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

October 6, 2022, 2 – 3:30 PM ET

VIRTUAL

Speakers

Name	Organization	Role
Medell Briggs-Malonson	**UCLA Health**	**Co-Chair**
Aaron Miri	**Baptist Health**	**Co-Chair**
Jim Jirjis	HCA Healthcare	Member
Steven Lane	Health Gorilla	Member
Eliel Oliveira	Dell Medical School, University of Texas at Austin	Member
Brett Oliver	Baptist Health	Member
Michael Berry	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Michelle Murray	Office of the National Coordinator for Health Information Technology	Staff Lead
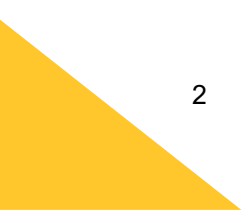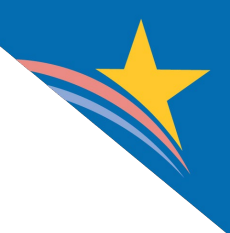
Call to Order/Roll Call (00:00:05)

<u>**Michael Berry**</u>

Hello, everyone, and thank you for joining the HITAC Annual Report Workgroup. I am Mike Berry with ONC, and I am pleased to welcome our cochair, Medell Briggs-Malonson, and one of our workgroup members is with us, Eliel Oliveira, and we are hoping that the other workgroup members, Steven Lane, Brett Oliver, and Jim Jirjis, can join us later. I will note that Aaron Miri, our other workgroup cochair, is not able to join us today. Public comments are welcomed, which can be typed in the chat feature of Zoom or can be made verbally during the public comment period later in our meeting. So, I would like to turn it over to Medell for your opening remarks. Medell?

Opening Remarks, Meeting Schedules, and Next Steps (00:00:41)

<u>**Medell Briggs-Malonson**</u>

Thank you so much, Mike. It is such a pleasure to have the workgroup back together again today. As Mike mentioned, we will have some additional workgroup members that will be joining us, but today is going to be a very impactful meeting as we discuss some of the various different additional crosswalk topics and continue to define some of our different recommendations. So, as a quick overview of today's meeting agenda, we are just going to go over a presentation of vulnerability indices, and that is going to be something that I am going to present, just some of the highlights of some of the vulnerability indices that are actually out there and how we can use that for both driving care as well as public health interventions and also advancing equity.

And then, we will dive into the discussion of the draft crosswalk, and especially really focus on some of those topics that we need to continue to refine our recommendations, and at the very end, we will definitely make sure that we have public comment, and so, we do want to hear from you all throughout, as Mike mentioned, in the various different chat capabilities, but also, we will open it up at the very end. Next slide.

So, just to give a high-level overview of our schedule, you see the areas that are grayed out. Those are some of our past meetings. For this annual workgroup meeting, today, of course, is October 6th, where we will continue to walk through that crosswalk of topics. Our next meeting will take place on November 3rd, in which we are going to sort of wrap things up so that we have a very clear idea of what is going into the annual report, and then, December 1st, we are going to continue to move forward with developing a draft of the annual report that will then be presented to the HITAC full committee. And then, January through February, we are going to continue to update that report directly from the HITAC's recommendation, and that will also go back to HITAC in February time in order to then be approved and continue to move it forward for transmittal. Next slide.

And this is just the meeting schedule for the full committee. And so, this upcoming October 13th, since we are still in the process of taking a look at all the various different topics through our crosswalk, we are just going to give, if anything, a very brief update to the full committee on our progress to date, but on November 10th, as mentioned, we are going to go back and actually present the complete crosswalk and the complete recommendations at that point, and then we will continue through January and February for review and approval of the annual report. Next slide.

And for the next pieces, we sort of mentioned this in some of our various different schedules just now, but today especially, we will continue to develop some of those recommended activities in each one of the key

3

target areas that we have not had as much time to really focus on, so when we bring up the crosswalk, you will notice that we as the workgroup are going to be focused really on the cells that are blue, and those are the ones that actually need the most focus at this point in time. Next slide.

Presentation: "The Use of Vulnerability Indices to Advance Health Equity" (00:03:49)

Great! So, we are going to change things up just a little bit, and how we are going to change things up is because there have been a lot of conversations about the purpose and the opportunities of using vulnerability indices as well as how that can actually play a role in algorithm bias. Now, due to our limited time today, we are not going to go as much into algorithmic bias, but I am sure we are going to continue conversations, and the ONC team has done a phenomenal job, especially for us as the workgroup members, of doing some additional research in not only these two areas, but many of the other areas that we will discuss later on during today's meeting for us to just sort of get a little bit more context into some of the beginnings of this, some of the challenges of some of these different areas, and most importantly, how we may want to define our recommendations.

So, let's move directly on into the presentation. So, this is just a high-level overview of the use of socioeconomic vulnerability indices to advance health equity, and we started really looking into the socioeconomic vulnerability indices during the beginning of the pandemic, and since that point in time, many additional organizations have started to adopt it, but what I wanted to do here is just get the basics so that everybody understands what these vulnerability indices are, what type of domains they actually capture, and again, how we can use them to continue to promote greater healthcare, public health interventions, and overall to advance health equity. Next slide.

So, these are some of the most common social drivers of health, neighborhood indices, or socioeconomic vulnerable indices, and I will go around to each one of these various different areas, and this is a little bit California-heavy, of course, given my location here at UCLA, but it also does bring up some of our national vulnerability indices as well. And so, the first one I want to just bring your attention to is the CDC Social Vulnerability Index score, and we are going to go a lot deeper into this in the presentation. And what this vulnerability index has been is that it has been around for several decades now, and it was really developed in order to measure a community's ability to respond to emergencies. So, it was a tool to actually determine the resiliency of a community and what type of resources a community may have in order to effectively deal with any type of emergencies, such as natural disasters or other types of emergencies that may impact a community. And so, that is what we call the SVI, and the SVI stands for Social Vulnerability Index.

Now, another national index score actually came out of the Department of Medicine from the University of Wisconsin, and that is actually called the Area Deprivation Index score, and we are going to see a couple of different pieces here of the measurements between the SVI and the Area Deprivation Index score, which is called the ADI, in which these two items or indices are national index scores. And then you have some other indices that many states have that were developed in individual states to measure the overall community social vulnerability within that state, and here, on this screen, you see some of the ones that we use here in California, which is California Healthy Places Index score, and then also, through our UCLA School of Public Health and our other UCLA centers, we have also developed additional social vulnerability index scores, not only for California, but now spreading throughout the country. Next slide.

So, once again, how do these things work? Well, the idea behind all of these index scores is that they are serving as geographic proxy measures in order to account for nonmedical social structural drivers of health. And so, all of these index scores tend to be based off of ZIP codes or census tracts, depending on the index score that is being utilized, and what it is really doing is looking at that geography and saying, "Gosh, what is in this area? What are the various different resources that exist?" And although you may not know what an individual's set of social structural drivers are that are impacting their overall health, you can actually make almost an assumption of what is available to them and what their environment is like from these index scores. Next slide.

And so, we will move a little bit more into what these really mean. So, this is a high-level example between the Social Vulnerability Index score, the Area Deprivation Index score, and the Healthy Places Index score, and I will very briefly walk through all of these different areas and define a little bit more of how they created these indices. So, starting with the Social Vulnerability Index score, which is actually the oldest of all the different scores and, I would say, the most validated, there are 15 factors that the Social Vulnerability Index score actually does utilize, and they are grouped into four themes that we will see in just a moment. And so, as mentioned, this was developed by the CDC, and the primary data source that the Social Vulnerability Index score uses is the U.S. Census, and it is really focused on census tract as well as looking at counties.

