The Office of the National Coordinator for
Health Information Technology

Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) ANNUAL REPORT WORKGROUP MEETING

September 30, 2020, 2:30 p.m. – 4:00 p.m. ET

VIRTUAL

Speakers

Name	Organization	Role
Aaron Miri	The University of Texas at Austin, Dell Medical School and UT Health Austin	Co-Chair
Carolyn Petersen	Individual	Co-Chair
Christina Caraballo	Audacious Inquiry	Member
Brett Oliver	Baptist Health	Member
Lauren Richie	Office of the National Coordinator	Designated Federal Officer
Michelle Murray	Office of the National Coordinator	Staff Lead

Call to Order/Roll Call (00:00:00)

<u>Operator</u>
Thank you. All lines are now bridged.

<u>Lauren Richie</u>
Good afternoon, everyone, welcome to the workgroup of the HITAC annual report. We have our full team with us today; Carolyn Petersen and Aaron Miri as co-chairs, and Christina Caraballo and Brett Oliver as members. We have the meeting agenda up in front of you, and I will turn it over to our co-chairs to get us started.

Opening Remarks and Meeting Schedules (00:00:29)

<u>Carolyn Petersen</u>
Great. Thanks, everyone. It is great to see you all on our second meeting in September. Looks like we are making some really good progress, and I am excited about what we are going to take up today.

<u>Aaron Miri</u>
Same here. Let's get right into it, and appreciate everybody joining today. Let's have a little fun with this. Okay, Carolyn, you want me to kick this off?

<u>Carolyn Petersen</u>
Sure. So, here is our schedule; pretty familiar to all of us by now. After today, we have a meeting in mid-October and mid-November and mid-December, and then we will present the draft and hopefully get approval early in 2021. Next slide.

And then, these are the dates of the HITAC meetings where we will be bringing things forward for their review and discussion. Next slide.

So, our steps starting today will be to review the draft crosswalk of topics and then to present an update on the draft crosswalk of topics in October at the HITAC meeting. Next slide, please.

So, let's dive into it. Next slide, please. Oh, there you go. We had thought we would start from the top again and go through because there have been some changes and just figured it was good to kind of reconnect with the whole thing instead of just the parts that we have been working on. Are we able to make that a little bit wider, or are we limited by the tool? Okay. Yes.

<u>Lauren Richie</u>
I think we are – oh, sorry. Katie, is that it? Are we not able to widen that? Or should we just instruct people to use full-screen?

<u>Accel Solutions LLC</u>
We can, it just depends if you want to zoom in more or not.

<u>Carolyn Petersen</u>
Or we could use binoculars. I will open my copy of this so that I –

<u>Aaron Miri</u>
That is fine. Exactly what I was doing. Yes, exactly what was I – go full-screen is pretty easy.

<u>Lauren Richie</u>

And I think, Katie, just for the – yes, or for the public view, if we can – for those that are listening, if you can – you can enlarge to full-screen in the upper right-hand corner, looks like a little square box there next to three dots. It is a little hard to read, otherwise.

Carolyn Petersen
Okay.

Aaron Miri
A lot of good information, so.

Discussion of Draft Crosswalk of Topics for HITAC Annual Report for FY20 (00:03:32)

Carolyn Petersen
That is right. It is not a quick read, even when you have a full-size copy. So, starting on the first page, additional target area; this is the public health target area that we have been talking about adding. And the first topic: exchange of clinical data for public health purposes. We have got a gap and a challenge, our opportunities. And then, a third recommended activity that we have added would be: facilitate acceleration of the practical use of data standards to improve situational awareness for local, state, and federal government emergency response. That is in addition to: hold a hearing to understand stopgap solutions to improve reporting capabilities and assess whether long-term solutions are needed, and then suggest HHS guidance on minimum necessary datasets for exchange of public health. So, it is kind of expanding upon the theoretical idea that we already had listed on the grid. Thoughts?

Aaron Miri
For me—and I think we talked about this a little before—I like the standards of the concept there. I think it is important, and I think it expands upon the need that there may be gaps there, particularly with public health, which I think we all know that there are. So, to me, it is a worthwhile add. But I think we imply it, I do not think we ever called it out like this before, so this makes sense.

Brett Oliver
Yes, Aaron, I agree with you. I think that is a key concept that maybe was missing.

Christina Caraballo
Yes, I agree. I like this addition.

Carolyn Petersen
Good. Yes, I agree that it kind of – it is sort of the obvious elephant in the room that was there but was not called-out, so now it is very specific. Do we have any other thoughts for that one, that topic?

Aaron Miri
No, I like this. I think the other dynamics, we get into it a little later on. But to me, this is good.

Carolyn Petersen
Okay. Let's head to the next one: privacy and security for public health purposes. And here, we had an existing gap and challenge and an opportunity to discuss the tradeoffs between increasing interoperability, protecting privacy and security, and ensuring public safety during pandemics. We have a new opportunity: increase the clarity about the privacy and security concerns associated with biosurveillance activities. So, this kind of extends it a little further and adds more specificity about what the privacy and security concerns are. And particularly, also things that are not necessarily privacy and security concerns about other kinds of information.

Aaron Miri
That is right. And to me, I like it because it really brings a level of transparency, which is the whole point of this thing, which will raise the public trust with these efforts for public health purposes, right? The more you are transparent and the more we can bring awareness to any gaps, I mean, at least the thought is,

the more that the public will participate in various activities to keep people safe. So, to me, this is another dimension of it I think is important.

Christina Caraballo
Yes, I agree with that, and I think it is kind of like the elephant in the room. It is one of those things that if we do not address it, then people's fears will get in the way of us actually making progress.

Aaron Miri
Bingo. Okay.

Carolyn Petersen
All right. And then, the proposed recommended HITAC activities remain the same. I think we have talked about those quite a bit in the past, so I will not delve into it again.

The next landscape analysis topic is vaccine tracking, and here we have the gap. We have a challenge now that is more clearly stated: large populations require advanced technology to create models using large datasets and to identify individuals or groups at higher risk of disease, but such resources and expertise are limited. And the opportunity more developed: is to investigate whether predictive analytics is or could be used to aggregate and analyze this data to anticipate need for vaccines among vulnerable and/or high-risk populations, including for flu and COVID-19 prevention.

Aaron Miri
Mm-hmm. Yes, the only thing I would add to this—and I think it goes to the challenge as well—but with respect to the vulnerable and high-risk populations, there is a lot of scrutiny occurring now with these large datasets related to making sure that there is a level playing field, so the health equity component of these datasets and making sure that it is representative of the entire base of people so that your models are not inadvertently excluding types of demographics or various individuals.

