ONC | HealthIT ADVISORY COMMITTEE

Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) MEETING

January 19, 2023, 11 AM – 3 PM ET

VIRTUAL

Speakers

Name	Organization	Role
Medell Briggs-Malonson	**UCLA Health**	**Co-Chair**
Aaron Miri	**Baptist Health**	**Co-Chair**
Shila Blend	North Dakota Health Information Network	Member
Hans Buitendijk	Oracle Health	Member
Sarah DeSilvey	Larner College of Medicine, University of Vermont	Member
Steven Eichner	Texas Department of State Health Services	Member
Cynthia A. Fisher	PatientRightsAdvocate.org	Member
Lisa Frey	St. Elizabeth Healthcare	Member
Hannah Galvin	Cambridge Health Alliance	Member
Rajesh Godavarthi	MCG Health	Member
Valerie Grey	State University of New York	Member
Steven Hester	Norton Healthcare	Member
Jim Jirjis	HCA Healthcare	Member
Bryant Thomas Karras	Washington State Department of Health	Member
Kensaku Kawamoto	University of Utah Health	Member
Steven Lane	Health Gorilla	Member
Hung S. Luu	Children's Health	Member
Arien Malec	Change Healthcare	Member
Anna McCollister	Individual	Member
Clem McDonald	National Library of Medicine	Member
Deven McGraw	Invitae Corporation	Member
Aaron Neinstein	UCSF Health	Member
Eliel Oliveira	Dell Medical School, University of Texas at Austin	Member
Kikelomo Adedayo Oshunkentan	Pegasystems	Member
Naresh Sundar Rajan	CyncHealth	Member
Alexis Snyder	Individual	Member
Fillipe Southerland	Yardi Systems, Inc.	Member
Sheryl Turney	Elevance Health	Member
Thomas Cantilina	Department of Defense	Federal Representative

Name	Organization	Role
Adi V. Gundlapalli	Centers for Disease Control and Prevention	Federal Representative
Ram Iyer	Food and Drug Administration	Federal Representative
Meg Marshall	Department of Veterans Health Affairs	Federal Representative
Michelle Schreiber	Centers for Medicare and Medicaid Services	Federal Representative
Ram Sriram	National Institute of Standards and Technology	Federal Representative
Nara Um	Federal Electronic Health Record Modernization (FEHRM)	Federal Representative
Micky Tripathi	Office of the National Coordinator for Health Information Technology	National Coordinator
Steve Posnack	Office of the National Coordinator for Health Information Technology	Deputy National Coordinator
Elise Sweeney Anthony	Office of the National Coordinator for Health Information Technology	Executive Director, Office of Policy
Avinash Shanbhag	Office of the National Coordinator for Health Information Technology	Executive Director, Office of Technology
Seth Pazinski	Office of the National Coordinator for Health Information Technology	Director, Strategic Planning and Coordination Division
Michael Berry	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Al Taylor	Office of the National Coordinator for Health Information Technology	Presenter
Larry Jessup	Office of the National Coordinator for Health Information Technology	Presenter
David Kendrick	MyHealth Access Network	Presenter
Derek Pate	Oklahoma State Department of Health	Presenter
Laura McCrary	Kansas Health Information Network (KONZA)	Presenter
Chris Guerrero	KONZA	Presenter
Melissa Talley	KONZA	Presenter
Bryna Stacey	Kansas Department of Health and Environment	Presenter

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

Mike Berry
Good morning everyone and welcome to the January 2023 HITAC meeting and a new year with the HITAC. We are glad that you could join us today. I'm Mike Berry with ONC and I am the designated federal officer of the HITAC. This meeting is open to the public and your feedback is welcome which can be typed into the Zoom chat feature throughout the meeting, or it could be made verbally during the public comment period that is scheduled at about 2:50 PM Eastern time this afternoon. Let's get started with our meeting. First, I'd like to welcome ONC's executive leadership team to the meeting. With us today is our National Coordinator, Micky Tripathi, Steve Posnack, the Deputy National Coordinator, Elise Sweeney Anthony, the Executive Director of the Office of Policy, and Avinash Shanbhag, the Executive Director of the Office of Technology.

I will now begin roll call of the HITAC members and federal representatives. When I call your name, please indicate that you are present and if you have any conflicts of interest to disclose. I'll start with our co-chairs. Aaron Miri.

Aaron Miri
Good morning. No conflict of interest to disclose.

Mike Berry
Medell Briggs-Malonson.

Medell Briggs-Malonson
Good morning, everyone, and no. I do not have any conflicts of interest to disclose.

Mike Berry
Shila Blend

Shila Blend
Good morning, everybody. No, I do not have any conflicts of interest.

Mike Berry
Hans Buitendijk.

Hans Buitendijk
Good morning. This is Hans. No conflicts to report.

Mike Berry
Sarah DeSilvey.

Sarah DeSilvey
Good morning. I have one conflict of interest to report. I'm the Director of Terminology for the Gravity Project which receives ONC funding as part of the ONC HL7 Cooperative Agreement.

Mike Berry
Steve Eichner.

Steven Eichner
Good morning. No conflicts.

Mike Berry
Cynthia Fisher.

Cynthia Fisher
Good morning. I have no conflicts to report.

Mike Berry
Lisa Frey.

Lisa Frey
Good morning. I have no conflicts to disclose.

Mike Berry
Hannah Galvin.

Hannah Galvin
Good morning. I have one conflict to disclose. I'm the co-founder and co-board chair of SHIFT, the Independent Healthcare Task Force for Equitable Interoperability, and ONC sits on SHIFT's board in an ex officio, non-voting capacity. I do not receive any financial compensation for my work with SHIFT.

Mike Berry
Raj Godavarthi.

Raj Godavarthi
Hey. Good morning. No conflicts to report.

Mike Berry
Valerie Grey.

Valerie Grey
Good morning, everyone. No conflicts to report.

Mike Berry
Steven Hester. Jim Jirjis.

Jim Jirjis
Present and no conflicts to report.

Mike Berry

Bryant Thomas Karras.

Bryant Thomas Karras
Present. No conflicts, but I will disclose I am also a member of CDC's Advisory Committee to the Director of Data and Surveillance Workgroup.

Mike Berry
Ken Kawamoto.

Ken Kawamoto
Good morning. I have just a few general conflicts. I have recently had sponsored research consulting for co-development relationships with Pfizer, Hitachi, RTI, NORC, MD Aware, and several universities.

Mike Berry
Steven Lane.

Steven Lane
Good morning. I should report that I serve on the board of The Sequoia Project and as the chair of the steering committee for Carequality, both of which are involved as serving as the recognized coordinating entity to help implement the TEFCA. I also work for Health Gorilla, which is a company that is applying to be a QHIN under TEFCA.

Mike Berry
Hung Luu.

Hung Luu
Good morning. I'm involved in several research projects into interoperability, and I receive salary support through the FDA Broad Agency Announcements for those projects. I've also been appointed to the Clinical Laboratory Improvement Advisory Committee run by the CDC.

Mike Berry
Arien Malec.

Arien Malec
Good morning, and no conflicts.

Mike Berry
Anna McCollister. Clem McDonald. Deven McGraw.

Deven McGraw
Good morning, everyone. I have no conflicts as well, although I also serve with Bryant on the Data and Surveillance Workgroup of the Advisory Committee to the CDC. Thank you.

Mike Berry
Aaron Neinstein.

Aaron Neinstein
Good morning, everyone. I do have some disclosures to make. I've received research funding over the past several years from Eli Lilly, Pfizer, Philips, and Cisco, and have received consulting fees from Roche, Sanofi, Medtronic, Eli Lilly, and Intuity Medical. Thank you.

Mike Berry
Eliel Oliveira.

Eliel Oliveira
Good morning, everyone. I disclose that I am the Principle Investigator of an ONC LEAP award, and also that I have equity stake in a small a startup company that is in the Health IT industry.

Mike Berry
Kikelomo Adedayo Oshunkentan, formerly Belizaire.

Kikelomo Adedayo Oshunkentan
Hi. Good morning, everyone. I have no disclosures to report. Thank you.

Mike Berry
Naresh Sundar Rajan.

Naresh Sundar Rajan
Hey. Good morning, everyone. I do not have any conflicts of interest.

Mike Berry
Alexis Snyder.

Alexis Snyder
Good morning. I have no conflicts of interest.

Mike Berry
Fillipe Southerland.

Fillipe Southerland
Good morning. No conflicts of interest.

Mike Berry
Sheryl Turney.

Sheryl Turney
Good morning. I don't have any conflicts of interest, but I do have two disclosures. I have been voted to the Steering Committee for AF, which is Accelerating FHIR. Also, I'm appointed to the Carequality Advisory Committee.

Mike Berry
Thank you, Sheryl and all the HITAC members. Now, I'm going to ask our federal representatives to let us know who is here. They are not required to report any conflicts of interests. Thomas Cantilina. Adi Gundlapalli. Ram Iyer. Margaret Marshall.

Meg Marshall
Hi. Good morning.

Mike Berry
Michelle Schreiber or Alex Mugge.

Alex Mugge
Alex Mugge. Hi.

Mike Berry
Ram Sriram.

Ram Sriram
Good morning.

Mike Berry
Nara Um. Great. Thank you so much, everybody. Now, please join me in welcoming Micky Tripathi for his opening remarks. Micky?

Welcome Remarks (00:07:10)

Micky Tripathi
Great. Thanks, Mike. Good morning, everyone. I am Micky Tripathi, National Coordinator. I have no conflicts to report. I guess if I did, I would be in jail by now! Welcome. I am really delighted to be here. I want to thank all HITAC members and federal representatives and express my appreciation for all of your contributions, both past and for an exciting year ahead.

Earlier today, we published a blog post which is available on our website and an infographic to highlight the HITAC's work over the past year along with a look ahead to 2023. I'm excited to see what the HITAC is going to accomplish this year. I know there's a very rich agenda ahead of us. I think there's going to be more things to come as well as we start to see things unfold throughout the year. We'll put a link to the blog post in the chat, and I encourage everyone to take a look to see the progress that really is really exciting to see. I also want to congratulate and welcome eight new members on their recent appointments to the HITAC for a three-year term. Please join me in welcoming Kikelomo Oshunkentan, Shila Blend, Sarah DeSilvey, Hannah Galvin, Bryant Thomas Karras, Anna McCollister, Deven McGraw, and Naresh Sundar Rajan. We also have two new federal representatives, Meg Marshall who is representing the VA, and Nara Um who is representing the Federal EHR Modernization Program.

I also want to thank Jonathan Nebeker for his many contributions over a number of years with the HITAC, and want to acknowledge Meredith Josephs from the FEHRM for her time on the HITAC as well. Thank you so much. My time before joining the federal government, some of the most enriching professional

experiences that I had was working with the FACA and then HITAC, the HIT Policy Committee, and HIT Standards Committee. I hope all of you have that same type of experience with the HITAC over this year and over the coming years. I am certainly looking forward to learning from each of you and greatly appreciate your service on the HITAC.

We are making plans to hold two in-person HITAC meetings this year. I know people have been eager for that. We are going to have two in-person meetings, one in the spring and the second in the fall. We'll be working closely with Medell and Aaron to develop the agenda to ensure it will be a great experience. We strongly welcome and encourage your voluntary participation. More to come on that, but as I said we're really excited to get back to in-person meetings. We'll anticipate one in the spring and one in the fall with more details to come there.

I'm really excited to highlight some ONC program updates. We released the draft USCDI Version 4, which contains data classes and elements from USCDI Version One through Version Three, along with proposed data classes for inclusion in Version 4. We'll be reconvening the Interoperability Standards Workgroup starting next week to review the draft and provide recommendations. Also, ONC released the 2023 Interoperability Standards Advisory, the ISA Reference Edition. Some notable updates to that include a new Human and Social Services subsection with standards the enable healthcare provider referrals with Human and Social Services. We also added a new pharmacy interoperability subsection that consolidate the interoperability needs aimed at safe and informed prescribing, medication management, and the exchange of medication data for various clinical administrative purposes. You may recall at a previous HITAC meeting we got a great presentation from Tricia Lee from the ONC staff, and there was a lot of interest among the HITAC members on pharmacy interoperability. We're really excited about being able to add that as a new sub section. Comments are welcome year round, so please go to HelpIT.gov to review these and other key provisions of the 2023 ISA.

I'd like to point everyone, for those who haven't seen it, to the Fall 2022 Unified Agenda. For those who aren't familiar with Unified Agenda, it is published twice a year and is where OMB, the Office of Management and Budget, lays out the proposed rulemaking of the different federal agencies to give the industry a perspective on what type of rulemaking is going to be upcoming in the 12 months. The Fall 2022 Unified Agenda was released. I just want to point you to some of the proposed rulemaking that is of interest to all of you, hopefully. There are three rules that are under ONC. If you go to the Unified Agenda, you'll see that there are three listed under ONC. The first is a notice of proposed rulemaking that's anticipated to be focused on ONC health IT certification program updates. There'll be some information blocking updates and it will also include the EHR reporting program, condition, and maintenance of certification requirements. That release date is pending final clearance right now. You'll see the date there says December 2022. As you can probably surmise from that, that means that it is imminent. We're working very hard on getting that final clearance.

The second NPRM is anticipated to be around the establishment of provider disincentives for healthcare providers related to information blocking. The release date of that is anticipated to be September 2023. I'll come back to that in a second just to give a little bit more explanation. Then the third NPRM is anticipated to be around patient engagement, information sharing, and public health interoperability. The release date for that draft rule is anticipated to November 2023. Those are the ones that ONC is specifically working on. I just want to come back to the provider disincentives one for a second because I know that there were

some questions about that and how ONC is listed as the agency for that. That is a department rule, so many of you may remember from the 21st Century Cures Act specified that penalties for providers were found not to be in compliance with the information blocking provisions of the 21st Century Cures Act and the succeeding ONC rule. The 21st Century Cures Act directed that the Secretary of Health and Human Services would identify appropriate disincentives from appropriate agencies within existing authorities for those providers who were found to not be in compliance after an investigation and a finding from the Office of the Inspector General. Because that was directed specifically at the secretary to identify those appropriate agencies, it is a department-wide multi agency kind of approach.

ONC will be the lead author in helping to facilitate that rule making, but you'll be working with and collaborating with a number of federal agencies, HHS agencies, who will be a part of that rule making. So, I just wanted to -- I know there was some questions about that which I saw in different places. I just wanted to clarify what that is and ONC's role in that.

There are two other proposed rules that I would just point people to because they are important even though they aren't ONC-led rules. One is a rule that is from the Office of the Secretary, which is specific to Federal Acquisition regulations. Many of you may recall that we announced last July a new HHS department policy for Health IT alignment across the department. That proposed rule is really just taking guidance that is already in place and establishing a new rule to have requirements in federal acquisitions programs coming from the department of Health and Human Services, so funding vehicles being based on the standards that are approved by ONC already for Health Information Technology. What that does is it just **[inaudible] [00:15:02]** rule guidance that is already in place to support that department-wide health IT alignment policy that Secretary Becerra signed in July. It's very important, I think. Hopefully, all of you appreciate as we go forward making sure that all of us in the Department of Human Services are working in alignment to further our goal of an open architecture ecosystem based on open industry standards across the ecosystem.

The other rule that I would point people to is the Office of the Inspector General has also put into the Unified Agenda that they anticipate March of 2023 for the issuance of their final rule related to enforcement of the information blocking provisions. There is a draft rule that I think they published in 2020. You can look at that draft rule. As I said, they are putting in right now that March 2023 is their expectation for the final rule. It's very important for the enforcement part of the information blocking provisions. We have the OIG proposed rule, and then appropriate disincentive proposed rule which then sort of fill in those last gaps of the full enforcement of the information blocking provisions of the 21st Century Cures Act.

Finally, saving the biggest announcement for last, as you know we've been hard at work with our partner The Sequoia Project on advancing TEFCA, the Trust Exchange Framework and Common Agreement, which is the nationwide network of networks for secure medical record sharing that was called for in the 21st Century Cures Act of 2016. One year ago, yesterday, we publicly released the foundational policy and technical framework for TEFCA known as the Common Agreement and the Technical Framework. In September of 2022, The Sequoia Project opened up the application process for networks seeking to become a QHIN, a Qualified Health Information Network under the TEFCA umbrella. We got tremendous response and collaboration from the health IT community, and I'm really excited to announce that on Monday, February 13th, Secretary Becerra will host an event in the great hall of the Humphrey Building in Washington announcing the first group of QHIN candidates to have their applications approved.

This milestone marks the first group to be deemed eligible to perform the obligations of being a QHIN, and each candidate's agreeing to the legal terms and conditions of the Common Agreement, which is the same agreement that each of them will sign with The Sequoia Project as operating as the recognized coordinating entity of the operational partner for TEFCA. It also marks the commitment of those candidate QHINs to being fully designated within 12 months, which means that they will go through testing and proceed to full production in that time period. We're really excited about this. This is another key milestone in what we've been trying to accomplish for a number of years. In addition to the core use cases of exchange for treatment and individual access to their own records, we'll soon be enabling the payment and the health care operations use cases. Last week, ONC and the CDC began recruiting public health agencies interested in being early adopters for TEFCA exchange to support nationwide public health interoperability. I mention these things because these are part of the effort through this public private partnership of having TEFCA expand the aperture of nationwide interoperability beyond treatment use cases, for individual access, for payment and health care operations, and for public health. We're making great strides towards putting those into place this year.

More details will be forthcoming about this event, and I want to thank The Sequoia Project and the ONC team for all of the hard work on this, the HITAC for your guidance and support on this, and the QHIN candidates for stepping up to support a public private model to give our country the nationwide interoperability network that we've all been working toward for almost two decades now. We're very excited about that. There are more details to come, as I said.

In closing, I just want to thank all of you again for joining us today and really look forward to a new year with the HITAC. Let me now turn it over to Aaron and Medell for their opening remarks.

Opening Remarks, Review of Agenda, and November 10, 2022, Meeting Notes – HITAC Vote (00:19:08)

Aaron Miri
Thank you very much, Micky. What exciting news, Micky! That is a Valentine's present of the ages. Thank you for that. You really made our day with that and we're all excited about it. I'm sure that it will make for some good poems on the 14th as they always go for health IT land on the internet. It'll be good. We're really excited for that.

