

Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) COVID-19 PANDEMIC RESPONSE HEARING

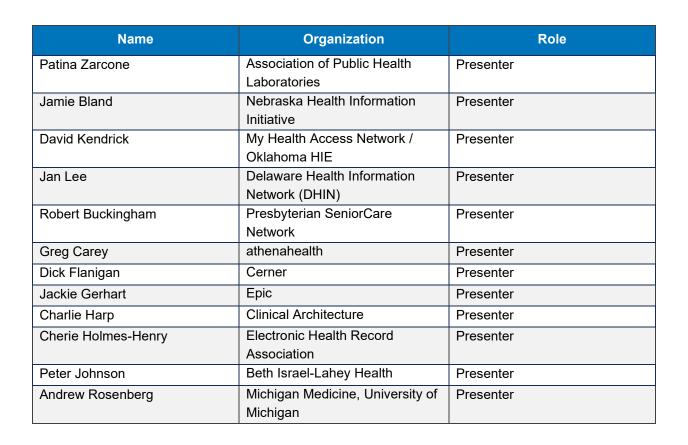
April 15, 2020, 9:00 a.m. - 4:00 p.m. ET **VIRTUAL** ONC_HealthIT HealthIT.gov

Speakers

Name	Organization	Role
Carolyn Petersen	Individual	Chair
Robert Wah	Individual	Chair
Michael Adcock	Magnolia Health	Member
Christina Caraballo	Audacious Inquiry	Member
Tina Esposito	Advocate Aurora Health	Member
Cynthia Fisher	PatientRightsAdvocate.org	Member
Valerie Grey	New York eHealth Collaborative	Member
Anil Jain	IBM Watson Health	Member
Jim Jirjis	Clinical Services Group of Hospital Corporation of America (HCA)	Member
John Kansky	Indiana Health Information Exchange	Member
Ken Kawamoto	University of Utah Health	Member
Steven Lane	Sutter Health	Member
Leslie Lenert	Medical University of South Carolina	Member
Arien Malec	Change Healthcare	Member
Clem McDonald	National Library of Medicine	Member
Aaron Miri	The University of Texas at Austin Dell Medical School and UT Health Austin	Member
Brett Oliver	Baptist Health	Member
Terrence O'Malley	Massachusetts General Hospital	Member
James Pantelas	Individual	Member
Raj Ratwani	MedStar Health	Member
Steve Ready	Norton Healthcare	Member
Abby Sears	OCHIN	Member
Alexis Snyder	Individual	Member
Sasha TerMaat	Epic	Member
Andrew Truscott	Accenture	Member
Sheryl Turney	Anthem, Inc.	Member
Denise Webb	Individual	Member
Amy Abernethy	Food and Drug Administration	Federal Representative

Defense Health Agency, Department of Defense	Name	Organization	Role
Adi V. Gundlapalli Centers for Disease Control and Prevention Department of Veterans Health Affairs Michelle Schreiber Centers for Medicare and Medicaid Services National Institute of Standards and Technology Donald Rucker Office of the National Coordinator Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Seth Pazinski Office of the National Coordinator for Health Information Technology Avinash Shanbhag Office of the National Coordinator for Health Information Technology Avinash Shanbhag Office of the National Coordinator for Health Information Technology Lauren Richie Office of the National Coordinator for Health Information Technology Designated Federal Officer	James Ellzy	Defense Health Agency,	Federal Representative
Adi V. Gundlapalli Prevention Department of Veterans Health Affairs Federal Representative Michelle Schreiber Centers for Medicare and Medicaid Services National Institute of Standards and Technology Donald Rucker Office of the National Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Avinash Shanbhag Office of the National Coordinator for Health Information Technology Acting Executive Director, Office Coordinator for Health Information Technology Acting Executive Director, Office Coordinator for Health Information Technology Acting Executive Director, Office Coordinator for Health Information Technology Acting Executive Director, Office Office of the National Coordinator for Health Information Technology Acting Executive Director, Office of Technology Lauren Richie Office of the National Coordinator for Health Information Technology Designated Federal Officer		Department of Defense	
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Jonathan Nebeker Affairs Federal Representative	Adi V. Gundlapalli	Prevention	
Michelle Schreiber Centers for Medicare and Medicaid Services National Institute of Standards and Technology Donald Rucker Office of the National Coordinator Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator Office of the National Coordinator Coordinator for Health Information Technology Elise Anthony Office of the National Coordinator Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Andrew Gettinger Office of the National Coordinator for Health Information Technology Seth Pazinski Office of the National Coordinator for Health Information Technology Avinash Shanbhag Office of the National Coordinator for Health Information Technology Lauren Richie Office of the National Coordinator for Health Information Technology Designated Federal Officer		Department of Veterans Health	
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Coordinator for Health		-	
	Lauren Richie		Designated Federal Officer
Information Technology			
Laura A. Conn Public Health Informatics Office, Presenter	Laura A. Conn		Presenter
CSELS, CDC			
Krystal Collier Arizona Department of Health Presenter	Krystal Collier	•	Presenter
Services			
Debbie Condrey The Sequoia Project Presenter	•	-	Presenter
Janet Hamilton The Council of State and Presenter	Janet Hamilton		Presenter
Territorial Epidemiologists			
Liz Thomas American Clinical Laboratory Presenter	Liz Thomas	1	Presenter
Association		Association	
Thomas Walsh Quest Diagnostics Presenter	Thomas Walsh	Quest Diagnostics	Presenter
Tom Wagner Quest Diagnostics Presenter	Tom Wagner	Quest Diagnostics	Presenter









