fred Trotter – Founder and Healthcare Data Journalist – Not Only Dev

It seems like we are kind of accidently splitting things…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Name for people that are on the phone?

Fred Trotter – Founder and Healthcare Data Journalist – Not Only Dev

Oh, I'm sorry, Fred Trotter. First of all I Tweeted the NPI Rules and NPI Facts under the hashtag for the meeting so if you want to actually look at those you can. We might consider, for the purposes of this meeting, dividing things that we want to do outside of NPPES and things that we want to do inside of NPPES.

NPPES has already said, in yesterday's talk, that they are going to be adding Direct addresses and they are going to be adding many to one associations for addresses, physical addresses which addresses at least some of the things that we are talking about and then there is a case I think if people are in practice using UUIDs there are identifier spaces inside NPPES files already, I do not think they support UUID as a field type for those, in fact I am almost certain they do not. But if they did then all of a sudden you have a reconciliation moment inside the NPPES data to link two different identifiers and say, here is a Direct address, here is a UUID so that I am identified by the State of Michigan.

But just practically speaking, we should be talking about what provider directories are going to do outside of NPPES and we should be talking about what provider directories are going to be doing inside of NPPES and probably, most importantly, what the relationship is going to be.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

One more comment on this, okay, two more comments on this.

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services

This is Bob Dieterle, the point you made was good about multiple identifiers but I think if we keep it to the basics of an individual is an individual they need one identifier globally. An organization may have more than one but it is for a purpose related to some service being delivered, they have one. And now the question is, what are the relationships that also need end points and those relationships can be complex and based on a number of things, it could be based on an individual in an organization and individual in an organization within a role. But the point is the organization and the individual remain static. It is the relationship that defines additional end points. So, I think we have done this a number of times we do not need to lose the history of what we have done but we do need to put it in the context of what we are trying to accomplish.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay, all right, two more and then we are going to move onto the next one.

Elaine Fontaine – Director, Data Quality & Analysis - Rhode Island Quality Care Institute

Elaine Fontaine from Rhode Island, I think that you are right about that we do have the basic conceptual framework there. I think that if we come back to what are the business questions and needs I think we are missing interim layers and adequate clarity on the organizational IDs that folks…if they are not a billing entity they may not have an NPI as an organization but they really should have an identifier and that would influence where data is flowing as well as our ability to look at it, as you know I care deeply, about from an analytics perspective in the end.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay, one more.

Ryan Askey – Manager, System Configuration - UPMC

Hi, it is Ryan Askey from UPMC again. I guess one of the things as well and we have talked about this in the past where when we were getting providers to sign up for Type 2 NPIs they either got one or got 1000 and none of them made any…it did not make any difference as to what they meant. Some of them had different taxonomies some of them did not. Type 1 NPIs I think providers really understand those, it belongs one to a person. The problem to a certain extent is the location that has been talked about before. A lot of this has been about Direct address and that has worked well.

We have been, in the payer space, demanding provider location data as the primary means of organizing provider data since the beginning of time and there is still no good solution to it. And the problem is that the definition of what is the location or how can I even communicate what that location is varies.

Providers do not understand as a biller what their Type 2 NPIs even mean and since Box 32a on a claim is not required I cannot even tell you if they did not fill that address block out or a claim was rendered, which is insane and I should be able to use a Type 2 NPI to deliver that information. I think there are opportunities for giving structure to those Type 2 NPIs that can allow for us to shortcut some of those things as well.

The people managing these Type 2 NPIs if you knew that you had 10 and that these 5 belonged to these five offices, and these five were something more global the data is there, the structure is there, they already have the identifiers, the problem is the structure was not put in place to begin with, again, we were just trying to get them all to sign up for anything so that was a boon that they got Type 2 NPIs at all.

But when we manage location data the idea that if you are a provider group and you buy out another provider group and you absorb those NPIs what do they even mean? The NPIs that they had to begin with they had the meaning that someone described to them in their head and now when you require them maybe you hire that same office manager and maybe they can tell you what they thought each of those NPIs meant to them as an organization, maybe they do not, maybe you do not hire them.

I think that there is a lot of opportunity within the Type 2 NPI space to provide the basic bones of structure in a dataset that providers are already comfortable with to give meat to those NPIs and give them meaning and give them a means to communicate with every entity here what all of those things mean.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Thanks. I would say that we have certainly identified an issue that we have not solved today that there are ways to address it that we have a need to identify uniquely individuals and we may or may not have a way. We need to define who those individuals are in the context of that identifier that we have organizations and we need to define what an organization means, that we have locations or role, or some other context to these identities and there are some tools that we have and some experience.

There have been some comments from our remote people asking questions about NPIs and Tax IDs and what the regulations are, etcetera. I think that is one of the things that we need to get out and I would like to think that this is, at least what we have done this morning is identify one of the big ticket problems that we have, that we have lots of input into perhaps how to fix this and if we can come to a consensus on where to go that we can move the ball forward a little bit and I would say that is the purpose for today is to identify those big things and hopefully get people in the room that are interested in working on those and coming up with a potential solution. So, I would check that as a good outcome from today because I do not think we are going to necessarily solve everything. So, let’s write that one down.

Now the good thing is, well maybe the bad thing is, I thought that one was going to be easy because we had some partial answers and at least the thing that I would say is, there are no red dots on that one, nobody said “oh, don’t do identifiers.” So, that makes it sound good. So, let’s take a hard one here.

The next highest ranked item on here is consumer-facing directories including healthcare social services and community support. That got the same number of dots as a unique identifier for providers.

And then over here with the highest number of red dots is consumer care service and service coordination. So, what’s the deal? Are consumers part of what we need to be supporting now or not? Are social services and broader care services something that we need to be supporting now or not? Is now the question and not today but tomorrow? There are apparently some differences of opinion here.

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
Well, I put the big red dot on that one not because I do not believe in services, coordination, especially for the elderly, but our model is that all of that is done in the consumer directory not in the provider directory. So, it is a red dot because it is on the provider directory sticky pads. If there were a consumer directory sticky pad it would have a green dot from us. Does that make sense?

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, what is…

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
Our consumer directory is separate from our provider directory. They have the same…and what connects them are those patient provider attributions in the object model. So, they are connected but they are separate directories and I only put that as a red dot not because we do not believe it should be done but we do not believe that belongs in the provider directory.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay and that makes sense. I would say potentially though because you have a concept of a consumer directory which I do not know that other people here in the room do and I am not saying that makes it wrong, but there are other red dots up here. So, whole else put red dots and said that this should be…and I am not trying to call people out but clearly there is a difference of opinion here and I think that we should try to talk about that a little bit. Carol?

Carol Robinson – Principal – Robinson & Associates Consulting
Hi, this is Carol Robinson, I did not put a red dot there and I think I want to get some clarification on what Jeff is saying because when I see that consumer care and services coordination for elderly parents I was thinking that there are a lot of different kinds of care coordination entities and organizations that could be involved in caring. Now I was not thinking about that being a child of an elderly parent, but I think in terms of care coordination services and identifying transportation services and housing services, and domestic violence shelters and all kinds of other kinds of organizations where care coordination could be really facilitated well by a directory that included more than just traditional medical providers would be a very high value.

Now, incrementalism is always important in terms of learning along the way but I do think that when we are really thinking about the success of value-based payment and alternative payment models we are going to need something bigger than just provider directory.

Jeff Eastman, PhD – Senior Architect – Michigan Health Information Network Shared Services
This Jeff Eastman again, I put a red dot on there because I thought that focusing on care coordination for elderly parents was kind of out of scope, the same reason Jeff Livesay said that, but I would also like to point out that care coordination in general got six green dots and so I think that is really in scope and I just think it can only solve so many problems in the provider directory part of things.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So…

Jeff Eastman, PhD – Senior Architect – Michigan Health Information Network Shared Services
There are nine, sorry, there are nine for that. That is the biggest one now.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
I'm sorry, did I miss the…

Jeff Eastman, PhD – Senior Architect – Michigan Health Information Network Shared Services
Well they are off to the right, they are on subsets of it.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

All right, yes, thank you. All right, so maybe what the issue here is consumers and maybe it is not care coordination, and maybe it is not even social services but the specificity of this use case?

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
Jeff Livesay again, for us the issue is, is this a function in the provider directory or is the provider directory infrastructure that supports Apps through APIs that support those use cases? For us we have layered it so those care coordination use cases are like Apps or other services that talk to the directory but the care coordination does not take place in the provider directory.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
And I think…

Jeff Livesay – Associate Director – Michigan Health Information Network Shared Services
It is the infrastructure that supports it.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
And I think that one of the things that is going to be a little bit difficult when we talk about use cases in general this morning and this afternoon as well is that we are not talking about HIE we are talking about directories supporting HIE and so where does that end and where does it begin but at least kind of what I am hearing, and if I am getting this wrong tell me, is that supporting care coordination if there is a role in provider directories to support care coordination than it should be and maybe there is, I'm seeing nods in the room that "yes" there is a role there. That care coordination larger than just direct care delivery maybe social services, I'm seeing nods in the room. I'm not seeing anybody shake their head. So, shake your head if you think that this is wrong.

There are some hands up and I am going to hand the mics out again in a second, but one of the things that I do not know for sure there are care coordination use cases, there are social services use cases, those, ultimately all of this is supporting the patient or the consumer. Is consumer access to that information in the directory is that part of it in or out?