And, the way that the rankings exist, and you will see when we see examples of this, the higher the Social Vulnerability Index score, the higher the level of vulnerability for that census tract or for that particular community. Now, the Area Deprivation Index score is very closely related. It actually measures about 17 different factors, and as I previously mentioned, it was developed by the University of Wisconsin, but the primary data source that it uses to source its information is the American Community Survey. Just like the SVI, it also is divided by census block, and once again, the higher the ranking on the ADI, the greater the vulnerability for that community.

Last but not least is just an example of one of our California measures, which is the Healthy Places Index score. Again, 25 factors grouped into eight sections, as you will see, and this was developed by several different public health organizations here in the state of California. It actually pulls a lot of different data, such as U.S. Census, American Community Survey, some of our other data sources such as CHIS, which is California Health Information Survey, and it is also on the level of census tract. Now, unlike the SVI and the ADI, in the Healthy Places Index score, or what we call the HPI, the lower the ranking, the greater the vulnerability. Next slide.

So, what are some of those different domains? And this is really important when we are thinking about how to apply these indices because once again, when we are caring for a patient, or a group of patients within the healthcare setting, or developing new public health interventions, oftentimes, we do not truly know all of the various different social structural drivers that are impacting an individual person or an individual population, and therefore, that is where the power of these social economic indices comes into play because if we know a person's ZIP code or which census tract they are a part of, or we know where a certain population lives, whether it is more rural or a little bit more within the inner city, we can apply these index scores as a guesstimate of the type of environment that they are actually living in, and that actually allows us to think more critically of how we can provide more appropriate equitable care to them, develop more community programs, and other types of interventions to truly advance their overall health and wellbeing.

So, when it comes to Social Vulnerability Index score, as mentioned, it is divided into four primary domains: Socioeconomic status, household composition and disability, minority status and language, and housing type and transportation. So, when it comes to the socioeconomic status, what this index does is actually looks at the percentage of individuals that live within that specific census tract and identifies what percentage lives below the poverty line, what the percentage is of those that are unemployed, what is the average or median income, and what is the percentage of that census tract that does not have a high school diploma, again, measuring for potential vulnerabilities.

Same thing with the household composition and disability, looking at how much of the population actually is age 65 or older, but how many are also children age 17 and below, and of those that are living in the community, how many people are living with various different forms of disability, whether it is physical disability or cognitive disability, and how many of those households are single-parent. And then, when looking at minority status and language, knowing that here in our country, when people are of a minoritized population or marginalized population, there tend to be more barriers to receiving certain opportunities, so what it is also looking at is what percentage of that community identifies as being in a minority and how many of the residents of that census tract speak English less than well, and really trying to get at any language barriers that may exist which can add to the vulnerability of that community.

And then, last but not least, the housing type and transportation. So, is this an environment where it is all single-family homes, or is it a community where there are multi-unit structures or high-rises, or are there multiple families living in one structure? In addition, what is the transportation like? So, how many people within that census tract do not have a vehicle? And that actually leads to us, as we even saw during the pandemic, when we have multigenerational households or we are looking at communities that have a larger percentage of people that use public transportation, we saw the rates of COVID go exponentially higher in those communities due to the built environment around them.

So, how does that compare to the Area Deprivation Index? A few more categories, but you are going to see that it is very similar to the SVI. So, when it comes to education, for instance, it is really looking at those that are between 9 and 25 and the overall population there, and then, especially when it comes to attaining a high school education or not. When it comes to income, there are a few more specifics, as you can see. So, it is looking at how many people in that community have "white-collar" occupations, and so, they may be sitting more at a desk or using more of the computer and less manual labor, but then, also looking at some of the same aspects, such as median family income, the percentage of families that live below the poverty line, but also the percentage of families that live below 150 percent of the poverty threshold.

Housing is very similar: How much are people paying for their housing on average? And that is another measurement of socioeconomic status, as well as the wealth in that community, but also, once again, looking at owner-occupied housing units. Do most of the residents own their property, or are there a large number of renters within that area? Employment is directly linked also with the income and education, but then, it is also still looking at household composition, how many single-parent households are in that region, and also in terms of transportation and telephones, and we can probably update these indices. They are really looking at landline phones, and I believe they just started looking at more mobile phones, but really thinking about that communication aspect and that accessibility to various different forms of technology.

And then, last but not least, the HPI. Again, you see a lot of the same various different domains, so I am not going to go directly into it, but two areas I do want to amplify which are a little bit different from the SVI or the ADI are clean environment, really thinking about climate sustainability and environmental justice, looking at the ozone levels, looking at the water contaminants, which we know play a significant role in one's overall health and wellbeing. And then, the HPI also includes healthcare. What percentage of people living within that census tract actually do have healthcare insurance? We know accessibility is so incredibly important when we are thinking about overall health, and measuring the number of people that are insured tends to let you know the resiliency of that community as well. Next slide.
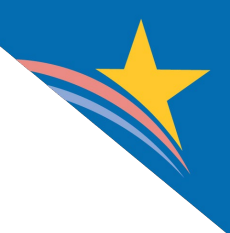
So, let's try to figure out and go a little bit deeper into how this works. Now, this is just a roadmap of how we at UCLA Health actually assign an individual patient into their census tract, and therefore into one of the vulnerability index scores. So, for instance, we will first take a patient, and this is a made-up ZIP code, but it is a real street and real ZIP code here in Los Angeles. So, let's say our patient lived at 4550 West Pico Boulevard here in Los Angeles. What the teams actually did was take those exact coordinates, and then, what we did was take those specific coordinates, the X and the Y, and then, using all of our national data, especially our U.S. Census data, we are able to convert that directly into the specific census tract that that patient lives in, and then, from there, we are able to take that specific census tract and then convert that with the CDC SVI in order to get the ranking score of 83.36 for that particular patient.

And so, we knew, just from this, that that patient lives in a community that tends to be more socially vulnerable and likely under-resourced, so therefore, we have to think a little bit more carefully, strategically, and equitably in order to ensure that that patient had every single thing that they needed in order to do well after they left our medical care. Next slide.

So, after we did some of these conversions, one of the things that we did in terms of our own validation at UCLA Health in order to see which of all of these index scores we wanted to use was we took all of our patients, and these are just patients that belong to certain clinics within UCLA Health, so it was not the entire universe of patients, but we took a large sample of our patients and we actually mapped them out to the SVI, the HPI, and the ADI, which is on the bottom, but we also did a mapping out to one of the index scores that was developed by our UCLA Fielding School of Public Health, which is really a set of three different scores called the Barrier to Accessing Services, Built Environment Risk, and Pre-existing Health Vulnerability. And, we mapped them to all of the various different index scores because we wanted to see, based on where our patients live, what information that we were able to capture about their social vulnerability, meaning which index score was better for us to use on our particular patient population in order to assess the communities that they lived in.