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

Operator

Thank you. All lines are now bridged.

Lauren Richie

Thank you, and good morning, everyone. Welcome, again, to another HITAC meeting. Again, this is a special hearing on the COVID-19 pandemic response. I want to thank the members, again, for taking time away from your busy day jobs. I especially want to thank our guest speakers for joining us today and for also taking time away from other very important work. I do have just two quick housekeeping reminders. First of all, please mute all lines. We will have, obviously, everyone is virtual today, so we want to minimize the background noise as much as we can. And then, secondly, please remember to state your name before any question or comment. We have a number of guest speakers who don't quite know our voices yet. This will also help with the transcription services with so many people on the call today. With that, I'll do a quick roll call and we'll get started. Carolyn Petersen.

Carolyn Petersen

Good morning.

Lauren Richie

Robert Wah.

Robert Wah

Good morning, everyone. Present.

Lauren Richie

Michael Adcock. Christina Caraballo. Tina Esposito.

Tina Esposito

I'm here.

Lauren Richie

Cynthia Fisher.

Cynthia Fisher

Yes, good morning.

Lauren Richie

Valerie Grey. Anil Jain. Jim Jirjis. John Kansky.

John Kansky

I'm here.

Lauren Richie

Ken Kawamoto.





Ken Kawamoto

Good morning.

Lauren Richie

Steven Lane.

Steven Lane

Good morning.

Lauren Richie

Les Lenert. Arien Malec. Clem McDonald. Aaron Miri.

Aaron Miri

Good morning.

Lauren Richie

Brett Oliver. Terry O'Malley.

Terrence O'Malley

Good morning.

Lauren Richie

James Pantelas. Raj Ratwani.

Raj Ratwani

Good morning.

Lauren Richie

Steve Ready.

Steve Ready

Present.

Lauren Richie

Abby Sears. Alexis Snyder.

Alexis Snyder

Good morning.

Lauren Richie

Sasha TerMaat.

Sasha TerMaat





Good morning.

Lauren Richie

Andy Truscott.

Andrew Truscott

Present.

Lauren Richie

Sheryl Turney.

Sheryl Turney

Good morning.

Lauren Richie

Denise Webb.

Denise Webb

Good morning.

Lauren Richie

Okay. From our federal representatives, do we have either Michelle Schreiber or Alex Mugge from CMS? Okay. James Ellzy?

James Ellzy

Present.

Lauren Richie

Ram Sriram.

Ram Sriram

Present. Lots of people are having problems getting in the telecon. I see the chat messages.

Lauren Richie

Okay, thank you. We'll keep an eye on that and get folks bridged in. Adi Gundlapalli.

Ram Sriram

He's on, but I saw the message.

Laura Conn

He's on here. He's trying, yeah.

Lauren Richie

Okay. Laura Conn.





Present.

Lauren Richie

Okay. Jonathan Nebeker. And either Amy Abernethy or Nina Hunter from FDA? Okay. Again, we'll work on getting those other members who are in the queue on the phone. On the ONC leadership side, we have our National Coordinator, Dr. Don Rucker; Deputy National Coordinator, Steve Posnack; Elise Sweeney Anthony, Director of Policy; Avinash Shanbhag, Director of Technology; Andy Gettinger, our Chief Clinical Officer; and Seth Pazinski, our Director of Strategic Planning and Coordination. And with that, I will turn it over to our National Coordinator, Dr. Rucker, for remarks.

Welcome Remarks (00:04:11)

Donald Rucker

Thanks, Lauren. Welcome, everybody. Thank you very much for participating in what we certainly hope is going to be a unique event in our lives with this massive viral infection. I did want to, for folks in the public listening, I do want to acknowledge our agenda today is our effort to get some of the key folks that we work with, but obviously, there are many, many others that we are not able to get on the agenda today. And there are many other segments, frankly, in Health IT that are involved in responding to the pandemic. The interest and willingness to contribute has been really amazing. I think many of us from the federal government have gotten an absolute sea of suggestions about things. To sort of help collate that, we've taken our interoperability proving ground and opened it up for COVID-related activities. We have received 80 submissions so far, and this is an open community platform where folks can take a look, learn, be inspired by things.