Aaron Seib – Chief Executive Officer – National Association for Trusted Exchange (NATE)
My name is Aaron Seib I'm an Advisor to the Robert Wood Johnson Foundation Data Cross Sectors for Health and we are specifically looking at this. So, the model that you described with providers versus other types of entities is a big part of a lot of work that we are doing around data sharing agreements and so forth. So, I think that there is a route to this in the notion that we have of HIPAA…purposes being one type of entity in a provider directory and then there are other services in other sectors where we identify people who support care delivery such as community health workers, ambulatory drivers and so forth.

So, there is a reason why I think the model that they have in Michigan evolved the way it did. Providers being entities who are permitted to do TPO and there are other entities that are important to consumers and important to improving payment models that today have a long struggle yet, no NPI, no notion of having an identifier that is definitely going to be critical for us to improve outcomes for consumers in need.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Bruce?

Bruce Schreiber, MS – Chief Technology Officer – MaxMD

I am Bruce from MaxMD I am also affiliated with DirectTrust and co-chair of the provider directory work that DirectTrust is doing. I think that we are getting very deep into the workflow issues and application issues and we are moving away from the fact that the directory is a data store and the data has to support the process and so I think we need to separate out what we are putting in the directory and the processes that want to operate on that directory.

And I think the role of this group is to focus on the directory structures and the data elements that we want to support and allow for these workflows and these processes to operate on it but I do think we should be discussing the workflow so much as discussing the support requirements of the workflows.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, I think that is a good comment and something that we really should be thinking about. A counter point to that, there is so much power with holding the microphone, a counter point to that is that in California we recently had a long discussion about starting with HPD because that's what we do, within that data model what is the minimum datasets that we are going to push into the directory, we are going to require all participants to populate and one of them really caught me by surprise and that was the age of the provider. And why do I want to know the age of the provider and it was a necessary data element because there was a perceived use case and workflow associated with it.

And so we need to at least keep in mind what it is that we are supporting when we identify the information that we are moving around that we are collecting and that we are validating. And so I agree with you that we cannot get too deep in particular workflows because we just do not have the time or the bandwidth to deal with any of that but at some point we need to identify in the near-term at least and to the extent we can in the long-term what is it that we are supporting so that it drives some of that information.

I'm coming, no, not until you get the microphone. I am not going to listen to people on the phone holler at me because you wouldn't wait for the microphone.

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems

Thank you for keeping us straight…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Name?

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems

Alex Izaguirre, I actually agree completely with the point that was just made and I think actually what you said actually supports what he just said because the point is this, no one really knows the what use cases are going to be. Tomorrow there could be a new legislation passed, there may be something else going on in an organization that requires for their business purpose to use some other aspect of "hey, I need to know that you guys like the color blue." I do not care about that but maybe it is really important for some organization to capture that.

So, we need to separate the aspect of how it is that data is being used from how it is being delivered and I think if we segregate those two and say that we are going to generate a framework and a model that allows for any data to be captured from a provider and then provided to those organizations. And at that organization layer like what was said before, build your application, use the data any way you need to be based on your particular need.

But if we are going to kind of hardwire the use case into the data you are never going to meet all the use cases, you will never do it. That is actually the whole point of APIs and Open Auth and a bunch of the things that we are talking about. Let's separate the two.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

I have to admit that I was expecting with so many green and red dots that we were going to get more arguments there than we did. We are not going back to identifiers though we just are not. A couple of other things that I wanted to point out that got a lot of dots here and I would invite people to talk about them if they would like. So, care coordination got a lot, we kind of touched on that already.

Common elements and requirements across use cases obviously there is some efficiency there that we need to deal with and make sure that we take into account. Consumer finds API end point for hospital providers they are visiting.

There are a couple of things on consumers and I would say that if I looked across the charts here in general I would say that there is a fair amount of support for getting consumer access to this information in the near-term. And I think that is interesting because I can tell you right now in California we do not support that. And we have a technical problem with supporting it because if there are issues with the provider with sharing some of this information whether it is regulatory or legally, or simply their perception of the sensitivity of sharing that information out, there is no mechanism for me to assert authority for a query. So, I have no way to say, well, my role, is as consumer asking this question versus as a provider asking that question.

So, I think that if we really are going to look at consumer access in the near-term there may be some shortcomings for some of the implementations, I know that mine has a shortcoming there that we need to consider. Are there more thoughts about this? Okay, see hands are going up.

I expected a lot of conversation about consumer access today despite the fact that some of the advocates of consumer access were not represented necessarily very well in the room yesterday because I do think that it is at least a potential issue that we need to start to address.

John Donnelly – President – InterPro Solutions
Yes, it's John Donnelly with InterPro, to that point, and I agree that if we open the accessibility to the consumer tier I think out of the gate it does bring with it some new, I am going to say, rules and regulations around identity management at that tier which I believe from the provider's stand-point providers feel that if they have access to data about other providers there is a certain rigor involved already in their engagement with the healthcare industry that gives them a level of trust of what they are actually accessing. I am not sure that they have that out of the gate with the consumers if they are going to be interacting with them. And I am not saying that we should restrict the consumers from getting added but in terms of a bidirectional kind of access it might be something that we might have to do iteratively that they are able to read but not necessarily provide input.

Linda Van Horn, MBA – President and Chief Executive Officer – iShare Medical

Linda Van Horn, iShare Medical, and I guess one of the things that keeps floating in the back of my head is the fact that there are data fields and then there are data fields that are required and data fields that are optional and so for example the changes that are being proposed for NPPES is to have the location data, which is fabulous and a provider can have more than one location and that's great too except that this data is going to be optional.

And what makes that difficult for us is that when stuff is optional there is a balancing act, right, between how much burden do we put on the place of the providers to getting the end result that we want which is being able to find out where are these providers providing services so that we can actually direct patients.

And I think it ties into the patient question because patients want to know, if I have a healthcare entity that is maybe a large entity that is downtown and everything is based on downtown but I live in the suburbs and maybe that is 30 minutes away and there is a location in the suburbs what I want to know as a consumer is that there is a location in the suburbs that I can go to. So, having the addresses is really important to us and that yet is an optional field.

So, I guess the other question I would kind of throw out there is more of a question which is, okay, great we have decided on these data elements then I think we have to ask ourselves which ones are optional and which ones are required.

Elaine Fontaine – Director, Data Quality & Analysis - Rhode Island Quality Care Institute
Elaine Fontaine from Rhode Island Quality Institute, so from our perspective the consumer use case was actually one of our driving forces associated with the work with the health insurance exchange, so being

able to have a consumer look up a doctor and figure out a normalized doctor, whether it is Jay Smith, James Smith whatever across multiple payers and say “yes, I’m part of this plan but not that plan” was part of our original intention and our thinking on this is really that we are working now on expanding our governance because you cannot control people’s ability to not control their own data. We have to, as a community agree on what is available.

So, that example of a physician’s age, consumers may actually want to know how old a doctor is but if the doctor does not want that data known initially I think our internal governance is going to control that. So, that is our model is being able to have a public-facing website so it does not matter we are all consumers at some point so we call it a consumer-facing website. But, again, not bidirectional just read only.

Andrew Kobylinski – Head of Platform - BetterDoctor, Inc.
Hi, it is Andrew from BetterDoctor, we ran a consumer website for many years and we just, in the past two weeks, took it off line because the data quality issues are such that we felt it was more of a disservice to publish it in the broad sense.

Now, when we looked at the core of the issues around data quality and we talk about different attributes like data birth and that you may have a lot of governance things and you might want to appease the providers but if your patient, anyone using the system, anyone getting a referral from your system, getting a doctor’s name, the consumer goes to Google types in that doctor’s name and looks up whatever they find. So, honestly, your governance does not matter. The information is out there on Google about these doctors.

So, the fundamental issue is, if you are creating something better than what is on Google you have to share it to fix what is out there because if you take any doctor right now that you know of and Google him you will see in the top 10 about 2/3 of the information is totally, completely incorrect, wrong addresses, wrong phone numbers just to call out a few of them. You will find that it is really a dire state.

So, we have to kind of rethink and reset our expectations on what is kind of private or secure in all that and open this up and if the EMR systems of a provider actually enters in an actual correct valid birth date in there, there has to be at some end point here that we just say “okay, that information is already public knowledge, let’s make sure it is public knowledge that is correct.”

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay, let’s take a few more quick questions, quick comments and then I want to see if we can drive some closure to this. You guys want to eat I would imagine, you wanted to eat yesterday. So, I do need to keep in mind what is going for lunch, so just grab a microphone out there.

Ryan Askey – Manager, System Configuration - UPMC
Hi, this is Ryan from UPMC. So, from the payer space all of our directories are inherently consumer-facing and have been since the beginning of time which makes it that it is the primary means by which a consumer has to consume who is in their network and where can they actually see them and that carries

with it a lot of responsibility. And frankly, the responsibility is the difficult part because if a provider works at the same Tax ID that they have worked at since 10 years ago and they stop working at one of the sites at that Tax ID they can still send us claims and we are still going to pay them. They do not have…unless they are on a Pay-for-Performance program or some other kind of…or a very connected data provider, they do not have any reason to tell us and now the member goes to that address expecting to see a provider there and they are not there. And so we get complaints back.

I mean, a significant portion of our data management is chasing provider data especially at those locations. Location and plan information, other than do they accept new members, is the most key part of all the provider data that we store. We use the same dataset to drive claims payment of course and that is obviously very important to those providers, but the difficulty is generally in chasing those changes.

When we make the change, if there is a quality service issue for a provider and we terminate them, well then you know that data is handled and communicated as fast as it can be. The problem is that a significant amount of the changes that happen in the provider community, shifting office hours, well now on Tuesday's they close at 4:00 because the person they had to cover that time…do they have a universal mechanism to communicate that. I mean, we know the data in Google is grossly inaccurate but that is because they are indexing data from 10,000 sources that were published 5-10 years ago or whenever that data came around, whenever a provider sent it.