So, I would just say something around "creating equitable models or equitable datasets," something to that effect, so that people know that we are aware that there are larger models out there. And I think we have seen this – one of the big bug-a-boos of machine learning is that some of the datasets inadvertently exclude types of race, gender, sex, whatever, that affect the outcome. And so, I would just say "equitable" because it is also coming up now with vaccine tracking.

Carolyn Petersen
Can we say "models that promote health equity"?

Aaron Miri
Yes.

Carolyn Petersen
I mean, I am just thinking. I do not know that there are any models today that we would say are truly equitable or that we even know exactly how to develop such models. But certainly, pointing out that we are heading for equity would be suitable today.

Aaron Miri
Yes.

Christina Caraballo
I like that addition. And scrolling through this, we might also include just education and awareness for patients, as well.

Carolyn Petersen

Good point.

Aaron Miri
That is a good one. That is a really good one, like educate people on the importance of these vaccines.

Christina Caraballo
Yes.

Aaron Miri
In an equitable manner, right? So, if you are Spanish-speaking, you get it in Spanish, or whatever. Okay.

Carolyn Petersen
And then, the proposed recommended HITAC activity is to hold a listening session to identify opportunities and barriers for healthcare and public health organizations, and highlight successful vaccine program interventions using predictive analytics.

Aaron Miri
I still agree with that. I need to know more, right? I mean, we are just now here in Austin looking at this and starting to dig into it, and there is a whole lot out there and a whole lot you just kind of scratch your head, so there is a lot more to learn.

Carolyn Petersen
Do you have any thoughts, Brett?

Brett Oliver
Yes, I am trying to collate them here. Yes, I definitely think we need to understand more. Part of it, when we say "predictive analytics," that is where I am struggling; I do not know what that means. Are we talking about machine learning, AI? Yes, all of the above? Because I think another piece to this, we are not only talking about equity, we are also talking about liability, too. And what I was struggling with is do not think what we are talking about here would – we are just trying to find potential risk populations to identify them so we can reach out, whatever the clinical scenario might be. With AI, there is this liability piece that is still up in the air, when you guys read "investigate whether predictive analytics," what are you reading into that term, "predictive analytics"?

Aaron Miri
To me, it is exactly what you said the first one was; so, it is not AI, it is identifying at-risk cohorts and potential clusters of high at-risk populations or people who could become at-risk, right? Example: we are right now doing a big study across the city to see just about one month of data with the students being back at UT, what is the infection rate and positivity rate? And the data is telling us that even though we have a high percentage of worsening infection rate on campus, those students are not mixing with the population as much as we thought they were, so it is not adding to the general positivity rate across the city. So, we are keeping track, almost like a virtual geo-sensing of students that we are contact tracing, to make sure that we maintain that positivity rate from really jumping out of the norm here in Austin. So, to me, the same thing with vaccines, right? You would look at it and say, "Okay, where are the predispositions for people that need vaccines first?" Especially once you identify what those different tiers are, who gets vaccinated first, and then try to educate and partner with. That is how I read this.

Brett Oliver
Yes, that makes sense.

Carolyn Petersen
And I am assuming that there might also be a functional component in that understanding where the vaccinations are occurring and where they are not, that might help you work with, for example, hospitals and health systems, schools, long-term care facilities in terms of identifying where outbreaks might crop

up.

Aaron Miri
Mm-hmm.

Carolyn Petersen
If you know that a particular area is lower in vaccination rate than in other parts of the country, say, where you have got some kind of medium degree of outbreak, then you could potentially say that is an area where they should be really watching and – well, I do not know how you would do penetration testing exactly with the technology we have today, but it would be a place for schools and care facilities to be really on the lookout because in the community you have a risk of greater infection rate and more escalated rates than others.

Aaron Miri
Mm-hmm.

Carolyn Petersen
So, fewer people that are vaccinated.

Brett Oliver
Yes, I would agree. And then, if you can identify where immunization rates may be low, then—a little bit back to what Christina was saying with education—there may be different ways of reaching different populations. Rather than blanketing everyone with every form of communication, which is probably not feasible to know: okay, in this population, if we could send out e-mails, or the TV ad or whatever it is, we know we have a better shot at reaching that group to get the vaccine. So, yes, thank you for your patience there, I wanted to make sure that –

Aaron Miri
No, that is a great question. I mean, I will give you an example. Some of the at-risk populations here in the State of Texas, what we have found is that sometimes the best way to reach them is actually partnering with the Red Cross or a local church or the YMCA that tend to be points of congregation for these individuals, that they are more trusting of something coming from, say, the YMCA than they would be an official leader. So, there are also those mechanisms which allows us to work with a trusted third party for public health purposes to make sure there is a vaccination program. So, that is how I read this.

Christina Caraballo
Yes, I agree, it is just – go ahead, Carolyn.

Carolyn Petersen
I was just thinking if you can probably use social media and Google searches to identify areas where there is greater interest in anti-vaxing information, which would inform your decision about what areas you really wanted to look at in terms of vaccination rates and potential for outbreaks. You know, if you know like particular neighborhoods or zip codes there is a higher proportion, they have been able to make estimates and assumptions about flu based on Google searches, for example. So, if you know this is an area where there is a particular interest in anti-vaxing websites and literature, and more activity on Twitter and other social media, you could interpret that as a place where you would want to be really watching and maybe doing more testing or other activities.

Aaron Miri
Mm-hmm, that is exactly right.

Christina Caraballo
Yes, I agree with that. I am wondering if, after predictive analytics, we add a little bit of guiding text. So, maybe something like "predictive analytics to better target outreach, education, and response efforts and

strategies," or something along those lines.

Aaron Miri
I like that, so more specificity on what predictive analytics means, kind of explaining the "why" and a little bit of the "what"?

Christina Caraballo
Exactly.

Aaron Miri
Yes, I like that.

Carolyn Petersen
Cool. On this next page, Page 2, the next topic is patient matching for public health purposes. We had our gap, and we have the challenge more fully described, that would be: missing demographic data can delay patient outreach and complicate contact tracing efforts. And I think that should be contact tracing rather than contract tracing.

Aaron Miri
Mm-hmm.

Carolyn Petersen
And our opportunity remains the same. And we have expanded the proposed HITAC activity a bit to: develop tactical recommendations based on ONC's forthcoming patient matching report to Congress, including consideration of expanded use of AI and related privacy and security concerns. So, do we need to add any expansion to that based on the discussion about the previous topic, as well as anything else?

Aaron Miri
I am just trying to think in my head how – I mean, I think we could. Actually, I like Christina's approach, which is to kind of break it down a little bit and talk a little bit more about, again, the "why" and some of the "what." To me, the "why" is, again, we are – this allows for—again, I am not a wordsmith here—but accuracy of identifying at-risk populations, and then, advanced algorithms or this augmented intelligence that will help determine where those potential risk points are and identifying people accurately. You know, so that I know that Aaron really is at-risk, and we are going to get in front of Aaron. But to the point of making sure that Aaron also understands that it is for his own well-being and that he can opt-out and all kinds of things that need to be done around privacy, and then, of course, security of that data. Somehow, I guess expanding on the "why," right? Again, using Christina's rubric from earlier, which I really like.