And, what we found when we actually took our same population and applied it to the SVI, the HPI, the School of Public Health index scores, and the ADI is that the SVI and our School of Public Health data were the two index scores where we were able to map the vast majority, basically 96 percent of our patients, to this index score. And you can see that there was a little lower performance when we mapped it to the HPI as well as to the ADI. So, we as an institution decided to fully adopt the Social Vulnerability Index score into our electronic health records system as well as into our clinical and operational practices to serve as our key index score to assess the vulnerability of our patients' communities, and we continue to use SVI in many, many different not only business cases, but clinical scenarios as well. Next slide.

So, once again, this is just showing a little bit about some of our patients in terms of vulnerability. Again, a high SVI means more vulnerability and a low SVI means less vulnerability, and UCLA Health tends to serve a very diverse patient population, but we do sit in a very affluent area of Los Angeles, so we do have many patients that live in some of the highest-wealth regions of Los Angeles, so you can see the very high bar of 73 percent, which means a low Social Vulnerability Index, but as you move forward, 50-70 percent, 70-90 percent, and definitely greater than 90 percent, we definitely have patients that are living in communities with higher socioeconomic vulnerability, and we have actually set a cutoff score for ourselves of 75 percent and above. We believe that tends to be a high SVI, and one of the things that we have done is created additional clinical interventions to ensure that our patients receive all the resources that they need to be as healthy as possible. Next slide.
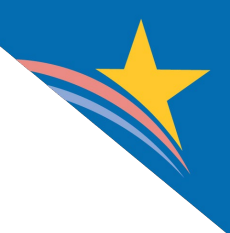
So, once again, this is just showing some of the areas of Los Angeles where we do these types of mapping, so we actually use this, again, for clinical care needs and business opportunity needs so that we can see where our patients live and what types of communities that they live in, with the darker red that you see being communities that are of highest vulnerability and the areas that are of lightest pink being of fewer vulnerabilities as well, and so, of this, we were really trying to think about how we can better serve our patients in our more under-resourced communities and try to figure out where they live, and from just mapping alone the SVI on top of where our patients live, we were able to pull out ZIP codes like 90011, 90044, 90006, which correlate with areas that we know have large amounts of vulnerability, for us to place more resources into. Next slide.

Now, how can we use these in terms of clinical applications and data analyses? Well, again, as mentioned, one of the very first time that we started to use the SVI was at the very beginning of the pandemic, and especially once vaccines became available. As we all experienced during the pandemic, when we had a very limited supply of vaccines, we had to determine who is actually going to get the vaccines first, and one of the things that we were very cognizant of here at UCLA is that while there is definitely medical vulnerability, we absolutely had to take into account social vulnerability because of the disproportionately high rates of COVID that we were seeing in not only our low-income communities, but definitely our low-income communities of color. So, we wanted to make sure that we got the vaccines to those that are most vulnerable in general. Next slide.

So, how we actually developed this is that we developed a three-step process in order to initially rank patients in terms of when they would be eligible for the vaccine. And so, while we followed, of course, all of the CDC guidelines and our Department of Public Health's guidelines here in California, this was at the very beginning, as you all remember, when we were really looking at patients 65 and older, then it went to 16, but the very first thing that we looked at was that we took all the patients that would potentially be eligible for the vaccine, and then, if you look at Step 2, we actually made a two-step process in order to determine somebody's risk.

We looked at their clinical risk, especially based off of what CDC and our other infectious disease experts at the time were saying made an individual more clinically susceptible to COVID, therefore they needed the vaccine first, and we included their social risk directly from the SVI, so we mapped out all of our employees plus all of our patients and said those that actually lived in a higher-vulnerability region, based off of that SVI, would actually get additional points for their social risk, and then, that total score is how we ended up

ranking patients into the various different phases of when they would be eligible for the COVID-19 vaccines. Next slide.

One of the great things I can tell you from this work, and there is going to be a paper coming out soon, is that when we took a look at our method of including clinical risk plus social risk defined by the SVI, and then categorizing our patients, we actually were able to vaccinate more socially vulnerable populations at a much faster time than many other organizations were able to do that were only just taking into account clinical risk, so we were able to spread the vaccine to those that were of highest risk in a much more timely manner, and that was something that was really, really important for us to do, knowing all of the increasing rates of both infection as well as death occurring in our most vulnerable populations. Next slide.

And so, even after the uses for SVI in terms of pandemic, we have now hardwired SVI in particular into some of our dashboards, and this is an older version of some of our quality dashboards, but what you will see that is highlighted in the purple rectangle is that now, when looking at length of stay, readmissions, and other outcomes, such as sepsis or other publicly reported outcomes, we also make sure to include SVI in there to see if we have any inequities based off of socioeconomic status of the community that an individual is living in, and that allows us, again, to really be aware of these inequities and make sure that we are doing what we need to do to support our patients that live in these more vulnerable communities. Next slide.

So, this is a demonstration of how we even use mortality by SVI, and again, this is kind of dummied data from a while ago, but I just wanted to show a little bit of how we do this. So, SVI is linked into four primary quartiles, the green being at Quartile 1, which is the lowest vulnerability, and red being at Quartile 4, which is the highest level of vulnerability, and one thing that we wanted to take a look at, of course, is seeing if we have any significant inequities between SVI quartiles of our patients. And so, we actually tend to do this for mortality, length of stay, readmissions, and so many other clinical and outcomes data so that we can always visually see if we are having differences in care or differences in outcomes based solely on SVI. Next slide.

This is another one showing length of stay and seeing where some of our different vulnerabilities may be with our patient populations for length of stay. Next slide. And then, we have also done it for many other areas, as mentioned, like specific clinical conditions. So, I just wanted to at least provide some insight into some of the various different social vulnerability index scores and how we as not only the Annual Workgroup can think more about how we can promote the use of vulnerability indices in our work, but also, when we take that back to HITAC in particular, really make sure that we figure out some of the barriers that individual organizations may be experiencing in incorporating SVIs or other types of vulnerability index scores into their systems because there is great power in these index scores in order to really take directly into account the social structural drivers that a patient may be experiencing in their community. So, I will pause there, and thank you all so much for allowing me to share that presentation. I think what we will do, Eliel in particular, I think it is probably time to jump into our discussion of the draft crosswalk of topics.

Eliel Oliveira
Yeah, sounds like a plan. I am speechless anyways, Medell, so I do not know if I could say anything. This is a tremendous amount of information. Thank you so much.
Medell Briggs-Malonson
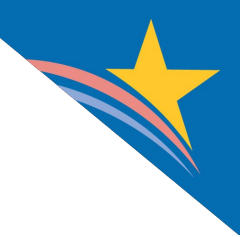
Oh, it is my pleasure, and if we need to go a little bit deeper into it at another time, I think that we can definitely do so as a workgroup or even as a larger committee because I do know that some of the other committees, such as the USCDI committee and the public health committees, have been thinking about this work with vulnerability index scores as well, and so, I think there is a lot of interest and a lot of eagerness to learn more about how we can utilize them in the best way to drive care, to drive public health interventions, and to drive equity also.

Eliel Oliveira
Yeah. I have a few thoughts, but I think as we go through the list, those will come up.

Discussion of Draft Crosswalk of Topics for the HITAC Annual Report for FY22 (00:30:32)
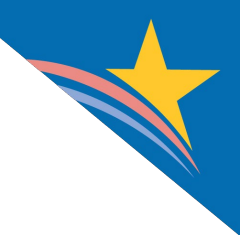
Medell Briggs-Malonson
Great, wonderful. Well, it is just the two of us for right now, so we are going to have a wonderful, robust conversation back and forth. So, the great thing that we can focus on is we are really not going to go through all of the cells that are white, but we are really just going to focus on the cells that are highlighted in blue. And so, one of the first areas that has been highlighted to really go a little bit deeper into is inequities in data collection. And so, just as a reminder, this is underneath our new target area of design and use of technologies that advance health equity, and when we start to think about inequities in data collection, the gap that we identified was the data availability and how often we tend to find inequities in the data collection or the integrity of the data itself.