Providers change more quickly than anyone can keep up with and there is a real difficulty in the means by which to communicate data to any party that needs it especially the payers, because we are communicating it out to the members and when a member counts on an office being open late and it is not then they just had a bad experience and they feel that system has failed them. And there is no point in "well, they didn't tell us, we didn't get a practice change for them or office visit, we had an office visit well a month before they made that change and they did not tell us." They have already had the bad experience. The consumer has already been failed by the system. And there is a real difficulty there in those pieces of data that are not as regimented as the rest of them especially location and the qualities that come with them.

How do you actually track that data? We put as many programs and as many pieces of the data that face providers as we can to hopefully engage with them and say "hey, here's an office verification sheet, here's a PDF version of it, here's someone coming to your office, here's a mail version of it" but the office manager has 10,000 things going on and if they do not tell us we have already failed the consumer. It is very difficult having a piece of data that you can actually stand up and say "this is real and we have a quality rate of this and that."

Because the hard part is you know what you have received and you know that you may have processed it, processed in a short amount of time but you really do not know what you haven't received yet. And it is the primary difficulty of dealing with provider datasets is that so many of them they can make changes and do not need to tell anyone and then that has a lot of downstream effects.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Thanks, one more comment and then I am going to call a question on this one and see if we can move on a bit.

Ron Urwongse, MBA – Senior Project Manager – CAQH

Hi, everybody, Ron Urwongse with CAQH. So, just speaking a little bit from the health plan perspective because CAQH does a lot of work with the health plans. So, as you all may know there is some regulatory requirements that have emerged and are emerging around health plans publishing machine readable data around providers, this started in the qualified health plans in the federally facilitated marketplace, it looks like it is going to happen with Medicaid Managed Care Organizations and Medicare Advantage Organizations as well.

So, the health plans are being required to publish their data out and they are also publishing it frankly out anyway for public consumption within their directories. I think when the provider knows that the data is going to be published for public consumption they do look at their data a little bit differently.

And the other thing I want to mention is that some of these regulatory requirements require health plans to have mechanisms to receive complaints and have a feedback loop from consumers about inaccuracies and errors in their data on the provider dataset. So, that is something that will be optimistically a positive feedback loop to increase data accuracy and it is something that if it is applied in other places will have the same effect.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Thanks, so I know I cut some people off here. This is clearly something that there is some controversy over, maybe not a whole lot, and some passion over. I would like to just poll the room real quick. So, who thinks that consumers should have access to provider directories? Okay, and who thinks that they should not? Pardon?

W

…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Well, so, yes and I asked that question way too broadly and there were at least a few hands that went up cautiously about we need to think about this a little bit more. So, I would say that what I have learned here in the room is "yes, we need to do this" and "we don't quite know how to do it yet." And so here is another thing that we need to put a group of smart people together and see if we can figure out a way to move this forward.

I want to do a couple more things, people have waived the 5 minutes to lunch time and so I want to try to wrap a few things up here. Just a couple other things that I wanted to point out were, got a lot of votes, so first of all, very few red marks on the sheet and I think that is something that we should take away on its own that in general the answer is “yes” to most stuff. So, we are continuing to build something bigger and more complicated in our thinking here and so we need to figure out how we deal with that.

Things that got a lot of “yes” there is another…there is one that got listed a lot up here that sounds like referrals to me, how providers find other providers that they might be referring to.

There is quite a few votes on information about when a provider was at a particular location or with a particular organization historical information. Marty yesterday talked about an SSA use case for that. I was surprised to see that many votes about a need to understand historical information about where providers where.

Consumer access, another one over here of providers, excuse me, looking up providers accepting new patients is listed here twice and between the two of them got five votes which is quite a few for the poll here. So, there is a need to identify, for consumers, providers that are accepting patients or at least something here.

In the few minutes we have here what do people feel like we have not talked about from a use case stand-point that we need to make sure that we touch on? And you are standing between this room and lunch so be brief.

Aaron Seib – Chief Executive Officer – National Association for Trusted Exchange (NATE)

This might be where you are headed but, yesterday…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Name please.

Aaron Seib – Chief Executive Officer – National Association for Trusted Exchange (NATE)

This is Aaron Seib again, yesterday we saw two or three presentations that said let’s keep this as simple as possible so that we actually achieve something. I get very, very worried, and I’m a consumer advocate I wear that hat, when we start talking about whether or not the doctor was there for his after hour’s visit, that for me is way out of scope of what I thought this could produce. I mean, there are so many thousands of things that we want to produce we have to figure out what the key things are to produce so that those other things can emerge and grow from the market.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Keep it simple.

John S. Scott, MD - Program Director, Clinical Informatics Policy, Office of the Assistant Secretary of Defense, Health Affairs - Department of Defense

I just want to say I agree with that, this is John Scott again from DoD and we are used to working at this consensus in DoD because we have the Army, Navy and the Air Force, so starting with the minimum that everybody agrees we need is an important thing for me.

Carl Leitner, PhD – Associate Director – IntraHealth International
Carl Leitner with IntraHealth, I thought there would be more discussion about national regulatory bodies and bringing the data in. It has not been talked about and how do we bring that data in. I do not know if there is anybody here that represents any of those, but I think that is a voice…

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology
…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
You are not allowed to talk without the microphone.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology
Dan Chaput from ONC, two quick ones, there was an item here that got red dots and only red dots on the financing of provider directories with CMS 9010 matching funds. I will own that and carry it into the proper camp where that discussion belongs.

And on the consumer items also we have a consumer group, if we want to take this discussion to our consumer group, wrap it up nicely, tease out the questions that are really just consumer-facing issues as opposed to…I mean, consumers do not care if it is HPD or FHIR except for us. So, let's tease out the issues that really effect the consumer and if is merely a matter of just a consumer's use case using our use case which is access the directory that we tease that out, that we not get the consumer use cases to go deep into the internal issues of how provider directories are built, maintained, stored or any of that stuff. So, if that is okay, I will also take responsibility for wrapping consumer nicely and seeing that this question is addressed well.

Alexander Izaguirre, PhD, MBA – Founder, Board Chairman, Chief Information Officer – Apprenda Systems
I just wanted to comment on the minimum requirement, Alex Izaguirre again, the minimum requirement for credentialing, at least in the institution that I work for, was a 35 page form. The minimum requirement for keeping a directory on our institution was 13 or 14 fields. So, I do not think we can simplify the concept to "oh, let's just start simple." The reality is it has to be flexible.

Instead of focusing our efforts on trying to say "let's just try to do what everybody can use" which really will not work because everybody has so many different purposes, we should be thinking how do we create an environment that allows our framework so that we can share whatever data we need with whoever we want and that would be all the way upstream from the provider, all the way downstream to the different use cases. That architecture, if built correctly, can handle all the issues and all the problems.

So, I think that is kind of what we need to think about instead of saying "what's the minimum data that we need." That is never going to be agreed upon. We can fight this out all day long for weeks and weeks in this room and everybody is going to have a different definition of minimum data.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Last comment.

M

So, kind of elephant in the room again, going back to NPPES. If NPPES has requirements about what they must do as well as requirements of what they can't do, things like the Direct addresses and the many addresses, these are wonderful things but they are necessarily, by statute, optional fields because what is optional and was not optional is defined by statute. However, maintaining accurate data in NPI and keeping the NPPES updated is defined in HIPAA. Not keeping your record updated is a HIPAA violation with fines associated with it.

So, what we need from NPPES is for them to honor the law because we are not going to be able to get any better and have any bigger hammer than they have and if the data that is coming out of NPPES is wrong that is the ceiling of how good we are going to be able to get and we cannot really reliably discuss how we are going to improve the data past where they are obligated to go anyway. So, I do not know who can speak for NPPES here, but hook us up.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

All right, I think some good points there and it comes again back to dealing with motivation, dealing with regulatory requirements, it is a complex environment that we need to deal with here. Real quick before we break for lunch and they are already hollering at me so we are going to make this really quick.

One of the things that we said before the meeting got started and we have continued to kind of do today is say that we are not going to be talking about governance and you cannot really have these conversations without touching on governance and so we do touch on governance periodically. We are talking mostly though about some of the technical issues and we will continue to talk about that, the business processes, etcetera.

One of the reasons is because there is a separate project dealing with some of the governance issues and I am going to ask that we just do a real quick brief about what is going on there so that people know where to go to talk about some of the governance issues.

Genevieve Morris, MA – Director, Health IT Policy – Audacious Inquiry

Hi, this is Genevieve Morris, Audacious Inquiry, contractor to ONC. So we are working with Lee Stevens of the O-Pol office within ONC to develop a policy advisory. So in the roadmap ONC made a commitment that in the next twoish years at this point, by the end of 2017, that they would release the policy advisory that deals with some of the trust framework and governance issues around interoperability. So, we have been working on that with ONC for a few months now.

We will admit that this is not a specific area that anyone had mentioned to us when we were doing our environmental scan. So, this is definitely an area that we want to add to that advisory. So, if you have input you want to provide please come and see me I can give you my card, you can reach out to me.

We are technically at our max for official interviews under a paperwork reduction act requirement so these are all unofficial conversations just for purposes of federal government requirements but come and see me or reach out to Lee Stevens we would love to talk with you guys about this so we can figure out what to include in the advisory.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

All right, thank you. We have a full afternoon we are going to talk about issues this afternoon so there is lot of time still to figure out what some of the problems are and to complain about stuff. We are going to break for lunch now though. Just like yesterday you need to be escorted up to the cafeteria if you are going to have lunch here in the building. We are scheduled to have lunch from 11:30, which was 5 minutes ago, to 12:30 so please try to be back here at 12:30 so that we can have our knock down drag out fight about FHIR and other issues. Thank you very much.