Brett Oliver
So, Aaron, if you are doing patient matching, say for COVID for instance, if the lab has CCDA information, are you allowed that information from a privacy and security standpoint?

Aaron Miri
For public health purposes, you are allowed elements of it, and it is different between what is allowed under FERPA versus what is allowed under HIPAA, and there gets to be some murky ground there. And then, how you can share that. Now, from a public health authority perspective, I think that public health authorities can definitely – from a public health emergency perspective, they have – I know OCR has done a great job of clarifying exactly what those data elements are. But when in doubt, as I have learned as we are doing contact tracing, we just get explicit consent, we explicitly ask before we get any elements from anybody on what we are doing. And it takes longer, but it does build trust. So, to the point of trying to automate some of that with again, artificial intelligence or augmented intelligence, again, it is all about how do you maintain that level of trust and transparency? But you are informing and teaching the patient or the at-risk population as appropriate.

Brett Oliver

It has been a clinical issue since I have been practicing, the data coming from labs not having – you know, you get a lab result on someone in the middle of the night that is critical, but the lab has no contact information, nothing. Now, it has been made a little bit easier with integrated EHRs and being able to look people up in your system that way, but it is a continuing problem. And I was just curious with the contactors, I know with HIV there is almost kind of an open book on what you can share with the public health officials, but I did not know with vaccines – or I am sorry, COVID tracking and things like that if it was just a mandate that the CCDA – and just that alone that had had the demographic information, would be enough. I do not know if it is a **[inaudible] [00:21:45]** problem or a legislative problem.

Aaron Miri

Yes, one of the biggest challenges we have had is exactly that. At times, the various EHR data back to the case reporting, right? And the lab reporting. And again, not having a unique patient identifier or a strategy around that to make sure that Aaron is uniquely identified in each of those. I mean, we have had people go to Walgreens and CVS for testing, and they come into UT of Austin for testing, and then they show up for PAT testing three weeks later for elective surgery, and you are like, "Holy smokes, how many times have you been tested in like two months?" But yet, you would not know that unless somehow the systems are all linked, and there is no master patient index. So, you end up having people that have been tested for COVID multiple times. Not that it is a bad thing; it is just a waste of resources of time, and effort.

Brett Oliver

Yes. Yes, I think the recommendation needs to stay in with the additional caveat to the AI piece that we all talked about, and Christina recommended.

Aaron Miri

Yes. Okay.

Carolyn Petersen

All righty. If we have no other thoughts about that one, we will hit the last topic in this area, and that is international exchange of clinical data for public health purposes. So, here we have our gap and our challenge. And the opportunity we have added is to share and apply lessons learned across many countries about the use of health IT to support public health, for example, for electronic case reporting.

And the proposed HITAC activity is to hold a listening session to identify opportunities and barriers for the use of health IT in international exchange, as well as lessons learned that can be applied domestically. And some suggested panelists could be the CDC, the WHO, clinician representatives, and privacy and security experts.

So, here we are kind of filling out some of the discussion that we have had in the past with the opportunity and a possible activity.
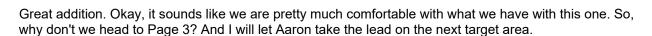
Christina Caraballo

I think this looks great. I think that we should definitely, in the proposed recommendations, add the Department of Commerce on here; they have a really strong health IT group. I actually just talked to them last week about USCDI and kind of how we are looking at international data standards in general. So, I think that would be of interest to that group. They also mentioned to me the Global Digital Health Partnership, which would be another one to note on the group of experts that we should potentially reach out to.

Brett Oliver

Great suggestion.

Carolyn Petersen

Great addition. Okay, it sounds like we are pretty much comfortable with what we have with this one. So, why don't we head to Page 3? And I will let Aaron take the lead on the next target area.

Aaron Miri
Cool. All right, and we are off. So, the item here was the exchanging of health data more broadly across the care continuum. Our gap here was interoperability to be increased across the broader care continuum. The challenge, of course, like long-term post-acute care, behavioral health, home-based services, whatnot, are limited in their ability to exchange data with other clinicians, including social determinants of health in part due to EHR design. So, the opportunity there is the collection of more complete data about a patient, which will help clinicians identify risk factors for procedures, offer interventions, and provide targeted care.

And some of the additions here that we added are in the red text there. And so, of course, one of our proposals is to learn more about the recent developments in the area of PROs. And then, 2.) Identify and help improve data streams where interoperability is a challenge to sharing broader datasets, especially when a pandemic affects healthcare settings like long-term/post-acute care and in transitions to and from those settings.

And so, I think what the point here was to expand upon that what we would do is not just say, "Hey, this is broken," but offer solutions and then focus really on what we are realizing to be the care transitions that end up being where some of those gaps are when patients go across the medium. And then they go to a long-term rehab, you are like, "What happened to them? Did Aaron recover? Did he go home? What happened?" Those issues are missing, again, and I think we know that in that in broad context, too, beyond just the pandemic. Thoughts, questions, concerns?

Brett Oliver
Yes, I would like to understand a little bit further with the ADT notification requirements upcoming, how that is going to affect this gap, at least for the long-term care facilities. Just knowing that they are there or they have left is a humongous step forward; I am just concerned about how that all will fit in. It is like there is – you know, there are different levels of this data, there is something as simple as an ADT notification, and then something that could be – maybe it is simple, but more complex to me, like a social determinant of health or notes from a nursing home, which if they are still on a Tandy 2000 with a daisy wheel printer or they are on paper, I do not know what kind of technology options would I have.

Aaron Miri
Yes, that is a good point. You know, outside of the pandemic, let me give you an example. So, we implemented patient report outcomes across most of our sub-specialty in our ambulatory line, whether it is GAD/PHQ 2-9, common PROs, whatever, you know HOOS/KOOS for ortho, we have implemented all of them. Those results, both preadmissions, and during and then post after, and then we do follow-ups, all of those data values actually are stored as critical lab values in the patient's chart so that physicians can go back and look at those and say, "Hey, is Aaron trending up or down on HOOS/KOOS?" or whatever, right? And you can trend that, and you can document it. In order to share that information across the other health systems so that it would go there, I literally had to send it as a critical lab value. Otherwise, there is no easy way to share PROs, right? They are just not built in natively to the system.

So, when you look at CommonWell now, and you pull Aaron's record from UT of Austin, say, XYZ Hospital that is on CommonWell, it will come across, PROs will come across, but it is going to come across as a lab value because there is no easy way to do that. That is just a real-world example of some of the gaps that exist here. And so, how do you do that when you are transitioning care settings when it was designed for that?