And so, therefore, when it is collected, we really want to make sure that health-equity-related data is collected consistently within and among various different sources, and the challenge is that without consistent collection of health equity data and having clear standards and guides, it may be difficult to identify overall disparities in healthcare, especially with all of the exchange of data going between various different organizations, whether it is provider organizations, public health organizations, or social service organizations. And so, therefore, we should really look at clinical data of how it can be enriched by the addition of various different forms of demographic data and social structural driver data as well.

So, one of the things that we discussed was that there was an opportunity for more industry standards supporting the collection of health equity data elements that we can all agree upon as well as exchange of supplemental data to be increased to provide missing race and SDOH data. The social vulnerability indices are a perfect example of if we sometimes do not have the patient-level specific social driver data, at least we may be able to use the vulnerability indices as a proxy for that individual's social structural drivers that they are experiencing.

And so, some of those proposed recommendations that we created was, No. 1, explore the adoption of improved standards for capturing patient demographics, which include race, ethnicity, sexual orientation, gender identity, faith, language, and so many others that we know are so important to our work, but then also continue to hold listening sessions to identify best practices that we can really think through at the point of registration and other incredibly relevant collection points throughout the patient's care continuum so that we can continue and consistently collect health equity data, and making sure that that data can also be transmitted appropriately between sources. So, I will pause here, and Eliel, I am used to the two of us, and I am just thinking if there are some other additions that we can actually add here in terms of inequities in data collection.

Eliel Oliveira

Yeah, thanks, Medell. Two things that come to mind based on the work that we do… We currently are piloting a solution through ONC, one of the leap projects, and through that practice, we are learning quite a bit about needs assessments that we perform with the community, and the way it is done is said here in a document. One of the challenges that is out there is the fact that there are many assessments, and organizations start to build their own assessments and utilize them, which I would say is the equivalent of what happens with labs, where lab results are basically coded by each organization, it then becomes a difficult problem nationally.

So, we have tried to crosswalk across these assessments because we are trying to get the community to collaborate and collect as few assessments as possible, but at the same time, get that full picture of individuals. So, there may be a need here, then, to think about how we can get a handle on that before it becomes a bigger problem in terms of how we map across the assessments and how we bring communities together so instead of them creating a new assessment that is unique to the organization, maybe build further into the assessments that may already exist or bring that to some consensus, like the Gravity Project, that then advances and creates the assessment that they need, but maybe using what is already there as opposed to creating something that is not going to be reutilized. So, that was one thing that I would add.

The second one, as we keep hearing from our communities, is the need for language variation because the folks that we are trying to help are not necessarily going to be English speakers, and yes, some are Spanish speakers, but there are a lot more than just English and Spanish. So, folks are really hoping that these assessments are part of their language. We see a lot of Pashto, and Vietnamese, and other ones. So, I those are two of the key points that came to mind that I think might be important to keep in mind given what is taking place, and the third is already highlighted here, which is where to collect. I think the way that is done today is in clinical settings, and that is challenging. My needs change on a daily basis, and my next visit might be three months from now, so how do we do that better?

And we have 211 nationally, which has been the front line of individual needs, but it does not easily translate, and I will highlight as well that 211 is moving from phone calls to text, and how do we get what folks are writing in that text and transform that into standards that then go back to the providers to be able to help individuals? That, to me, is a place also that there could be some advancement in terms of standardization of 211 collection of needs across a community, but it goes beyond that. I think community-based organizations are key in terms of capturing needs also across our communities, whether it is United Way, food banks, or other locations, and again, we have the same challenge across all these different types of providers, not just clinical providers, and it is not just about EHRs. Those have been capturing systems of outcomes. Anyways, I know that is quite a bit, but I wanted to add a couple of thoughts here that are important for us to consider in bullet form.

Medell Briggs-Malonson

I completely agree. What you are saying in terms of everything from accessibility and having standard frameworks, and especially as you mentioned with the Gravity Project, if we use some of their frameworks as standards so that people are not recreating and just tossing, or they are not able to be integrated with others, I think that is huge, and we know linguistic alignment has been one of the greatest barriers, because yes, English and Spanish are the two most common languages, but even in my region, we have so many
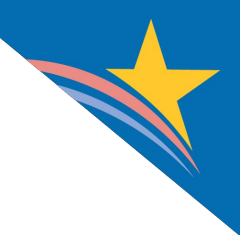
people that also speak Cantonese, and Tagalog, and Farsi, and all of these other languages, and they are disadvantaged when we are not thinking holistically in terms of the linguistic diversity that exists amongst our beautiful country and our beautiful regions, so I agree with you about that, and we also have to think about those different factors of where we are collecting not only the demographic data, but also all of the social data, and who is best to collect it when.

And so, that is something I think is a next area and a next phase for this work. And I even have some thoughts that are very similar to yours. I am going to put on my quality and my regulatory hat right now. We are all moving towards and understanding the importance of having appropriate data in our systems and being able to use that data to support greater health outcomes equitably and across all various different populations. And so, even some of our regulatory agencies or accrediting bodies are now requiring soon, in fiscal year 2023, that data is collected by every single provider organization, and that data has to be patient-reported data. So, if it is patient-reported data, the way that I think all of us as organizations are collecting it is probably going to be different.

So, we just recently launched a completely electronic approach for patients to self-report all of their identities, and we are also doing that for screening for their social needs, all the social drivers of health as well, where it is completely self-reported using our patient portal. It pushes to them and they just fill it out, but the way that we are doing it, for instance, still varies even from our own sister hospitals in our network, let alone various different hospitals across the country. So, as our regulatory and accrediting bodies are saying, "Hey, you all have to collect this very important data, you have to collect demographic data that is patient self-reported, you have to collect and do screening for social drivers of health," it seems like we should all come together and have clear recommendations on how that information is collected.

If not, it may just all be jumbled, and we are all collecting the data in a different way just because we know we have to, but the data is not going to be interoperable or usable in the way that it should be. So, we still have some work and some recommendations that I think we as HITAC can really provide back to ONC as well as to some of these other bodies for the appropriate way to collect this data that is consistent so that we can truly use it in the best way.

Eliel Oliveira
Yeah. I will add that maybe one key consideration here for ONC and the federal government might be the fact that it is not just about EHRs anymore now that we are embarking on social determinants of health, and what do we do about that before it becomes a bigger problem? ONC is there, working on the standards and certification of electronic health record systems, but what is going on with all the other endpoints that we just talked about with the community-based organizations and the other coordinating agencies within our communities? How are we going to continue to proceed without having some…maybe not mandate, but guidance of how these other systems need to interact. Otherwise, 20 years from now, we are going to find ourselves with the same challenges that we are facing today, that EHRs are still struggling to communicate and exchange, and hopefully FHIR is going to change that, but we are still now enforcing that, so it is going to be a few years until we see the results of that, but we have an opportunity here to maybe prevent that from happening.