Lunch Break

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

We are going to regroup here. In this final session we are going to take three topics. We are going to time box those topics. We will run them by you right now before we start and we will turn things back over to Rim and we will be watching on the webinar if folks have questions or comments. So, we are back.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

All right, thank you all for coming back. First of all, are people getting out today something useful? You came back from lunch, I take that as a good sign, Jeff is shaking his head “no” so Jeff is invited to leave the room, you are not getting the microphone again. I at least am learning things here and I think that is useful given that I feel like I have been doing this for the past six years. So, if I am learning things then hopefully other people are finding things new, finding different points-of-view that are useful and that is partially what I am trying to get out of today.

Let’s talk about the afternoon a little bit. So, we have the next hour and 50 minutes to talk about stuff and that is kind of what we are going to do. What it shows on your agenda is we are going to do panels, well the panel is everybody here in the room, and we are going to choose three topics and I am going to dictate what those topics are unless you guys take us someplace else.

We are going to start off, we are going to talk about data quality issues that maybe how we are collecting information, how we vet information, etcetera. We have had a lot of discussion this morning and yesterday about needing the information to be correct. So, how do we make sure that this ends up happening?

I think that we should be talking about the methods that we are using, talk about the incentives or the sticks that are out there to make sure that the information is updated, who it is that is updating it. I think that we should be thinking about workflows as well as technical solutions there. So, whatever that means.

We are also going to talk about access and security. Part of our discussion this morning we were talking about consumer access, well, what do we need to do differently than we are doing today or what have we done correctly that needs to be replicated elsewhere so that we can make proper access better. I don't know what adjective to use there.

So, I at least think that we should be talking about that some. And then we are going to talk a little bit about sustainability because this is an enabling technology that may or may not be and end unto itself and if it is not then how is it sustained to support other things? And I think it needs to be a part of the conversation.

What I would encourage everybody to do is tell us what you are doing that works. Tell us what you are doing that does not work. And let's also talk a little bit about what nobody is doing but should be. I think that we ought to be talking about all of those things.

Now notice that nowhere in there I said we are going to have a knockdown, drag out fight about HPD and FHIR. I am sure that you guys will bring us around to there someplace. We are going to stop that conversation at 2:30 and at 2:30 we will talk a little bit about next steps and what we might do as we move from here and we are going to end at 3:00 and I am going to collapse at 3:00 so if you guys want to keep talking you are going to have to do it without me and the microphone. Do we have the room past 3:00 if people want to gather and talk for a little bit afterwards? So, the answer was "yes." So, I think it has been really good at lunchtime and even when we came back from lunch here that there were these little groups of people that looked like you were talking about something real and probably not just the movie that you saw last night, but things that we have been discussing here in the room.

So, there is an opportunity to continue some of those conversations afterwards. But before then we will talk about what next steps might be. Does that make sense to people? Is that good? Is there something that we are missing here that urgently is on people's minds?

All right so it is after lunch now. I am hoping that everybody is not going to go to sleep on me. We were all talking and fighting for the microphone before lunch and I want people to continue doing that. Let's start off by talking a little bit about information quality and one of the big use cases that we have been talking about this morning was needing to support the exchange of health information if you are basing that off of information that you get in a provider directory then you need that information to be right. You need to be sending information to the right place. You need to be requesting information from the right place.

As kind of an obvious case if we are looking at consumer access to information going back to something that was said late this morning, if it is a bad experience that the consumers are getting they are never going to go back there. And if it is a bad experience that the physicians are getting in collecting that information they are not going to help us keep it up.

So what is that people are doing now that works well for them? What are people doing now that does not work that we can learn from each other?

I will start us off. One of the approaches that we used in California is that we made a decision that we were going to be federated because what that meant was that we had an opportunity to push down to the edges people maintaining directories for information as they were authoritative and that sounds right except that the truth of the matter is that the HIOs are not authoritative for doctor's names or NPIs, or phone numbers, or fax numbers and this information that they collect will probably have the same problems as every other database the physicians are keeping up, they move their office, they don't bother to tell the HIO that they moved their office because their system moved with them and they still get their information the way they want to and so their phone number didn't necessarily get updated. So, maybe that is the wrong thing to do.

What we are authoritative for is the electronic end points but that is about all we are really authoritative for. So, the idea was to put information where it belonged but it is not necessarily working. So, I need to find some other way to deal with the demographic information and need to find some other source for that. Either I need to get better participation among people that are represented in the directory or I need to find some other source for that information, some other directory that is more authoritative or something. I need to do something different.

What other experiences do other people have? What is working? What is not working? What suggestions do people have?

Kevin Joseph – Technical Services - EPIC

This is Kevin from EPIC; we have been fairly successful with the federation strategy where all of our community members, healthcare organizations export the data that they are authoritative on and share that data directly with all the other community members for EPIC.

There still have been challenges primarily with knowing what they are actually authoritative on sometimes they mismark records. Some healthcare organizations are still not that great at accurately capturing that information and that is also a challenge but generally we have seen a large amount of success there.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, who is it that is putting the information in? Is it your customers?

Kevin Joseph – Technical Services - EPIC
Yes, so it is the healthcare organizations themselves are capturing information about the doctors when they onboard for their organization and then where they are working, what facilities or departments and then they publish that information themselves.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

And so what motivation do they have to keep it up-to-date in the directory that you are maintaining for them?

Kevin Joseph – Technical Services - EPIC
Their motivation to keep it up-to-date is so that they get correct transitions of care messages sent to them. It has still been a struggle and one thing that was brought up earlier that I think is a great idea and we have talked about before with Surescripts is providing a feedback loop so that there is some accountability between those organizations. So, if one organization publishes the wrong fax number or address it is very likely that the other organization that is consuming that information is the one that is going to catch that first and so being able to open a dialogue between those two organizations so that they can say “hey, your data is crappy, please fix it” and they will actually fix it.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, does that mean that the motivation is to keep the information correct enough so that exchange works?

Kevin Joseph – Technical Services - EPIC
Correct.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

That is what it is?

Kevin Joseph – Technical Services - EPIC
Yes.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay, so that means that their fax number may still be garbage or is not there at all?

Kevin Joseph – Technical Services - EPIC
People still do fax things. So, I mean, that is also a form of information exchange.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
Dave Marotz from Surescripts, actually I asked for this before Kevin mentioned this. I will say, one thing that has worked well for us overall is that we are…even though we refer to it as a Surescripts Directory, our data is provided and sourced from the end point. We have deep integrations in the 700 EHRs and they provide the information and so when people come to us and say “hey, I can fix your data.” Well, end of the day is I can’t just overwrite what an EPIC site or a Cerner site has given me because they are our authoritative source of that information because our pharmacy is making determinations based off what they see in our directory as far as whether or not they send a refill or renewal request, or a clinician Direct message now in the future or now today another message types in the future. So, we really have had to push that information upstream.

The challenges that we have had though are about, well of course, accuracy of the information in our directory, sometimes it is not maintained. Different source end point systems do better at providing tools to help manage and keep information up-to-date in our directory, some are better than others. When our information if not correct usually the way it presents is there are faxes going back to those doctors. You need, from a pharmacy perspective, they need to get back to the doctor where they saw that patient within the right EHR context as well. So, within our directory is a business address but what is on the new prescription is the location where the patient was seen so we end up with this disconnect.

So, we are piloting right now a, what I am referring to as our, learning directory to kind of catch and pick up that additional information to improve that context and make sure we have all elements available for discoverability.

Then you go to the end point of “who is using the data” looking at the pharmacies, how well do they actually, now that they’ve got a prescription that came in, paper or electronic, how well do I find that doctor to get back to them? They have a very different approach to how they match that patient. What determines a confident match to send PHI back upstream?

Some entities take the perspective that if everything does not match exactly I am going to fax. I do not know why they think a fax is more secure, but that was something that they had in their system so that is their way of going around the network instead of sending electronic communication.

We are working with our pharmacies to try and encourage them. We have seen everything from a 30% electronic rate to 99% electronic refill renewal rates with the same exact data for one EHR. So, we know there are opportunities in how you use the data, the completeness of the data, the accuracy and we are going after each one of those and working with our EHRs saying, how can we help inform you and make your practitioners aware whether it is the practitioner themselves or an office manager, what makes sense to get that information to the person that cares that has to write the check for paying for the inefficiency services, what does that look like? I do not have a solution for that yet. I know that is something we need to go after.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, it almost sounded there, for a while, like there was some mechanism for feedback for inaccurate data too, that there is some discovery mechanism that you have for finding things are wrong.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

We have cases, lots of cases, they get opened up, so someone, a pharmacy opens a case and says "I can't find this doctor." Doctors open up cases and say "this pharmacy keeps sending me faxes." We sit in the middle and say "oh, your information isn't accurate, EHR, please update this."

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So it is a manual process?

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

It is a manual orchestration.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

I has been researched by an individual.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

Yes, exactly and so otherwise, I mean, it does present itself. I am getting faxes, something is breaking down throughout the workflow. And sometimes the third-party data sources say "well, I'm telling you this is an absolute blessed record for this doctor." Well, what they are validating, again, is different from our world. If you need to know the doctor is there today it is a different use case than I have a refill renewal request that I can send back to that doctor, their agent at that enterprise to continue care, because otherwise if the doctor falls out of our directory now we have just driven a pharmacy to send a fax to where the doctor used to be and now we have a fax workflow instead of an electronic workflow. So, it is all about that use case context, what do I tolerate, what do I need as far as enabling care communication.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Ryan Askey – Manager, System Configuration - UPMC

It is Ryan from UPMC, so as a payer we really…I spend more time on provider data quality than any other task and it is frankly the things that we are dealing with that we started dealing with when I started doing it 15 years ago were the same that we are dealing with today but we have a lot of different methods to achieve data quality and not all of them work and because they are the uptick rate for the providers it varies per solution.