Brett Oliver
Yes, yes. Great point, Aaron.

Christina Caraballo

Another recommendation that we could add that would build on work that was done in the interoperability standards priority task force is more work around closed-loop referrals. I have been working areas in social determinants of health, and I am following a gravity project very closely, and one of the things that has been identified is just the lack of standards around referrals in general, which the IT task force did identify. But then, also, what we are often discussing right now is referrals from provider-to-provider, so specialty referrals. And we are still not looking at referrals – standards-based referrals as much as I think we need to, to more of the community-based organizations. So, I think that would be a really helpful area to start looking at, as well. I am happy to expand on that more if that did not make sense.

Aaron Miri

Could you, for me? Maybe I am just not – maybe my brain just froze. I am not 100 percent understanding.

Christina Caraballo

So, I am in the earlier stages of figuring this out myself. But as we are trying to incorporate the use of social determinants of health data into the care continuum, and work with things like groups like community-based organizations, it has been identified that there is a lack of standards-based referral processes. And the ISP task force put this as a high priority, just standards-based referrals in general, with their top three as a gap during our last session. And I was reading through their recommendations as I was trying to figure out what standards-based referrals would look like in community-based organizations as well, and realized that it was very provider-to-provider focused, which is fine because they do not exist, that is a great place to start. But what I found is that groups are starting to look at social determinants of health, and expanding more broadly across the care continuum about how to implement referrals. So, it would be really helpful if we start now and start guiding the industry and these organizations to have a standards-based approach for referrals, as well.

Aaron Miri

I get what you are saying; so, I am going to give you a real-world example. I think I understand what you are talking about. So, let's take contact tracing as an example. One of the things that we have realized, and I think has published already here at UT Austin, is that as we are contact tracing with the city and finding contacts, we are finding people also that have discrepancies or deficiencies in their environment, in their home, or they are in a food desert, they may not have utilities, may not have a job, and there are other issues affecting them. And so, suddenly, our contact tracers now become care navigators and help connect them to like Meals on Wheels and other social services available, or whatever else, which is exactly what you are talking about, using SDOH data to set up informed referrals based upon other criteria, other than just your physical condition. If now you are in a food desert, and you need access to food or clean water or whatever, right? You need shelter, all those components. So, that makes complete sense to me.

So, how does SDOH, the point of the care continuum, how does this inform data-driven referrals or data-driven SDOH referrals? Again, I am not a wordsmith, but I hope that my example makes sense to Michelle, who will put it into English for us

Michelle Murray

I will try.

Aaron Miri

I totally get it. Yes, Christina, I get it. Thank you for explaining it to me. Once you did that, that scenario popped in my head. Brett, does that make sense to you as a physician?

Carolyn Petersen

Based on your own example?

Aaron Miri

Yes, does that make sense to you, Brett, as a physician?

Brett Oliver
It does. Yes, I am following.

Aaron Miri
Okay. All right. Let's go to the next one then. So, we do not have anything to change on the next item; it is still all in the black text, but please look it over. Just in the terms of time, though, I am going to skip it and go to the next item so that we focus on the colored-text items because that is what we really need to address. But do take time in your off time to go look at these that have stayed the same and address anything that comes up.

So, we are going to go to the third bullet now: exchange of SDOH data. So, the gap there is that business models across healthcare do not yet support the capture and use of SDOH data—yes—standards and data availability, patient matching at varying levels **[inaudible] [00:34:29]** maturity, like I just told you about, my example of PROs. As SDOH data is collected, they are usually documented as free text in the EHR—that is right, that is why I did discreet lab values—limiting the ability for data exchange across clinicians and community service **[inaudible] [00:34:42]**.

So, the opportunity is develop and adopt standards for SDOH data collection, transfer, and integration for pop health and individuals' needs. And then, of course, our recommended activities, one of them staying the same, which is suggest updates on SDOH for the ONC playbook and patient engagement. And then, 2.) Can be in a group of stakeholders in that community, SDOH tech companies, community-based organizations, standard development projects, to understand the state of SDOH data exchange and practice, identify gaps and barriers.

The only other thing I would add to the stakeholders is add the payers. We have had really great engagement from the large payers about using SDOH data and funding those kinds of programs because I believe it is well-documented that the preventive care and helping people out in a food desert and getting them food will help mitigate other co-morbidities that could become a lot more costly, and thus, have a detriment to social determinants. So, I think payers would be another group I would add to this blue text. But that is my comments; what do you all think?

Carolyn Petersen
Yes, that makes sense.

Christina Caraballo
I agree.

Brett Oliver
Yes, I like the addition of payers.

Aaron Miri
Okie-doke. All righty.

Christina Caraballo
And I really like our second suggestion on here, and I like how we added the actual understanding the state of SDOH data exchange in practice and identify gaps and barriers. I think that is a key piece and a nice addition.

Aaron Miri
Yes, and we can use examples like I just gave of my shop, what we had to do is just share PROs, right? We had to make them a critical lab value because otherwise, you cannot share as easily. It is totally bonkers. So, things like that, I think, would help give color **[inaudible] [00:36:25]** group of stakeholders.

All right, increasing health equity across populations, locations, situations. All right, so data is not systematically collected nor used to identify disparities in outcomes, healthcare, and risk. And the gap that would be challenges: lack of required adoption and use standards for collection and storage of relevant data can make it difficult to identify at-risk populations and to implement appropriate interventions. Again, lack of interoperability makes it difficult to exchange the data; we talked about that a little earlier. Opportunity there is advance requirements to collect and share data about groups experiencing health inequities. The data can be used to support the implementation culturally, linguistically, of appropriate health IQ solutions. Of course, again, still in the black text there: identify nontraditional sources of health information that could be made interoperable.

For proposed recommended HITAC activities: 1.) Convene a group of stakeholders; again, we need to understand how to improve collection and sharing of data that can support identifying and addressing disparities in healthcare. 2.) The current state of potential improvements of the accessibility of consumer-facing health IT diverse populations. And then, 3.) Nontraditional sources of health information that could be made interoperable to better serve at-risk populations.

All right, so again, I can give you a real-world example. Austin, Texas, has a large Latinx community; we know the Latinx community has a disproportionately high share of infection rate with COVID-19. We have had to modify a lot of our approaches, whether it is education, whether it is engagement, whether it is tooling, whatever, to make sure that those at-risk populations—in our case, the Latinx community and others—are appropriately engaged and feel safe to engage; this kind of goes along with themes earlier in health equity. And this is about leveling the playing field to make sure that whatever your locale, whatever the population you are engaging with, wherever you are, that you are able to reach them in a way that they want to be reached, and they feel safe and comfortable, and they understand it. That is my make-it-simple example. Thoughts? Questions?