Welcome to all of you. Welcome to all of you listening. Welcome to all of the new HITAC members. Micky said it best. This is one of the most rewarding committees that you will ever serve on and one of the most galvanizing. The material work that we do here translates to things like TEFCA, like information blocking, and all of the aspects of 21st Century Cures which are near and dear to our heart. So, welcome! This stands to be an exciting year, especially since we get to be back in person, hopefully, at least two times this year. I'm personally excited about that. Let me turn this now to my co-chair, Medell.

Medell Briggs-Malonson
Thanks so much, Aaron, and thank you, Micky, for those wonderful remarks. I too am very excited about this new year. It's going to be a new year of visioning, action, and collaboration. I would also like to extend a warm welcome to our new HITAC members. I look forward to another wonderful year with our continuing members. In addition, this year I feel is going to be a pivotal year as we continue to think about and actually

actualize how we optimize our health IT infrastructure, standards, and policies in order to achieve just and equitable delivery, overall health outcomes, and social wellbeing for our communities nationwide. We all look forward to working each of you all and really receiving all of your expert insights as well as those insights from the public. Once again, this is going to be a wonderful year and I really look forward to all that we're going to accomplish together. Aaron, I think I'll turn in on over to you in order to go over today's agenda.

Aaron Miri
Absolutely! Thank you very much, Medell. All right. Let's get into it. Today, we have a very busy opening meeting for us here to really set the ball rolling in the right direction. Let's go through it. Obviously, we had our welcome remarks. We're going through the agenda now. We've gone through the introduction. First up on deck is the overview of Draft USCDI Version 4 by Mr. Al Taylor. Then we're going to go into the work plan for 2023 by Mike Berry. Then, after a short break, we'll talk about the STAR HIE awarding program updates. There will be a number of folks presenting. I look forward to that. We'll have ONC updates, and that's always exciting to hear the very busy ONC what's going on, what's on deck, and what's coming up that we can look forward to. Then, of course, near and dear to Medell and I's heart, the HITAC Annual Report Workgroup Update, we'll go through that. All of you have been participating. Thank you to some of the new folks who have already jumped in and hit the ground running offering advice and insights. Thank you for that. Again, that report we'll go into more detail but that is a culmination of your work, your feedback, and your asks over year. We'll go to public comment about 2:50 in the afternoon and then adjourn around 3:00. That is the agenda for today.

With that, we need to call for a motion to adopt the November meeting notes. Hopefully, you all saw that in your email and you've been able to look at that. For some of the new members, I know you're maybe trying to catch up here. Please, take a look at those. They should be in your emails and attachments. Take a gander and see if anything there was amiss. We'll go for a vote. Before we do that, Mr. Steven Lane, you have your hand raised. Go ahead.

Steven Lane
Sorry. I was just happy to move that we approve the minutes from the prior meeting.

Aaron Miri
You're jumping ahead, my friend! No problem.

Steven Lane
That's why I put my hand back down!

Aaron Miri
Okay. No problem, Dr. Lane. We've got a primary, do we have a second or objection?

Jim Jirjis
Seconded, Jim Jirjis.

Aaron Miri
Seconded, Jim Jirjis. All right. All those in favor, please signify by saying "Aye".

Multiple Voices
Aye.

Aaron Miri
Any opposed please signify by saying “nay”. Any abstentions?

Deven McGraw
Abstain. We weren’t here.

Bryant Thomas Karras
I’ll abstain as well.

Aaron Miri
All right. That is Deven abstaining, Bryant abstaining. Okay.

Sarah DeSilvey
Sarah DeSilvey, abstain.

Aaron Miri
Okay, Sarah abstained.

Shila Blend
Shila Blend, abstain.

Naresh Sundar Rajan
Naresh, abstain.

Aaron Miri
Sorry. One at a time, one more time.

Shila Blend
Shila Blend, abstained.

Aaron Miri
Okay.

Anna McCollister
Anna McCollister, abstain.

Aaron Miri
Okay.

Hannah Galvin
Hannah Galvin, abstain.

Aaron Miri
All right.

Naresh Sundar Rajan
Naresh, abstain.

Aaron Miri
Naresh, okay. I think that's all the abstentions, which is understandable. These are all the new folks. All right. With that, I believe we have a consensus to pass the meeting minutes from the November meeting, so those are now passed. With that, we will get into the programing for today. Medell, baton over back to you.

Introduction of HITAC Members and Federal Representatives (00:23:48)

Medell Briggs-Malonson
Thank you so much, Aaron. Now, we're going to go into an exciting part of today's agenda that normally only happens once a year, and that's an introduction of all of our HITAC members as well as our HITAC federal representatives. We will actually proceed by alphabetical order of the HITAC members followed by the federal representatives. During this time, please go ahead and introduce yourselves and your role. What I'll do, I'll start off with myself. So, good morning again, everyone. My name is Medell Briggs-Malonson, and I'm the Chief for Health Equity Diversity Inclusion for the UCLA Health System as well as an Associate Professor of Emergency Medicine at the David Geffen School of Medicine. I'll first pass it on over to my wonderful co-chair Aaron to introduce himself.

Aaron Miri
Yeah. Good morning. I'm Aaron Miri, Senior Vice President Chief Digital and Information Officer for Baptist Healthcare in Jacksonville, Florida where is 77 degrees and beautiful sky today. Back to you, Medell.

Medell Briggs-Malonson
Wow! I can't believe you're warmer than Los Angeles right now. We're about 48 to 50. Well, let's keep on going through the committee. First, we will want to start off with Shila Blend.

Shila Blend
Good afternoon. I should put my video on. Good morning, everybody. I am Shila Blend. My role is I am the Health IT Director for the State of North Dakota overseeing ND HIN. I have a few other roles. I serve as a subject matter expert on an EMS coms committee that we have in the state here, which helps determine quality measures for EMS. I also serve as adjunct faculty for the University of Mary. Just to Aaron's comment, up here in North Dakota it's about 15 to 20 degrees, since we're comparing weather.

Medell Briggs-Malonson
Well, stay warm there! Hans Buitendijk.

Hans Buitendijk
Good morning. This is Hans Buitendijk. I am a Director of Interoperability Strategy with Oracle Health. As that, I represent a number of things in the industry that includes Carequality, common well, EHRA, HL7,

various HL7 accelerators to help more interoperability forward. Since temperatures are part of it, in Henderson, Nevada temporality at HL7 workgroup meeting where it's colder than I thought it would be, 34 degrees when it started.

Medell Briggs-Malonson
Thanks so much, Hans. Sarah DeSilvey.

Sarah DeSilvey
Greetings, everybody. My name is Sarah DeSilvey. I also wear a few hats. One of my base notes is I run a family practice in Vermont. In addition to that, I have the honor of being the Director of Terminology for the HL7 FHIR Accelerator Project, The Gravity Project. In addition to that, I consult with Yale Corp on ECQM and DCQM measure approaches to address health equity and social determinants of health.

Medell Briggs-Malonson
Thank you so much, Sarah. Steven Eichner.

Steven Eichner
Good morning! My name is Steve Eichner. I'm the Health IT Lead for the Texas Department of State Health Services. In addition to that, I've been very active in a variety of HL7 workgroups and with counsel state territorial epidemiologists, which is one of the national public health associated workgroups as well as ASTO and other national public health organizations. I also have a lot of experience working with rare diseases and privacy and data exchange related to research and specialty care. I'm pleased to be here.

Medell Briggs-Malonson
We're happy to have you hear as well. Cynthia Fisher.

Cynthia Fisher
Greetings. I'm Cynthia Fisher, founder and chairman of PatientRightsAdvocate.org. I'm happy to serve on this HITAC committee to help patients and their families be very well informed about their health care information and be able to readily have access and share. Thanks.

Medell Briggs-Malonson
Thank you, Cynthia. Lisa Frey.

Lisa Frey
Good morning. I'm Lisa Frey. I'm Executive Vice President for the Equal Services and General Counsel for Saint Elizabeth Healthcare in Northern Kentucky and Southeast Indiana. Among the areas that I oversee, I'm proud to address and protect patient privacy and confidentiality for our system through our efforts at complying with HIPAA privacy regulations.

Medell Briggs-Malonson
Great. Thank you so much, Lisa. Hannah Galvin.

Hannah Galvin

Hi. Good morning. I'm Hannah Galvin. I'm a pediatrician and the Chief Medical Information Officer for Cambridge Health Alliance, a public academic safety net health system in the metro north Boston region, as well as an associate of medicine at Tufts University School of Medicine. I'm also the cofounder and co-board chair of SHIFT, the Independent Healthcare Task Force for equitable interoperability with a mission to advance safe, equitable, and patient-empowered sharing of health information. It is a balmy 40 degrees here in Boston today.

Medell Briggs-Malonson
You brought the weather back around, Hannah. Thank you for that. Raj Godavarthi.

Raj Godavarthi
Good morning. It's 35 degrees in Seattle. I work for MCG Health as Associate Vice President of Technology and Interoperability. I also serve on WEDI Board and also on the HL7 FHIR Accelerators. We recently implemented a patient to provider prior auth network. I'm very excited to be part of this group. I learned a ton from the last year. Thank you.

Medell Briggs-Malonson
Thank you, Raj. Valerie Grey.

Valerie Grey
Good morning, everyone. I'm the Senior Vice Chancellor for Health and Hospitals at the State University of New York System. Our system has 64 campuses across New York State, six hospitals, a nursing home, four clinical practices, a wide array of both education and provider services. I'm pleased to continue to serve on HITAC.

Medell Briggs-Malonson
Thank you, Valerie. We're happy to have you as well. Steven Hester. Steven? Okay. We'll move on to Jim Jirjis.

Jim Jirjis
Yeah. Hey! I'm Jim Jirjis. I'm Chief Health Information Officer for HCA Healthcare. We have about 182 hospitals, a couple thousand clinics, ambulatory surgery centers, etcetera. We're in about 22 states. So, it kind of brings and interesting view into the variation between states, but we are eager to see this all move.

Medell Briggs-Malonson
Thank you, Jim. Bryant Thomas Karras.

Bryant Thomas Karras
Good morning, everyone. I'm Bryant Karras. I'm the Chief Medical Informatics Officer for Washington State Department of Health. I wear many hats, as many of you know. I'm an internal medicine doctor, biomedical engineer, senior epidemiologist. I'm hoping to bring the perspective like Steve Eichner has of state, local, territorial, and tribal public health agencies. I'm really looking forward to it. I'm with Hans in Henderson, Nevada at the moment, but we'll normally be joining from Seattle.

Medell Briggs-Malonson

Great. We look forward to all of your insights as well. Ken Kawamoto.

Ken Kawamoto
Hi. Good morning, good afternoon. I'm Ken Kawamoto from University of Utah. I'm a professor of Biomedical Informatics, Associate CMIO, Codirector of Additional Health Initiative, and actively engaged in HL7. I'm still currently in Henderson. I do a lot of standards implementation and grapple with these standards on a daily basis so I'm looking forward to seeing if I can provide that perspective. Thanks.

Medell Briggs-Malonson
Great. Thank you. It seems like many people are in Henderson right now. Steven Lane.

Steven Lane
Good morning. I'm Steven Lane. I'm in sunny Silicon Valley that is drying out after a long series of storms. I'm a practicing family physician at Sutter Health. I serve as the Chief Medical Officer at Health Gorilla, as I mentioned at the beginning. I serve on the board of The Sequoia Project and chair the steering committee at Care Equality, and also serve on HL7's DaVinci Project Clinical Advisory Counsel. I work with Hannah on the SHIFT project supporting privacy. Deven and I are involved in a number of privacy related efforts including through the Civitas Network of HIEs. I've been very involved in California in the development of our data exchange framework for the state. I have lots of hands in the health IT space and am really excited to be here for another year, actually my last year on HITAC going forward.

Medell Briggs-Malonson
Well, we will make sure it's a wonderful year, Steven. Thank you for your service. Hung Luu. Hung?

Hung Luu
Good morning. I am from the great state of Texas, and I am an Associate Professor of Pathology at UT Southwestern Medical Center. I also serve as the Director of Clinical Pathology at Children's Health, a pediatric tertiary care system. I've been heavily involved in laboratory data interoperability involving work with the Systemic Harmonization Interoperability Enhancement for Lab Data. That's quite the mouthful, but the acronym stands for SHIELD. I'm very honored to continue serving on the committee to advance interoperability for the nation, and to have a cohesive plan for how we can share data and improve healthcare. Thank you.

Medell Briggs-Malonson
Thank you so much, Hung. Arien Malec.

Arien Malec
Good morning. I am in the oddly sunny bay area where it has been raining for 40 days and 40 nights, but the sun has come up. I lead our clinical engineering organization at Change Healthcare which is part of Optum Insights now. I've had a multidecade career in health informatics starting in the pharma and life sciences industry and then moving into clinical interoperability driving patient engagement powering HIE and doing work on nationwide interoperability and health information technology policy. I'm very pleased to be here.

Medell Briggs-Malonson

Thank you, Arien. Anna McCollister.

Anna McCollister
Hi, I'm Anna McCollister. I'm coming to you from just north of San Diego where I don't like. I live in Washington D.C., but I came to San Diego to get away from D.C's bad weather just to experience a series of atmospheric rivers, but today is beautiful. I have a view of the ocean, so don't feel sorry for me. I have a very diverse background. I'm currently working for the past several years as an independent consultant, mostly focused on patient data use, access, and governance. In addition, I've done two health technology startups. I've been very active in advocating at the federal level for health IT policies that consider the needs and uses of patients particularly as it relates not just to clinical care but to self-care. I was an early founder of a patient hacker movement in the Type 1 diabetes space. I serve on a number of advisory committees, FDA Medoc, which is the Diabetes Drug Committee and the FDA Medical devices committee that oversees diabetes devices, as well as the National Quality Forums standing committee and a variety of other things. I was actively engaged with the policy makers just as individual volunteer with the policy makers as they were constructing the health IT elements of the 21st Century Cures Act. It's truly a pleasure to be here.

Medell Briggs-Malonson
Thank you, Anna. We're happy to have you here in the state of California. Hopefully, you can make sure that you're enjoying the sunny weather before the next front of all the rain hits us soon as well. Clem McDonald. Clem? Well, we'll move on to Deven McGraw.

Deven McGraw
Thank you, Medell. I'm Deven McGraw. I am the lead for Data Stewardship and Data Sharing at Invitae, which is a clinical genetic testing company. Invitae acquired a company that I helped to cofound called Citizen that helps patients gather all their medical records so that they are then empowered to use them and share them for care, for research, for whatever meets their needs. Prior to going into the company world, I was the Director of Health Information Privacy at the HHS Office for Civil Rights and the acting Chief Privacy Officer for the Office of the National Coordinator for health IT. I have kind of a long history of working on data governance and privacy issues across a broad spectrum. I also serve on the All of Us Research Program, IRB. I'm on the board for the Karen Alliance which promotes patient-directed generated health information exchange, and I'm on the board on Manifest MedEx, which is a health information exchange in the state of California. I'm very much looking forward to being on the committee. There's such an amazing range of skills and experience and interest. I'm looking forward to a great year. Thank you.

Medell Briggs-Malonson
Thank you so much, Deven. We're happy to have you with us. Aaron Neinstein.

Aaron Neinstein
Hi! Good morning, everyone. It's great to be here. I'm Vice President of digital health for the University of California San Francisco Health, UCSF Health. I'm an Associate Professor of Medicine practicing endocrinologist specializing in diabetes care. I've spent my career working to support patients and providers in improving and advancing patient access, empowerment, quality of care, value, and equity through the use of digital health. I'm very excited to be a part of this group in advancing that mission.

Medell Briggs-Malonson

Thank you so much, Aaron. Eliel Oliveira.

Eliel Oliveira
Thanks, Medell. Good morning, everyone. My name is Eliel Oliveira. I am the Director of Research and Innovation at the Dell Medical School, which is at the University of Texas at Austin. I lead our health informatics team in the Department of Population Health. I'm the PI on several projects related to health information technology. I have over 20 years of experience in the field, about 10 of which I collaborated closely with ONC developing specific standards for consent, PROs among other things, including some projects now related to social determinants of health exchange. We have a pilot project closely working with the Gravity Project where we're going to pilot the new standards as far UH exchange in real settings. I'm also very closely involved in health information exchanges. I'm a member of Civitas and serve on one of the committees for research development for HIEs. I have before led the health information exchange **[inaudible] [00:40:22]** and provide support to the health information exchange here in Austin, Texas. I think a lot of relevant experience was helping the development that patients **[inaudible**] research network nationally. I'm very excited to be here again and see the new faces and for the great year 2023. Thanks, Medell.

Medell Briggs-Malonson
Thank you, Eliel, for everything. Next we have Kikelomo Adedayo Oshunkentan.

Kikelomo Adedayo Oshunkentan
Yes. Nice to meet you all. I'm Dr. Kikelomo Oshunkentan. I go by Dayo for short, much easier, and that's from my middle name. I'm board certified in Internal Medicine with a Master's in Public Health. I just completed my master's in business administration at Wake Forest in December. I've got over 20 years in healthcare. I served a majority of that in clinical at HM Health and Novant Health in Charlotte, North Carolina, after which I pivoted to the payer side with Anthem BlueCross/BlueShield as a medical director and even led the COVID initiative during the onset of COVID in terms of creating a program from the ground level up and using new data analytics to develop it and to report detailed outcomes. I have now since transitioned as the Chief Medical Office of Pegasystems, a technology company based outside of Cambridge, Massachusetts. I look forward to working with all of you guys and learning from you, as sharing and infusing my experience into this committee. Thank you.

Medell Briggs-Malonson
Thank you so much, Dayo. Naresh Sundar Rajan.

Naresh Sundar Rajan
Thank you. This is Naresh. I'm an informaticist by training. I currently serve as the Chief Data Officer for CyncHealth which is a statewide health information exchange for the State of Nebraska and the State of Iowa. I've been dealing a lot with interoperability across the two states. That's what we do. Thanks a lot for this opportunity.

Medell Briggs-Malonson
Thank you, Naresh. Alexis Snyder.

Alexis Snyder

Good morning. I come to you from the Boston area, which is unusually warm these days and rather pleasant. I'm a patient and stakeholder engagement specialist with a focus on health IT, patient-centered outcomes research, and family-centered care and engagement. I work with a number of health organization, researchers, providers, and patients locally and nationally on best practices for engaging that voice in all areas of quality improvement in systems work. I'm also a caregiver with lived experience in complex care, disability, and rare disease. I'm happy to be here today.