We are also monitoring that to see if there are specific things that we can move forward. Literally for many of the projects we're getting five or ten similar suggestions on projects, and this is, I think, really throughout the federal government, the agencies. So, there's a lot of things to wade through, and, ultimately, obviously, choices are being made so that we can move things along as quickly as possible. I think you've obviously, seen that in the news on a relatively constant basis. You know, it's interesting to think about all of this, that if this were to have happened three or four years in the future when we have interoperability I think in a much better place, we would be in a much better spot here. But unfortunately, that's not quite the case, but we're still keeping our work going.

In particular, the TEFCA-recognized coordinating entity that's putting the work together on the Trusted Exchange Framework Common Agreement has a monthly public information call to just alert people to, if you're interested in that. I think you should have received a link to register, but if not, let Lauren know. And I'll ask Steve, if Steve wants to make any comments as well, since I know he's been absolutely working with all kinds of components here. Thanks.

Steve Posnack

Thanks, Don. Just to say good morning to everybody. I appreciate your effort. It's going to be a long day, but I think we're going to learn a lot and ask a lot of good questions, so I will save my energy for that time.





Carolyn Petersen

Thanks, Steve. Good morning, everyone, and thank you for coming to our meeting in the midst of a lot of work going on and a lot of unknown, unexpected challenges popping up. I know it's quite a chunk of time, but Robert and I have worked with our colleagues at ONC to try to line up what we hope will be a very useful and interesting day for us in terms of getting more information out so we can better provide guidance about what the Health IT community can do to address the situation with COVID.

I will start by reviewing our agenda. We have first today a presentation from our colleagues at the Centers for Disease Control and Prevention – that would be Laura Conn and Adi Gundlapalli. We'll have some discussion about that. And then, we will transition into three panels through the rest of the day. First, a group of Public Health perspectives, followed by discussion. A group of perspectives from the health information exchange view, with discussion. We'll have a public comment period, followed by a short break, and then a third panel on Health IT provider executive perspectives, with discussion. We'll have another public comment period, and then we will wrap up and discuss next steps.

Just to give you a little sense of how the meeting will run, we've asked all of our guest presenters to limit their comments to just five minutes and only a very few slides. And I'll be up front that Robert and I are going to be pretty tight about keeping things on track today, pretty direct when we start to get past the five-minute line. We're going to use a counter to help us keep on track, and also so our speakers can see where they are at. After all the speakers in each panel have presented, we will open up the discussion among the committee. We have a break about 1:20 Eastern; that would be 10:20 Pacific time, and we ask that you return promptly, so we can continue to stay on schedule. Finally, there will be the two public comment periods. Again, as I mentioned, with the second one being a little longer than our usual 15 minutes to ensure that the public has ample time to provide comment.

And with that, I'd like to take a vote on approving the minutes from our previous two meetings. The March regular meeting of the HITAC, and our initial discussion of activity related to COVID. Would all those who would like to support those minutes, approve those minutes, please signify by saying aye?

All Speakers

Aye.

Carolyn Petersen

Okay. So, all those who do not vote to approve them please signify by saying no. And are there any abstentions? All right. We have approved the minutes from the two March HITAC meetings. And with that, I will thank you again for your engagement today and pass the mic to Robert.

Robert Wah

Thank you, Carolyn, and thank you Don, Steve, and Lauren for getting us started this morning. Welcome, everyone. And as you've heard, we're all very busy dealing with the COVID-19 pandemic. We thought we would also review a little bit about where we are in terms of this process. At our last meeting, we tried to summarize your written and verbal suggestions on how Health IT in general, but specifically the HITAC and the ONC, can address the COVID-19 pandemic. And we felt that your feedback really fell into four



main areas: privacy, data standards, and data interoperability, along with infrastructure. As Don already talked about, data interoperability is still a goal and not a complete reality. To that end, we planned out this hearing today to dive a little deeper into these specific areas and wanted to understand what are the current efforts that are happening, where we are experiencing challenges, and where the HITAC and ONC can help.

And so, based on that, we've asked our presenters to really focus their presentations on describing what the current efforts and progress are in their organization, describe the challenges that they see at their organization, and then also describe how ONC and HITAC can help either bring relevant parties together, or other things that we can do to address the challenges that they are facing. In this, we've always tried to keep in mind, I think I mentioned it in the last one, that there's a lot of things that can be done to help the COVID-19 pandemic, but we need to be thinking about what are the things that are really in the realm of what ONC and the HITAC can do. I use the term who is the natural owner of the process or program or area that we're talking about, because some things, there are different natural owners for that are not necessarily the HITAC and/or the ONC. So, I would remind you to think about that as we discuss options today.