Carolyn Petersen
I like it.

Aaron Miri
Do we feel like we are missing anything when it comes to equity? Do we feel like we are missing anything? Or do we feel that health equity is generally understood, that most people will read that and go, "Okay, I understand what that is"? I mean, I do, and you all do because we love this stuff in a really interesting way, but will the general public? And will people understand what "health equity" means, or do we need to define it?

Brett Oliver
It never hurts to define it. I think "B" there will help us define it a little bit further in terms of understanding current state. But yes, I do not think it hurts to define what we mean by health equity within the context here.

Aaron Miri
Okay. Carolyn and Christina, are you guys good?

Christina Caraballo
Yes, looks good to me.

Carolyn Petersen
Yes.

Aaron Miri
Okay. All right, let's move on then. Sharing data with the research community—obviously near and dear to my heart here at UT. The gap is researchers are challenged by data quality and consistency concerns,

limited governance, policies, inconsistent implementations across technical architecture, and varying needs of individuals and organizations that create and use data.

So, the challenge, and this is in the blue text here: require a health IT infrastructure that supports the use of electronic health data for research and sharing of data among clinicians and researchers. The opportunity there is to increase alignment between clinical and research ecosystems to enable research to happen more quickly and effectively. And to me, I would simply add both research and prospective research, which are uniquely different when you look at it from an academic perspective.
Because one may be a new prophylactic that you want to deploy, but you do not really know, and you are going to try to source that out and work with the place to make that happen and figure out what data you need. And the other one may be like clinical quality improvement kind of research where you have already a program in place, and you are like, "How do I lower my rate of infection of cloud feeds in this unit a little bit faster?" right? So, I would just say maybe we need to define research a little bit and say this is both prospective and ongoing as two definitions.

And then, from a proposed recommended high-tech activity: to hold listening sessions to learn more about the gaps in standards needed by research, which is accountable to institutional review boards. And then, identify educational approaches that increase awareness and promote the implementation of national health IT priorities for research and a policy and development agenda. And I think both of those are needed, what do you all think?

Brett Oliver
I really like what you said about research because I think traditionally if I read this, it would have been somebody is doing an official study that is going to a review board or whatever. But the fact of the matter is, so much more of it is done prior to that, where you are trying to understand even as an organization, as an office, as a payer, where are your gaps, doing your own internal research. And if you do not have that data, you cannot find that. "I think I might have a gap here," you look at it, and you are like, "No, I do not. I think I might want to study this," and then as you do some pre-research, as you termed, you realize, "No, that is not going to be worth our while," and having that data is just as important as the data you need for an official research trial.

Aaron Miri
Bingo, that is exactly right. **[No dictation] [00:42:33 – 00:43:00]** Either on mute or I dropped.

Carolyn Petersen
No, I do not think so.

Brett Oliver
I am still with you.

Aaron Miri
All right, let's move on. All right, this is a metadata subtopic again around research data sharing. So, in this case, the gap is metadata management and **[inaudible] [00:43:23]**, is it a **[inaudible] [00:43:24]** for reconciliation? This kind of goes back to what you were just saying, Brett. The challenge there is the lack of **[inaudible] [00:43:32]** and nomenclature and use, even I would say data provenance and other issues that occur with data.

The opportunity there is determine the types of metadata and related standards necessary to facilitate machine-based clinical data management, including management of exchanged data to reconcile data from multiple sources. And then, the proposed recommended HITAC is to charge a task force to review and provide recommendations regarding metadata standards and potential additions to USCDI. I would go give an example—and Brett, you will probably remember this fondly—as you recall, in the early days of DICOM standards, and the early days of image standards, it seemed like every single vendor had their own proprietary standard that they would save a respective image on, so that If you had a vendor-X fetal

monitoring image, it could not be opened up with some generic viewer, you had to have that specific viewer. So that emergency rooms were then having to burn CDs if that viewer application was literally like executable on the CD with the image so that people at another site could actually read the image.

And it was impossible, right? Everybody had their own proprietary stuff, and it was like how do you read this? What is going on? And how do you exchange data? It was nearly impossible until people figured out how to a DICOM wrapper and make a universal UOM. Again, Brett, I am sure you remember those days fondly, right?

Brett Oliver
Absolutely, absolutely.

Aaron Miri
So, it is one of those things that it is still an issue in the research community because of these varying datasets and the nature of research to try to push the envelope and obviously generate new bodies of knowledge that you still have that issue. Maybe not with images, but you have that issue in general with datasets, like how do you actually use this thing? How do you actually work with it? And then, when you are looking at giant data, like 10 million records—the project we are working on right now related to COVID-19—just to normalize it is a Herculean effort because there is not a common nomenclature in metadata **[inaudible] [00:45:31]**, and a data dictionary that does not look up. So, that is just an example of some of the issues and gaps that exist. And thinking about this, it became very big, very wide, but it is very important how to standardize those types of things. Thoughts? Questions?

Brett Oliver
No, I agree with what you said. I like how you had it worded.

Aaron Miri
Christina, what do you think? I know you have a lot of dovetails with the USCDI.

Christina Caraballo
I do not really have anything **[inaudible] [00:46:14]**.

Aaron Miri
All right. Carolyn, are you good with this section?

Carolyn Petersen
Sure, sure.

Aaron Miri
All right.

Carolyn Petersen
My favorite, privacy and security. Okay, so the first one is analysis topic – are we able to fix the feedback?

Lauren Richie
Yes, we are working on that echo now.

Carolyn Petersen
Okay. The first topic is beyond HIPAA protections for data generated outside of the HIPAA framework, and it is a rules for sharing subtopic with this one. So, the gap was the lack of clear rules for data not subject to HIPAA protections.

The challenge was that for third-party access to health data, there are implications of private sector partnerships between apps and payers, like Google and the Ascension partnership. So, the opportunity

we have come up with is to increase transparency, education for business practices, and other potential uses of patient health data when healthcare organizations share or –

Lauren Richie
Apologies, Carolyn, if I could just jump in. If we could ask the task force members to mute your phone or computer if you have both on, I think that is where the feedback is coming from. Thank you. Sorry, Carolyn.

Carolyn Petersen
That is okay. So, I will read that opportunity again. "To increase transparency and patient education for business practices and other potential uses of patient health data when healthcare organizations share or license data to technology companies." And for the recommended – proposed recommended HITAC activities, there are three.

First, to hold the listening sessions to learn more about HHS and FTC activities. Second, to explore patient and clinician experiences with the sharing of health data with third-party technology companies to continue to identify best practices and gaps. And third, to review government and industry activities that are already underway protecting the privacy and security of health data shared with third-party tech companies.

So, here we know what the gap is and the challenge, we have known that forever. But these are more specifics about the opportunity and some possible activities.