Medell Briggs-Malonson
We're happy to have you as well, Alexis. Thank you. Fil Southerland.

Fillipe Southerland
Hi. Good morning, everyone. It is snowing here in Boise, Idaho today. This is my second year on HITAC, so great to see everyone again. My background is in software development. I'm Director of Healthcare Solutions for Yardi Systems. We are an electronic medical record in the long term post-acute care space. Our medical record services about 3000 communities nationwide, about half a million residents in the long-term care space. I head of up our interoperability initiatives for the company. I'm happy to be here. Thank you.

Medell Briggs-Malonson
Thank you, Fil. Sheryl Turney.

Sheryl Turney
Good morning, everyone. I am talking today from Orange County in California. It's also a balmy 46 degrees down here. I represent Elevance Health. I am the enterprise lead for interoperability and data use. I have been one of the original members of HITAC, and so happy to be so. I'm also very appreciative of the support we've been provided by all of the federal players here and the other HITAC members. I'm very happy to get going with 2023 and hope everybody is having a great day.

Medell Briggs-Malonson
Thank you, Sheryl. Make sure you're wearing your beanie and all of your gloves to stay warm. Okay? Last but definitely not least, we have Clem McDonald.

Clem McDonald
Hi. I'm Clem McDonald. I'm the Chief Health Data Standards Officer at the National Library of Medicine. I've been involved in medical records systems for decades. I've been happy to see the progress stimulated by ONC for standardization because this stuff can't work without it. I've also been very involved in standards as a result of that. That's all. Thank you.

Medell Briggs-Malonson
Thank you, Clem. Thank you to all of the HITAC committee members who introduced themselves. Now, we'll transition to our HITAC federal representatives for an introduction. First, let's start off with Thomas Cantilina. Thomas? We will go to Adi Gundlapalli.

Adi Gundlapalli

Yes. Thank you. I'm Adi Gundlapalli from the CDC. I currently serve as the Chief Public Informatics Officer at the Center for Surveillance, Epidemiology, and Laboratory Services. My work in our office has been heavily involved in looking at data modernization at CDC and also in looking at interoperability and standards setting. It's a great opportunity for us to hear and learn from all our HITAC members over the past years. It's a pleasure to be here from a little of a cool Atlanta today. Thank you.

Medell Briggs-Malonson
Thank you, Adi. Ram Iyer. Well, Margaret Marshall.

Meg Marshall
Hi. Good morning. I'm Meg Marshall, Director of Regulatory Affairs in the Office of Health Informatics at the Department of Veteran's Affairs. It's a pleasure to be here.

Medell Briggs-Malonson
Okay. Thank you so much, Meg. We're happy that you're here as well. Michelle Schreiber.

Alex Mugge
Hi. This is Alex Mugge in for Michelle Schreiber today. I am the Director and Deputy Chief Health Informatics Officer at CMS. Unlike many of my other CMS colleagues who are located in the Baltimore, D.C. area, I'm actually a neighbor to Aaron down here in Saint John's, Florida just next to Jacksonville. I believe he already shared our weather report, but it's pretty nice today. I will be here occasionally, but Dr. Michelle Schreiber, who is the Deputy Director for our Center for Clinical Standards and Quality, she is the official HITAC representative. She will be with you the rest of the time representing CMS. Thanks for having me today.

Medell Briggs-Malonson
Thank you, Alex, for being here. I do not believe that Ram Sriram or Nara Um are present.

Ram Sriram
Ram is here!

Medell Briggs-Malonson
Oh, Ram! Thank you! Wonderful. Sorry about that. Please excuse me.

Ram Sriram
No, no problem. I'm Ram Sriram and I'm the Chief of the Software and Systems Division at the National Institute of Standards and Technology in the Information Technology Lab. I also lead the Health IT Program at NIST. We do a lot of work on interoperability testing, especially doing it for the meaningful use. We work closely with a number of federal organizations including ONC, FDA, and CDC, and NIH. That's briefly what we do. We're basically on the software side of things.

Medell Briggs-Malonson
Great. Thank you, Ram.

Ram Sriram
I also **[inaudible] [00:48:25]** artificial intelligence which I've been working on the past 40 years or so.

Medell Briggs-Malonson
Great. Thank you. We're so happy that you're here with us as well. Just to double check, Nara Um. Nara, are you here today? Okay. Well, I think we can conclude our introductions of both the HITAC committee members and our HITAC federal representatives. As everyone can see, we have a deep wealth of knowledge that's on this committee. Again, we look forward to all that we will accomplish this year. Aaron, now that we have completed our introductions, I think we can proceed on into the rest of today's agenda.

Overview of Draft USCDI Version 4 (00:49:02)

Aaron Miri
Sounds good, Medell. Thank you. Let's rock and roll, you all. All right! Next up, overview of the draft USCDI Version 4 from Dr. Al Taylor.

Al Taylor
Hi. Thanks, Aaron. Can everybody hear me okay?

Aaron Miri
Yes.

Medell Briggs-Malonson
Yes, we can.

Al Taylor
Okay. All right. Thank you. My name is Al Taylor. I am the Medical Informatics Officer in the Office of Technology at ONC. I'm also the technical lead for USCDI and have been for all of the years that USCDI has been around. We can start with the next slide. We're going to talk about the comments and submissions. This is the public input into what goes into a new version of USCDI. It's using the same process that we've had over the last three years. Then we're going to talk about the data elements and classes that were added to Draft USCDI V4. Then we will touch a little bit on the individual data elements but not go into -- actually, I should have removed that. We can dig into details about data elements if there is an interest, but we will at least cover listing the data elements in Draft V4, and then take a look at Draft V4 overall and talk about what happens next. What is the normal process for the draft publication timeline?

If we could go to the next slide, this is a standard background. We talk about what USCDI really is. It is a standardized set stewarded by ONC and it is comprised of data classes and data elements that are used for nationwide interoperable health information exchange. USCDI is invoked in a number of different ONC certification criteria and as a result of that, certified health IT must be able to exchange the content in USCDI. Currently, that requirement is in what is in USCDI's version 1. Also, USCDI serves as a reference for a baseline set of data that can be used and exchanged in other settings, not just within certified health IT. It is used as a reference for other use cases including other federal programs, but in some cases, additional data may be necessary outside of what is included in USCDI.

We can flip two slides please and we'll talk a little bit about the what goes into a version of USCDI. There are two parts. One is we have a system to collect recommendations for new data elements in USCDI. These submissions are new data elements that are not part of previous versions of USCDI and have never been

submitted before. This is a high-level summary of the categories of data that were submitted through the system that we call On Deck for ONC new data element and class submission system. These are the categories. I just did a high level. We had 145 new data element requests for the version 4 cycle. These are broken down into several different categories. The biggest ones are there was a number of data elements that related to cancer care, although they were submitted in various different classes, some very specific classes, but they all fall under the realm of cancer care. We also had a number of data elements that were related to clinical tests. These were specific clinical tests that were submitted for addition. Special alerts for care handouts was another category that was submitted that contain data elements that were similar to other data elements in other classes as well. These are some of the rest of the data classes that were submitted for addition. The next slide, please?

In addition to new data element requests, we got comments on previously submitted data elements. These data elements were, not all of them… Once we receive a submission, we evaluate its maturity and readiness for addition to USCDI. That evaluation earns it a certain level of maturity and readiness. These comments were on previously submitted data elements that were previously evaluated at various levels of maturity. The ones that are directly evaluated or directly considered for addition to USCDI is what we call level II, and some of these were comments one level II data elements and some of them were on less mature, less ready ones. Some of these comments were suggestions to actually make these data elements, these less mature data elements, put them into the higher category so that they could be considered for addition to USCDI. These are the categories of data elements or the data classes in which the data elements were commented on. You see we got a lot of comments on medication, lab, and vital signs, and social determinants of health, along with some additional patient demographics comments. Can we go to the next slide?

I mentioned the different levels that ONC determines these submissions or other data elements would fall into. As I said, we look at the level II data elements, those that are already most mature and most ready for implementation should we decide to add it to USCDI. We determine if they fit into several different priorities that ONC has set and we have made public in the last year or so. The big ones that I describe as policy priorities are those addressing behavioral healthcare, the data related to behavioral healthcare, trying to bring behavioral health care data on par with non-behavioral health medical care, such as primary care and other specialty care areas. Working on bringing that behavioral healthcare data in line, or as interoperable as other data. We also, again, continue to look for data elements that start to mitigate inequities and disparities, serving needs of underserved communities along with addressing public health interoperability needs.

These last five are what I describe as technical priorities. These are data elements that do not require much in the way of development to be ready to be implemented. We looked at the level II data elements and the comments on level II data elements, and sorted through them based on those that met these criteria in addition to being more mature as level II data elements. If you go forward two slides, this is a summary table of the proposed data elements in USCDI. As you see, it covers nine different data classes including one new data class that we added to USCDI, and that is a data class to handle facility related information. We added a number of different health status assessments. These are areas within the health status assessment, particular kinds of health status assessment that EHRs should be able to handle specifically in these categories of health status assessment. Previously, as I'll show in a minute, we have had other health status assessments, so this adds to the list of specific types of health status assessments that EHRs

would have to be able to handle should they update to USCDI Version 4 in the future. As you can also see, we added a number of different specific laboratory data elements. Most, if not all, of these data elements are already required for certain other electronic lab functions, but it felt like these particular data elements were important for patients and providers to be able to use and exchange these particular laboratory data elements. The goals and the medications data classes have some unique additional data elements. I'll go into a little bit of detail with these.

The goals data elements are the treatment intervention preference and the care experience preference. What that means is the overall advanced care planning process which does include development of things like living wills and advanced directives, those processes that develop those documents that inform care, the content of those documents – one of the things that it does is it expresses a patient preference. The patient preference for things like does my doctor do CPR on me should my heart stop? Does my doctor give me IV nutrition if I am unable to eat? There is also another category of patient preference that we are calling care experience preference. Care experience preference is less specifically about interventions and more about the general care environment. It includes things like how does my doctor deal with my religion, my care environment preferences, who gets to be in the room with me, and things like that. Those two are data elements that are specifically patient-expressed goals that do inform other parts of care.

The new medication data elements are medication instruction and adherence. We added these data elements in order to provide data around what the patient is actually taking. That is different than what we have previously had. In USCDI version 1, we only had the name or the code for the medication that a patient might be taking or might have taken in the past. Last year with USCDI version 3, we added additional data elements that talked more about how much of the medicine a person is taking or might take. With USCDI version 4, we have taken it yet another step to collect and exchange data about what the patient is actually taking. That is really the ultimate goal of medication reconciliation and provides the most accurate and the most complete information for use by a provider or by a patient or someone else in the care chain. These last couple that I've discussed are a significant step forward in the type of data that we are seeking to collect and exchange in USCDI.

The other data elements that we added are a new allergy data element for non-medication data elements, an additional encounter, the encounter identifier, and new vital signs, which is the average blood pressure which of course can be calculated from diastolic and systolic blood pressure. It is unique data element in that it has a closer or more direct link to health and health outcomes than individual measurements of systolic and diastolic blood pressure. We also added a timing data element which we do not have a lot of in USCDI, and the element is called timer procedure. ONC feels like this data element could be used not just to represent an intervention like a surgical procedure or invasive procedure that might be done in a clinic or ambulatory care setting, but other procedures that can be performed on or for a patient such as a vaccination, medication administration, and related types of things. We feel like that one data element rather than adding a data element for each of the data classes that does have these procedures in them, we felt like this single data element could be used for multiple purposes. We are looking for comments on these data elements during this comment period, which I'll talk about in just a minute. Can we flip to the next slide, please?

This is the overall summary table of Draft USCDI Version 4. The new elements and data classes are indicated using the stars. I also wanted to point out that we have some new names for some previous data

elements or data classes. One of them is what used to be called the assessment and plan of care data class and data element has been renamed to the patient summary and plan. I apologize, there is not an indicator on the new name for the patient summary and plan data class. We will fix that for future versions of these slides. The assessment and plan of treatment data element stays the same. It just falls under a different data class with the same purpose to contain data that is more of a general summary of a patient rather than specific diagnoses or specific interventions. We also have renamed the unique device identifier for implantable devices data class which had a single data class in it. We've renamed that data class medical device. The reason for that is because unique device identifier or implantable devices is obviously one kind of device, but there are other medical devices out there that may well need to be captured and exchanged to provide further information about a patient, things like applied devices, externally applied devices, or assistive devices like wheelchairs and walkers. Those are other kinds of devices that do not have UDI's but they have other identifiers and can be identified by using other methods, using other data elements. Those have not been added to the USCDI at this time. However, we are looking at the elements that were submitted in this area for addition to future versions of USCDI. If we could skip to slide number 12, please?

As I mentioned, we have a public feedback period that starts with publication of Draft V4 and ends in the middle of April. This corresponds to the last meeting of the HITAC just before that, and it gives people three months to submit comments on the data elements that were included in USCDI. We are actually asking for some specific information in addition to asking the public to comment on data elements that we did add to USCDI. We are also looking for feedback on these data elements that were considered mature enough, these are level II data elements, but were not added to the USCDI. We are looking for that sort of feedback as well, what may have been missed in adding data elements to Draft V4. We are also looking for specific input on several different data classes and our approach to adding data elements to USCDI. If you could flip back to the summary slide two back, please?

We are looking for specific feedback on the approach that we took adding treatment intervention preference and care experience preference to the goals data class, and if this approach does advance the idea of collecting and exchanging data related to the overall advanced care planning process, which includes preparation of advanced directives, living wills, powers of attorney, along with other more general patient preferences or other parts of the care plan that may include patient expressed preferences. We are also looking for the medication reconciliation data elements that we added to USCDI and whether or not that approach of adding these two data elements adequately addressed that intent. Also, with time and procedure, we are looking for specific feedback on whether the approach of adding a single data element to USCDI does address the need for exchanging valuable timing elements for a number of different other data elements in other data classes.

As a reminder, the public feedback window or period extends until April 17th of this year at midnight. In order to do that, you have to be logged on to the website. Getting an account is pretty straightforward, but you have to have an account, the account has to be reviewed and approved, and then you can put your comments in for any of the data elements that were either a part of Draft V4 or not a part of Draft V4. We are looking at everything that comes in and we will evaluate every comment that comes in and put that up against the Draft V4 list and see what we need to do. We are presenting this to the HITAC because we are also charging the HITAC with answering the same questions that I just said we were asking of the general public. That is commenting or making recommendations on the data elements that were added and the

level II data elements that were not added to USCDI. I am going to pause now for any questions. I'm sorry. I am not following the chat but if we can sort through the questions that are coming, then I might be able to answer.

Aaron Miri
Absolutely! All right. Yes. Please, use the hand raising function if you have a question and we'll in order of hands raised here. There were several that shot up at the exact same time, I think within seconds of each other. First up, Anna.

Anna McCollister
Hi there. Again, I'm just coming up to speed on a lot of this. Forgive me for that. One of the questions I have is I don't see on any of the elements that are listed on the ONC website any outpatient data collected, especially as it relates to clinical measures for patients with chronic disease such as blood pressure, weight, blood glucose, continuous glucose monitoring. I mean, that's very clinically relevant. There are a lot of validated instruments that are used on the outpatient. It's more relevant than the in-clinic measures that you get, but I don't see any representation that the outpatient data has been included in the standards thus far. I was wondering, am I getting that right? Historically, is there a reason for that? If this is something that we need to take offline, I'm happy to do that. I'm just curious.

Al Taylor
Thanks for the question, Anna. We feel like the data elements, things like the laboratory, the level of detail in the data elements that are part of the USCDI address things like laboratory settings, laboratory tests, clinical tests like EKGs and treadmills, vital signs, including whether it is outpatient blood pressure, inpatient blood pressure, and things like that. We feel like the data elements represent all care areas, not just specific ones. We feel like the data is equal and comparable across those settings. The value of the blood pressure in an outpatient setting versus inpatient setting is equal and equally represented by those data elements. We do not specific specify specific care area. We normally do not specify a specific care area for these data elements.

Anna McCollister
By care area do you mean the clinical area or do you mean the setting in which the data was collected or generated?

Aaron Miri
Level of care is what it sounds like.

Al Taylor
It's both. It's not a blood pressure that is only obtained in a cardiologist office, it is a blood pressure that can be taken at home. It's a blood pressure that can be taken in ICU. It applies to every setting and potentially specialty.

Anna McCollister
Again, I'm happy to take this online. I don't want to delay us, but are these requirements on what is necessary to be interoperable and exchangeable or is it a requirement on healthcare providers EHR companies to make it possible for patients to import their data collected at home?

Al Taylor
USCDI is a set of data elements that certified health IT must be able to capture and exchange, at least exchange. They can import it and exchange it, or collect it and exchange it, but it is specifically not a provider always has to collect every data element in USCDI. That is not what USCDI is. USCDI is about the capabilities of the EHRs to handle those data.

Anna McCollister
Okay.

Aaron Miri
Good questions, Anna. I think it's a great discussion for a follow up on that. Thank you for bringing it up. Next up, Alexis

Alexis Snyder
I had a couple of comments on some of the new additions under goals for treatment intervention preference and care experience. I'm not sure if we want to spend time commenting now or if you'd like us to do that at another point, or if this was just for questions.

Aaron Miri
This is really for questions, unless it's a quick annotation you would like to make or note for it now.

Alexis Snyder
I don't want to take up time if you're just taking questions right now and not actually comments. I will just say quickly, and I can give you other comments at another point in time. Most importantly when talking about advanced directives, I want to make sure I had clear under goals you had talked about treatment intervention including advanced directives. Advanced directives would not be a goal. It is important to specify that somewhere else. We label goals to goals and directives. Advanced directive really needs to stand out separate from goals.

Al Taylor
Right. What we meet by adding these data elements is that these are patient preferences that inform things like advanced directives. It is not the advanced directive which is a composite of a lot of things including available treatments, but also is informed by what is patient preference. That could eventually lead to an advanced directive of some sort whether it is a living will etcetera. This is just a component of some of those other advanced care planning products or results, if that makes sense.

Alexis Snyder
I guess that makes sense, but I would say that there needs to be an addition of advanced directives in another area. It might be something that was overlooked that is important. Again, having time to comment at another point in time just about what preference actually means, I had some thoughts in those areas as to really getting into what a clear patient-centered goal is rather than a preference, which can be looked at as something you prefer but will not be necessarily a shared decision-making process or followed through with.