Medell Briggs-Malonson

I completely agree. We just have to be a little smarter this round, right? Wonderful discussion. So, I believe our ONC team actually captured all of those different details, and we can move on to the next blue box. The next blue box down the line is bias concerns. And so, this is algorithms, clinical decision support tools, and patient interview data. Again, I want to thank the ONC team, led by Michelle Murray, especially with all of the background information and the research that you all have done in all of these various different areas of these blue boxes. I really appreciate some of the additional efforts that you all have gone above and beyond to do.

And so, the reason why we brought this to the crosswalk was it really stemmed from some of the various different national discussions we have all been having about artificial intelligence and the power of our AI algorithms, but also the susceptibility to bias that these AI algorithms can have as well, and especially when it comes to various different demographic features such as gender, race, and ethnicity, and this actually correlates and is kind of a partner to our clinical decision-making tools as well, which are normally based in algorithms, and some of those algorithms, again, can have built-in inherent biases, and that will directly impact our care decisions or how these various different rules or decision support tools are actually applied to various different patients.

And then, the last piece about the patient interview data: We are really looking at the biases of individuals and when they are actually interviewing patients, and in fact, I was just giving a presentation yesterday to some of our soon-to-be clinical medical students here at UCLA about bias, but also how bias shows up in the clinical setting, not even just interpersonal bias, but, for instance, anchoring bias and others. And so, how one's insight or one's perception of an individual, if it is not checked, can actually be perpetuated to other providers, and that can be part of their overall care plan that leads to adverse outcomes. So, really, those biases that are coming into play when even interviewing the patient, how that can directly impact the data that is entered into a patient's medical records.

And so, the challenge of this that we have been looking at is really trying to mitigate any algorithmic or CDS bias, as well as really making sure that the algorithms acknowledge, again, the underlying characteristics such as demographics and social drivers of health, but also that the clinicians understand how to use that technology appropriately in order to mitigate bias when screening demographics or highly vulnerable populations for preventative services and also for social drivers of health. And so, the opportunity that we have as HITAC and as the reporting group is that we can think about those additional ways for screening healthcare and public health data systems for bias in the algorithms. We have already identified many algorithms that are already biased, and I think there is a movement to identify them and eliminate them from our systems, but then, also making sure that we are thinking about how to use these clinical decision support tools in the best way possible for decision making, and then continuing to encourage the use of digital tools to support clinicians in conducting unbiased patient interviews and screenings.

So, some of the recommendations that we had in this area, and especially given all of the work that is going on around bias in algorithms, CDS, and now also thinking about patient interview data, one thing that we have previously discussed was holding a listening session in collaboration with other agencies that are looking at this and really thinking about some of those best practices and, again, standards to, as I say, take a look at what your algorithm is saying from the very beginning, dissecting it to make sure that there is nothing underlying that actually is biased, then also, upon implementation, looking at the outcomes by various different patient demographics to see if there are any unintended consequences or unintended

outcomes between groups, and that will actually allow us to really make sure that our new AI/machine learning algorithms are actually truly full of integrity and not perpetuating various different forms of racism, sexism, or other forms of discrimination of bias, and then doing some of these same tips with CDS and other patient interview techniques, just getting the best practices or forming the best practices.

And then, we also talked about exploring the best practices for the use of sexual orientation and gender identity data elements in clinical decision support tools to support appropriate clinical care that is aligned with the patient's preferences, and I believe this recommendation came about that, again, as we continue to serve a much larger population of gender-diverse patients and we know some of an individual's various different needs in terms of preventative care as well as other forms of healthcare or treatment, and maybe a combination of the organs that they currently still have although they are gender diverse in terms of their identity.

So, we want to make sure that we are providing care and recommendations in a very affirming manner, but still making sure that we are delivering that high-quality care to prevent disease and to treat it if it does show up. So, Eliel, that was a lot as well, especially when it comes to bias, but I wanted to just provide for us an overview of this section, and also for those that are listening and joining in on the meeting. So, are there any things that we are missing with this bias concern in terms of this topic? Are there any other recommendations we should have?

Eliel Oliveira

I think one key thing that is coming to mind, Medell, is that this is focused on bias, and a listening session would definitely be great, but I was thinking that there is still a lot of concern there about the validity of those algorithms, which is as important, I would say, because there are a lot of folks out there that are working with machine learning. We have our own team here doing some work. They are using AI for other things. As far as I know, there is not a body that actually validates what is being built and possibly being used, and some of that is in research and still being validated. I do not know if there is a clear process nationally by which these technologies are validated, and then, bias becomes a **[inaudible] [00:50:01]** of making sure that there is no bias imposed, but I think there is something above the process of accepting and using these algorithms. Anyways, that is one key point that comes to mind.

I think the listening session would help quite a bit. ARC has done quite a bit of work in CDS tools, artifacts, and how they can distribute, but there are still a lot of challenges there, especially on how making CDS still patient-centered, and I would even add what I think they usually call clinical decision support, but if we are talking about SDOH like we were just talking about a minute ago, decision supports are probably necessary also in community-based organizations to be effective in some of these interactions for SDOH specifically. But patient-centered decision support tools are quite important when we are taking the steps necessary to maybe eliminate some of the biases that are led by algorithms, AI, or other aspects. If the patients are part of the process as well, maybe some of the bias that has been generated can be prevented if engaged early on. So, this is a bit different, again, from the bias concern itself, but I think there is still a lack of validity, somewhat, that governs these algorithms to start with, and maybe that listening session is the beginning of that learning and next steps.

Medell Briggs-Malonson
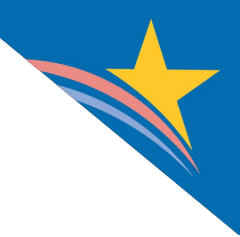
Yeah, very interesting point, because you are right. We are diving so quickly into AI and machine learning, and there are so many other forms of AI, but what is even the governing process of all of these items, let alone before we get into the elements that each one of these areas actually does consist of? So, that is a really good point, and I really appreciate you mentioning that. The only other thing that I would mention for this topic here, for No. 2 in particular, is that we have explored best practices for the use of sexual orientation and gender identity, or SOGI, to support appropriate clinical care aligned, I would actually say, with patients' identities, because it is not really about preferences. This is who patients are. And so, I would think it is probably a little bit more appropriate and better aligned with especially, for instance, our transgender patients to refer to patients' identities, and that would be more all-inclusive of some of the various different CDSes that we need to create. All great. Hi, Steven. We see that you are joining. Thank you so much for joining us.

Steven Lane
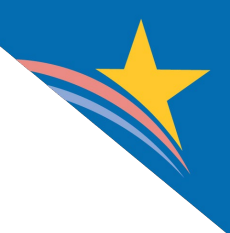Sorry to be so late, but here I am.

Medell Briggs-Malonson
No problem at all. We are happy to have you. All right, so, let's go ahead to the next topic, and we can continue going through the crosswalk. Okay, we are now up here to the next blue box. So, Steven, just as a recap, one of the things we are doing is primarily focusing on the areas that are highlighted in blue because those are the areas that we have been asked to provide a few more recommendations for, and I do notice public health data systems infrastructure has a TBD for proposed recommended HITAC activities, but we will come back to that in another meeting, but let's focus right now on public health reporting, especially with the ELRs.