We have an office verification form that we produce a copy of our storage of their data and when an office manager visits that provider they need a signature on it before they leave the office. Now that is all well and good, but that's very limited. We have thousands and thousands of offices and at best that data was attested to on that day but you do not see everyone every month let alone every year so we have that also on line. A provider can attest to their data there, but that also depends on them going to that data source picking that option and experience. They are probably there just to check eligibility and drop claims. So, hopefully they engage with that. You can put nag screens and do what you can to kind of prompt the user to be more engaged. We make phone calls, we do as many of those things as we possibly can to engage with the providers.

One thing that we have done is we have back ended data quality into it is that we have a Pay-for-Performance Program, but the providers that are in our Pay-for-Performance Program are there for clinical reasons. Now typically speaking in the modern day if you are very clinically engaged and producing good outcomes then hopefully your technologically engaged as well, you are doing things in a more connected way and we are going to receive better data as a result. But the difficulty there is that if you are disengaged then you are disengaged on both fronts.

I can come at you every quarter and say “I need you to attest to your provider data because it is part of your Pay-for-Performance arrangement.” But that is not the majority of our network. And so for our IDFS, I have thousands of providers that our corporate entity owns, they work at only locations and so we have constant data communication with those very connected practices, those guys are already engaged at data partners, I do not worry about them. Our physician services division guys do not keep me up at night.

Who keeps me up at night are the providers that are just outside that footprint, the independent contractors, the providers that exist in the middle of forest county for example and they are the only provider within 40 miles that does anything like that. Now maybe they are a very technological person, maybe they are not, maybe they are 70 years old and have more Internet connections than you have ever seen, maybe they are 25 and do not connect to anything. You do not really know how engaged they are going to be.

One thing that we have been trying to do is track provider data across our entire enterprise. So we are actually communicating provider data to our partners within physician services because they may know them through a more external connection. So, they may have a profile on a provider that is more updated than we have because the only thing we know is that data cannot be trusted. It is only as trusted as an office manager signing off on it and even then it could have changed the week after and if they did not tell you they did not tell you.

One thing we have also done recently is we have engaged with some third-party vendors. We are now using clarity which is a LexisNexis product. Their whole game is that they know that no on payer has the right data. They know that no one source has the right data. Their idea is to connect the payers together and so if I have better data than someone else does that I improve their data and vice versa. Now that is difficult because in the payer space people think that the quality of their data is a proprietary thing and it sort of is.

Our methods and our business processes are things that we have designed to be effective and so the better my data is the better the member experience and hopefully they think more favorably upon me, but on the other hand bad provider data disenchants the members thought on the whole insurance industry and the whole medical process to begin with, because, again, they have had a bad experience. By the time you failed them in some small way or some large way because you sent their PHI to the wrong address, well, holy moly that's a big deal and maybe that was because no one told you about a provider address being wrong.

So, we chase data constantly but one of the most important parts is if you have engaged partners from the top down…when we started as an IDFS it was a provider led organization and it was also a data-driven organization from the beginning. So, when it came time to say "I need your provider data" and "I need it not once a year but once a month or maybe once a week." It was an argument that they understood the reason for it.

And providers really vary in their technical aptitude, they really vary in their business processes they may think of it is HR data, as these are the lists of doctors that work for this set of practices. They do not think of it as a connected dataset that drives all these different other outcomes and improves someone's experience. They are just trying to get by and making sure that someone's broken leg is fixed.

And so getting providers to engage as data partners often requires organizational buy-in and support from a variety of levels. It is very difficult to…and still even with all these things that we have going on and all of this money thrown at this solution we still know we are chasing the ghost of provider data.

And until you give an easy means by which either the provider can drive that data themselves or that other entities can communicate when a difference is detected it will continue to be that same problem.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, what we have heard first off is, the information comes from the provider organizations, the information comes from the provider organizations that are your customers. In your case the information comes from individual providers that are part of the network.

Ryan Askey – Manager, System Configuration - UPMC

And the provider…so it all depends. If they are one of our delegates, let's say, then we get that data strictly through the delegate. Now that assumes the delegate does their data, but they are chasing the same problems we are.

In some cases, if they have a large governing body, like our physician services division that manages all their data through an EPIC system, then we can talk system to system, we do not have as much anxiety about it.

But if you filled out a credentialing application and you run a practice, let's two offices, three doctors let's say, you do not have a system that you belong to. I mean, you contract with payers to perform a service, you have an NPI but you have not engaged with that since you filed for it. There is no penalty anywhere for the inaccuracy of your data and part of it is providers have often relied on the soft parts of the member experience, meaning, you still stuck to the same building, you know you need to schedule an appointment. If their data on 10 sources is inaccurate, if they have left a wrong phone number and then a member…I do not have the right phone number on my member ID card, which is one of our primary means of getting a number of tools they can use, if that phone number is wrong, and we have not made a phone call to verify, which we do, but not often enough for those numbers to change, the member will then look them up and if they did not lodge a complaint with us we do not even know.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, your mechanism is feedback from the system from failures, kind of like some of the things that I have heard earlier, okay, and your motivation to keep the information up-to-date we heard earlier that it was you do not get the electronic information properly, is that what the primary motivation is or you do not get paid or what?

Ryan Askey – Manager, System Configuration - UPMC

So, we do not really have a means by which to stop a provider from being paid for data inaccuracy reasons. Unless they are part of the P for P Program, but then I am just holding back $2.50 on an office visit, and again, that was clinically driven to start with. So, I am not opting everyone in and dropping their reimbursement by a $1.00 per visit because they have not updated me. There are no good weapons to use against the provider for inaccurate data.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Ryan Askey – Manager, System Configuration - UPMC

You can…the thing is that as a payer we face fines, we face whatever it is for that inaccurate data but there is not any external force other than ourselves but one payer among dozens in a market compelling action from providers that already have 10 million things going on. I would like to think that we are near and dear to the hearts of all providers in our network and for some of them we sure are, but on the other hand I am just another voice asking for the same thing. The same thing the state is asking me for, the same thing the feds are asking for, the same thing that the pharmacy partners are asking, the same thing everyone is for.

And so maybe they finally get through to me and I update my data, great, did you remember to also update everyone else? Well, if they were not holding anything over you maybe you did or maybe you did not. And I have no way to verify that they did or they did not. At best, I have the thank God they told me and that I can serve my members better because of it. But if they did not tell anyone else…we share data as often as we possibly can but there is no connective tissue other than exchanges and things we get to make that with.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, a couple of things that I would like to make sure that we touch on here as part of this topic is sharing the information that you get and the fact that the same information has to get updated in a bunch of different places which are kind of related. So, if the state is asking for this, the feds are asking for it, you are and every other plan that this doctor is working with how do we make that repetitive ask quit happening which might lead to better quality because the provider is more likely to engage.

Nicholas D'Addabbo – Project Manager – athenahealth, Inc.

This is Nick from athenahealth; so I would like to kind of take this from two approaches here and that is the data that we provide to our trading partners and then the data that we receive in. So, for the data that we provide part of athena's services agreement includes us for each of our clients that we take over their EHR we also take over their fax machine and thus issue a fax number for those providers. What that means is that we are very confident in…whether this is right or wrong unfortunately the fax machine is still a really large part of healthcare today.

So, we are confident in the fax numbers that we provide externally to our trading partners. In addition to that we get all of our provider data directly from the EHR where it is entered by the provider. Now where the incentive lies, in order to provide accurate information, is one getting paid, so there is a business incentive there and two is to also receive that data electronically in a structured format where it can go directly into a patient's chart. So, that is the provider incentive for us gathering the data and so it is a federated model much like EPIC described and Surescripts as well and then we push that data out to our trading partners.

Now the data that we receive in goes into our external referral table where it is matched with providers that are referred to by any athena client around the country. What that includes again is going to be fax numbers and phone numbers and other identity verification components. When that information comes in we are able to match it to what we have as an existing entry and if there is a difference the team that handles that does manual outreach to the practice to verify phone and fax information and ensure that this is correct. If there is a discrepancy then they are able to correct that through that manual outreach.

So, part of our monitoring solutions also include monitoring failure messages so a lot of messages that are intended to go via Direct as an example but are actually failing and dropping to fax we are able to do manual outreach on those entries to ensure that we have the proper information in our external referral directory as well.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, a question for you, given that you are monitoring failures do you report those? Do, I, as a consumer of your directory information, do I have any indication of how likely this information is as being correct because it was properly used recently?

Nicholas D'Addabbo – Project Manager – athenahealth, Inc.

I would not say as a consumer that we service that information. And one of the reasons for that is because if the message fails electronically we are able to kind of drop it to a fax as a backup so that the document actually still is received by its intended recipient. And then we are able to kind of take that data and make sure that we fix the electronic component of it.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay, one of the things that I will just say and I was hoping that we would hear a little bit about it, the fellow from BetterDoctors that just left the room, one of the things that they actually do is maintain the information about when information was last confirmed and do have a mechanism to surface that, well, is that useful? Would anybody bother to pay attention to information that gave you an indication that "yes, this phone number was used in the last two months" and "was used properly" and "connected to the provider and therefore it is probably a good phone number" or is that getting too much information and too much noise to be useful? I think it is at least an interesting question to be asking.