Aaron Miri
Good comments, Alexis. Great comments. I do know that Dr. Taylor is very available so I'm sure he's willing to have many discussions offline and go into all of the nuances here, as well as of course commenting via the FACA itself.

Al Taylor
Absolutely. I am 100% certain that we are going to get deep into this in our interoperability standards workgroup. I'm 100% confident in that, and any other place that we need to.

Aaron Miri
Next up is Rajesh.

Rajesh Godavarthi
We can get all the data elements here. I am pretty much deep into payer/provider data exchange in the value-based care world in terms of prior authorization and cost transparency and a lot of that information. I see clinical notes and I see coverage and a lot of these things are really critical for the things we are trying to do in the payer/provider exchange. One other data element we should possibly include or consider is the order information when a doctor signs an order. That information triggers a lot of actions in terms of whether the patient needs a prior authorization or not. That triggers a lot of workflows as well. I propose that we consider adding order information as well if possible.

Al Taylor
We have considered adding data elements that are unique to the orders, the order itself rather than the thing that is being ordered like a procedure, or medicine, or appointment. We have considered that and have gotten quite a few data element submissions previously for orders, so comments on adding orders as a new data class certainly would be welcome.

Rajesh Godavarthi
Thank you.

Aaron Miri
Letting folks know we are really close to time. For both Hans and Ken, could you please keep your comments brief so we can get back on schedule? I'd appreciate it. Hans, you are up first.

Hans Buitendijk
Sure. Thank you, Aaron, and I'm happy to help with that. Just one area to clarify on the comments that you made around the applicability of the USCDI, Al. At times, you go back and forth between the terms EHR and HIT. As Steve Posnack confirmed in the chat as well, but the intent of the USCDI to the extent that it is used in certification is that it is meant to apply to any HIT that is certified not just EHRs that needs to be certified. I think that is going to be important in the conversation as we look at what elements are ready or not, and how this will impact in that area as well. We have to kind of get away from the EHRs only perspective and understand what that means or does not mean for HIT in general.

Al Taylor

Great and thank you for putting that out, Hans. I admit to slipping into EHR speak instead of the health IT speak but ONC's mission is health IT not just EHRs. We thank you and we will make sure that we continue to stay consistent with that message.

Aaron Miri
Good observation. Last but not least, Ken.

Ken Kawamoto
I have just a quick comment. I still do not see a detailed smoking history in here, in particular how long a patient smoked and how intense they smoked. I think that is something that is a low hanging fruit. Some large vendors like Epic already send this that cover like half of the US population. It's really needed for lung cancer screening, with lung cancer being the number one cause of cancer deaths. Lung cancer screening is projected to be able to save more lives than breast cancer screening. It's also a health equity issue because Black patients are disproportionately affected, yet the US still has about a less than five percent screening rate among patients who are recommended for screening by the federal government. I think it is low hanging fruit. I think we should move on it and I will keep bringing that up until we do that. Thanks.

Al Taylor
All right. Thanks, Ken. Thank you for that comment. That's an area that we certainly would welcome additional feedback on. We have addressed smoking status in detail with every version of USCDI, including the first one. We can continue to look at whether there is a best way to address it to require certain data to be able to be collected and exchanged rather than general smoking status. We are certainly hoping to look into that again.

Aaron Miri
Good deal. Al, thank you very much for a wonderful presentation and answering the great questions from the HITAC. HITAC, thank you for your questions. Clearly, this is a subject that we are all passionate about. I encourage you to please comment in, get with Dr. Taylor, get your feedback in, and we will see how we can keep this thing being very robust. Medell, I will hand it back to you to go to the next section.

HITAC 2023 Final Work Plan (01:21:52)

Medell Briggs-Malonson
Thank you so much, Aaron. Thank you again for the wonderful presentation and engagement from the committee. We are going to transition over to Mike Berry in order to give an overview of the HITAC 2023 final workplan.

Mike Berry
Great. Thank you, Medell, hi everyone, I wanted to take the opportunity to review the HITAC final workplan that we will be working from for 2023 activities. It is important to note that ONC begins the HITAC workplan process in the fall of each year. We actually last discussed the workplan at the November 10th HITAC meeting primarily to let you know what we were thinking and also to get the HITAC member's input. I wanted to show you what we incorporated and changed since this was last presented in November. There is a process to this. We take a look at all of the HITAC meeting notes from your discussion and of course all the recommendations and other activities outlined in HITAC annual reports. We do consider our legislative requirements and emerging issues, and we meet with the co-chairs to get their input as well. Today, Al had

mentioned that we are going to charge the interoperability standards workgroup to reconvene starting next week. I also wanted to just review the actual work plan, the grid of activities further along in the presentation. We can go to the next slide.

The message today is we are charging the HITAC to reconvene interoperability standards workgroup. The work group will review the priority uses of health IT. This year's focus will be on the Draft USCDI Version 4 that AI just reviewed. The work group will review the Version 4 and provide recommendations to the HITAC who will consider those recommendations for submission to the national coordinator in April. Later this year, we are also expecting to charge the HITAC to form two other task forces to address the priority uses of health IT, that being the public health data systems task force or something else related to that, and also the pharmacy interoperability task force. We are continuing to review past recommendations from the HITAC. We have many, of course, as it relates to the priority uses of health IT. That is our focus for this work group for this year. The next slide will show the actual charge for the work group to review any prior recommendations on the Draft USCDI Version 4 and submit those recommendations to the HITAC for deliberation at the April 12, 2023 HITAC meeting.

The next slide shows the roster, and I want to announce that Sarah DeSilvey and Naresh Sundar Rajan were selected by ONC to serve as co-chairs of this workgroup. We are really excited that they will be filling this role. It is a heavy lift as our past co-chairs know. It is a lot of work for the co-chairs and the workgroup members themselves. We are excited that our new members will be serving in this co-chair capacity. As you can see, a number of HITAC members have put their names forth to join this workgroup and we also invited a handful of public SMEs to participate to complement the HITAC member's experience. It's quite a big workgroup to manage but we are really excited to welcome all these people to the workgroup.

We are planning on having workgroup meetings each Wednesday from 10:30 to noon Eastern time. The first workgroup meeting is actually going to be next week, so we are racing ahead to get started on this now that the Draft Version 4 is available. All workgroup meetings are open to the public and I put a link to the workgroup webpage, which also links to the registration page. Of course, you can always Google HITAC calendar and look at the calendar there for the workgroup and you can register. HITAC members do not have to register through that, but the public does. I just want to point that out. Additional HITAC members are always welcome to join this and any other HITAC subcommittee. If you are interested, please let me know. Just shoot me an email and we will certainly add you to the roster.

The next slide is the grid I was mentioning. This is the final work plan in a table format for ease of use for those of us like me who like visual representation. We are planning to have full HITAC meetings every month this year except December. If there's an opportunity for a break or that we can cancel, we will let you know, of course. As Micky mentioned, we are planning two in-person meetings. We're not sure when those are going to be but we're planning for one in the spring and one in the fall. One of those dates will be in person. The annual report workgroup is getting ready to wrap up. There will be a presentation from Medell and Aaron a little bit later today. There will be a bit of a break and then they reconvene in May to start FY 23 report and that goes throughout the rest of the year.

As I mentioned, the interoperability standards workgroup will start next week, and their recommendations are due in April. There is not too much rest for many of those who want to be on the pharmacy interoperability task force because we will end the interoperability standards workgroup and segue to the

pharmacy interoperability task force. As I mentioned a few times, there's a lot of interest from the HITAC members and also the public in this Task Force. Their recommendations are anticipated to be due probably in August. That's what we're looking for right now. The notice of proposed rulemaking task force that many HITAC members have expressed interest for, Steven Lane and Steven Eichner were selected to be the co-chairs of that Task Force. We are waiting for the rule to go into public comment and that Task Force will kick off immediately and will convene during the public comment period. Their recommendations will be due quite quickly during the public comment period. We are anticipating two meetings needed per week. I think we are looking at Tuesdays and Thursdays to start those meetings when the NPRM is released for comment.

I think we mentioned, in the unified agenda there are two other NPRMs listed in there. The timing of those is listed in the unified agenda but then the Task Force will kick off when those are released for comment. Health equity by design is incorporated into all of ONC's work, so we are looking for opportunities to consider future work for the HITAC with health equity. Again, the public health data systems Task Force or maybe feedback sessions, we will let you know what we are thinking, those are going to be coming back this year. We had one in 2021 and 2022. We really appreciate the HITAC's work in providing all these great recommendations for ONC's consideration. At the very bottom you will see footnotes to the unified agenda for the future rulemaking and the one that is hoping to come out soon. They are linked there if you want more information. Next slide, please.

We'll be working with the HITAC co-chairs to identify opportunities to discuss these additional topics. The items in orange are some of the feedback that the HITAC members offered in November. We have incorporated their comments into the slide. Some of this is already part of the HITAC's work, but we will be looking for opportunities to build perhaps listening sessions, or presentations, or other things based on these topics and others. Of course, you can work with the co-chairs and let them know if there are other topics that were not on the list and we will see what we can do about those. That concludes my presentation. That is the work plan for HITAC. I would like to turn it over to Medell for questions.

Medell Briggs-Malonson
Thank you, Mike, for that overview of the work plan. I want to underscore the importance that if anyone on the committee has additional items or thoughts or topics, please feel free to reach out to Aaron or myself. We are more than happy to discuss that and see how we can align that with ONC. We are going to open it up for questions and we are running a little bit behind so we will keep this section short. Again, your feedback is always welcome. I see one hand so far, so Ike, please feel free to ask your question.

Steven Eichner
Thank you so much. Even before you said that I was going to post this as a placeholder question for later on. Let's make sure we have a good discussion about what health equity is and to who it applies and what we all mean from it at least from a short-term definitional standpoint so we have a good frame for discussion. Whether we are looking at equity across race, equity across access, equity across care, there are lots of opportunities to interpret health equity. Having a good definition about what we mean I think could be really, really helpful.

Medell Briggs-Malonson

Thank you so much for that comment, Ike, and we absolutely will. As you know, that it is an area that is near and dear for my heart because not only do we have health equity, but it is important to understand the difference between healthcare equity, access equity, and so many other forms of equity. We will discuss that more during our annual report because we do have a definition for health equity which is the most commonly adopted definition throughout our country. We will definitely dive into that, so thank you for that comment. Clem, you have the floor. Okay. I'm not quite sure if Clem has a question. Clem, your hand is up but if you have a question, feel free to let us know in a moment. Any other questions?

Clem McDonald
I have a question about the NPRM that was supposed to come out. Is that still cooking? I know it was a proposal we're making.

Mike Berry
Yes. It is still cooking. Micky had mentioned earlier that the NPRM is in clearance and we hope to get it out as soon as possible. We will convene the HITAC for the NPRM Task Force that Steven Lane and Steve Eichner will be leading.

Clem McDonald
Okay.

Medell Briggs-Malonson
Thank you, Clem. Any other questions? All right. I'm not seeing any other hands that are raised. What we are going to do now is we are going to transition into our break. As we transition into our break, for the HITAC committee meeting members in particular, please be sure to keep your cameras off as well as your microphones muted. We are going to recording, but of course, we are still in session.

Break (01:32:53)

Mike Berry
Welcome back, everyone. I hope you enjoyed the short break. I would like to turn it over to Aaron to introduce our next presenters. Aaron?

STAR HIE Awardee Program Updates (01:33:05)

Aaron Miri
Thank you very much. Welcome back, everybody. Now, we are going to talk about the STAR HIE Awardee Program updates. This should be really exciting to hear what going on across the entirety of the landscape. First up we have Larry Jessup. Larry?

Larry Jessup
Good afternoon. Can you hear me?

Aaron Miri
Yes, we can.

Larry Jessup
Great. Good afternoon, everyone. As mentioned, my name is Larry Jessup, and I am one of the branch chiefs in our Office of Policy here at ONC. We are excited to have this opportunity to be back with you all again to share some of the incredible work that has continued to take place under the STAR HIE Program since we were last with you all about a year ago. A special thank you to the HITAC members and co-chairs.

As you all can recall, this was a $5 million program funded under the CARES Act back in September of 2020. Our goal was not easy. It was to improve HIE services that benefit public health agencies and increased data sharing between immunization information systems and HIEs, which pretty much meant how do we reduce burden for public health during the COVID-19 pandemic but also establish an infrastructure going forward. In doing all of this, how do we also address the disproportionate impact that COVID-19 has had on certain populations. Today you will hear from Laura McCrary and her team from Kansas, and also Dr. David Kendrick and his team from Oklahoma about their successes. We are also mindful of the challenges. While we are happy to celebrate all of the lessons learned, we are still dedicated to mitigating some of the challenges that still exist for public health. That is why for today both Oklahoma and Kansas are joined by one of their public health partners. These are two of the 22 awardees, so while they are front and center today they are still representing all of their peers that were part of the entire program. Again, thank you all for your partnership and I will turn it over to Oklahoma.

David Kendrick
Great. Thank you, Larry. I am glad to be with you today. My name is David. I know many of you, but for those who I do not know, I am the CEO at MyHealth Access Network. I will share my screen here really quickly. I am doing the very dangerous thing of sharing my dashboards live and interactive's. Let me grab the right corner of the screen, here. Also, late breaking news, I got a text about 30 minutes ago that my public health partner Dr. Derrick Pate that I've been working with since the beginning of the pandemic, he is at the Oklahoma State Department of Health, he now has COVID-19 for the first time. He let me know last night that he was a possible but not necessarily for sure here. Unfortunately, we will not have him today, but he has slides and we will be able to catch up.

This is the agenda. I will go through it in pieces. The first thing I wanted to get across and to really credit ONC and the STAR Program with is really helping us as health information exchanges to get the message out about the opportunities with health information exchange. Many of you have seen me present this slide before, but we look at the data in healthcare as looking like this. You have got claims data. It's a mile wide but an inch deep and missing a lot of details. You've got data in any given practice's HER. It's a mile deep but only an inch wide. Real patients, especially sicker patients, have their data fragmented across many places. That is the role of the health information exchange to pull that together. I wanted to show you real data behind the fragmentation story.

This is the four largest health systems in Oklahoma. It is a histogram showing how many patients have all of their data in only one of those health information exchanges, and how many patients have their data scattered across many health systems. What you see here is that some patients have data in as many as 27 different organizations in Oklahoma. This number tells us that between 80% and 98% of patients in any given health system have records somewhere else. This is even more true during a pandemic where people were really struggling to get access to care and services wherever they could, and presenting in lots of unusual and new places for testing and so on.

We also want to take a look at this from the perspective of EHR vendors given the existence of these networks where if you are a particular vendor you can get all the records, in theory, from that vendor. This is showing a similar picture for the six largest or most deployed EHR vendors in Oklahoma. You can see there's a wide range of fragmentation there as well. Our goal in bringing the health information exchange to bear on the pandemic was to be able to paint this whole picture of data and show the big picture of what was going on in its true form.

What you see here is a map of MyHealth, which is the nonprofit now, I'm happy to say, official state designated entity of the State of Oklahoma. We are serving more than 110,000 patients a day from more than 1400 locations that are connected, which is about 85% of all healthcare activity. Which you may know is a little bit difficult to measure, but we base that on some reliable metrics like adjusted patient days and so on. We are also a part of that patient-centered data home model that the HIAs formed to enable the data to be pushed in real time from one region to another. This is important because in all the dashboards we present for public health, if an Oklahoma patient has been admitted or transferred to a hospital out-of-state or transferred as many were, we get updates on those hospitals from out of state as they appear there. As far as I know, this is the only real time push network of clinical activity connecting whole geographies in the country.

The ONC STAR HIE Program had some really important direct impacts on what we are doing, including first and foremost creating a platform from which we could engage with our state health department. That really created the foundation for all the work I'm about to show you in this dashboard. We were able to afford the legal fees to go toe to toe with the state and create the participation agreement to exchange information. We were able to get a regular exchange of the COVID-19 vaccine data from the state, so that we can present those on these dashboards, as I will show you in a moment. We have a whole long list now of additional collaborations that have been teed up by virtue of the fact that we were able to establish this relationship under the STAR Program. We also participated in HHS Connect program which was the project to create a nationwide dashboard. Before I go into that, and Larry sort of alluded to it, I want to talk about some of the issues you face in trying to pull together all of this data from various places and make a credible dashboard of information.

Anybody remember this commercial from Dunkin' Donuts, I think? The “Got to make the donuts”, this poor guy gets up every morning at 5:00 a.m. and goes in and makes the donuts? That has been me since MyHealth received the first COVID-19 test March 8, 2020. Every morning I would get up and I would take a look at the codes that are flowing in to MyHealth. Apologies, Clem, this might make your heart hurt, but it was a while before I actually got good codes. For some of you on the call, you may recognize that there are some long codes at the beginning of these core elements on the left, and unfortunately those were a minority of the data that I would get every day. You can see I get this kind of information on the right. Every day, I would say on average it’s about a thousand codes, a thousand results that I need to clean up or map differently to actual standardized codes for the lab results. This is one of the problems we face. The reference labs are not mapping these correctly, but certainly and especially during the early part of the pandemic, these tests were hard to come by. They were being performed out of the trunk of people's cars with kits. Just getting electronic data was the difficult thing to do. I remember at the beginning of the pandemic I was presenting I think it was in late March, a dashboard similar to what I am about to show you and somebody said, “My goodness, how did you pull this together so quickly?” I said, “We didn’t! We started

this work in 2009 to build all of these pipes and get all of this data flowing so that the only step we had to do when this pandemic came along was to recode this data into something standard we could use."

To show you how this has resolved, I've got the COVID-19 test is the row I'm focusing on in most of this report. 1238 unique ways that test is reported to us, code wise. I've got all those normalized to the standard ones. Then on the right you can see negative and positive, over 528 different ways we have been told that a test is negative and 410 different ways we've been told that a test is positive. So, having to have clinical eyes on the data to co-analyze it, that is the thing that I think we really can improve upon and USCDI is helping us get there. Hopefully, with some enforcement, we will be able to get there quickly. Here's the national dashboard be contributed to. You can see Oklahoma there among other states. This is a great proof of concept that both lab testing data, and the vaccination data could be shared across the nation and into a common report coming from what are essentially real-time repositories in these parts of the country. These are just the HIEs that participated in the program and most other HIE's could do the same as well.