Aaron Miri
Yes, I can tell you that this is, again, **[inaudible] [00:49:25]** in the industry in terms of topics. And, in fact, I have some discussion today with some national folks about this kind of stuff. There is a lot of folks I think that do not understand the nature of third-party agreements, business associates, and what do you do with data generated outside of HIPAA, what do you do with that, right? And that does not fall under HIPAA, and I will give you an example. So, there is someone that sends their data to a genetic testing service, consumer-wide like 23 & Me, that does not send it to HIPAA, or disclosure, or breach notifications, or any of that kind of stuff. And FQC has limited jurisdiction in its accountability. So, there are these gaps that you would have thought that these things qualify for, but HIPAA was written at a time when those companies did not exist, those business models and things because it was not thought of. So, that is what this is about, in my opinion.

Carolyn Petersen
Yes, I think this a recurring theme in all sorts of **[inaudible] [00:50:39]** across the high tech over the last three years. I think the question is, how do we feel about **[inaudible] [00:50:49]**?

Aaron Miri
I think it is important. To me, I would like to know more, and I know there is a lot of work going on, right? I know that based upon my various levels of engagement with various folks. And I think it would behoove us to learn more, and to identify those specific activities that we can do to help educate and pave the way so that we can have the industry get their arms wrapped around this.

Brett Oliver
Yes, I agree with understanding. We need to learn more.

Christina Caraballo
In the discussions, it might be helpful if we include some of these third-party apps, as well.

Carolyn Petersen

Yes, if we have an example or two, we can add just in parentheses like, "e.g. you know whatever," that would kind of help point people in the direction we are heading.

Christina Caraballo
Yes, I mean, I like that. But when we are looking at activities that are like focused on as far as the patient and clinician experience, we are viewing government and industry activities. But we are talking about third-party apps that do not explicitly put them in as a stakeholder group that we should be reaching out to, as well. So, when we hold the listening session, that is a group that we should also learn from and listen to, so engaging third-party apps.

Aaron Miri
That is fair, that would be interesting. I do not know how you would – I guess you would set out a general policy, anybody that does healthcare apps or third-party kind of things, I mean, that I am aware of, there is not like an EHRA for third-party apps.

Christina Caraballo
Yes, I do not know.

Aaron Miri
Again, you have to learn. I do not know. Okay.

Christina Caraballo
Maybe **[inaudible] [00:53:16]** group could help us.

Carolyn Petersen
Okay, is that helpful, Michelle?

Michelle Murray
It is hard to hear sometimes, but I will try again.

Carolyn Petersen
Are you all ready to go on to the next one, or do we have more to bring up on this first topic?

Christina Caraballo
I think we are good.

Carolyn Petersen
Yes, so for the second one, this topic is beyond HIPAA, protections for data generated outside of the HIPAA framework; and here the subtopic is consent. So, the gap was a lack of clarity about the parameters of data sharing and disclosure and their implications for consent.

The challenge is the rules for consent have not been established for receivers of received data when they get it. The opportunity is to further improve clarity around patient consent for research and exchange of data. And then, we are adding two topics, two proposed recommended activities: first, to identify educational approaches and potential regulatory solutions that offer improved transparency of privacy protections outside the purview of HIPAA; and second, to explore ways that clinicians can educate patients about the benefits and potential risks of using third-party apps as contemplated by the ONC Cures Act final rule, and about the need to review and comprehend the apps' privacy policies. So, this gets at the patient-ed point that Christina has often brought up and that I sometimes do, as well. Thoughts?

Brett Oliver

Yes, I think the patient-ed piece is critical. People need to understand what in the world these apps – what kind of – I am sorry, this echo is driving me nuts. It is not on my end; I am muted, and I am only on my phone.

Lauren Richie
Yes, well, I think the others, just Aaron, Carolyn, Christina, if you can mute, as well. Meanwhile, we will keep troubleshooting on our end. Okay, it should be clear now. Can we try again, Brett?

Brett Oliver
Sure. I was just saying I think this is critical. You know, a patient sees an app, and if it is in an app store, all of a sudden, there is some credibility to it. Even within the Epic EHR app orchard, if it is in the app orchard, it must be clinically accurate. And I think patients need to understand that the clinical utility and accuracy of things, and what kind of scrutiny an app has undergone as well as the privacy and security concerns.

Christina Caraballo
That is a really good point.

Carolyn Petersen
Yes, I agree. Okay, any other –

Aaron Miri
I have returned.

Carolyn Petersen
Oh. We just talked about our agreement for that second one on the subtopic.

Aaron Miri
Okay.

Carolyn Petersen
Do you have any additional thoughts?

Aaron Miri
Mm-mm. No, I like it.

Carolyn Petersen
Okay. We will go on to the third topic, then. This one: protections for data generated outside of the HIPAA framework; the internet of things, subtopic. The gap is that there is limited interoperability across IoT vendors; as IoT objects become more integrated with health IT systems, security risks increase. Additional concerns have been raised regarding the challenges of informed consent for users of IoT technologies.

So, we have added a challenge and an opportunity, and proposed recommended activities. The challenge is: there is a lack of understanding of the privacy and security vulnerabilities of using devices connected to the internet of things.

The opportunity is to increase awareness of the privacy and security risks of using the IoT. And the two recommended HITAC activities are: first, to identify best practices for increasing the privacy and security of connected devices; and second, to identify educational approaches that increase awareness of the privacy and security issues related to the internet of things and ways to reduce them. So, still kind of an emphasis on awareness, but not specifically patient-ed via the provider.

Aaron Miri

I would absolutely agree. I mean, this is a major issue, especially as more consumer devices become medical-certified with the FDA fast-tracking a lot of things, which is great. There are a lot of standards and a lot of variety of technical devices now in the wild that are now coming into the healthcare continuum, and so I think we do need to put some guidance out there, and we need to learn some more about what is going on and bring awareness because it is not a bad thing, we just need to just be ahead of it.

Carolyn Petersen
Brett or Christina?

Brett Oliver
Nothing to add. Thanks.

Christina Caraballo
Same.

Carolyn Petersen
Okay, we will head to the last topic under this priority target area: privacy, and security of synthetic data. So, the gap was HIPAA constraints limit the ability to conduct research and train machine-learning models using large-scale datasets in both research and healthcare settings. The challenge was to determine the unique privacy and security considerations driven by the emergence of synthetic data, such as using AI to re-identify/de-identify data.

And then, today, we are adding an opportunity and a proposed activity. The opportunity is: explore whether the use of synthetic health data raises privacy and security issues, and if so, to what extent? And the proposed activity would be to hold listening sessions to determine whether the use of synthetic data raises any unintended privacy risks such as the ability to use AI to re-identify the actual patients on which the synthetic health data is based.