Also, I want to make note that we really appreciate the time given by the presenters. They are all very busy people in important areas in the economy and our healthcare process, and some of them will not be able to stay on for the full call. They will most likely be available during the discussion period following their presentation, but they may not be on for the entire call.

We also thought it was important to recognize that this meeting today we decided to use our normally scheduled April in-person meeting. As you know, that had to be moved to a virtual meeting, but we wanted to use this time period for this follow-up from our last call on COVID-19, and we recognize that our schedule has become a little bit reoriented based on the COVID priorities here, but when we had our meeting discussing the ONC final rule, there were a lot of questions that we were not able to fully discuss during that meeting, and the plan at that time was to revisit those issues at our April meeting, this meeting. So, we know that there will still be those questions that we have not been able to address, and we appreciate the fact that your flexibility is allowing us to have this hearing take precedent today.

There will be another round of public webinars on the ONC final rule that are going to take deep dives into specific areas of the rule. We encourage you to attend those if you are able. The ONC is still taking comments from the public on that, as well. So, we've already heard from Carolyn about the meeting format, and we, again, appreciate the speakers adhering to the time limits. We tried to pack as much as we could into here, but it means that everybody's got to stay on track with the timing we tried to lay out. We will use the five-minute timer pretty aggressively and make sure we're allowing time for everybody to present.

And so, before I turn it over to the first presentation from the CDC, I'll just switch gears here. Several have asked about COVIDcheck that I mentioned last time from the Commons project, where I am a board member and leader of the COVIDcheck project. COVIDcheck.org is now live. It's a risk assessment tool that we created with WHO and CDC guidelines. It also establishes a two-way communication link between people and Public Health organizations and was built on the CommonHealth platform. As a reminder, CommonHealth is going to be initially the Android app that does the same function as Apple

Health. We have a number of academic medical centers that are lining up to start the piloting of that, with one in California starting already. We are also adding a data store and a mapping engine that will display, initially, COVID information. The East African Congress has asked us to stand it up first, so that will be our first iteration of the mapping engine there.

And just a reminder, the Commons Project is a nonprofit that sits between the public and private sectors, doing things that neither sector can do alone, and our first tenet is putting people and privacy first. And so, in this era when we're talking about a lot of technology that may be viewed as intrusive in privacy, like contact tracing and identity management, we think that there's a place for this neutral, Switzerland-like nonprofit that sits between the private sector and public sector. But I appreciate the questions that I've had about COVIDcheck.org, and I just thought I'd give you that as a follow-up. And so, with that introduction, let's go ahead and get this started. We'll start with our first presentation from the CDC. Laura and Adi, I think the floor is now yours.

Centers for Disease Control and Prevention Presentation (00:17:34)

Adi Gundlapalli

Thank you, Robert. And this is Adi Gundlapalli from CDC. We really appreciate the opportunity to participate and present at HITAC today. We are seeing and hearing of numerous efforts to support the response for COVID-19 at the local, state, regional, national levels, and we wanted to add our gratitude for all of you working hard to support the response. I'll now hand it over to Laura to present on one important aspect of the response from CDC. Thank you.

Laura Conn

Thank you, Adi, good morning. I'll echo Adi's thanks to the chairs, ONC and the committee, for your time and interest to hear about this key Public Health activity that really does require the engagement from healthcare, Health IT industry partners, and Public Health to succeed. Next slide. So, I'll take a few minutes to go over the background to set in context, talk about what the activity is about, some key efforts to accelerate, and then needs and next steps. Next slide.

So, COVID-19 is reportable. What does that mean? So, in this country, healthcare providers are mandated by state laws to submit reports to Public Health for conditions deemed reportable by that Public Health agency. So, that makes sense, but on average, each state has over 100 conditions reportable, and the criteria around those varies by the condition, and at times by state. For example, pertussis is reportable, but in one state it might be reportable in patients under the age of 10 and another under the age of 15, or in another for all age groups. Sometimes the conditions are reportable immediately, sometimes within 24 hours, three days, seven days. You get the picture. With this variation, Public Health knows that cases of conditions are significantly underreported. And the CDC estimates, for example, 1 in 10 Lyme disease cases ever get reported to Public Health.