All right. Let me show you this live demonstration. I will start with this dashboard. I wanted to go to a particular part of the story. In the upper left-hand corner, you can see a positivity chart and you can see the orange line there is a seven day moving average of positivity. Today's number is what? It's about 13.6% positivity for COVID-19, but you can also see all the important landmarks I call them of the pandemic in Oklahoma. You see the initial outbreak here in March of 2020. Then we see the first summer where we had a bump, and then up here to the November, December, January timeframe, the first winter prior to the vaccinations. Now, vaccines have gone out here and we reached a low point during that summer until we got to the Delta variant, which crept into Oklahoma from the Northeast from Missouri. I can show you that on a map in a moment. The Delta variant cooled off. We had pretty high hospitalization rates there, and then you can see Omicron, of course, the big story, the rapid rise and rapid fall. Last summer, we also had a rise up to a positivity of 27% at its peak with a drop. We're just coming off another little peak around the end of the year.

I wanted to contrast this with the other side of the story which is the actual case count. Positivity is the percent of tests that are positive, but it has a lot to do with the rate of testing, which you will see in a moment. This other chart on the upper right is the actual case count or the number of people positive in the last 14 days. You can see that Omicron lines up very well. You can see the Delta variant peaks here but look at the mismatch between last summer's peak in terms of case counts and what we have with positivity. This is a very important thing to note and a distinction to be made because the COVID-19 case we see today is different than the one we saw prior to, yes the vaccinations, but also the fact that most testing is happening at home now. The patients we get data on from the COVID-19 test is sicker. They've got symptoms. They are generally older. We have a much lower case count but a higher chance of the test being positive because they only come in when they have symptoms. Of course, our most recent peak for positivity is nowhere near the case count to line up with that. We are partnered with our wastewater testing folks and they continue to show the high rates in the community, but this concept of home testing kits has blinded us in a way that should be understood.

Let me show you a little bit of the map just around the Omicron so you can see the state of Oklahoma as I've animated it. This is where our public health leads said we have run out of shades of red. You can see how Omicron kind of came and went very quickly in just a few weeks on our radar. I will stop that.

In addition to COVID-19, because we are a health information exchange, we have an ability to track much more than just COVID-19. This is that same COVID-19 positivity pattern and you can see where we are today at 13.6% with all the other mess out of the way, but guess what? We also can report on things like influenza in the same way. There is the flu positivity in Oklahoma. What I found interesting about this is we essentially had no flu season during 2020 or 2021. Then we began to have a real flu season right starting during Omicron, and then it seemed to be almost suppressed and then peaked again after Omicron ended. It seemed to be suppressed during the summer when we had our other COVID-19 outbreak and then you can see that it rose, COVID-19, and now they are both in decline. We think unless we have a bimodal peak that we are done with flu. There are other things of course that we can track from respiratory virus perspective. Lots of RSV in the news, so we threw that into our data. Here is the RSV outbreak in 2021 and here is our most recent point where it made the news in November. We can study this down to hospitalizations and lots of other things as well. Finally, something that really didn't get a lot of press that I oversaw was parainfluenza, which is the green. I hope you can see it. This was a whole outbreak that we had in the summer of 2021 that I don't think ever made the news at all. A lot of parainfluenzas is the cause of admissions or at least ER visits that these were coming through.

That's another component of what we can report on, but I do want to show you it's really helpful to have the actual row level data because this is the same data for the four viruses I was describing, but this is showing them by case count. As you can see, both RSV and parainfluenza basically disappear into the bottom line here because they're really a very low case count even though there's a high positivity. Then you can see here where the flue in red was the issue and then COVID crossed over. Now, they are both in decline.

All right. The other thing that I often report on is what I always call the pandemic in one slide. The blue line here is the rate of testing, Okay? The yellow line is the case count. The orange line is emergency room visits, and the red line is hospitalizations. I think this is a good place to see that a big percentage, bigger than previous part of the pandemic, of all the cases are being identified in an ER visit or in a setting where they've had to come because their symptoms were bad enough. Whereas before, the only place to get testing was in a clinical setting, so we had good clear data on these ratios. In any case, the test count also helps us understand what's going on with the positivity.

Okay. The next thing, we track all hospitalizations, ER hospitalizations and so on. This is the story going back to January of 21 of hospitalizations in Oklahoma over that time. This is ER on top and this is inpatient admissions on the bottom. You can see here after Omicron how we were able to decompress and have not really had a problem with beds. I think this also illustrates how much more flexible emergency rooms are because you can see how much they flexed up in their volumes of visits compared to inpatient settings. This line here is where we were in crisis from a bed perspective in Oklahoma, and we are in much better shape right now. The other thing to know about this, of course, is we can attribute these ER visits at the top and these inpatient admissions at the bottom to COVID. We also have the ability to look at that for other things like the flu and so on. Right now, admissions to the hospital, 11.5% of ER visits have a COVID test somewhere in the last 14 days, and 11% of inpatient admissions have a COVID test somewhere. We can look at this same information for say the flu, and you will clearly be able to see the impact of the flu here on the ERs and on the inpatient beds as well.

All right. Let me go back quickly to this. One of the things that we can track now because of this information is admissions by age group. The yellow indicates over 65, so we can clearly see the story there of

admissions by age group. I'll do this as a percentage of total, but I can show a lot of other ways. This is our ICU bed rate. These little sticks here at the bottom are how many are going to the ICU. This week isn't finished yet so I wouldn't count it, but last week was around 2% going to an ICU bed. We also have maps that we report on of where admissions are coming from. I can animate those the same way. I won't because it takes time. This might be some actual science. We've been asked by the health department and others to investigate associations between lots of things. For instance, based on chief complaints how many of these admissions are really COVID and how many are something else. I've showed you a bit of that. This is a study showing by zip code, by population of zip code or by population density of zip code here on the right, is there a relationship between the case count or the case rate, and the admission rate and population size of the zip code and population density of the zip code? What I can show you is for COVID there's not really. Maybe just the beginnings of -- I'm sorry. I'm looking at the flu. We will start with the flu. With the flu, what we see here is there is a significant relationship between population and zip code size, and admissions and zip code size as well as population density and admissions.

If we look at COVID, however, there doesn't seem to be that same relationship, as you can see. It's a much flatter curve. This is the kind of thing we run all the time, and we can report on. We're doing actual science. The vaccination status, we now thanks to the partnership with the state health department have always available the notion of vaccine status across the state of Oklahoma. I'm not sure if from where you're sitting you can see it, but we have weakness here, and we have a little bit of weakness here in the Panhandle and then Southeast Oklahoma. Over here in the West, we believe it's patients going into Texas and some big health systems there, but Southeast Oklahoma, this is where some of the tribal health systems have really stepped up and are administering vaccinations, but they don't report to the state health department. They report to a federal registry so that's the blind spot. Over time, you can see a big push for vaccinations. This is dose one in green, dose two in yellow, first booster in Orange, second booster in red and so on. We are now down to pretty low numbers. We are below our targets for vaccinations, and I have calculated how many deaths we could've avoided and presented that but we're still in that situation, unfortunately.

In order to see, and we reported on this all the time, this is the same pandemic in one slide that I showed a moment ago, but at the top row you are seeing the unvaccinated population, all the way down to the numbers of boosters. You can see overwhelmingly the cases, admissions, ER visits are in the unvaccinated population. Even today as more than 60% of our population is fully vaccinated.

I'll just show one more thing, just the breakthrough of cases. We have breakthrough hospitalizations and so on that we can track. So, those are a few of things we study and report on in our dashboards. I'll just conclude by saying a huge thank you to ONC for giving sort of legitimacy and weight to the work of the health information exchanges as we reach out to our colleagues in public health. We've been able to leverage that work to many new additional things. We were able to the COVID testing reporting and learning and the code normalization that I showed you, but we are able to support the state health department and the governors Response Team with briefings multiple times per week. I did weekly briefings for tribal health systems. The tribal health systems were real heroes in the pandemic, taking on a very active role in participating well. We were able to do alerting to outbreaks, 48 to 72 hours before the state was made aware of them because of our live flowing data. We had hospital bed tracking, positive admissions.

Blue Cross Blue Shield of Oklahoma joined in the effort and created a grant program for us to administer to onboard providers for free, so that, for example first responders had access to the data before they went

to pick up a patient so they could be away of the COVID status in the home before they got there. There were a lot of those kind of use cases.

Finally, I have been doing a public community briefing every Thursday at noon kind of since May of the first year the pandemic, and we have many new and expanding public health collaborations in queue. I will stop there. Thank you.

Aaron Miri
Al right. Let's get going then. Next up here, we're going to have Laura McCrary?

Laura McCrary
Thanks Aaron. Hi. My name is Laura McCrary. I appreciate the opportunity to spend a little bit of time talking you today. I've got a great team of colleagues with me that are really going to manage the bulk of our presentation. I want to give you just a little bit of background on the KONZA National Network and talk just a little bit about the development of our exchange because it's very different than what probably most of you have known in your states or across the nations I listened to all the introductions this morning so I want to give a shout out to all of you who have lived in Kansas City, which is where I live now in Overland Park, either while you're working in Cerner or Garmin or Sprint, it's good to see all my old friends on this committee.

If you're wondering, which you may be, the weather in Kansas is just as it always is in Kansas in January. It's 39 degrees with a wintery snow mix. For those of you in all of these other lovely places that I heard that you're at, pretty happy that you are there and not here. Next slide.

Let's see. Very good. These are our presenters today. I'm going to let each one of them actually introduce themselves, just make sure we use time as efficiently as possible. I am the President and CEO of the KONZA National Network. I've been in the health information business really since about 2006 here in Kansas City where some of you may remember we stood up a health information exchange called the Kansas City Bystate Health information Exchange. I had a lot of fun doing that with many of you and have been in the interoperability business ever since. Next slide, please.

A lot of people wonder about the name, the KONZA National Network. They don't really fully understand what is the business structure of our organization, so I'm going to take just a minute or so to describe that. I think it is important to go back to really looking at the difference in the way Kansas stood up health information exchange in 2010 as opposed to what the rest of the nation did. For those of you who know Kansas, you would probably guess that Kansas is probably not going to be told to do anything. So, when there was the idea that the state would establish a statewide health information exchange, basically the state said, "No, thank you. What we will do instead is allow private businesses to come into the state and actually establish their own health information exchanges." However, there was a pretty significant caveat, which was they will have to meet all the requirements that we have established for them. They will have to meet those requirements on a two-year cadence. If a participant in our state, a hospital or doctor's office or a payer for that manner, does not choose to work with one of the exchanges that we've certified, they will have to tell all their patients that they participate in noncertified health information exchange and use an opt in process. As you might imagine, that pretty much caused all of the providers, payers, and others in our state to come in line with actually doing business with the private, not for profit. Most of the exchanges at

that time were not for profit, and state directly come in line with actually doing this mess with the private not for profit exchange in Kansas.

Four exchanges do business in my little state of Kansas with just under 3 million people and those exchanges have morphed into KHIN, which is the exchange that we started early on back in 2010, the Kansas Health Information Network. The other exchanges include Lacey, the Lewis and Clarke Health Information health exchange and Tiger, which is basically a Serna sponsored exchange. Then, we had the Missouri exchange, which is now run by Vela Tura, then we have a Nebraska Iowa exchange. All of those do business in Kansas.

One of the things that's important to note is that as a part of our certification requirements, we are required to work with Public Health. It's not an option. That's always been a real important role that all of the exchanges in Kansas have played is to support Public Health. Additionally, we are required to provide patients with access to their medical records, so all the information that's available in the exchange has been available to patients. Now, that particular model changed a little bit after the requirements were put into place, but we still provide access to patients to all of their information at no cost if it's in the exchange. Because of that, we were one of the early participants in the Harvard Open Notes Program because we've always provided that access to patients. Because there were really four exchanges doing business and there was no federal or state funding, we had to create a Sustainability model right away. We never received any federal or state funds. All those went to the providers. As you might guess, and you can see there's a lot of exchanged names on this slide, it became pretty clear to all of us doing business in Kansas that without any state or federal funds there just wasn't enough money in a state the size of Kansas to actually be able to make the model successful, any health information exchange model successful. In fact, I think many of you may have potentially seen that in your states.

As early as 2014, we began looking at how we could provide the products and services at a broader scale than just in Kansas. We decided that the best way to do that was in conjunction and in cooperation with the state medical societies. We developed a revenue sharing model that has been in place for about the last 10 years. It has been very successful in terms of being able to really expand health information exchange through the medical societies in respective states.

Just across the top, Kansas is obviously KHIN. Then we moved into Georgia first, that is Healthy Paradigm, then South Carolina, Connecticut, New Jersey. All of these at the invitation of the state medical societies and in conjunction with the revenue-sharing model with them. When the Mississippi exchange failed, we were asked to go into Mississippi, then Louisiana. We were asked to go into Dallas. That's Genesis Link there and obviously Missouri. Those were all exchanges that we did in conjunction with the state medical societies. We also support other exchanges in Northern California as well, and really work with them in conjunction with their Board of Directors and executive directors.

This is important to note in this presentation that we're going to have, because sometimes we'll talk about KONZA, and that represents all of the exchanges that we operate across the nation. Sometimes we will talk about KHIN, which is just the exchange we run in Kansas. Some of you might be thinking back to the conversation that Micky had with us just a bit ago about the qualified health information networks, and yes, KONZA as a national health information exchange has applied to be QHIN. We are in the process of going through the definitive review of our application.

What I would like to do is go to the next slide, please. This is a high overview of what we are going to do on the agenda today. Many of you might've discerned that my background is as a teacher and a university professor. I always like to make sure we have our agendas in place, so you know what we are going to be doing. We will spend a little bit of time talking about how important the STAR HIE Program really was to us in developing new products and services, as David said, very quickly. I think David did an excellent job of pointing this out. Health information exchanges have been running under the radar for many, many years. We started in 2006 or so and have been running health information exchanges now for 15 years. We have been building capacity. We have been building capacity to be able to provide alert, to be able to provide analytics, to be able to provide longitudinal medical records. We have been building capacity to provide de-identified and identifiable data.

When COVID hit…I was thinking about this. Three years ago, it is hard to think back on that time on how panicked we all were. How could we take the existing HIE technology that we had built and turn it into products and services that benefited public health and benefited our doctors, hospitals, payers and others?

We will talk about that. We will talk about the new products we developed, but one of the things that was unique to us is that we were working with public health departments in all of our states. Particularly in five states, we worked closely with the public health department, not just ours in Kansas, but all across the nation. We had a wide diversity of experiences. We will talk about the challenges that we found in working with public health departments, and then what we did in terms of being able to address those challenges. Next slide, please.

We faced the same problem that all of you did, which is we needed to get data to public health quickly. Luckily, we had built the infrastructure, as David mentioned. We had spent years building the infrastructure. Every hospital in Kansas is connected to KHIN. 4500 other facilities across the nation are connected to KONZA. We had a lot of data and we knew that we could get it to our public health departments quickly and in a way that could give them insights into what was happening.

One of the first things that we did was try to make sure that we could provide that to the public health departments in dashboards, very similar to what David showed you. We also provided it in a de-identified version to KU Med Center who was doing a great deal of analysis around COVID patterns and behaviors that were occurring in our state. We provided it in an identifiable way under our state laws to our state public health department.

I'm going to turn this over to Chris Guerrero, who we hired a little over a year ago. She can introduce herself to you and tell you the unique perspective and ideas that she brought to us. Thank you very much, Chris. I will turn it over to you.

Chris Guerrero
Thank you, Laura. Next slide, please.

Good afternoon. I would like to thank the HITAC committee and our ONC STAR HIE partners for the opportunity to present today. My name is Chris Guerrero, and I am the Public Health Project Manager for KONZA National Network. Prior to KONZA, I served 27 years in public health at the Texas department of

state health services. I started my career in public service in the 90s as an EPIC systems programmer for the Texas state lab. Over the years, I was directly involved in key public health initiatives, including electronic laboratory reporting, the national electronic disease surveillance system, Syndromic surveillance, and Texas **[inaudible] [02:08:05].** After the passage of the HITAC Act in 2009, I served as the agency's public health IT architect, focused on advancing health information technology and exchange in our state. Later, I served on the VHAS institutional review board for six years. At the time of my retirement in 2021, I was the Deputy Director of Vital Statistics. I can tell you in almost three decades, the challenges of public health have remained largely unchanged. These same challenges became challenges for the STAR HIE program. The STAR HIE program was an opportunity during a critical time to contribute it COVID-19 response efforts. Today, I would like to share with you our approach in achieving those outcomes, some challenges, and our vision for continuing progress in supporting public health with the shared goal of improving health outcomes.

As COVID-19 emerged in 2020, it was mandated that physicians' offices and ambulatory care facilities should report positive and negative help results that might test results to state public health agencies. These data points were essential to understanding the spread of COVID-19 in our communities. Our challenge was, how do we capture critical data and deliver it to state public health while also not adding to the burden on the state's resources already taxed by response and prevention activities?

Prior to the STAR HIE program, when COVID antigen test results were reported, these were being manually reported. KONZA developed the Translate product which utilized existing electronic laboratory data from the EMR's. We were able to transform and submit the data in compliance with state public health electronic reporting requirements. Our STAR HIE program activities connected practices performing testing to state public health agencies. To date, under the STAR HIE program over half a million results have been electronically submitted to state public health. If not for the ONC and the STAR HIE program, these data points might not have been available for public health response and prevention. Next slide.

In addition to deploying Translate, when we were working with practices and it was determined that they were administering COVID-19 vaccines but were not connected to the dedicated state immunization registry, KONZA provided technical and project management support to connect physicians to their respective state immunization registries. Approximately 145 practices were assessed for their readiness to connect, and where necessary we provided technical and project management support to assist them in connecting to their state agency. At the end of our grant activities, 186 practices had electronic lab capabilities to produce an HL7 data feed. Over half a million COVID-19 test results were delivered to state public health and 94 practices were connected to the state immunization registries.

In addition to these efforts, KONZA adapted our learning platform to create a COVID-19 registry that provided real-time COVID diagnosis data to the Kansas Department of Health and Environment to improve data visualization via KONZA's HQInsights dashboard.

At this time, I would like to pass the presentation to Melissa Talley, KONZA's Director of Quality and Clinical Services to share more about these efforts. Melissa?