Aaron Miri
So, to me, this is important, right? And I think this ties back into especially the research realm that we talked about earlier, and all the things around health equity and all kinds of concepts. And so, to me, these large piles of synthetic data, if they are not de-identified and/or stripped, and/or really have any identifiers removed and all sorts of things, you could reconstitute the data; as well as, if the dataset is missing gaps of—again, race, color, sex, whatever—types of individuals, it could be leading to health inequity, as well.

Brett Oliver
Yes, I agree with you, Aaron. I think I would like to recommend an activity; from my perspective, we need to understand more and what are those unintended risks?

Carolyn Petersen
Did you have any other thoughts, Christina?

Christina Caraballo
No, I do not have anything else to add on this one. Looks good.

Carolyn Petersen
Okay. So, we are done with the privacy and security priority target area. Do you want to grab the last one, Aaron?

Aaron Miri
Sure. Last two. All right, so this is priority target area patient access to information. The topic is patient-controlled data collection access and sharing. The gap is a safety of mobile health applications. The challenge is safety and effectiveness concerns with consumer-facing mobile health applications.

Here is the opportunity: to provide reliable information about the quality of apps to enable clinicians to advise patients about which app to use and to empower patients when using apps to make decisions about their own care.

So, what are we proposing as activities? One: to support the existing efforts of a consortia that are working to vet apps based on their safety and accessibility and educate patients about the findings of the consortia. And then, two: explore ways the safety of mobile health applications could be enhanced.

This goes back to, again, the examples I used earlier with people walking in with third-party apps or whatever else, and the issues there: what covers them, what does not cover them? Right now, it is putting clinicians like Brett in the firing line to have to explain to patients when they have questions, and half the time they do not, right? We get phone calls all the time in our call center from patients asking just general questions, right? And so, it is just there is this gap when it comes to mobile health applications; not that it is a bad thing, we just need to understand it, scope it, size it, and address it.

Christina Caraballo
I agree. I think that you put that really well. And I think this is becoming increasingly more important, especially as we see more and more efforts around access, and **[inaudible] [01:05:05]** systems, and other things that we have heard out of the federal government, so from CMS and ONC and others.

Brett Oliver
Yes, I agree, as well. I think as we see more information sharing, there is going to be more opportunity for apps to be developed, and this is really key.

Aaron Miri
Mm-hmm.

Carolyn Petersen
I am wondering for proposed activities if we might also investigate whether frameworks for assessing apps or a scorecard of sorts have been previously developed, and if that is something that the HITAC would want to look at enhancing or promoting or raising awareness about. I have this sort of vague sense that I have seen not an ethical framework, but that there has been some work about assessing apps and what to think about, and you know, kind of questions to ask yourself.

Aaron Miri
Mm-hmm.

Carolyn Petersen
If we could identify something like that, I mean, if it is out there, that could really speed and facilitate this notion of helping clinicians help patients with that.

Aaron Miri
Mm-hmm.

Carolyn Petersen
Because I think it is fair to say clinicians have a lot of other things to do, and somebody somewhere is going to have to develop something to help them with that, they are not just going to go do it themselves. Maybe this is sort of like the 2021 version of the Patient Playbook that ONC did some time back. Maybe within all this whole framework of landscape analysis tasks, there are a number of things here that can be done to get at this whole issue of patient education and helping all the parties understand the issues and make better choices.

Christina Caraballo

Yes, I agree with you.

Aaron Miri
Yes, that is great. I do not know if that exists, Carolyn, but if it does not, that is great.

Christina Caraballo
The CARIN Alliance has done a lot of work around this.

Aaron Miri
Yes, maybe just promoting that, right? And getting it out there and maybe codifying it.

Christina Caraballo
Mm-hmm.

Aaron Miri
Okay, I am good with that.

Carolyn Petersen
Okay. Thank you.

Aaron Miri
All right, let's move on to the last one, then. So then, the topic is here: correction of incorrect data and the ramifications of exchange of incorrect data. The gap is: Today, there is a limited ability to correct the data that has already been exchanged, as a result, this incorrect data may persist and be further disseminated. So, transparency about the accuracy of patient data and consent to share it are lacking for patients, which, in turn, affects the patient's safety.

The challenge: Errors need to be fixed upstream in the process of data collection and sharing while addressing concerns about clinician liability and health equity for patients.

So, the opportunity is to increase clarity on the applicable statutes and liability that apply to the exchange of incorrect data. So, two proposed HITAC activities would be: holding a listening session to 1.) Identify approaches that clinicians and HIEs are collecting to correct incorrect data, and 2.) discuss the liability considerations related to exchanging incorrect data. And then, I would say a third one based on some discussions I was on earlier today, would be about third-party access to data and making changes after-the-fact, a.k.a. finalized medical record. And now, you have someone challenging who made the modification and why, and why is it said like this? And having to look at the audit trail and all kinds of stuff. So, it would be interesting to see with third-party access to data and how that intersects here with correcting data and the liability around that. Because if Brett finalizes a medical record and note, and then somebody after-the-fact comes back and modifies that thing from the same medical group, well, how does that translate to the patient if they are like, "This is wrong," are they going to go after Brett or what? So, there are a lot of little question marks there.

Brett Oliver
Yes, I would agree, Aaron. Does it need to discuss the liability considerations relating to exchanging incorrect data and correcting incorrect data? If we are talking exchanging, that is fine, but are we also going to look at what is the responsibility of a clinician or organization to change that or communicate the change? The wording there just is talking about the exchange of it, the liability if you exchange incorrect data, do you have any liability to correct incorrect data once you recognize that it is incorrect?

Aaron Miri
That is a good question. Yes, I mean, I think we should have that as an item on here because it is both. But it varies state-to-state, right? Like, what those criteria are, who could make the modification, is it just

the provider that gave direct care? Could it be some of the same health system? All that kind of stuff.

Brett Oliver
Right, it is probably gonna vary by the dataset.

Aaron Miri
Yes, exactly. Exactly. There are just so many little quirks and variations to it, which is why I have the utmost respect for HIM professionals because they keep it all straight, and I cannot. But there are so many variations to it.

Brett Oliver
I bet.

Christina Caraballo
I think it would be beneficial to add in the proposed recommendations section a line on data provenance, as well.

Aaron Miri
Hmm.

Carolyn Petersen
It is important, and I think it will be more important as patients gain the ability to add additional notations or register notes in the record that statements are incorrect. I am aware that there are concerns about letting patients change information, but because there continues to be inaccuracies and sometimes inaccuracies are propagated forward again and again, it seems like there is going to need to be some way for patients to be able to put in a notation that, "Hey, I am not taking this drug," or "I did not have an abortion in 2007, that was a different Carolyn Petersen," or "I do not have mental health issues," or whatever it is that is inaccurate.

Aaron Miri
Uh-huh. Uh-huh.