So, the details of cases are front and center with COVID these days, and Public Health needs to get this individual-level data to support case management investigation, but we also recognize that we can't burden the healthcare system to manually complete forms and fax them to Public Health, especially during this crisis. So, next slide. We have an answer. Maybe it's the obvious one, but we need to make it electronic. So, we automate the generation and transmission of these case reports using data that's put in the health record as part of normal care and deliver them to Public Health for action. This can occur

without disruption in the workflow in the healthcare setting and completely behind the scenes. Next slide.

So, the value of making case reporting electronic has benefit to both healthcare and Public Health. For Public Health, we received these automatic, complete, and accurate data in real time to support the reporting needs, situational awareness to have a better sense of what's going on in the community, to do case management, support contact tracing, connect that information with lab results, and coordinate other response efforts. For healthcare, we diminish the burden on the healthcare providers to meet these required reporting needs, and we also have the ability to provide information back from Public Health to healthcare providers in this context. We've heard often, over time, that Public Health is sometimes a black box to healthcare and that they feel like they do a lot of reporting and they don't see what gets done with that data. This gives an opportunity to give information back from Public Health in the context of the condition and the patient through a return document of information from that case report. Next slide.

Electronic case reporting is happening in these current implementers. You can see these four clinical organizations. They range in size from large healthcare systems like Intermountain and Houston Methodist to smaller clinics and hospitals. Next slide. In early January, we decided to extend electronic case reporting to include COVID. We have defined the codes of interest, we call those codes "trigger codes," and our implementers rapidly use these new codes to start identifying cases of potential COVID for Public Health. These case reports started flowing, initially triggered on diagnosis and later on lab orders and results as those became available, and to date, now we have over 62,000 reports from these four organizations that have been identified for 16 Public Health jurisdictions. This represents residents of one jurisdiction seeking care in another jurisdiction. These reports can be delivered both to the jurisdiction of care and to the jurisdiction of residence.

Maybe it's obvious to say that it's faster, that these jurisdictions have confirmed cases from the electronic report before they've received the facts report. They've also been able to pair the case reports with electronic lab results reports and been able to use the information in those case reports to more fully complete and use contact and demographic information from those. You'll hear a little bit more about that later. Next slide. So, we kept hearing and saying to ourselves, "What can we do now? We have to do something now." And this turned into eCR Now. I've been involved in many response efforts over the years, and more than anything, in every after-action report that comes out, don't do something during a response that isn't relevant and can't be used during routine times. So, eCR is taking what's being done for routine reporting and accelerating the implementation of it.

There are three components or elements of what we're calling eCR Now. The first is to accelerate what already exists, take a cohort-based approach to accelerate the implementation of case reporting in provider organizations that have an EHR that have capabilities to do eCR currently. The second is to put something in place that is minimally invasive for those that don't have the capability now. And where – we'll talk a little bit more about that – there's a FHIR app that can be implemented quickly to automate COVID electronic case reporting. And the third is extending beyond a relationship that we have with eHealth Exchange but to include Carequality electronic case reporting implementation guide to support the trust network and legal requirements for agreements to share this data. Next slide.

So, just expanding a little bit on element one. We are moving forward with cohort-based onboarding for facilities that are rapidly implementing. Epic has streamlined their implementation to just three days. We



have an initial California cohort in process now that includes Sutter Health, Contra Costa Health Services and OCHIN, and we are signing up folks for the second cohort now. We are using an existing delivery method for triggers. As you can imagine, the codes for COVID are evolving as new lab tests and procedures are identified and start being used in healthcare systems, so we're using that existing mechanism to get those new codes out. And this allows for these confirmed cases to be delivered to Public Health without manual entry on the manual case report forms on the healthcare side and reducing that burden, both for Public Health and for healthcare providers to receive that information. Again, behind the scenes with what's going on in the healthcare sector.

The next slide, we are building a FHIR app to existing implemented specifications related to FHIR in healthcare now that can be used by EHRs that don't have the capability. We are making sure that can be easily used without requiring a software release by the vendors. And then from that point on, using the rest of the existing infrastructure, and I'll show you that in just a second, to make the case report to use the infrastructure to have the case reports flow into Public Health. This will be available soon in one of our apps, as we want to connect with partners to help us test this. So, next slide.

Maybe a little bit of an eye chart. Hopefully, you're close enough, but you have the slides. The point here, the green is the providers and electronic health records, and the blue is what exists already for electronic case reporting. So, we really are working to implement rapidly solutions in the provider EHR side but taking advantage of the things that exist to already process and deliver these case reports to Public Health. Also, just to point out, we are using the standards that we had put in place for electronic case reporting before that are HL7 balloted and published. Next slide.

So, what are needs and next steps? We need to get the word out there. We thank you for this time. We are looking for opportunities both within healthcare and with vendors to encourage their implementation. We invite you all to participate with us in the upcoming May FHIR Connectathon. We have seen lots of interest to help, and really what has worked, and evidence had worked during other responses is to focus on supporting activities that work during routine times and extend them for these response efforts. And so, that's the primary goal of this effort. Next slide.