Melissa Talley

Hi. Thank you, Chris. As Chris mentioned, I'm Mel Talley. I am the Director of Clinical Quality Services for KONZA. I have 20 plus years background in healthcare. I was a nurse and then also clinical informatics healthcare leadership. I have had experience in managing interoperability and quality programs such as **[inaudible] [02:11:48]** MIPS, and Patient-Centered Medical Home. Next slide, please.

What we were able to do during the pandemic is utilize our standing HQInsight toolkit that we have in place that is a platform where we take data from the health information exchanges aggregate it in ways that is useful for public health, for providers, to be able to look at various metrics inside of this platform. Next slide, please.

One of the things, as Laura had mentioned, that we did very quickly was we stood up a dashboard for the Kansas Department of Health and Environment. We had two versions of this dashboard; one was identifiable, and one was de-identified. This dashboard reported out on COVID positive cases, and they were able to utilize the information. They could download it out of here and trend it out just to see what the landscape and what was happening in near real-time across the state. The identifiable dashboard contained information in it that allowed them to be able to assist in their efforts for contact tracing, which was a challenge at the time. We were able to pull in that information and allow them to use that to be able to assist in that effort. This also showed the patient encounter type, which the positive COVID cases were. They were able to look at COVID-related ED visits, hospitalizations, as well as outpatient stay and trend that information as well. Next slide, please.

One of the things that we were able to do with being able to put all of the different facilities data together inside of that dashboard was to increase data completeness for both race and ethnicity. It was easy to see the gaps that we might have in that data. We started off around 93% of data completeness for race and ethnicity and we were able to increase that to almost 100% on the facilities that were submitting data on the COVID positive cases. Next slide, please.

This is just a general overall graph showing the positive cases over time for over a year and half's time frame. We were able to report out on 508,669 unique positive patients with a COVID diagnosis. You can see, much like when David was showing his graphs, how this is really in line with the trends that we saw with the different variants and over time throughout the pandemic. Next slide, please.

When the vaccine came out, we also felt it was really important that we be able to get that information back to our providers. We established two different metrics that they could look at inside of the HQInsight portal. One of them we added to our current disease registry dashboard, where they were able to see a list of their patients that had received the COVID-19 vaccine. Additionally, in that disease registry tile, they can see a list of patients that had a COVID diagnosis as well. We also added immunization information to our quality metrics tile and we created a measure that they were able to look at patients who have both met and not met the criteria of having a COVID-19 vaccine. This allowed them to be able to generate those lists and look at the gaps in care and to be able to reach out to those patients who had not yet received immunization, if they were qualified. Next slide, please.

I will turn the presentation back over to Chris. Thank you.

Chris Guerrero

Thanks, Mel. Let's look at challenges and lessons learned. Next slide. One of the most common questions that I have heard both in my career in public health as well as in my career with health information exchange at KONZA is about the language of public health, how that might be a challenge or barrier to achieving successful health information exchange. I want to talk a little bit about how the STAR HIE program positioned KONZA to effectively engage public health and the steps that KONZA had already taken or put in place during the grant activities.

KONZA was able to leverage its network to deliver value by connecting its providers to state public health on its existing national network. This became a mechanism to share the burden when COVID-19 underscored the importance of collaborative action between nonprofits, private corporations, and government. KONZA had recognized the need to add public health experience on its team. While I am not KONZA's first public health project manager, I was blessed that my retirement coincided with KONZA's need for a new public health project manager.

KONZA's charge and mission, as Laura described, as a nonprofit health information exchange in Kansas has always been rooted in its responsibility to the state and communities. It has been poised and positioned to support public health, both in quality reporting and delivering value from our network to public health. Data sharing agreements with KDHE had already been established and were in place as far back as 2012. These agreements had been revisited and renewed annually, and they supported STAR HIE grant activities. If they had not been in place, it would've been a difficult time to try to establish data sharing agreements for health information exchange with public health, given the taxes on existing resources.

The STAR HIE program demonstrated the immediate value of data sharing and proved that continuing efforts warrant investment of our time, resources, and dialogue with other health information exchanges within states that we practice. I want you to hear directly from our public health partner from the Kansas Department of Health and Environment. Bryna Stacey is the section director for health acquired infections and antibiotic resistance microorganisms. I know we benefited from our partnership with KDHE and I would like you to hear a little bit about how we may have benefited them during this grant program. Bryna?

Bryna Stacey
Hi. Thanks, Chris. As Chris said, I'm Bryna Stacey. I am the Section Director for Healthcare Associated Infections and Antimicrobial Resistance. It's a mouthful. We just call it HAIAR, which is still kind of a mouthful. Just a little bit of background on me in general, I was a bedside nurse an NPH, and then I came to KDHE to run this team. The HAIAR teams are set up through a cooperative agreement with the CDC and Epidemiology and Laboratory Capacity, or ELC. That's kind of where the funds all come from. Those teams allow us to do our work, which is really to help healthcare facilities in our jurisdictions address healthcare associated infections, and that includes these resistant infections. We do that through response to infections and also through prevention efforts. You can see why having access to an HIE would really be beneficial particularly for my team considering what we do is in healthcare. The work we do is in healthcare and very focused and all that protected health information.

I can also speak to the fact that other epidemiology teams that KDHE that respond to infectious diseases also need that information, even if they are necessarily working directly in the healthcare facilities. Obviously, when we are talking about infectious disease and being part of the human experience, we are talking about their protected health information. I know personally my team and the other infectious disease

response epidemiologists have had struggles in getting access to that data when we've done it outside the HIE. It's been a lot of trying to call the providers directly or the patients directly, or the facility and say we need this information in order to properly respond and really you should give us this information because there are legal rules that allow you to give that to us without having to go through paperwork or without having to go through approvals. We are a public health entity, and we are kind of exempt from that. Many of them think of HIPAA. We can't really do that. They don't realize that that rule really tells them that you give public health agencies this information as they need it. We are kind of quote unquote exempt from HIPAA. It's good to point out everybody, and we do, that once we get the data we obviously follow HIPAA. We are not using it inappropriately and we are not sharing it our inappropriately. You can see that creates a really large barrier for us because I know instances in which places have straight up refused to give us information. Even when we do get it, it's usually very delayed. Some people are still even using fax or sending it in the mail, so it's very delayed.

Really, getting access to all that data via the HIE has allowed for so much better response time and easier access. My team who has access can just go look and they have a plethora of different lab reports and doctors' notes and things like that that could really help us when we are responding to these potentially healthcare associated infections. You can see how this is a huge advancement for public health because we need to have awareness of the disease in order to respond appropriately. Especially, you are talking infectious disease, timeliness of response is very important in a lot of those, especially these highly resistant infections, which my team deals with. The sooner we can respond the better, because lots of times you run into whether it be COVID or a resistant infection, if a person transfers from a hospital to a long-term care facility and nobody is aware of the infectious disease status, that can just spread like wildfire.

Plenty of us have seen that happen and we are always trying to work against that clock to try to help with that. Again, access to health information exchange and that data really helps us with that. Just I want to put in a plug after hearing David talk about what he was doing in Oklahoma and cross communications, of course Oklahoma is one of the states that we do share a border with, and especially Kansas City. Missouri and Kansas City cross populate a lot. We have seen infectious diseases that are resistant starting in the Missouri side and spreading to the Kansas side, again due to lack of that kind of communication or availability of the data.

I'm sorry. I didn't realize this, but the next slide should've already been triggered, which just kind of talks again about quickness to respond and availability to know where in time and space those are happening in the state is obviously very helpful. That's kind of what these bullets speak to. If you would go to the next slide again, I'll talk briefly about the new project that I'm working with Chris on, my team and I are working with Chris on.

Again, we really focus on multidrug resistant organisms, and in particular some of these targeted multi drug-resistant organisms. The importance of that is obviously the resistance they have allows them to in effect get around the antibiotics or whatever the drug is that is meant to kill them. The problem with these very targeted organisms is not only do they have that, but they can share that with other bacteria. Obviously, we are worried because they can make more resistant organisms by just sharing their genetic makeup. The project we are working on with Chris is that KHIN is creating a way to alert not only my team but the facilities infection prevention team when they do have one of these targeted multidrug-resistant organisms in their

facility, coming to their facility. That allows not only us to help those facilities, but also the facilities to quickly put them in isolation as needed and things like that. This is the last slide for me.

Aaron Miri
Bryna, I just want you to know we have about two minutes left before we have to go to questions here.

Bryna Stacey
Okay. I'm sorry. Yeah. This is my last slide.

Aaron Miri
No problem.

Bryna Stacey
I was just going to say the opportunity that the STAR HIE has given us in working with KHIN has been really great. Again, it's just mostly because of the ability to get access to that data which is really opening up communication for us. Something that Chris talked about earlier was the difference in language, and we had another project with KHIN that kind of fell through, but it was late into trying to do the work that it fell through. That's when we realized, they didn't have the particular data we needed. I think with the presence of Chris, we are able to talk about those and have that language gap mitigated because she's got both sides of it. I just think it's very important. Not only does it alleviate burden on the Public Health side but all of our goal is to do the best we can for our people, thus Public Health.

We also want our healthcare facilities to have the burn alleviated. Chris and Mel's work in helping with reporting and data quality I think is really important. I just wanted to say thanks for letting me talk really quick and say that I hope that this continues even outside of COVID because it really helps with all of our work.

Aaron Miri
Outstanding job. Thank you very, very much. Great work by all of the speakers today. I do want to transition us to Q&A time for our speakers from the HITAC members. If there are any HITAC members with questions or comments, please do so by using the hand raise feature so we can dig into any of the things you're curious about. We've got about 10 minutes for Q&A here slated. Are there any HITAC members with questions?

While folks are marinating, I hope you all were seeing the kudos in the chat for all the HIE participants and hard workers there. Please relay that to your team that appreciation of the entire country for the work your team heroically does behind the scenes every day. In my prior life, I was in Texas for a long time. We lived off the data off of an HIE. Steve and Ike, you remember those days. We really appreciate all of the HIE workers. All right. We've got some hands raised here. First up, Medell.

Medell Briggs-Malonson
Thank you, Aaron. Yes. I want to say congratulations to all of you and thank you for sharing these amazing and inspiring reports to us as well. My question is actually to David and I put it in the chat before. When looking at the COVID rates, especially in comparison between the emergency departments as well as the inpatient admissions, does your current data set and database on the HIE able to differentiate between

COVID incidental findings, meaning a patient completely asymptomatic but upon being admitted for a different diagnosis are found to have COVID? Does the database allow for that differentiation?

David Kendrick
It does. The way we actually tackled that very question with the department took a lot of manual effort, I will say, because we have the chief complaints. What brought the patient to the emergency room? We essentially used NLP, natural language processing, to go through all the chief complaints and categorize them. I suppose now we would use chat GPT for this, but originally we categorized them respiratory, GI, and so on and got as fine grained on it as we could. Then we created a grouping to categorize those ER visits and inpatient admissions as being primarily initiated because of it.

Then we were able to carve out admissions for delivering a baby, trauma. Those were pretty easy to cut out, but there was a little bit of clinical decision-making you've got to have when you're dealing on the chief complaint level. I would just add, one proxy I wanted to use but haven't had time to code all the data for yet is pulse oximetry. If we've got shortness of breath and things like were pretty clear indicators, but pulse oximetry would be an objective numeric value I could use. Great question though.

Aaron Miri
Great questions. All right. Next up we have got Bryant.

Bryant Thomas Karras
Thanks again for the amazing presentations. I think both presenters could answer this and especially the combo of the group representing both within the health department and the health information exchange. I'm wondering if you could comment on if any problems arose with potential case counts or positivity rate that might differ between what's displayed on data coming from the health information exchange or data that's coming out of the public health department after full investigation and case determinations were made. Was there any difficulty in those numbers not always being the same?

David Kendrick
I see Laura trying to talk.

Laura McCrary
Bryant, this is Laura. I'll just share that initially there was. What we found when we were reporting the positive cases to KDHE as a part of our COVID registry, they were going back to the hospitals and they were checking to say we received this information from the health information exchange, but we didn't see that you reported this information. That was pretty powerful and turned around pretty quickly some of the problems that we were having with hospitals reporting the positive COVID tests because we had been sending it electronically so the state actually had an opportunity to compare what we sent electronically to what they had received, in terms of manual reporting.

I'll just let David or some of the others respond if they might have experienced that as well, but we certainly did.

David Kendrick

There was a gap in both directions. One, of course the Public Health Department had the benefit of policy and law saying these cases must be reported. Reference labs were in particular a difficult data source for us to get. Our state health department was not in a position to wrap data to us at that point because our relationship was just beginning. We were short some of their results. I think we would run about 85% of them. On the other side, we would be getting results in that they were not aware of based on the case that Laura just described.

The other thing I would point out is that often state health departments, certainly ours, were using a different method for calculating positivity that didn't rely on knowing the number of negative tests. That was a major methodological challenge at the beginning of the pandemic, and still is in some case. You can't readily do positivity correctly if you don't have the correct number of negative tests to make the denominator correct. I used to have a chart showing positivity calculated using all three methods to show how different they were. In some cases, they were five or 10% different.

Aaron Miri
Thank you very much. I appreciate the answer there. We have about five minutes left here. Ike, you are next.

Steven Eichner
Thank you so much. Chris, it's good to hear your voice. I have just a couple of quick observations. If you are looking for additional work on identifying terminology associated with COVID-19, you might want to look at some of the work that is going on in public health with syndromic surveillance. They have developed a pretty sophisticated lexicon and vocabulary to support differentiating subsequent cases coming out in that space.

Looking at health acquired infections and the like, I think there is some work going on with the national hospital surveys and data reporting improvements that you may want to take a look at, in terms of making it easier for hospitals to report data for that as long as you are looking at exchanging data in that space. Those are more observations, rather than questions. Thank you both for the great presentations.

David Kendrick
That is great advice. As we say in informatics, the great thing about standards is there are so many to choose from. I will note something that is a challenge with the standards you mentioned that would help to address is we don't really have physical exam findings coded in a way that we can use coming in from standard systems. That is an important component of really putting a fine point on a case or coincident event, coincidental event for admission or something That would be a nice thing to add. I know. We can't boil the ocean. Eventually, we will get there.

Aaron Miri
Last but not least, Clem McDonald. Clem, if you are speaking, you are on mute. Clem, you still may be muted, my friend.

Okay. He may have stepped away. We can hold him in queue for a second here. Does anybody else have any questions while Clem works it out?

Clem McDonald
I couldn't tell it was muted.

Aaron Miri
There you are! All right.

Clem McDonald
I just wanted to say it was a great pleasure to hear the success of these other HIEs. We started an HIE a long time ago and didn't want to be a lonely guy off in the corner. They have done a really good job. It is nice to hear about it.

David Kendrick
Thank you, sir.

Aaron Miri
Excellent. All right. With one minute remaining, any last second questions from HITAC members? Do you want to raise any concerns, or questions, or items?

David Kendrick
I think I should acknowledge, and probably half of the people on this call should make the same acknowledgment to Clem, we are standing on the shoulders of giants here. Thank you.

Aaron Miri
Clem is a legend, an absolute legend. All right. Medell, I think I'll turn this over to.

ONC Updates (02:37:17)

Medell Briggs-Malonson
Thank you so much, Aaron. Once again, thank you all for the wonderful presentations. Aaron, you got us right back on schedule! The next thing we are going to do is transition to our various different ONC updates.

It is my pleasure to also bring directly to the meeting Elise Sweeney Anthony, the Executive Director of the Office of Policy for ONC and also Avinash Shanbhag, the Executive Director for the Office of Technology at ONC. Elise and Avinash, we'll turn it on over to you.

Elise Sweeney Anthony
All right. Hi, everyone. Welcome to the new year. Hopefully you all can hear me okay. It is a pleasure to be here this afternoon/morning, depending on where you are. Today we are going to talk about some of the activities that are underway at ONC. I will talk about some that sit on the policy side and Avinash is going to talk about some that sit on the technology side.

For those of you familiar with ONC, you know everything we do is in tandem. There is no piece of technology that does not involve policy and there is no piece of policy that does not involve technology. That is the beauty of working with ONC and across ONC. That doesn't even bring into the conversation many of the others at ONC who work on the clinical aspects as well. We are really happy to share some of this with you. Definitely note, it is an all ONC endeavor as we move these projects forward. Next slide?

This slide you have seen before, particularly in the last year when we were talking about some of the benchmarks and objectives at ONC. I wanted to highlight this, we know standards, we know certification, we know exchange. Those are concepts that many of you are familiar with, but the piece that I really wanted to emphasize, and you will see that thread throughout this entire presentation, is the coordination aspect of it. When we are looking at different aspects of our programs, our certification program, or any of our activities, we try to think holistically about not only what we are putting out and to what we want to advance in terms of health IT, but how that is all going to come together for those who are implementing and those who are experiencing the benefits as well, such as patients. A great example of that is what Dr. Taylor presented earlier today on the USCDI and how we think about the USCDI and its function in terms of supporting exchange. Throughout this presentation, you will hear a lot in terms of coordination of activities we have underway in that regard.

One of the things I wanted to highlight a little bit more was what Micky presented earlier this morning, which was around coordination activities within HHS. There is a great blog that's out there. The way I put together this presentation, I included a lot of links so that you are able to go and check out some of the materials and see what speaks to you and what might be of interest to you. There is a link here for a blog that Micky and Steve put together that highlights our commitment to working across HHS, and very importantly Secretary Becerra's commitment to a departmentwide management policy that is focused ONC really aligning and coordinating health IT activities across HHS. One of the things that Micky mentioned was a proposed rule that is in the unified agenda. Again, the unified agenda is a list of rules that are on the horizon across the federal government. HHS has its own section as do other agencies, of course.

I just wanted to note, that rule that Micky mentioned the reg number as we call it, you can find it on reg info.gov. The reg number is 0991AC35, in case folks are interested in that. That rule really focuses on amending and updating the HHS acquisition regulations to implement requirements to procure health information technology that meets the standards and implementation specifications that are adopted by ONC. Again, I believe that rule is listed in the unified agenda for April 2023, so keep a lookout for that. And of course, check out this blog as well.

The next thing I wanted to highlight is the STAR HIE program. We just heard a great presentation on the STAR HIE program, so I wanted to focus just on a couple of aspects of how we got to that program and where we are now. One of the things we wanted to focus on with that program was really thinking about innovative health information exchange services that can really benefit public health agencies. I think that is something you see come across in the presentations today, but also the second part of it is understanding where COVID-19 was at the time that the STAR HIE program was established and the need to support communities that were being disproportionately impacted by the pandemic.