Linda Van Horn, MBA – President and Chief Executive Officer – iShare Medical

Linda Van Horn, iShare Medical, it seems like we keep circling around the same drain which is that the information we get is not reliable so we are jumping through all kinds of hoops to make it reliable. So, if we kind of fall back to data principles and Dr. E.F. Codd for those of you who are not data scientists, he is the guy that came up with relational database theories that a piece of data should exist in one and only one place, be dependent upon the key and nothing but the key so help me Codd. So, oh, he, didn't say that last part "oh, my Codd."

But anyway, so the problem is we do not have one true source of data and if we had the NPI table, NPPES table which they are talking about updating, if we had that up-to-date that would just snowball through the whole thing and solve a lot of our problems. So, we are talking about redoing it, we being, the healthcare industry, CMS, is talking about redoing it. There is a project right now to modernize it, we heard about it yesterday.

Why don't we identify a core set of data elements that we can rely upon and that CMS perhaps, I do not know this legislative stuff, can enforce through PECOS certain data elements like the NPI number and the address, and maybe multiple addresses, but some core elements that they can ensure that they are up-to-date and that they keep track of when they were last updated and that there is a process of verifying them on a regular basis. And then we all go…data source.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, let me ask you a question, I heard a lot of people think that this sounded like a good idea. If this were to happen and people were to know that there is an accurate source for some of this information would you quit storing it in your own database? Would you go out there for it real-time?

Linda Van Horn, MBA – President and Chief Executive Officer – iShare Medical
I would go out there for it, we already do with the…we have a RESTful API and we pull from the NPI database now. And we have a bidirectional RESTful API to our EHRs that we work with so they can update…in our case the other added item we are keeping is a Direct address and they can go and add the Direct address, we integrate it and add it to our database.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
Okay. I would like to take a quick poll. I heard a lot of "yes that's what we would do" or "we do that already." People would feel comfortable pulling information in real-time if they knew it was right?

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Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, I know I have a microphone out and a couple of things, but I want to chase this for a second. So, why not in real-time?

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
Because some our registration interactions with our end customers have a need to be sub-second response.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges
So, is that a technical problem? Is it a workflow problem?

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
It is a technical problem until you get to the laws of physics. In a monila-second count your directory is seconds away, you have challenges when you have millions of transactions that you need to validate against the data and hit against it, it is a scalability but it is a performance challenge.

I will say that what I absolutely would love from the NPPES, sorry, Dave Marotz, Surescripts, is to see the name information. I have gotten burned where I have acquired the full name and people say "well that's not what I gave you." This is what NPI says, this is it.

I think the government and NPPES should know who this person is and an organization should know certifiable organizations and I think that is definitely something they can drive towards. All that location and joining I think is really complex but eventually you might be able to do it, but it is keeping that up-to-date that relationship, so that asking people to manually do that is not necessarily the right place and that is again a technical piece of it as you are saying…

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Until we get to the law of physics?

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

You need to figure out certain people.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

Folks on the webinar would like you to remember to announce who you are before you speak. Thanks.

Brian Postlethwaite – Senior Solutions Architect – Telstra Health

Brian from Telstra Health. So, I guess I look at this and having the timestamp on when this data was last validated or researched I think everyone is given that "yes, we just want that data" and I guess along with that we want to have who was it that actually attested, was it the provider themselves, was it a representation organization.

I look outside of health and say, well where else do we have content update issues and you look at social Wikipedia, so everyone dives in and goes "this is wrong I'll fix it." Just the HL7 Wiki, you jump on there and you add in the content. But there is no real responsibility or tracking against that. So, Brian can get in and change the definition of gullible in Wikipedia to someone else and there is nothing to stop that.

But if we look at what we have done with our directory is we allow that. Now how can you do that because we have what is called an author approve model. So, anyone can make a suggestion or a recommendation and change the content and go "this address is wrong it is actually this now" or "this is the phone number." That is flagged in the backend it is not what is served up to people when you go searching, but someone in the backend goes "oh, I have to go and chase that. So I'll go back to the authority source and ring him up and actually physically check, is this right? Are you no longer serving that?" And then they will go "yes, that's wrong, sorry we should have told you." And there it is. So, that is sort of how we are handling it in Australia.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

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So, to echo Linda's point it was rumored that Albert Einstein did not know his own phone number and his logic was "why would he commit to memory anything that he could look up."

So, we are very much in favor of a national lookup that solves maybe 60 or 70% of our common needs and you heard Richard Gilbert yesterday talk about the NPPES plans to add things like whether a provider is Medicare or Medicaid, I think they have already added one of those, and we have been talking REST with the NPPES since Alan started prototyping it, it is quite easy to do, but the example of being able to determine if a provider is Medicare of Medicaid just by a get to NPPES can help 49 other states avoid the nightmare that we have been going through for years trying to get regular extracts from our state MMIS because we have vendors who do not want us to get the data that they believe they own, that belongs to the state and so on.

The same for state licensure data. Why should 50 states deal with 50 state bureaucracies to get their state licensing data if the NPPES could make that available through a simple REST get, solve 70% of the problems one time nationally and we will do the other 30%, we will do our use cases and care coordination, we will do our FHIR ESI. We will do the other part but solve the common data elements for all of us once and I think you are going to have a lot of happy people if that could become a national push.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Ron Urwongse, MBA – Senior Project Manager – CAQH

Ron Urwongse, CAQH, so I know BetterDoctor was mentioned a little bit earlier so I just want to mention that CAQH also does a lot of provider outreach and we have traceability around communication and e-mail and all that kind of stuff and we use timestamps.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Do you share that then with customers?

Ron Urwongse, MBA – Senior Project Manager – CAQH

We share all that with customers so it is fully traceable.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

How much do you think people actually look at that? I'm just curious, I'm not being critical here.

Ron Urwongse, MBA – Senior Project Manager – CAQH

Our health plans need it for compliance purposes. When CMS comes knocking on the door then they need to be able to show that I communicated with this provider on this day and this is the method and this is what they said about their information.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Ron Urwongse, MBA – Senior Project Manager – CAQH

So, just wanted to say that. Then I wanted to talk about the idea of a centralized database whether it is NPPES or anything else. I think it is a great idea if it can be enforced and if there is the right incentives and motivation for the providers to go in there. So, providers frankly have an incentive to come to CAQH to provide their information because otherwise they are not going to get credentialed by a ton of health plans, right?

If there is a similar incentive to update in NPPES, great, we should funnel all the data through there. Now if there is not is there a model where there are multiple sources of truth and everybody has their own collective efforts and like in the Australian model could we all share that data that we have on providers that we have reached out to and confirmed against and then collectively improve the accuracy of the data as an industry. I know that there are a lot of questions around that, around incentives and motivation and kind of aligning our interests but I think from an industry perspective that would be tremendous if there is not a centralized location with the right motivation to the providers to update their information.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

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So, one thing we may want to keep in mind are some basic principles that we try to update information in one and only one place, have one and only one, if you will, master copy, but we replicate it as many times as are necessary to deal with performance and workflow. So, the idea that there is only one that everyone accesses is kind of contrary to that basic principle. It should be one place to manage it and replicate it to every workflow environment that requires it.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

Sarah Summer, who is online, wanted to talk. Stacey could you unmute Sarah and we will see if she is there? Hello, Sarah? Are you there Sarah? Okay, we cannot hear you. Okay.

Sarah Summer, JD, MPH – Deputy Director, Public Policy – Blue Shield of California

Oh, I'm unmuted, can you hear me?

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology
Yes, go ahead.

Sarah Summer, JD, MPH – Deputy Director, Public Policy – Blue Shield of California

Hi, so I just wanted to go back a little bit in terms of I think the guy, Eric from UPMC, was talking about provider responsibility and kind of the provider motivation and we talked about payments. Yesterday I mentioned a little bit how in California we can, because of SP-137 the new law that was passed; we can withhold payments, so claims payments and capitated payments for up to a month. The challenge with that, although it is kind of a good stick, is that it is really operationally challenging to do especially if it is only for a month.

So, I think we are still struggling with how we can kind of incentivize providers to kind of participate with us and I think the…I forgot who also mentioned it, but kind of simplifying, so single sources like one place where they can update data in multiple places, which is what we are trying with BetterDoctor, but also kind of creating the incentives both kind of the carrot, the simplification and then the stick in terms of penalty is what we are really working on.

So, I think it is really interesting to hear kind of everyone talk about the data sources and kind of which data sources are the authoritative place for which data pieces because if we could come up with either multiple places which are authoritative for one data element or one place that is authoritative for all and then kind of replicate it, as the last speaker mentioned, I think that would be really helpful.

Whereas, right now we are seeing there is a lot of work in a lot of different places to kind of have everyone own the master dataset, whereas we kind of need to come together collaboratively to kind of figure out which is the master dataset. So, I did just want to mention SP-137.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology
Great, thanks, Sarah, and again that was Sarah Summer who spoke yesterday from California Blue Shield, she was here.

Fred Trotter – Founder and Healthcare Data Journalist – Not Only Dev
So, this is Fred Trotter, it seems like we are again hammering on NPPES now again. There is a consensus in the room that we want NPPES to do certain things. NPPES cannot do anything it wants to. It really is dictated by regulation. They have told me “no” countless times on things that I have asked them to do because of that but I think there are also things they can do and there are things they really should be doing. I think it would be interesting at this point given that we are getting into specific things that we want from them to start talking about how…let’s make a document of things we expect them to do because they are supposed to be doing it right now and things that we wish they would do but they do not have to, but we wish they would.