So, the last time we discussed this, we were looking at the public health data systems as a whole, and of course, what came out of it was our ECRs as well as our ELRs, and in particular with our ELRs, we were discussing that ELR adoption has increased significantly, but standardization still is required, and one of the common themes that we have had during this meeting is the importance of yes, we are thinking about provider organizations, but we also need to think about our other non-direct-care organizations, whether social service agencies, making sure it is aligning also with our public health agencies, and ELRs are going to be one of the really important ones for this as well. And so, the challenge that we had discussed was that ELR standardization is needed to ensure that data flows seamlessly among public health organizations, labs, healthcare providers, and health IT developers, and our opportunity is to improve the alignment of all of these standards across those main stakeholders and really, in particular, think about the terminology standards that could be improved.

I cannot remember who mentioned this last time during our last workgroup, maybe one of the two of you, but we were talking about how a lot of our case reporting, but even sometimes our electronic lab reporting, tends to be centered in the acute care setting, but we are missing all of, for instance, our ambulatory settings, such as our long-term care facilities and our rehab facilities, where, when we are thinking about emerging diseases or looking at things from an epidemiologic standpoint, they are critical centers to make sure that they do have appropriate electronic reporting systems as well. And so, that is one thing I wanted to make sure to bring back and highlight, that I think that is another really important piece that I feel we as the workgroup can recommend to the HITAC full committee about making sure that we are inclusive of the different types of facilities and potential stakeholders in this. So, I will open it up and see. It looks like we

need some proposed recommended HITAC activities in order to address this topic, so, any thoughts about that?

Steven Lane

Hey Medell, this is Steven. I will just make a couple of comments. One is, I think, that this opportunity is not so specific to ELR. I think it really is applicable across the board to the various use cases and purposes of exchange between providers and public health. And then, I will just reiterate what I said last time, which is that so much work is going on right now in this public health workgroup that has been meeting weekly, very active, looking not just at the question of certification or potential certification/modular certification for the public health data systems themselves, but has really been going back through the details of ELR, ECR, and syndromic surveillance and making some very detailed suggestions about that. So, I think that it might be a good idea for you as cochair to maybe touch base with Arien Malec and just really understand what he sees as the ultimate output of that group so that we can piggyback on that rather than, again, as I said last time, trying to recreate the wheel or rethink this in this smaller group because there is just so much expertise coming to that group that is meeting presently.

Eliel Oliveira

Yeah, that was going to also be my comment, Medell, because I am also part of that workgroup, and there is so much that is coming out of that discussion. The report that is coming out of that work is coming together pretty soon, before our report is completed, so it would be very fitting, it would nicely serve us here to get the best recommendations.

Medell Briggs-Malonson

So then, a quick question for the two of you, because we have this entire public health data systems infrastructure, which includes ECRs and ELRs. Should our proposed recommended HITAC activity simply be to review and support what is coming out from our public health group? Because I completely hear you all. It sounds like the work that is being discussed and the report that will come out is going to address not only these items, but so much more, and so, these were just topics that were recommended at the very beginning for us to potentially explore in the Annual Report Workgroup, but really, it is just aligning and incorporating what is coming out of that other group into that annual report. What are your thoughts about that?

Steven Lane

Yeah, I agree, Medell. I think one of the things that might come out of a discussion with Arien, but we could also just have him come and talk to all of us, or you could just do it as a cochair, is that inevitably, there are going to be the things that make the report and the things that are still in a parking lot from that group's work, so I think we should pick up any parking lot items in addition to referencing the recommendations of the group itself.
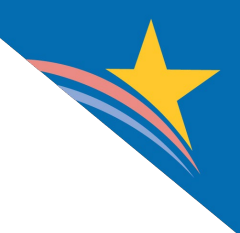
Medell Briggs-Malonson

Sounds great.

Eliel Oliveira

Yeah. Medell, I think the only thing that I would say that may be a recommendation here for this area is possibly the need of innovation in this area. I think the work is very important. It is complex with the

standards and the systems that provide this reporting, but I have noticed at times in some other discussions that there is a solution for that out there, and how can we integrate it? I will give an example. Some of the reporting may be delayed because of identity. In our case here in Texas, immunization is an example. It is hard to get ahold of that **[inaudible] [01:00:25]** measure because there is state-based regulation that limits that access. But, there are privacy-preserving record linkage solutions that would allow for data to be aggregated at a national level, like what was done by the NPC consortium to be able to analyze what is going on through COVID.

So, some of those innovative ways of aggregating data and reporting might be the only recommended activity here for HITAC or maybe for ONC and HHS to consider, that there is maybe another way to look at this, just thinking in terms of the next pandemic, which we do not know when it is going to happen or what we will have ready when we get there. The other example I will mention is you probably are familiar with the sewer epidemiology, right? That is what we do today at a thousand points across the country. We are really looking at sewage, analyzing what is going on there and being able to say what is taking place in that specific community in terms of infectious disease, drugs that are in the sewage, or other things.

This might be something crazy, but the same probably could be done in terms of sensing with data. The data that is flowing within electronic health records and other state records, just by flowing to the data networks, you could get a sense of what is taking place in a specific community without necessarily having to do case reporting. My job is innovation, so my head is always thinking about what is the next thing that we need to be doing, but I fear that if we are hit by another pandemic, would we have better systems in place to be able to do things more efficiently? And so, innovation might be additional solutions that can advance the space of public health reporting. To me, that is an important place to think about.

Medell Briggs-Malonson

I am an innovator as well. I believe that we should always be creating something new and improved, and so, I really like your idea. We already have a significant workgroup that is working on these items. Maybe that is where some of our contribution comes in as well, of really reinforcing that charge of what we have learned from this pandemic and what we are planning to put into place in order to make sure that we are even more prepared for the next pandemic that will come, because it will come. We just do not know what it is going to look like, but it will come. So, that is something that is a very great idea to consider as well. Thank you for that.
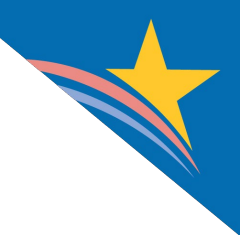
Steven Lane

The other thought I have with regard to public health in terms of being more forward-looking in the annual report, which is really what it is, what we should be looking at next year, is more of allowing HITAC to help ONC envision what their ongoing role may be in terms of supporting health IT for public health use cases. Obviously, we are in a data modernization process, some standardization, but looking ahead, how is TEFCA going to support public health? I think that we should capture that ONC may, in fact, need to or want to have a whole dedicated arm focusing on health IT in support of public health as a permanent part of the structure, so that is something to consider.

Medell Briggs-Malonson

Absolutely. And, I like the way that you framed it, too, Steven. It is really our job to continue to help to guide ONC to the next phase and the next endeavors, and public health is such an essential component of our

entire nation, and so, making sure that ONC is really thinking about the future and whatever we can provide to actually plant some of those seeds and what is coming, and the importance of ONC in creating those structures, that would be great. Now, we are talking about innovation as well as the importance of ONC at the forefront of this. I already know what is going to happen after this meeting, so, any explicit ideas and recommendations for what we can offer right now in those two different domains, or do we want to think about it for a little while and bring that back during our next meeting?

Steven Lane
Well, I would propose that we recommend that HITAC prepare a set of specific recommendations for a permanent ONC department, effort, or initiative to support the ongoing advancement of public health data systems and connectivity.

Medell Briggs-Malonson
Great. Thank you for that.