That also is some of the activities that were highlighted today and you can find more information about that on our website. At ONC, many folks know we are very committed to making sure that we are engaging and sharing information in regards to our activities overall. One way we do that is to identify, what are the lessons learned, what are the things that rose up through our program to identify ways that we can help and advanced the landscape?

The STAR HIE program is no different. There are two great blogs you will find on our website, buzz blog. They are by our STAR HIE team. They focus on different aspects of the program and some of the things that some of the grantees have participated in. It covers everything from COVID testing and vaccination information availability to public health immunization, interoperability, and ways to connect between HIEs and jurisdictional IISs. Just take a look at that as well because it's an opportunity for identification of how the successes and progress that has been achieved through STAR HIE can spread further and move across the country in terms of different ways we might be able to approach this particular technical or policy matter that we're seeing. Take a look at that. There will be more blogs that we are putting out regarding the STAR HIE program, so stay tuned. A huge, huge thank you to my team for all of the work that they do to manage the program every day. Next slide.

Here's a TEFCA update. I know many of you may be familiar with TEFCA, but I'm going to walk back just a bit to some of the background on TEFCA. Here we are in 2023, if you can believe it, but the work around TEFCA started soon after the passage of the Cares Act. That takes you back all the way to 2016. What Congress asked us to do was think about how we can support network to network exchange across networks. A lot of progress has been made within networks and in some cases across networks. Sometimes, that focus is on particular use cases such as treatment and really just identifying the gaps that were in existence with KEY. Throughout this TEFCA process, whether it was getting feedback from the public on what were formerly known as minimum required terms and conditions that we were thinking about including in the common agreement, all the way to getting feedback on the common agreement itself.

We are now at this point where all of that feedback has come together and we have in place at trusted exchange framework and a common agreement. That common agreement is the legal agreement that was QHINs sign on to with the RCE to say we will support the movement of this information as per the specifications of the common agreement and the QHIN technical framework and the standard operating procedures. To see where we started and getting feedback and asking folks what was of interest and where the gaps existed to now a place where we have a common agreement and we are moving towards that QHIN onboarding process is really exciting. I think you heard Micky say it best. It is amazing place to be. We are really excited about the events coming as well.

As of January, there are six applications from prospective QHINS that the RCE is considering. The RCE is the Recognized Coordinating Entity, The Sequoia Project. They manage the operationalization of the common agreement. They bring all of the pieces together, review applications, handle on boarding of the QHINs, as well as the metrics and governing approach that will ensure that not only does TEFCA stand up and be stood up in terms of having the QHINs on board but as it is being operationalized, that everything is happening as it should and in accordance with the common agreement, the standard operating procedures, and the QHIN technical framework.

Approved applicants will next enter into the onboarding process to potentially be designated as QHINs. There is a lot of work that continues to be underway. TEFCA will always be in a place of development, identifying how it is operating and where we may need to update things and make tweaks. In this case, we are in the place of still developing certain standard operating procedures or SOPs. There are many of them you will find online on the RCE website, rec.sequoia.org. Also, we are working on others as well, such as the payment and healthcare operations, as well as the public health exchange purposes SOP. More to come on that.

There is also work that the RCE has underway to facilitate connected on style testing as a pilot of FHIR under TEFCA. There is more to come on that and that is scheduled for February or March 2023. Generally, I would say for more information on things like which SOP's are already up, what is the process for onboarding of QHIN, if you want a copy of the common agreement, all of that you can find on the RCE website. ONC also has information on TEFCA as well, but in terms of the operationalizing side of it, definitely check out the RCE website. Many thanks to them for all of the work that they do and have done to get us to this point as well. Next slide?

I included this as a reference so folks can go back and see where we are in the process. This timeline starts in 2021, but so much work and so much public feedback went into getting us to 2021. We are excited about that. We are now at that Q1/Q2 2023 timeframe, aiming for the first approved QHIN applicants to come on board. That is a process the RCE is leading right now. Hopefully, this will be a helpful resource to folks as we go throughout the year. Next slide?

We're going to switch gears a little bit and talk about one the other programs at ONC. The Fit Workforce program really focuses on public health informatics and technology and identifying ways to advance the number of public health professionals that are trained and focusing really on recruiting from Minority Serving Institutions. That's because we know there's a need to diversify that workforce. We know having a diverse workforce benefits the landscape in many different ways, including life experiences that individuals bring to the table, but also ensuring and thinking about the communities that are being served across the nation. When we think about informatics and technology, identifying ways that we can support that diverse workforce is key. That's why there's a focus on recruiting from minority serving institutions. This is a four-year program, and the goal at the end of the program is that at least 4000 individuals will be trained in public health informatics and technology. We are really excited about this. Next slide.

You can see on this slide the grantees who are part of the program. We are really excited about the work they are doing, the curriculum, and the programs they are bringing together. One thing I want to note here is that the grantees are working in a consortium-based landscape. The idea when we were setting up the funding opportunity was really to make sure we were bringing community. That the grantees would be bringing communities. That they would be thinking about whether it's Community Health Centers or Organizations or whether it is the public health agency in that local area. We were really thinking about the landscape that exists in the community in terms of care. That could help inform the public health informatics and technology landscape and also the curriculum that's being developed. All the work that the grantees are doing consider that and works in that consortium environment. In fact, they meet monthly in a community practice to exchange ideas and share progress on what they're working on. As we move forward through these four years, we are really excited about the progress they are making the work they are doing to educate and bring forward a workforce that is truly diverse and really supports the needs of informatics and technology for years to come. Next slide?

Continuing to shift through a number of programs, often when you all hear me talk, I'm talking about information blocking or sometimes the rules, but I wanted to highlight many of the other programs that offer policies engagement, and how we get feedback, and how it helps us to really build and think about what are the next policy steps that may be necessary or helpful for ONC to engage in. This is where I say check out healthit.gov, because we know we get a lot of requests in for presentations on information blocking or

the rules, which we are always happy to give. I also want to note that when we do those presentations, they usually are about an hour in and of itself and we don't necessarily have an opportunity to talk about some of these other programs.

A huge kudos to all the ONC team who works on these projects that are really bringing forth the next phase in the evolution and progress that we want to see in the health IT environment as well. One of those is the SDOH Information Exchange Learning Forum. There's a couple of different aspects to this program. One, we know the important of social determinants of health in terms of care. Thinking about how health IT fits in that landscape is critical. We have been working on social determinants of health information exchange foundational elements. We had a technical expert panel who helped to inform that process in 2021, and then in 2022 we had five sessions in particular that talked about many aspects of what SDOH health information exchange entails and needs to be successful.

Following that, this year, 2023, we're going to continue that process in terms of having new learning forum sessions focused on SDOH and health information exchange, but we are also going to be releasing a toolkit in early 2023. The goal of that toolkit is to provide a resource for those who are on the ground, those who are thinking about SDOH and how it can support those they are providing care for, how they can build it into their programs, and what they need to think about, whether it's from a policy perspective, a funding perspective, a governance perspective, from an implementation services perspective. We are looking at all of those foundational pieces that really inform the development of a successful program. Look out for that toolkit. We will definitely be announcing that when it is released.

Another opportunity for me to give a PSA is to say to sign up for our lister where you get all the latest announcements on our projects when they release all the opportunities for engaging with us as well. The learning forums are really that, an opportunity for us to learn what's happening on the ground, what some of the considerations are, and what we are thinking about SDOH. Next slide? Okay.

I also want to highlight our informational resource series, or the IR Series, is a way that we are able to put together information that might be helpful to particular practice settings. The series is focused on pediatric care and we have released least two already on pediatric care. The newest one we released in November 2022 and it's on neonatal abstinence syndrome. It's an informational resource that can be really helpful to the healthcare landscape if they are treating, engaging with infants who have experienced withdrawal after maternal exposure to opioids or other substances during pregnancy. Definitely check that out. You can find it on our website. Next slide.

These I'm going to breeze through quickly, because these are the rules that we are planning to engage in. Micky went through these quickly already so I will highlight these. The reason I included a snapshot from reginfo.gov because it's a great way to keep tabs on what we're doing in terms of rules, and when the rules are released as well. This is what it looks like on reginfo.gov. Each rule has certain components to it. One, it has an abstract that describes the rule. That's really what we are able to say at this point in terms of what the rule would include. It also has an RIN number and that number is how you track the rule throughout the entire lifespan of the rule. Note that as well.

On the first rule that we are currently working on, this rule we are aiming hopefully to be released soon. It is a rule that is currently under review, and it would address a number of different aspects, including the

EHR reporting program, condition and maintenance of certification standards and certification criteria, and a number of other areas as well, as noted here on the slide. Next slide.

The next rule is the appropriate disincentives rule, and Micky summarized that. I'm going to skim through this to make sure we stay on time. Again, just note that not only do you have information on the rule itself but also note that it shows you the timeframe we is expected, the timetable for the rule as well. You will see that at the bottom of each slide. All right. The next rule we have up will build on the policies, or it will plan to build on the policies from not the Cares Act final rule, but the first rule I mentioned earlier as well, AA03. Both those rules will feed into and be built on by this rule. This rule is designed to advance electronic health information sharing through proposals related to standards adoption. There's also components in it related to certification of health IT to support expanded uses of APIs such as prior authorization, patient engagement, interoperable public health exchange. Keep a look out for this one as well.

The last one I'm going to mention is actually not an ONC-led rule. This rule is an OIG rule. It's the Office of the Inspector General rule. This relates to another aspect of the Cares Act.

In the Cares Act, one of the components that is included is the idea of including civil monetary penalties for entities who are found to be information blocking. It would impose CMP's for information blocking. This rule by OIG in part addresses some of those components. There are other aspects to the OIG rule, but for today's purposes I wanted to highlight it as it relates to the information blocking regulation and the civil monetary penalties component. Do check out that one as well. This rule was released as a notice of proposed rulemaking. The next release would be the final action or the final rule.

All right, moving along. Where can you find information about what we are working on? Information blocking is one area where we do get a lot of questions regarding implementation or how it is set up, so we included this slide so you could see information that can be found. There's a homepage on information blocking. There is also a series of frequently asked questions that address many of the questions that we've gotten to date. There's also fact sheets and different webinars and presentations that we have. That's in relation to information blocking. There's a number of different resources that we have online for different aspects of our work, including guides that help in terms of the certification program and such. Definitely, check out or website overall. Here is just some of them that might be helpful.

The last two slides are regarding what's new in educational resources. Steve Posnack released a blog recently that talks about some of our new resources related to existing activities around the conditions of certification. We call these the explainer series. One focuses on communication, for example. Next slide. What we aim to do is really look at what the reg tec says and what the regulations say, including the preamble, regarding the specific requirement that exists around the Cares Act final rule. Not only do we include what the rule says, but then we include an explainer section that says this means. It gives you a look at some of the things you might want to be aware of regarding what the rule says. I encourage folks to check this out as a resource. Not only does it give you a high-level look at some of the aspects of the program and what we are doing, but it also includes links to where you can find more information, and that's really key. There are great information in the preamble of the rule that talk about things to consider and things that we considered at ONC, questions that came in through the comment process in the final rule. I encourage folks to check this out. We hope that these resources are really helpful to you. As always, there are more webinars and resources we will put together throughout 2023.

Stay tuned, check out our website. If you have any questions, we also have a feedback portal where you can let us know your questions are as well. I know ran through that pretty quickly, but I want to make sure that I leave time for my colleague, Avinash. Avinash, I'm going to turn it over to you.

Avinash Shanbhag
Thank you very much. Audio check; you can hear me?

Medell Briggs-Malonson
Yes, we can hear you.

Avinash Shanbhag
Great. Thank you very much. I appreciate a chance to come and present to you all. I should say as being a member for ONC and having worked with HITAC previously, it's such a great honor to have a HITAC team. I think my team will definitely benefit from the experience and expertise that this panel has.

Again, to introduce myself briefly, my name is Avinash Shanbhag. I am the Executive Director for the Office of Technology, which as Elise mentioned is an office within ONC that works jointly on all the program that Elise mentioned. Next slide, please.

What I wanted to do today was rather than going through some of the program updates, I wanted to give just a brief high-level overview of the Office of Technology and how we are set up so that as you all start working on your activities, if there are any questions you know where to go through. I want to quickly look at our Office of Technology structure and talk a little bit about certification and testing programs and the team that manages the activity.

Then, I will talk a bit about how our standards coordination activities are being done, given that HITAC does a lot of work that engages with our team from the standards division. Then, I will talk a little bit about our innovative activities and data analysis that some of the HITAC members are already aware of but would be a good introduction to. Next slide, please.

Just to give you a high-level overview and just kind of put in little nuggets of where each of the work activities happen, we have our technical strategy and analysis division where we have a combination of both innovation activities. I think some of your HITAC members are aware of our leading-edge acceleration projects. Those are some of our new technology and new standards related activity that is managed by our technical strategy and analysis division. As the name suggests, we also have analysis division which does release data briefs and data sets and engages on several of our interoperability measurement related activity. Most importantly, that division has engages with NIS, FDA, and other large federal agencies to make sure that our health alignment activities with research emphasis is also a part of our standards portfolio.

Then we have the standards division, which really you heard from my colleague Dr. Al Taylor in the morning. This is where USCDI is formally based. We also engage with other science development organizations, including IHE and LOINC and CPD among others. As Elise mentioned, this is a group that also focuses on ensuring that TEFCA, technical infrastructure that supports TEFCA is instantiated. Finally, we have the

certification and testing division that, as the name suggests, manages our certification program. I talked briefly about it.

At a high level, I would say that certified health IT as was rightly put is beyond and broader than EHRs. It's really over the last decade or so that we have had a certification program. It has really expanded to over 600 health IT products across 22 federal programs. Over the last decade, certified health IT has become a foundational component of the electronic health information and it is really now ready for the next step in the future of providing value to the communities. This is what really is the basis of a lot of our work within the certification program.

I will just briefly provide insight into what is on the day-to-day basis certification program team does. It's really to ensure that certified health IT developers that are part of the program are meeting the requirements of the certification program and avoiding nonconformities. Really, the way in which the certification program manages is through our certified health IT product list, which is a website that provides very detailed information about certification status and abilities of certified health IT products.

We have a vast standards health IT testing platform which was started a decade ago based on HITAC, your predecessor's suggestion for ensuring that standards that are developed by standards organizations get well tested before they are ready for use. Our standards platform provides other IT platform testing capabilities for standards that are part of the certification program and also for standards that can be developed that can be used by health IT developers to test before they are used the certification and are used at scale.

Finally, as part of our Cares final rule, we obviously got additional responsibilities around managing the conditions of certification requirements for health IT developers, that the certification health division also manages through managing the attestations, the real-world testing, and all of those activities which are really ensuring that the program meets the desire that it was expressly intended to. Next slide, please.

I won't talk a lot about it because my colleague, Dr. Al Taylor, talked about USCDI, but this is just to briefly mention what Al talked about. We have a team across ONC from policy, technology, and clinical teams that really weigh in on all of the comments that are coming from the public, including your membership as you all go through your working group and provide comments. We have a team of analysts that are available to provide initial guidance as needed, because this is again an important aspect for us. It's a multiteam effort. I wanted to let you know. The way we have structured right now is you are going to be reviewing the USCDI Version 4 of the standard. Just as a background, we have USCDI Version 1 that was finalized during the 21st Century Cures Act final rule period, and we have the USCDI Version 2 that is currently approved for certification under the program as part of the standards version advancement program. Next slide, please.

Just to talk it through as your predecessors have done and you will do is once USCDI, just looking at 2023 now, we are in the January timeframe. We are at the point where your work will get into the finalization of USCDI and then will be part of ONC approved standards in 2023. Just to emphasize that your work is very critical. Next slide, please

I will try to wrap up in a minute or so. I just wanted to give a very high-level overview. Just very briefly, HITAC last year and over the past few years had worked on ISA, Interoperability Standards Advisory, which

is a great resource for health IT industry broadly. A lot of federal agency programs look to ISA as the standards Wikipedia, of sorts, that provides a good curated list of standards across previous use cases. They continue to maintain, manage, and curate that with input from HITAC over this year and would certainly love to kind of work with you all if interested. Next slide, please.

As our standards division works with a lot of standards, I want to pick on our FHIR standard as one aspect of how ONC works. As you see on the right side, ONC participates on a variety of health IT HL7 FHIR accelerators, including Fast, Gravity, and Helcio's that work on various use cases and domains. We are also supporting HL7 for the development and maintenance of some of the core underlying tools that go into ensuring that those FHIR standards implementation specifications are actually working. That includes the tools that go into publishing the FHIR standards on the websites. Also, we are focused on ensuring that some of the standards in our certification program, such as the US core IG implementation guide, the bulk data access all get supported and funded, and some of our important terminology related activities.

I just wanted to give high-level overview that ONC and office of technology really coordinates a lot on FHIR standards. Incidentally, a lot of folks are present at the HL7 working group meeting at Henderson, Nevada. We have a large contingent from ONC that are currently participating in that event right now. Next slide, please, and I will wrap up in a minute.

Monitoring of standards are very important. I'll briefly mention that we have actually developed a tool called Lantern that provides real-time monitoring of FHIR-based APIs. This has really provided us really good insight into availability of standard FHIR APIs. This will be ever more important as the Cures implementation in 2023 become real and providers start getting their updated certified health IT and are able to start developing third-party apps to use those APIs. We will continue to provide additional insight into the availability of these APIs. Next slide, please.

Finally, just to wrap up, a high-level analysis is our team is really important. At the end of the day, as we get into all these programs and identify all the various ways in which we can improve interoperability, we want to measure and want to show and know that we are going the right direction. We have a large team that publishes data briefs, data sets, and blogs and articles to highlight and show those challenges are there. We encourage HITAC, if interested, to reach out to us. We are certainly interested in providing additional insights as needed. Next slide, please. Hopefully, that is my last slide.

Just to recap, broadly, our Office of Technology meets the requirements of our certification program through ensuring that our testing platform and the certified health IT website is maintained. We are focusing a lot on USCDI, and the interoperability standard advisory is a way to ensure that curated standards are available. We are ensuring that FHIR standards development can continue and support the underlying infrastructure. Finally, one of our key focus areas is to ensure that ultimately those standards-based APIs are leveraged by industry and any of the challenges that are seen can be mitigated and that we are made aware of it and can be mitigated over the next year.