And then I think it might also be useful to start discussing if they would do certain things we would respond with. So, one thing that I am interested in not seeing is a proliferation of multiple hundreds of provider directories where the Direct address for a provider is, well, he has this address over there, he has five addresses over here and maybe he did not feel like it was worth putting it in NPPES, even though NPPES can do it. So, if NPPES is going to do Direct addresses I want to get a consensus in the room that we push the Direct address problem all the way up into NPPES, right?

So, I think there are kind of three documents that we should try to consent around which is, why aren't you doing what you are supposed to NPPES? That's the first one.

And then the second one is, please do this NPPES.

And then I think the third is for us, which is to say, if NPPES does then we will, because that really narrows the scope.

Because NPPES cannot turn off even if we decided we did not want a centrally…we talked about a federated system, we cannot have a federated system strictly speaking because right now the law says there is an NPI Final Rule, they have to have that top database, so we can either have a federated system that ignores it, which is really problematic, or have a federated system that respects it which means it is going to be a one source of truth and then we all talk about how we relate to each other, but if that is the case we really need to focus on what the relationship is there.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, what I would add to that, I think that was some really good suggestions and I think that is one of the things that we should do is actually start some real conversations with CMS about what we wish they would do. I think one of the other things that we need to do is make sure that people here in the room are educated on what NPPES can and cannot do from a regulatory stand-point, because there are issues there and as long as we understand those issues then that will help us all out a little bit because there are things that they will not be able to do. And where we are today is that we are federating our directories and ignoring NPPES. So, something has to change if we are going to quit doing that.

Kevin Joseph – Technical Services - EPIC

This is Kevin from EPIC; so it seems like we are circling around the same old discussion of centralized versus federated and from my perspective all the data elements that we care about for a provider no one source will ever be authoritative on all of them and assuming that we can get them all into one place is I think naïve for me.

NPPES cannot even do basic demographic information like their name so how do we expect them to do addresses correctly. I know that healthcare organizations struggle with defining where their providers work on any given day, how do we expect that data to propagate accurately up to NPPES.

And then to the guy over there about saying we throw all our directories together and figure it all out that scares me. That is just all a bunch of hearsay and what are we supposed to do with all that data? You say telephone x, I say telephone y. The only way we are going to know is if somebody calls those numbers and figures it out or we get that data from a good data steward. I think we need good data stewards for all of this data.

M

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Kevin Joseph – Technical Services - EPIC

I think that is just what I heard today. So, the question was, why do I think that NPPES cannot even handle a name well, that is just what I heard in this room. I have heard from a lot of EPIC customers that they do not trust NPPES data and they have found a lot of cases where it has been inaccurate.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, maybe one of the things we need to add to this is to understand what NPPES really does do and doesn't do well, because let's face it there is a lot of hearsay around that and so there is probably a lot that we need to disseminate about NPPES and let's take that as an action that we will figure out some way to follow-up and better education people on what NPPES can do from a regulatory stand-point and what it does do now and some mechanism to have a real conversation because I was here in the room yesterday and it sounded to me like Richard was willing to entertain input, well, let's quit throwing rocks and let's talk to them.

Carol Robinson – Principal – Robinson & Associates Consulting

Carol Robinson, I have several things that I want to comment on. Number one, what NPPES can or cannot do now does not have to be what NPPES can or cannot do in the future and that is why we have a United States Congress that can pass laws to change permissions.

I think that, number two, and there is a draft bill right now out of the Senate Health Committee that has provider directory language, Jeff mentioned it yesterday, we could, out of this meeting, think about how to impact that and influence it.

Number two, is that I agree that NPPES does not have fully accurate data now but there are also some things that we could do and recommend to change that. One thing is to better certify all naming conventions in all technology systems so that they conform to a certain standard and that there is not variability in the way that work is collecting the information which would make a big difference in interoperability.

The second thing is, of course, mandating in some way, shape or form with a carrot or a stick the requirement for providers to update their information on a regular basis and withhold payment if they don't.

And the third thing that I think is really important to capture is that it does not have to be one database that does everything, but if that was taken off the plate of all of these other provider directory initiatives that they could then do much more because they would have the capacity to think about their community organizations that needed to be included as well and the functionality of those would go up drastically.

And the final thing I will say is that there is a boatload of federal money available for that to happen at the state level and that 90/10, 90% federal contribution 10% state match money is available through 2021 it is a time limited offer that states could then take a very validated NPPES directory and do so, so much more. Thank you.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

So, there is actually no one in the room right now who can speak to that level of specificity on NPPES and what it can and what it cannot do and likewise any kind of discussion about what it might do in a future state would involve upper leadership in CMS to speak to it, but we will see what we can do through some off shoot sub-working group of this to have those discussions in the appropriate time and place.

Carol Robinson – Principal – Robinson & Associates Consulting

Well, I really appreciate that, this is Carol Robinson again, I appreciate from your position at ONC that is what you have to say, but we are all citizens here that can actually come together and think about what we want to do as citizens to influence our government.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

Oh, absolutely, yeah, I am just speaking about what we are capable of because we convened the meeting, no by all means.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, we have spent a fair amount of time on this topic and I think it is an important one; we went way over the amount of time. We have one more comment back here and then I do not know if there are any on the phone that we will take and then we will move on.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

Dave Marotz from Surescripts, just one clarification or answer in the earlier question about NPI and name is one of the challenges with names are there is not consistency between your NPI, your DEA, your state licensure, your driver's license and in our system we take the approach of saying, put in your legal name and whatever EHR they are with we sometimes end with a ping-ponging of "I'm Dave here, I'm David here, I'm David Roberts here" and that bounces around. So, when it comes to a tiebreaker we defer to the NPI and I do not think I have a lot of backing necessarily to even break the tie from that perspective when I have a doctor on the line that says "gosh, darn it, this is my actual name, put this in today." I'm like "okay, we'll go back to that." So, I do not have anything to anchor to, which I would love to anchor the NPPES for that.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, one of the things that I heard yesterday as part of comments when we did not have time during presentations we talked about context a lot and that in many cases it is either the requestor of information or the sender of information who actually knows the context for some of the information they are talking about and it almost gets to what you are saying "well put my name is as this because that is what people know."

If you look at the agenda my name is listed on the agenda two different ways and it is because I use my name differently depending on who it is that I'm talking to. And that is the reality of how a lot of people treat a lot of things and I think that we need to be consistent with that reality. I think there are a lot of things that came out of this discussion. There are some things for us to follow-up on and we will talk a little bit later about how we might address some of those.

Our next topic was to be security and data access. Access to the directories not access to the PHI that you might use the directories to get to, but when we start talking about that we are sharing information even if we are reading it with providers and with consumers, and that there may be differences in sensitivities to some of that information between one and the other we need to be thinking about access rules. And maybe the answer is there should not be any but we need to at least think about that and try to move that forward. And there is going to be security and reliability, etcetera of the data that goes along with all of that.

I will turn back to what we are doing in California just to kind of get started on things, because our use case is to support providers with only system level authentication and authorization for access to the directories, and it has to be a provider system, and that means that I really, if I am going to include consumers in what is going on here, need to figure out how I am going to do that. I either authorize certain consumer-facing application systems or I redo my authorization or my authentication and authorization system, or I publish publically, or I segment my database so that there is the provider version of it or the consumer, but I need to do something.

I am interested in what people here are doing in the room. Am I talking about a red herring that this is not an issue and I should just quit thinking about it that way? Is this something real and what is it that people are doing?

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services

I will just make the comment from the work that we did with the FHA looking at how the different federal authorities focused on the information.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Your name?

Robert Dieterle – esMD Initiative Coordinator – Centers for Medicare & Medicaid Services

Oh, Bob Dieterle, sorry. And we saw the need for both fairly discrete level security around certain elements of information because if you do not have it, it creates a barrier to contributing them to any kind of a common resource. On the other hand, if it is information that is currently publically available and accessible it makes little sense to suddenly protect it because it is in this structure.

So, the question becomes how do you decide where to draw the line? The line will be there. There will be a need for a public and private version there is little doubt about that. The question is what exists on which side and how you get to it. So, I do not think there is a lot of question about what needs to be part of the directory as far as capability the question is where specific pieces of information reside.

I may have a specific Direct address that I use only to receive referrals, okay? Do I want to publish that openly? No, maybe not. Okay? On the other hand, my gender as a provider probably is not something I am going to be able to protect because more than likely that is available in any number of public documents.

So, we have some work to do to segment it appropriately but the question of whether it should or should not be all openly accessible or should be restricted, at least with the work we have done, we see a need to provide both public and private capability and I know that some of the work that is going on with NPPES is the same way. They are looking at providing both public and private capability even within NPPES.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, I'm sorry, I want to be devil's advocate for a second here because a year ago I would have completely agreed with you Bob that there was a need for a public version and a private version of some of this information and whether it is because it is all discoverable publically, whether or not it is for business reasons and therefore not PII and is not protected in any way. Outside of all of that there were sensitivities among providers. I have to admit, based on the things that we have been talking about over the last couple of days I am beginning to question this and whether there is a need or there is merely a perceived need to segment things.

So, I am just kind of curious of the people here in the room that run directories today do you have a different public and private, a different consumer and provider version of the database? And I am seeing some hands, so, yes there are hands that went up and people nodding. Is there anybody that does not? So, there were a couple of those as well.

So, I would agree with you that it seems obvious to me but maybe at least in some circumstances not so much. So, there probably needs to be a mechanism that may not always be in place. I don't know.

Elaine Fontaine – Director, Data Quality & Analysis - Rhode Island Quality Care Institute

This is Elaine Fontaine from Rhode Island; we will be bringing up a website search functionality for our provider directory in Q4 this year. There will be a free form public version and a provider-facing version. The kinds of information that a provider would want and want available to their peers is different than the data that they would want available but the underlying database is the same so I do not have two databases but what I present to the public is obviously going to be different than what I present to another provider.