Eliel Oliveira
If I may use your words there, Steve, before you joined, we were talking about social determinants of health and I was making a similar point, which is that we are very EHR-focused, but those systems that help support social services are not EHRs. And then, there is the patient aspect as well. So, if we do not attend to that today while they are nascent, new standards for SDOH collection and systems, 10 or 20 years from now, we are going to be in the same boat we are with EHRs today, that exchange and interoperability are still challenges. So, you said very well how public health could be an arm of ONC. I would say SDOH is probably another one that needs to be taken care of sooner than later.

Steven Lane
Yeah, I completely agree, and as you say, ONC has really been so focused on EHRs for a generation, and it is time to go well beyond that, and of course, TEFCA points us in that direction, but ONC needs to be leading even ahead of what this current TEFCA scope is.

Medell Briggs-Malonson
And so, Eliel, to your point, maybe even expanding that language of saying that, and kind of similar piggybacking off of how Steven phrased it, that ONC should be the primary facilitator between multiple stakeholders, providers, public health organizations, social service agencies, and others in order to coordinate the general standards for collection, utilization, and interoperability of social driver data.

Eliel Oliveira
Correct. It is literally getting ONC's mandate and expanding it to these other areas beyond clinical systems.

Medell Briggs-Malonson
Correct, and that most importantly, ONC should take that lead, and really also just making sure that with all of these different groups and all of these different systems that we know are critical to this work, we are not going to be reactionary, we are going to be more proactive, and this goes back to the health equity by design and now, I would say, the public health by design, where we are just thinking in the future and being intentional about some of the different standards we are setting, and then making sure that we are bringing
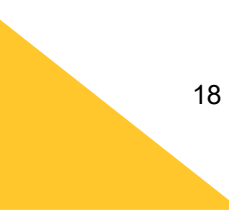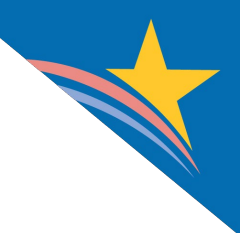
all the appropriate systems and stakeholders together collectively versus doing one at a time. Okay, that is all great. I hope we captured all that discussion from our ONC team.

So, let's move on to the next blue box that we have. Oh, we are going down. Okay, so we have three of them here. So, this is all in the area of interoperability. So, first, to start off with, the interoperability standards with the closed-loop referrals. And so, once again, this topic was brought up because there was a lack of cross-organization support for closed-loop referrals, including for social services. We have discussed the challenges, which have been the lack of standardization among national systems, making closed-loop referrals difficult, and also, some social service organizations completely lack the ability to capture and exchange data, so this is once again going back to this previous conversation we have had.

So, what are the opportunities that we have in front of us so we can explore the opportunities to advance standards that can improve systems for closed-loop referrals, but also explore opportunities to increase the adoption of electronic systems by social service agencies and organizations. So, initially, our proposed recommended HITAC activities were to hold a listening session to learn about existing progress and determine additional opportunities to advance closed-loop referral, and then we stopped there, with two TBD. So, what are some thoughts?

Steven Lane
I have been involved in the 360X work, which is all about evolving technical standards for closed-loop referrals, including with social service organizations, and I believe we had a 360X presentation at HITAC at some point within the last couple of years, though I am not 100 percent sure. So, the 360X group continues to expand in terms of use cases, participation, and vendors, and is starting to look at real-world experience. So, I think we are further along in this, and ONC has been super supportive of that effort. As far as I know, that is the closed-loop referral effort. It started with direct messaging, and now it is expanding beyond that, and FHIR. So, I think one of the recommendations is really to just make sure that HITAC is kept abreast of the progress that has been made, has a chance to identify any gaps or redirection. I do not think we have to start way back at a listening session.

Medell Briggs-Malonson
Great. And that would be wonderful, that maybe, as part of our homework offline, we can try to see and pull up some of those presentations or see if we can find some additional information on that. So, I like that in terms of making sure that we are at least kept abreast of what is going on with that area. Eliel, any thoughts?

Steven Lane
The other issue here is the issue of adoption. It is one thing to have a technical standard, to have HIMSS interop showcase presentations, which we have had for a number of years in a row, to even have connectathons and all of that, but what about adoption, and what are the opportunities for HITAC to provide input to ONC, for example, on certification requirements, not just having the ability to do this, but actually implementing it in the real world and finding some way to incentivize that? I think that would be something worth exploring.

Medell Briggs-Malonson
Absolutely.

Eliel Oliveira

I will start by disclosing that I am funded by ONC through one of the big projects to address this over at Dell Medical School, and the PI on the project is piloting an end-to-end referral system. We have learned quite a bit, and I think one thing that I believe that maybe needs to take place along the lines of what Steven was saying is he is talking about 360X, and I am working closely with Gravity. There are open referrals and a set of standards out there that need to be work together, and I think that we are not at a place that this can function seamlessly, and I think one of the reasons is because we are missing that piece of data that we talked about just a minute ago in terms of the community-based organizations not having the electronic systems, necessarily, that are required to comply with such standards, to receive referrals and then engage back with the providers, and then, we also have the patients, who need to be fully involved in that aspect of referrals.

So, the way that I guess we have been working on is assuming that we needed to pilot the FHIR resources that were created by Gravity considering patients, clinical providers, and the CBOs, and making that our work, and we are faced with quite a bit of challenge to get that done. So, I think what Steven was saying is connecting the dots about these different standards. The is fact that with the average referral system out there, none of them use a standard for referrals. Open standards exist, but none of them follow those standards. And then, like we were talking about earlier, community-based organizations may be using a variety of different systems. How could we then enforce or figure out a way that that integration between clinical systems and community-based organization systems would be using standards as well? I think that might require some kind of landscape assessment of what community-based organizations do use.

I can tell you that the use case that we addressed in piloting is just for SNAP referrals using our own data standards that we have currently, and that is not going to paint the picture of what is the end system at the community-based organization, which, in our case here, is the Central Texas Food Bank, which is a pretty large operation, but there are many smaller community-based organizations that do not necessarily have the systems that the food bank does. Now, we cannot boil the ocean and try to understand what al CBOs would have, but I think what I read from the first column here is what are the priority use cases?

To me, that speaks quite a bit because it has been a two-year project just to figure out how an end-to-end closed-loop solution for SNAP would work, and then we tried to replicate that possibly to WIC and to other programs. What are the key programs that need to be addressed that then inform the assessment of what is available on the other end, of patient engagement technologies or the community-based organization tools that they used, and how standards could be used? So, I do not know if I helped a lot here in coming up with a lot of recommendations, Medell, but I think maybe there is a need for that definition of the priority use cases, and then an assessment of the technology used by the community-based organizations that serve that use cases, and then how they could start to utilize standards.

Medell Briggs-Malonson

Correct, and I am going to add another layer of complexity to what the two of you all already mentioned, and Eliel, you were talking about the overall variation in terms of the systems of social service organizations, and that is one of the things that I was pondering on because we know that a lot of our social service organizations' margins are very small, so the truth is whether they are small social service organizations or larger ones, even if we do figure out methods of saying, "Okay, what technology or what screening or referral systems are you using, here are our standards," what are we going to do… And, I say "we" in terms
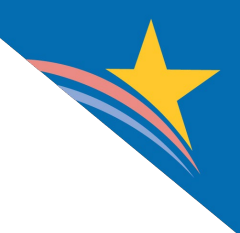
of ONC, in terms of all of our other agencies, to support the social service organizations to actually convert to whatever standards that we think may be best in order to have that exchange of information appropriately because oftentimes, changing of various different systems and changing of their workflows can be very costly, both financially as well as in terms of labor, and so, I think that's another bit of this.