As I said, we are organizing these cohort for those that work in an organization that this would apply to. I encourage you to join us, and you can see their information and how to provide that in order to join a cohort implementation. And next slide is our contact information, but I also want to say eCR works because of so many critical partners and send a huge thank you out there to everyone who's involved.

Discussion (00:29:41)

Robert Wah

Great. Super. Thank you, Laura and Adi, this is great. And we really appreciate you sharing that with us. Couple of housekeeping notes. I know you all got a lot of batches, files this time. There were just two batches, but a lot in each batch. We tried to send out the bios on all the speakers and their slides for you to take a look at before this meeting, because we knew it was so packed with so many things. So, we won't spend a lot of time on introductions or backgrounds. Hopefully, you can see that in the slides and the bios that we've distributed.



Also, a note that we will continue to use our raise-the-hand function that we've used in the past, and as we said, we will be using the timer. But we also recognize that a number of people were dialing in at the opening of the meeting. I saw all the typing into the public chat area, and we will, obviously, record your presence based on that. If anyone else has signed in but not been recognized, you can either do it on the public chat, or just send us an e-mail. But we appreciate everyone's patience. We got a lot of people coming into this call all at the same time at the beginning. So, with that, I'd like to open the discussion of the CDC presentation. And start with Arien.

Arien Malec

Thank you and good morning and thank you for your fantastic presentation. So, maybe two questions. Number one is that I understand that eCR typically has a four-month time delay in between new trigger conditions and being available and rolling them out, and it sounds like you've been able to expedite the rollout of additional trigger conditions. So, I wonder if you could comment on how much of the population of EHRs is in place to do full eCR and what the process is for updating those triggers in the sense of using the infrastructure you have now. And then, with regard to the FHIR-based app, maybe just a few questions – are you using CDS Hooks for the same approach of driving additional trigger conditions – and maybe extend an offer.

There's a good implementation community that I know really wants to help, that is eager to help. Folks like Josh Mandell, folks like the Argonaut Project, implementation community. And I'm more than happy – I'm sure Steve Posnack is more than happy – to provide matchmaker to really, really strong folks in the FHIR community who can help accelerate this important effort.

So, anything that the community can do to accelerate the development of the eCR Now app to accelerate better information on case reporting, I think that would be really appreciated. And maybe just as a comment, the last MMWR that I saw from CDC had no data on smoking status, or almost no data on smoking status, indicating people hadn't been filling out that section on the form, because we have a 17%, more or less, prevalence of smoking. And that data would be incredibly important for looking at smoking status as a predictor of risk in mortality. And that's an obvious data element that can be captured better through EHRs and electronic case reporting than we've been able to capture via paper-based reporting. I'm sure there are any number of additional fields that would be useful for both case identification, contact tracing, and risk identification.

So, again, what's the prevalence, what's the network of eCR-ready EHRs that you could roll this out to, number one. And, number two, is there any additional work in the community for the eCR Now FHIR-based app that you might get some help from, and is that FHIR app a CDS Hooks app, so does it have the same trigger-based conditions that eCR itself has? Thank you so much.

Laura Conn

Thanks, Arien. First, your question about distribution of triggers. We have a process for distributing routine triggers and emergent triggers. So, for routine triggers, yes, we put them out there and we give a period of time in which we anticipate vendors should update and start using new triggers. For the emergent triggers, we were able to put them out there and see within a number of days that those triggers can be pushed into the existing implementations. So, that is a very quick process. As I said, we're using the distribution process as we do the same for routine triggers or urgent triggers, and we've obviously

seen this exercised very well in the COVID response. We've done four updates to trigger codes from the first release. So, it's been sort of weekly, depending when new lab temporary codes are coming out or when new lab tests are available. We've simply exercised that urgent distribution and seen that work well for implementation.

Related to the FHIR app, we are looking at – and I may get out of my depth here quickly – but it's looking at approaches and talking with vendors of how to initiate the look for the trigger codes. Some have mentioned CDS Hooks, some have mentioned other approaches, query, FHIR query behind the scenes. So, I'd be happy to connect up and have a more technical group of folks help support the discussion of what that looks like. I'd also be delighted to have you connect us to the implementation community for discussion and just engage those folks for the testing procedures and other things.

Arien Malec

Thank you. I'll send you my contact information, and we'll connect in that community. Thank you.

Robert Wah

Great. Thanks. Steven?