Carolyn Petersen
Because that, too, would be something that will wind up in the record at some point, and it will be important to talk about the access to be able to do that, and also the way that that is there and available to clinicians and how they can engage with it.

Aaron Miri
That is a good point. So, what is that mechanism for the patient—I am going to use the word "grievance," that is not the right word—but for patients to dispute what is in a medical record and change it? Anywhere I have ever been on the provider side is varied, right? The rules are varied. Of course, patients can do that, but some of them have to put it in writing, you have to request, the clinician that saw them has to do with it on their behalf, has to agree with their change, I mean, all kinds of stuff, right? It is a lot of hoops to jump through for a finalized note, finalized record to change that. Because it is a legal record, right? So, I do not know what the liability is and how that works state-to-state; it is just there is so much to learn. But I think it is a great point, Carolyn. What is that, right? How hard is that for patients to qualify and quantify that, in general?

Carolyn Petersen
Yes. Yes, because as EHRs are used for more and more years, more errors are going to accumulate, and at some point, patients are going to be harmed by those inaccuracies. So, even though right now there is resistance to some of the opportunity for patients to rectify things, you know going forward, that will be recognized as an important point.

Brett Oliver

Yes, I see this as a subset of chart correction, whether it is a lab that was in error or it was a diagnosis that the clinician entered in error or it was in disagreement, it can go both ways. I have had open notes for a few years now, and I have not had too many conversations, but I have had patients question a diagnosis, like, "I do not have an anxiety disorder, and you have got that down. I want that removed." And I am like, "Mr. Johnson, that is what the Paxil is for and the occasional Valium." "Oh, okay, I understand," they are always good conversations one way or the other, but I just kind of see it as a subset of data correction, kind of the same thing we are talking about with this, but just making sure we include the patient portion.

Aaron Miri

Mm-hmm. Yes, one of the biggest –

Brett Oliver

Because you are right, each organization has different chart correction policies.

Aaron Miri

That is right.

Brett Oliver

You know, how it can happen.

Aaron Miri

That is right. That is right, and so many times, there are a lot of medical bodies that are concerned about open notes because they are concerned about their liability for the way that some of this – as Brett said, "You do not have depression, but this is what the clinical diagnosis came back as, and it is depression. Sorry. Whether you think it is or not," having that debate makes people awkward. But if you are able to have a very structured conversation, and it is a normal, again, grievance or change process or whatever that is standardized for folks to adopt a framework of some sort, that would allow organizations to be able to start figuring out how you safely have these conversations with people, and thus, level health equity for folks.

Carolyn Petersen

Yes, there is that, and there is kind of what is the intersection of that with systems that rely upon that information, like workers' comp systems, where there is a desire for verification, like qualifying for disability and SSI?

Aaron Miri

Mm-hmm.

Carolyn Petersen

The issues around people trying to qualify and wanting the medical records to say something or not say something, or change the diagnosis because there is some other stuff going on.

Aaron Miri

Right, I think it is all –

Carolyn Petersen

It is partly chart correction, but it can be driven by a lot of other things that bring in other issues.

Aaron Miri

It could. As well as, medical malpractice or—not that I am aware of anybody directly—but assume there is some bad organization out there that is like, "Let me modify this record," after-the-fact, without the patient knowing, and the patient goes back and is like, "What is this?" You know, things like that, those are all

big, big no-no's which I am sure have happened. I do not know of anybody that does it, but I am sure it has happened. So, that patient should have the ability to be able to go back and address those, right? In a normal addressable manner, where there is a framework, whether it is a grievance process, something.

Carolyn Petersen
We would hope, yes.

Aaron Miri
Okay, any more questions about that? That was the last item.

Carolyn Petersen
Do we want to talk about the tiering? If you look in the notes, in the very – in the small – well, I guess it is not really smaller print, it is just small print, or else I have old eyes. In fiscal year '19, the immediate action that was one tier that was 2020-2021, and the longer-term tier was 2022-2025 and beyond. We are proposing for fiscal year '20 that immediate would be '21 to '22, and longer-term it would be '23 to '26 and beyond. At some point, we need to go through and assign a tier to each of these topic areas; they are all TBD right now. We could think about it and do that at the next meeting since that will still occur before the full HITAC meeting.

Aaron Miri
Let's do that.

Carolyn Petersen
We will probably a little tight on time to do it today because we just got published on that still. So, anyway, the two questions are: are you good with the proposed fiscal year '20 tiers moving everything forward a year and keeping the immediate term as two years, and the longer-term as beyond that; and then, what are the tiers that we want to put on each of these topics?

Christina Caraballo
Yes, thumbs up.

Brett Oliver
That sounds good.

Carolyn Petersen
Okay. Are there any other thoughts around the crosswalk or anything else that should be addressed that we did not get to?

Aaron Miri
I think it is spot-on. I like this crosswalk this year; it is really coming together.

Carolyn Petersen
Yes, well, we have enough momentum behind us that we have a really good foundation for it, part of why it really resonated this year. Okay, well, why don't we go to the public comment slide? And I see in the public comment chat there are instructions and a link, and I will pass the mic off to Lauren.

Public Comment (01:19:45)

Lauren Richie
Great. Thanks, Carolyn. We will ask the operator to open the public line.

Operator

If you would like to make a public comment, please press "star-one" on your telephone keypad. A confirmation tone will indicate your line is in the queue. You may press "star-two" if you would like to remove your comment from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys.

Lauren Richie
Thank you. And do we have any comments in the queue?

Operator
There are no comments at this time.

Lauren Richie
Okay. Carolyn and Aaron, I will let you know if any others come in.

Next Steps and Adjourn (01:20:21)

Carolyn Petersen
Okay. So, the only thing I can think of is that we have a meeting coming up in a couple of weeks, and we should probably plan on doing some of the tiering work at that time, and look at the previous annual report to see where things sat before and if we think they should be advanced or dropped back.
What other thoughts do you have, Michelle, about what you will need from us next?

Michelle Murray
I think we are in good shape on the crosswalk. And we can talk offline about how we want to proceed to gather any further input on it from the workgroup, and how we want to present it to the HITAC on the 21st. Other than that, I think I have what I need.

Carolyn Petersen
Good. Any thoughts, Aaron?

Aaron Miri
No, I am good. I appreciate everybody's discussion today. That was fun, it was engaging, and now onto the next one.

Carolyn Petersen
All right. Do we have any public comments?

Operator
There are no public comments at this time.

Lauren Richie
Okay. Great. With that, I think we can adjourn, and thanks again for your time today.

Aaron Miri
Thanks, everybody.

Carolyn Petersen
Thank you.

Brett Oliver
Thanks, everybody. Take care.

Christina Caraballo
Thank you. Bye.

<u>Carolyn Petersen</u>
Bye.