What are the costs of even making sure to bring in all of our social service organizations, plus our clinical providers, plus our public health providers, into this type of process? So, I think this is definitely more of an exploratory topic for us to see what is going on with 360X, and then, of course, moving forward with thinking of what are those standards that can be adopted by all, what is the needs assessment right now, and then, how can we continue to support our social service organizations in particular that I think they do tend to be less resourced than many of the other organizations.

Steven Lane

Medell, let me just blow up this discussion a little bit. I think it is great that we have highlighted the lack of connectivity of social service and community-based organizations, but I think that is just one of a number of relevant care settings that are missing from our current structure, and I think we should highlight the longer list: So, behavioral health, dental health, therapies, complementary care providers, work, school, camp, cruise-based healthcare, correctional healthcare. There are a whole bunch of stakeholders that are involved in providing care that are completely not part of the interoperability framework, so I think everything that we just said about social and community-based services applies to those others as well, and we should capture all of them.

Medell Briggs-Malonson

Yeah, so this is truly an exploratory journey. All great points, you all, this is really great. So, it sounds like really, where we are heading is to have a greater understanding. The recommendation is to understand the current landscape more, but also the current needs for all of the various different stakeholders that are part of this closed-loop referral process, and once we gain that greater understanding, we can then proceed further with other additional recommendations. Okay, great. Well, how about we go to the next blue box, which is our priority uses, especially when it comes to e-prior auths. So, once again, same challenge: Lack of common standards to support prior auths across payers.

The challenge that we have been experiencing is a lack of standardized approaches to prior auths, and that can actually add large amounts of administrative burden, but I would also see a delay in clinical care as well due to the lack of prior auths. We see that all the time, where patients are literally lost in the cracks because a prior authorization was not obtained, and therefore there are delayed appointments and delayed treatment. And then, the opportunities we have are exploring the opportunity to advance standards that can improve systems for prior auths. So, our previous recommendations were to continue to monitor the implementation of existing high-tech e-prior auth recommendations, including relative to the HHS initiatives, such as from ONC and the CMS rules. So, this sounds like we already have a fair amount of work that is being done in some of the other areas. This is something that we discuss, but any thoughts on where we as HITAC can go and the recommendations we can provide for e-prior auth advancement?

Eliel Oliveira

I think similarly to the public health, Medell, I was also in the prior authorization workgroup, and the report is quite extensive and should probably feed directly into our annual report with the recommendations that should be followed.

Medell Briggs-Malonson
Wonderful. So, incorporating those. You are on so many different committees!

Eliel Oliveira
I know, huh?

Steven Lane
Come closer, Medell. This is where the work gets done.

Medell Briggs-Malonson
Thank you for your service! All right. So, Steven, any additional thoughts to really just incorporating that very detailed, extensive e-prior authorization recommendation report into this one? Any additional thoughts on this topic?

Steven Lane
I guess the other thought I would have would be is there an opportunity for us to have an update from the ONC team or from other teams that are actually working on this. I think this is one of those areas that is repeatedly identified as a need, and I think that as new people, we cycle on and off of HITAC, and within the ONC team itself, I think it is good to either have an annual or an every-other-year refresh of these high-priority areas to understand what progress has been made and what opportunities remain.

Medell Briggs-Malonson
Sounds great, wonderful.

Steven Lane
And I am actually going to have to drop pretty soon because I am going to have a new meeting here.

Medell Briggs-Malonson
Yes, and that is a great segue. We are almost at the end of time, so we do want to pause for public comment right now as well, so, Mike, I will turn it over to you.
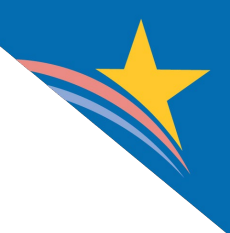
Public Comment (01:23:20)

Michael Berry
Okay, great. Thanks, Medell. We are going to now open up our meeting for public comments. If you are on Zoom and would like to make a comment, please use the hand raise function, which is located on the Zoom toolbar at the bottom of your screen. If you happen to be on the phone only, press *9 to raise your hand, and once called upon, press *6 to mute and unmute your line. Let's pause for one moment to see if anyone raises their hand. I am not seeing any hands raised, Medell, so I will turn it back to you. Thank you.

Next Steps and Adjourn (01:23:48)

Medell Briggs-Malonson

Thank you so much, Mike, and Steven, we understand you need to leave, and in the last three minutes or so, we are going to go through the next item there that was on the crosswalk. So, once again, what I am hearing from the workgroup is No. 1, we have already a very comprehensive report, but one of the things that we should start thinking of, and I want to bring this up as a possible recommendation, is there are several topics that seem to come around year after year. Even me being a new member, I am noticing this, and Steven, you are amplifying that point. And so, is there another way that we can continue to provide or identify those high-priority hot topics that everyone wants to know about, and we do have those consistent updates, so that then we can determine if there are more recommendations that are needed by HITAC or if we are all in agreement in terms of the great progress that is already being made. So, that is just one idea that came to mind after you said that, Steven, given the recurrence of some of these concerns that have come up.

So, the last topic is directory standards and management. Very briefly, this is in terms of how healthcare stakeholders struggle to find digital contact information for other providers and health information exchange. The challenge is that the electronic endpoints remain difficult to find for different entities because we do not have a unified standard source for providers, and then, the opportunity to was to improve the availability so that we can have appropriate health information exchange between healthcare providers, and the proposed recommended option was to explore opportunities to support the adoption of directory standards and management approaches that support complete, accurate, and usable electronic endpoint directories to support and advance health information exchange. In the last couple of minutes, any additions to this recommendation?

Steven Lane

I would just say, Medell, that this is another one of those perpetual important topics where it would be good to get a review of where things stand and what initiatives are ongoing. Patient matching is another one that is kind of like that. There are problems that we will eventually solve, but a need to review where we are at.

Eliel Oliveira

I totally agree. I was dealing with this 10, 13 years ago, and the same with patient matching. At least with patient matching, there was a federal barrier that has been lifted, but I think that is a great thing with how do we start closing on some of those challenges and coming up with solutions that finally deliver results, and this directory is one that has been around for a while.

Medell Briggs-Malonson

All right, okay. So, same thing as the prior two to a certain extent, just really trying to see where we are in terms of our progress with all the various different groups that are working on this, and then, hopefully, if we do identify a gap or an area that we can make a new recommendation for, doing our part to try to decrease the time or address these longstanding problems because yes, these have all been around for a while, so it would be great to continuously hear more about them and to see what we can do to help to solve the problems.

Eliel Oliveira

I know we have run out of time, but maybe one way to approach this, Medell, is recommend that there is a plan, almost like a strategic plan for those areas that keep coming back. What are we doing in three years,

what has happened in five years? We track those goals and objectives until they are completed. It does not have to be that, but I would keep it simple to say that there is a need for something so we can track progress.

Medell Briggs-Malonson
Absolutely. I like that idea. All right, well, I do not think we have enough time to go through the rest of our blue boxes, so I just want to thank all of you all from the workgroup that were here, I definitely want to thank the ONC team for all of their support, and I also want to thank everyone else that joined us during today's meeting. And so, our meeting is adjourned, and thank you, everyone, and have a wonderful day.

Eliel Oliveira
Thank you.