Steven Lane

Thank you. I also wanted to add my tremendous thanks to Laura and Adi and their entire team for the work that they've done on this. This is really a tremendous opportunity that we have insofar as the work has been done through various groups over a number of years to get this functionality ready to go into a pilot mode with multiple EHR vendors, and it just so happens that it was just ready as COVID hit. I've had an opportunity to work with their team in California in trying to accelerate the implementation of this. We in our organization at Sutter Health are going to probably turn this on today. That's our plan, and we have a number of other organizations that are going to go live with us this week and next.

There's really a tremendous opportunity with the EHR vendors who have this capability. Literally, hundreds of provider organizations around the country that can turn this on over the course of just a couple of days, and then any EHR user that has the technical capability can do this either through the trust framework provided by eHealth Exchange, soon by the trust framework of Carequality, and also for those who can't use those trust frameworks, there's a direct agreement that can be signed with the organizations to get this done. This case reporting really supplements tremendously the flow of information from providers and clinical organizations into Public Health. We all know that we have the electronic lab reporting, but this adds so much more with data on hospitalizations, race, ethnicity, pregnancy status, medication use, et cetera, and so really is something that in this time can have tremendous additional impact.

As was mentioned, this is using the eHealth Exchange trust framework now, but we're also looking to get this implemented as an implementation guide within Carequality, and we hope to be able to have that work done by the end of next week. So again, we're really doing everything we can to fast track this. So, I think the question that I have is really back to the ONC and to the HITAC generally, is what can we do at our level to encourage both vendors to help be able to implement these existing tools as quickly as possible and provider organizations to get on board and do this? It's a very light lift, and yet people are very busy doing all sorts of things at the same time, and I think anything that we can come up with that



will help to incentivize this implementation very quickly would be most helpful. Thank you.

Robert Wah

Thanks, Steven. Clem McDonald? Clem, I see your hand up, and I know you are on the chat. Not sure if you are on mute or having trouble getting through the audio. Leave your hand up, and I'll go to John Kansky for now. John?

John Kansky

Thanks. John Kansky, Indiana Health Information Exchange. Obviously, in favor of electronic case reporting and the value that it can have. I'm wondering about how HIE infrastructure should have a role, and if it can be helpful and complementary. In our state, and, ironically, in part because of Dr. Clem McDonald's work at the Regenstrief Institute more than a decade ago, we're doing electronic notification of notifiable conditions through the state Public Health authority. Are these things complementary? How can HIEs be supportive?

Laura Conn

Thanks, John, for that question. Yes, we are working with a number of HIEs already. They are definitely part of the flow, and I don't know if the slide person can go back to the diagram, but you can see there that HIEs are included in that. We have found that the triggering needs to occur in the electronic health record but having the functions and capabilities to route and share data through an HIE has certainly been helpful. We've been working on an implementation in Michigan with MIHAN, and we're certainly open to work with others.

John Kansky

Thank you.

Robert Wah

Clem, I'll see if maybe we can get you on here again. The team is saying you might be on mute. Okay, other comments or questions for the CDC team? All right. With this, I'll turn it over to Carolyn to lead the next panel.

Public Health Perspectives (00:42:05)

Carolyn Petersen

Great. Thanks, Robert. We will now head into the panel with Public Health perspectives. And we have six speakers with us today. I'll briefly introduce them and then we'll go into the presentations. First, we have Krystal Collier, who is the Syndromic Surveillance Program Coordinator with the Arizona Department of Health Services. We have Debbie Condrey, CIO of The Sequoia Project. We will then be followed by Janet Hamilton, Executive Director of Council of State and Territorial Epidemiologists. We have Liz Thomas, Director of Government Affairs at the American Clinical Laboratory Association. We have Thomas Walsh, the Vice President of HTAS Strategy and Digital Transformation and Tom Wagner, who is Vice President of HTAS Enterprise Architecture and Design with Quest Diagnostics. And Patina Zarcone, Director of Informatics Program at the Association of Public Health Laboratories. And with that, I'll hand the mic to Krystal.



Lauren Richie

Krystal, are you here?

Krystal Collier

Hi, can you hear me?

Lauren Richie

Now we can, yes.

Krystal Collier

Sorry about that, I was trying to get everything off of mute. Good morning, everyone. I just wanted to thank you all for this opportunity to speak to you today. If you want to go to the next slide, please. So, in – hello?

Clem McDonald

Am I connected now?

Robert Wah

Clem, if you can hold on, we have a presentation that's starting now.

Clem McDonald

Oh, okay. Thank you.

Krystal Collier

All right. In Arizona, we wanted to share some of our work around syndromic surveillance, and specifically some of the activities that we have been working on for the COVID-19 response. So, the Arizona Department of Health Services has been providing our state and local health departments syndromic surveillance email alerts in detection of COVID-19 visits of interest. These serve as an early alert for Public Health to determine what Public Health actions may be needed for prevention or control measures in this response. Some other things that our syndromic surveillance data has been able to assist with is situational awareness of COVID-19 visits to participating healthcare facilities.