Hopefully, this was a very rapid fire, going three minutes over the time allotted, but hopefully it gives you a good overview of the kind of work the Office of Technology does. I want to turn over again to the co-chairs and thank you again for inviting me to the HITAC meeting.

Medell Briggs-Malonson
Avinash and Elise, absolutely. Thank you so much for these incredible updates on what is going on in both the Offices of Policy and Office of Technology. Now, we will open it up to see if there are any questions from HITAC for Elise or Avinash. I think I see Ike's hand already. Ike, you have the floor.

Steven Eichner
Thank you so much and thank you both for the great presentations. One of the things I have noticed in some 15-20 years of working in public health going to conferences for CSTE and others is that I am often the only person with a mobility challenge using a wheelchair.

Looking at my current health department, there are very, very few people in my current health department who have noticeable physical disabilities. If we are talking about diversity in the workforce, I think it is really important that we include diversity across a wide variety of factors. In many cases, a lot of what we do in healthcare and public health especially really impacts people with disabilities an awful lot.

I'll give you a really short example. As far as I know, I am the only male above 50 with my health condition in the state of Texas. Which means it is pretty darn hard to de-identify me. That is a real issue, as someone with a condition, I want people to be aware of the condition and develop treatments and develop resources to help meet my health needs. However, if I just disappear to a magic asterisk, my disease doesn't exist. I have a real-world example of, hey, what's the issue with small numbers on both side of the equation?

There are other folks in similar positions with similar life experience looking at the disabled side of the community that really need to be brought into the conversation and into the decision-making all the way through. They really do have good skills and capabilities to bring to the table. I think as we kind of look forward, we need to keep our eyes on the ball and make sure as we are talking about diversity and equity that it extends both in terms of service delivery, but also in terms of who is designing, building, evaluating, and managing that service delivery. Thanks so much.

Medell Briggs-Malonson
Thank you so much, Ike. I cannot agree with you more. Especially with those living with either mental or physical diverse abilities, it is incredibly important to make sure to center their voice and make sure they are included. We will touch on that even more later on as well. Thank you.

Any other questions or comments. Okay. If there are no other questions or comments, thank you both so much. We are incredibly grateful for all of your updates. We are going to move directly on into our annual report workgroup update. Aaron, do you want to go ahead and kick us off? We will tag team on this update.

HITAC Annual Report Workgroup Update (03:14:44)

Aaron Miri
Absolutely. Thank you, Medell. All right. As you all know, this is one of my workgroups I really enjoy reporting out all of the work we are doing here. I am glad to bring you guys up to speed and for us to go into some of the meat of it. Medell and I will tag team this one. Next slide, please.

The workgroup update for those of you new to HITAC, this is the workgroup that's charged with assembling the work that has been going on over the past year that HITAC has been working, cataloging future efforts

and things we want to go down, and starting to double-click on various priority areas across our charge as a HITAC of things that are going on in the industry. It is a well-received report that does go out to everybody and it is well read. It is a fantastic culmination of your work and what we have going on here.

As you see here, we've got the workgroup scope and membership we're going to talk about and our meeting schedule. We will talk about the annual report for 22, and then we're going to go into a discussion of the draft background research document. As note, we will be voting on the report next HITAC in February. This is an update on where we stand with still time to get some feedback in although it is close to the 11th hour. We will have to get quick on that on anymore feedback. Next slide. All right.

Overarching charge, we will inform, contribute to, and review draft and final versions of the report to be submitted to the Secretary of HHS and to Congress each fiscal year. As part of that report, the workgroup will keep track of ongoing HITAC progress. In prior years, the secretaries have been very generous and appreciative and always send a very complimentary note after the fact after they read it. Again, this work does not go unnoticed.

Specific charge is to provide feedback on the content of the report as required by the 21st Century Cures Act, analysis of the HITAC progress as related to target areas, assessment of health IT infrastructure and advancement in the target areas, analysis of existing gaps in polices and resources for target areas, and ideas for potential HITAC activities to address identified gaps. In our preamble, you recall that we had talked about using this as a vehicle if you have ideas or placeholders to go into parking lot. ONC would be helpful to use be able to double-click and look at what is going on. Again, those potential HITAC activities, really feed in your ideas if there are items you see going on across the national landscape we should consider. Next slide.

This is our work group membership. We did have a few folks roll off due to their HITAC terms expiring. If you are interested in throwing your name in the hat, go ahead and reach out. I know several of you already have. We are always at all times taking names, even if we do get full up in our compliment. I just want to throw that out there that it is an open book. Next slide.

We are here at the January 19th review draft annual report. Again, we'll go into detail about that with approval on February 8th meeting, which will be very important for us to go through and really talk through. Transmittal will be subsequently thereafter sometime a few weeks after that, once everything is cleaned up. Next slide.

All right. The next steps here, we are going to view the annual draft report and the supplemental background research document and then any kind of edits there with the vote to approve the revised annual report. That's going to be next on the 8th. Then, the HITAC will transmit it after that, as I said earlier, and then national authority will forward that on to the Secretary of Health and Human Services and to Congress. Both get a final copy of that some point in springtime. Next slide. All right. Next.

All right. This is important, and I do want to ask my colleague here, Medell, to really introduce the first one because it's very important since it's new and sort of the criticality of this topic we've alluded to it. What better than a national expert on this topic to explain the importance of it? Medell, I'll give you the floor here.

Medell Briggs-Malonson
Great. Thank you so much, Aaron. This is also in direct relationship to Ike's question about how we are defining health equity. Health equity, one of the best definitions that many of us that are health equity practitioners use and is also the definition that many other agencies use such as CMS and CDC was developed by the Robert Wood Johnson Foundation which is defined as that everyone has a fair and just opportunity to attain the highest level of help. That term everyone, that means regardless of an individual's race, ethnicity, gender identity, sexual orientation, language, religion, ability status, or any other personal identities, but that also includes geographic locations, as well as other factors that we know play a role in overall health and healthcare outcomes.

Health Equity is an umbrella term because it's not just one thing or another. It is a combination of the various different social drivers of health. One cannot attain true health equity unless we are addressing all those other factors such as education, economic empowerment, the built environment, and so many other aspects including access to healthcare and all the things we talk about here, the interoperability of data and those other items.

Within this report, one of the things we want to propose is making sure that we are looking at everything through an equity lens when we are developing our health IT infrastructures, our policies, our standards, but also making sure we are thinking about our most vulnerable populations as we are developing all of the various different technologies or making recommendations. That's where the whole idea of design and use of technologies that advance Health Equity came into play. As has been mentioned numerous times even during this meeting, equity is already incorporated into all that ONC does and also into all that we as HITAC do.

That clear definition is very important, and that is a different definition from healthcare equity, clinical equity, data equity. There's a lot of them, but overall health equity is when we are taking in all those factors to ensure that everyone has a fair and just opportunity to be as healthy and as productive as possible. Aaron, I will turn it back on to you.

Aaron Miri
Well said, Medell. You are an expert. Thank you for introducing that. I couldn't have said it better myself. That's excellent. Number two item on here, use of technologies to support public health. Third on here is interoperability. The fourth is privacy and security, and fifth patient access to information. You can see exactly how Medell was speaking towards Health Equity, even in these other ones. There is a common thread here, how to do it equitably, for everybody. Next slide. We're going to kind of go through the outline of the draft report. We have a forward introduction, the IT infrastructure landscape. We have the infrastructure gaps, opportunities and recommendations and kind of the HITAC progress for FY 2022. I will just give a shout out to the blog posted earlier today. They did a really good job of highlighting how much work that HITAC did in FY 2022. The report will definitely double click on that and show the details of it. Finally, there is the conclusion and appendix. Next slide.

All right. What is the HITAC progress in FY 22? Especially for those who are new, we had 10 HITAC big committee meetings including one hearing on Health Equity which was excellent, 50 meetings of five HITAC subcommittees, which is a lot of work. As you know who serve on the committees, how much work goes on outside of that, trading emails, editing documents, a lot of work there. We made 135 recommendations

to the national coordinator for health IT, and then subcommittee activities that were focused on adopted standards, e-prior authorization for information, HITAC annual report (as we're going through in this topic), interoperability standards, and our public health data systems group, which did an excellent job last year. Next slide?

All right. From an infrastructure landscape analysis, our 21st Century Cures Act requires an annual assessment of Health Information Technology infrastructure, nationally and locally, that allows for health and for electronic access exchange and use of health information. This is critical, because it keeps everyone up to date on what's going on. As we all know, it's always changing. Next, this landscape analysis then covers key topics in each of the five target areas, as well as federal activities across target areas. Additional topics are covered in the landscape analysis for awareness. Lastly, the landscape analysis is summarized in the annual report and covered in more depth in a supplemental background research document, which you will notice here for those of you that have been on HITAC for a while, our report changes every year. It gets a little longer. We change the format to try to make it easier to understand because we realize just how meaty it's getting, which is a good thing. It's getting so long; we want to make sure it's also useable. What you're going to see this year is us really focused on trying to come up with a manageable document that represents a report with a ton of supplemental information for those of you who really want to go deep and understand why, but at a top level, so it's a usable format versus this hundred page behemoth that sits on your shelf like an Encyclopedia Britannica. Next slide.

All right. Next is the gap analysis. 21st Century Cares Act requires an analysis identifying existing gaps in policies and resources for achieving the ONC FY 22 objectives and benchmarks, and furthering interoperability throughout the Health Information Technology infrastructure. The gap analysis covers key topics in each of the five target areas and then summarized in the annual report and covered in more depth in that supplemental research document. Next slide.

Recommendations for addressing gaps, the Cares Act requires analysis identifying opportunities or recommendations for HITAC activities to address the health Information technology gaps. Sort of a tiered approach is how we go about it with key opportunities. We have immediate stuff, which is like we really need to do this immediately. It's a burning platform. We have to get in front of this. There's issues, a.k.a. Public Health specifically when we were going to COVID-19, things that are occurring and we need to address immediately. It correlates the plan topics for HITAC consideration within the next one or two years, calendar years 23 and 24, and then there are longer-term opportunities. These are potential for us to consider but we need more data. An example would be artificial intelligence. Although every year, every day it seems we're getting more information, we saw chat GPT referenced earlier, some things on the horizon that are still nascent. We don't want to lose track of that idea, but it's something we're going to put on a longer term as more information becomes available to it.

You will recall for those of you who have been on the committee for a while, DG suitable is one. Those are those pharmaceutical apps that are out there that is still an emerging market. These are the kinds of topics want to keep track of, but more longer-term things that we just want to have our eye on. We really want to focus on immediate opportunities. These recommendations are documented in the annual report. Next slide.

As you go through this, and Medell will take us through sort of our document here, there are three things you need to be thinking about. Do you have any questions or comments about where were going and what's in there right now? Do you have any suggestions for revisions? We always take your suggestions. Do you have any ideas for the parking lot? This is critical! Right? The parking lot, we revisit it every single year, actually the first meeting of the annual report workgroup, we pull the parking lot out and say what was talked about, what was said, what did we identify. We never lose sight of your requests and your items, even if it doesn't make it into the report because of timing or whatever, it's in the parking lot. Rest assured, bring those good ideas to the forefront. Every idea is a good idea. Next slide.

All right. Medell, it's yours.

Medell Briggs-Malonson
Great. Thank you, Aaron. As Aaron mentioned, there are two different documents this year, the report itself but then also from the amazing annual workgroup, we actually partnered directly with the ONC team in order to provide more supplemental information to clarify some of the various different recommendations without having to go very deeply into that information during the standard annual report. So, next slide.

The overall supplemental background research document is organized very similarly to the annual report, but again has more meat, has more context, and also has all the various different references. It first starts off with the overview, and then it goes pretty significantly into the health IT infrastructure landscape analysis followed by the gaps analysis, which you will see is just a much more expanded version than what was presented in the annual report. Then there's the conclusion and then the appendices with all the various different references. Next slide.

As you go through both documents, what we really want you to do is again think about if there's any additional questions or comments, and especially the annual report. If you have questions, we recommend that you go to the supplemental background research document to see if some of your questions are answered there. If it's not there or if you think it needs to be elevated to the annual report for greater clarity, please let us know your recommendations are. Also, if there are any additional suggested revisions to the draft document that is key. Last but not least, as Aaron mentioned, parking lot ideas. We really make sure to take a look at that each year and also during all of our workgroup meetings. You know, things change over time, definitely within healthcare and public health, within health IT in general. Sometimes things come up and we see that on the parking lot and it's like goodness, that's so relevant right now. We definitely need to make sure that we prioritize that. So, please give us your feedback and we will definitely take that into consideration. Next slide.

We want to thank you all, and definitely want to thank all the various different members on the annual report workgroup. We look forward to your feedback. Now we will open it up to see if there's any additional questions over the update of the report.

Great! I see Deven's hand but then also Clem’s in the chat. Deven, we will go with you first and then we will go directly back to Clem’s question.

Deven McGraw
Are you sure because Clem’s looks pretty easy.

Medell Briggs-Malonson
Where can one find the current drop supplemental? We can definitely make sure that is sent directly to you.

Aaron Miri
I do see that we got a note that both reports are posted on healthit.gov. I believe they are both there.

Deven McGraw
They were also part of the emails that we all received in advance of the call today. Mostly, I just wanted to clarify. It's interesting. It's an annual report that's both backward-looking but also sort of forward-indicating in terms of the prioritization of what issues HITAC thinks ought to be sort of prioritized for HITAC consideration going forward. It seems for those of us who are new, I don't want to sort of Monday morning quarterback what already occurred in 2022, and yet when you are having the committee say these should be the priorities for 2023, it feels appropriate for those of us who are new to definitely weight in. I wanted to clarify that. That was my thinking, but I could see how usually annual reports are almost always backward-looking. So, if you could provide some feedback on that, that would be great. Thank you.

Aaron Miri
Medell, did you want to start this one? I can answer, or however you want it.

Medell Briggs-Malonson
Yeah. You can start. Go ahead, Aaron, and then I'll fill in any additional thoughts.

Aaron Miri
Deven, it's a great question. All thoughts, by all members, are welcome at any time. Even if you're brand-new, day one, where's the Starbucks, where's the bathroom kind of look in your eyes. It's totally fine. We want those feedbacks. We welcome those feedback. I will say timing is of the essence. We really want to get feedback in by the 26th of this month for it to count for the FY 22 report. Sometimes folks, especially when they are new, will say something and it's that's not for this year because that work didn't take place in the calendar year 22, so we'll put it in the parking lot, and we'll address it in the future iterations of the report. Please comment. I think it's the right thing to do. We look forward to your feedback. Medell?

Medell Briggs-Malonson
No. I agree. Thank you, Aaron. Any other questions? I'm sorry, Deven?

Deven McGraw
I was just saying thank you.

Medell Briggs-Malonson
You're welcome. Thank you already for your feedback that you've already provided for us. We appreciate it. Any other questions or comments?

Aaron Miri
I will say as a pro tip for the new folks on the HITAC, if you read the report, it will catch you up very quickly on where things are. You will be a professional coming by February.

Medell Briggs-Malonson
It also provides some insight into where opportunities are. I agree, this report is critical for the new members to HITAC. I know it was very helpful. That was one of the reasons why I decided to join this workgroup.

You can easily see the connections between the annual report workgroups as well as even what ONC is doing. That provides us additional opportunities to say, where are the additional priorities as well as we move through fiscal year 2023? We definitely want your feedback on all of this.

All right. Everyone is quiet here. Aaron, did we just do our job, and no one has any additional questions?

Aaron Miri
Maybe they are all reading the report. That's what I'm going to go with.

Medell Briggs-Malonson
We will get lots of emails after this.

Aaron Miri
I'm sure we will. I welcome it.

Medell Briggs-Malonson
Exactly, which we will enjoy. Great. If there are no other additional questions or comments, I will turn it back to Aaron as we proceed through the rest of our agenda.

Aaron Miri
Yes, we are approaching the end of the first meeting here, which has been very productive. No other questions or concerns, Mike, I think we can probably transition to public comment.

Public Comment (03:33:23)

Mike Berry
That would be great. We will open up our meeting for public comment. 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 the screen. If you happen to be on the phone only, press *nine to raise your hand. Once called upon, press *six to mute and unmute your line. Let's just pause a minute to see if any members of the public raise their hand.

In the meantime, I just want to remind everybody that our next HITAC meeting is in three weeks, on February 8th. We look forward to seeing you there. You can register on healthit.gov. Also, all the meeting materials for today and all the HITAC meetings can be found on the HITAC page on healthit.gov. I do not see any hands raised. I will turn it back to Aaron and Medell to close us out. Thanks so much for joining us today.

Aaron Miri
Medell, would you like to start please?

Medell Briggs-Malonson
I'm more than happy to do so. Once again, this has been a wonderful, productive first meeting of the year. We really do appreciate all of your different feedbacks and insight, and we look forward to our additional collaboration together over the next year. In the interim, if there are any questions or ideas, Aaron and I are always available. We are more than happy to support in any way.

Aaron Miri
Absolutely. I echo those exact same sentiments. Congratulations to all of you who are new numbers of the HITAC. I appreciate all of you. Dr. Lane has a question, as he did the first round. Now, he will at the end of the day. Steven, if you want to go ahead and ask before I finish out?

Steven Lane
Sure. I put it in the chat. It has been mentioned that we do get to meet in person this year. I heard two meetings, spring and fall. Any idea yet about the dates of those meetings? Can we look ahead to those?

Aaron Miri
Mike?

Mike Berry
We don't have any specific dates in mind yet. We are working on some options, Steven. We will give the HITAC members as much notice as possible so that you can make plans to be here. We will definitely keep you posted on our progress.

Steven Lane
It does sound like we are all invited to the February event, which would be a great chance for those who can travel to meet in person.

Aaron Miri
Beware, traveling in New England or the Northeast in the wintertime in February, you roll the dice seeing how that goes.

With that, I'm going to close us out. Thank you very much. I also want to congratulate Medell for her first meeting as co-chair of the HITAC. Great job, Medell. I love having you as a partner in crime to help lead us through the next year. With that, have a wonderful afternoon and we will see you in three weeks on the 8th.

Medell Briggs-Malonson
Have a great one, everyone. Goodbye.

Aaron Miri
Goodbye, everybody.

Final Remarks and Adjourn (03:36:10)