And we are taking in lots of data some of it from matching purposes, some of it because we may take data master it, clean it and send it back out to an originating source that is definitely PII, that is the Tax ID or a DEA number those are certainly things that you do not want made available to the broader population.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC
Dave Marotz from Surescripts; I'll say our directory over the years has evolved from early days of providing all access to quickly mid 2000 saying certain pharmacies might say "I don't want to communicate with this EHR because they are performing poorly on the network." So, we put in abilities to restrict. So, we had certain just rules around the network and who could talk to whom because of needs. Luckily, over time that subsided and said, you know what, all prescribers can talk to all pharmacies let's make this a very open community.

Now we are getting into the world where we do have pharmacies that are private dispensing where those entities want to be excluded from our public website where we post all pharmacies that are available, all prescribers that are available and additionally our directory so we have filtering from that perspective. We need to address is how to remove in those private exchanges, sub-networks.

Additionally, from our data, yes, at the root it is providers or practitioners and organizations but then it comes down to what services, what use case, use your buzz word here, I need to find ePrescribers so certain entities that contract with us for ePrescribing as a pharmacy you only see ePrescribers that can receive refills, you only see your pharmacies. As a prescriber you can see vice versa.

Additionally, too, is now with clinical messaging we just add another column and said, well, here's Direct addresses, if you are using us for ePrescribing only you do not see Direct addresses. The same thing for our native HISP users they see all of our records plus all the HISPs that we have interchange agreements with, they get everything with our HISP to HISP exchanges we publish all of our native.

So, we have business needs to facilitate and accommodate from that perspective, but in general we want to try to maintain a more open community and exchange, but part of it is also addressing technical needs for those customers. They do not want to see all 4 million records that are out there since the beginning of time if all they really care about is this one use case.

Nicholas D'Addabbo – Project Manager - athenahealth
This is Nick D'Addabbo from athena just curious for those folks that do share your directories publically I don't know if those are on public websites or whatnot, but in our agreements that we have for directory exchanges we essentially state that we will not share directories that we receive in externally with anybody that is not a client of athenahealth. So, just curious how that is handled on the front of sharing your directories publically and how you have gotten consent from whether those directories include your trading partners that you have received external directories for or if they are just your own clients?

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

So, who raised their hand that they share publically? So, if it is quick to mention what you do I'll just report it to the people over the phone. What?

Yvan Charpentier, MSEE – Senior Development Manager & Software Architect – NextGen Healthcare

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Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Never mind I will give you the microphone. Sorry, about that.

Yvan Charpentier, MSEE – Senior Development Manager & Software Architect – NextGen Healthcare

Yvan Charpentier with NextGen. The sharing is with the consumers is with our patient portal patient. So, they still need credentials to get to the portal but then the view of the provider is the same as what the provider sees within the application. Now one of the reasons is because we collect basic information so there is nothing really to not share.

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Okay.

Ryan Askey – Manager, System Configuration - UPMC

Ryan from UPMC, yes, our directories are primarily for public consumption but the difficulty is that they are also used by providers as well. So, for example, I'm a member and I'm in a certain network, I need to consume the providers that are in my network, although I may be shopping for another different network. So, there is a difficulty in that we need to present as much information to the public as possible without making the information about the networks too invisible to them and that if a provider is using the directories to say, pick another provider they are going to refer to, that this provider is par with the plan that they are going to be in. I do not want to refer you to a provider that does not take your insurance.

So, we actually have a couple of different means for people to be able to consume it, our public UPMCplan.com/find that is the main tool our member services reps use it all day long to answer phone calls. The members use it all day long. The providers use it all day long. We have another version of it when you log onto our member portal that only delivers to you providers that are par in your network. So, I cut out providers, which is good because by the time I know who you are I can tell you exactly the providers that are in. Whereas on a public site we need to let the member handle that part themselves, which they may be able to, they may not be able to.

We also have a mobile version of the same directory dataset. We have another version for our exchange shopping experience but it is all the same dataset which is an important thing for us. We have the ability, if a provider wants to send us claims for a Tax ID that maybe they are only at once a month or once a year, I need to store that so I can pay those claims, but I do not want to list them as being there in the directories. So, we allow for a bit of masking where we want to know that a provider works somewhere but we don't want to let any members know that because they cannot be counted upon to be there. So, we do allow for that but all of our data does face the members by nature which is a real design challenge as well.

You work backwards from the time of…you want everything to sort of function like the yellow pages to now a more unindexed sort of dataset that someone can just consume from a variety of sources. A provider dataset to face the public is a semi-guided experience indexed in a way that they can find a cardiologist but do they know what a cardiologist is to begin with versus a cardiovascular surgeon.

So, yes, it all faces the public but we have had to cut and tailor several different versions of the same data so that at least the hours are the same everywhere you look and the phone number is the same everywhere you look at the same dataset but its presentation in one module can be very different than its presentation in another. It is difficult but you have to be consistent.

James L. Fisher, PhD, CISSP – Principal Architect – MedAllies, Inc.

Jim Fisher with MedAllies, I'm one of the Co-Chairs of the DirectTrust Direct Directory Policy Working Group. We have a sharing agreement that we have with the DirectTrust pilot and basically the HISPs end up being the authoritative source of the data. The HISPs are permitted to share, actually they upload to the aggregator, and then they can…if they are a participant they can retrieve from the aggregator, those HISPs are permitted to share the data elements with their client EHRs but those HISPs must also tell the client EHRs that they are not permitted to re-share with anyone else. We also have some policy usage agreements on top of that. And so, the edge EHR systems are also required to do some checks to make sure that the data is up-to-date before they use it. So, that is one example of a policy agreement.

Now I am going to take the DirectTrust Co-Chair hat off for a moment. After listening to this conversation I do not know how much of this is really it is protected data versus it is really you should give different answers based on who is asking. So, if one provider asks another provider what is your Direct address about data release point then they will get the real Direct address.

Typically a provider does not want to be the first point of contact for a new patient. So, if a patient is asking the question "what's your Direct address?" The answer coming back is most likely "here's our front office."

And then from the conversation that we had yesterday with SSA, and I'm going to assume CMS has the same thing, if they are…health plans organizations, if they are asking for data from a provider, the Direct address, then chances are that the Direct address that should be answered to them is "here's our compliance office Direct address they will take care of your needs."

Robert Cothren, PhD, MS, SB – Executive Director – A Cunning Plan, California Association of Health Information Exchanges

Just real quick, as I said before, you cannot completely separate what we are talking about with governance versus technical issues. We do have on the parking lot here I just wanted to point out that somebody has put up here a need for legal agreements or perhaps standard language, etcetera, it gets to some of the things that were just mentioned about the policies there that there may be some need that we are going to get to outside of this workshop.

David R. Marotz, PMP – Director of Directory Services – Surescripts, LLC

One more item on the public website front, so, on surescripts.com, this is Dave Marotz, we publish all ePrescribers. Our charter was to make ePrescribing happen and one of the things that was always needed was pharmacy saying "who are the prescribers in my area I should be engaging with" and from the prescribers "which pharmacies are available for me to communicate with." So, we had a need to make this available for end users to discover that information.

Dan Chaput – Public Health Analyst – Office of the National Coordinator for Health Information Technology

Dan Chaput from ONC, just to test this concept some, there were folks asking that we publish the list of names and attendees of who is here in the room and we have agreed to do that. We will be redacting some e-mail addresses so if you would like your name or just your e-mail address redacted from a published list of who attended this meeting let me know.

Carl Leitner, PhD – Associate Director – IntraHealth International

Carl Leitner with IntraHealth, so in a lot of the directories that we have there is a home address and the home phone number or the mobile phone number of the provider and that is in fact the only way to contact the provider is that one mobile phone that is there personal phone as well as their business phone. So, we want to obviously redact that in a lot of our use cases.

And just since we have not gotten to the standards war and to try to get us into that, just to say that in the CSD model the use case is very clearly identified, there are four standard queries against the database that can be made but there is also a way to easily extend those queries within the standard so that you can have redacted information, so you could have the public version of the access to that data.

Christopher J. Hills – Team Lead, Standards Engagement Team - DoD/VA Interagency Program Office

My name is Chris Hills with the DoD/VA IPO. I am going to talk out of both sides of my mouth here, right, one with my official government hat. I'm here in…mode, I think this is a fantastic meeting and I am very encouraged by the discussion and support, right, so the DoD has a lot of similar concerns and we actually have a business challenge that we need something like this, but our driver is different than everybody else's and I think each of your own are different than everybody else's. There is not going to be a solution for everyone.

So, one of the things I would encourage is standards, right, we have the exact same transmission standard that everybody else does. So, I know we only have an hour and 10 minutes left but we hit on some really easy wins, right, ask some standard organizations to standardize the name, the formatting and the name, right, let’s pick some low hanging fruit, let’s move forward with that.

From a data privacy perspective our data is our own, right, so we are here to contribute we are not allowed to share our name, I cannot talk on behalf of the government, I cannot commit on behalf of the government. So, there is some information that I am not allowed to share. So, putting that out on a public site, yes, we will have a conversation about that because it just cannot be shared out there because I am not representing the government as a whole.

So, to put my personal hat on, right, if I can halfway do that, is if you have the data you need to secure the data because that data while it may be yours as your business drivers you cannot just share it because I as a consumer provided you that data don’t share it, don’t violate it because I’ll tell you as soon as that data gets hacked no matter how much it gets hacked, lost, leaked, spilled you are liable, right? So, just be careful.

This with my consumer hat on, because I used to work for LexisNexis for 10 years, I am very aware of the different data hacks and it is…

Audio abruptly ends