So, in addition to these early alerts, the Arizona Department of Health Services has been providing training and education to our Arizona syndromic surveillance community on what syndromic surveillance practitioners across the country have developed for syndrome definitions being used in the BioSense platform, which is our National Syndromic Surveillance System, one type of ESSENCE Dashboard. ESSENCE is a visualization and analytical tool housed within the BioSense platform, and areas that are being focused on in the data for surveillance, such as specific age groups most affected by this disease, vulnerable populations, provider and healthcare outreach, are just a few of the examples that we've been able to work on.

A combination of participating in discussions with the National Syndromic Surveillance Program's community of practice, using the analytic and visualization data sharing tools within the BioSense platform and working with our Arizona syndromic surveillance community on our specific needs enables



the syndromic data to add to the larger Public Health surveillance picture, and it aids in making timely decisions in this pandemic.

I will say that what I'm sharing here, I hold many hats, but I'm not speaking on behalf of or representing the Centers for Disease Control and Prevention or Council of State and Territorial Epidemiologists. I just wanted to add a little disclaimer there. Another area that we've been able to support is supplementing other Public Health data sources with our syndromic surveillance data, which can in some instances provide information about possibly related COVID-19 visits before some of our other surveillance systems are able to do this. The syndromic surveillance data can also help fill in information gaps that may not be captured in traditional Public Health surveillance systems related to these visits. Can you move to the next slide, please?

Some of the challenges and needs that we have had really focus on timely automated and electronic syndromic surveillance data that can be used for Public Health decisions. Some others are more complete data from the visit for optional fields, such as procedure codes for the use of ventilators; identification of hospital units to identify some of the bed capacity for intensive care units; Standard and granular value sets used for travel history. Coordination for the future, something else we wanted to highlight, is continuing support for syndromic surveillance now and in the future so that data collected can be used to inform the Public Health surveillance picture and make decisions to protect the health and wellness of our communities.

Without the investment over the years in the incentive program for promoting interoperability, the Public Health measure for syndromic surveillance and the Health IT certification program, we would not have the data or capacity to support the Public Health surveillance need for this timely data source. We could not support the need to respond to COVID-19 if we had not taken the necessary steps working together over the past years. Continuing these efforts is critical to maintaining the Public Health infrastructure. Providing the forum is another opportunity for collaboration between Public Health, healthcare, and electronic health record vendor communities to address emergent conditions, such as COVID-19, but also the many use cases across the program that syndromic surveillance data can assist with.

ONC has been a contributor over several years, bringing these partners together, sharing their expertise, and leveraging opportunities to troubleshoot, as well as problem solve a variety of issues. We have also worked together to develop and implement standards that produce higher quality data that is received in near real-time support, situational awareness, and critical decisions Public Health makes for our communities. Connecting these communities to identify –

Carolyn Petersen

Krystal, thank you. I think we're going to move on to our next presentation now but thank you for sharing with us. We will now hear from Debbie Condrey, CIO from The Sequoia Project.

Debbie Condrey

Good morning, everyone, and thank you so much for having us today. I really appreciate that. I am the CIO for The Sequoia Project, but I have spent the last 12 years working in Public Health. Just a quick note about The Sequoia Project, the key mission there is to advance health information and technology



ONC

interoperability for the public good. During this presentation, I'm going to provide you some background and insights for potential recommendations to ONC.

In terms of current efforts and progress to date, some of you may be aware of the PULSE project, which is the Patient Unified Lookup System for Emergencies, which has been in progress for some time, a tool in response to the need for a tool for volunteer clinicians and others to have relevant and timely access to health information to support those displaced from their homes or seeking care in alternative sites during declared emergencies. PULSE COVID was created after identifying Public Health data needs during the pandemic. Patient demographics, admitting information, comorbidities, ventilator usage, and other key pieces of clinical information in order to facilitate patient monitoring, case management, care coordination, contact tracing, et cetera. PULSE AND PULSE COVID are currently connected to the eHealth Exchange as a national network and now more broadly to other health information networks via the Carequality Interoperability Framework. Next slide, please.

In terms of how Health IT is helping and how we can maximize the current infrastructure, we do suggest doing just that, maximizing and leveraging existing information technology infrastructure during emergencies. This enables Public Health access to information via these existing health information networks. Some of the needs and challenges that we've considered during this time and that has evolved over considerations with multiple states and state Public Health agencies, we have recognized that Public Health needs access to real-time, patient-level, clinical data from HIPAA-covered entities for treatment, care coordination, case management, and surveillance that Arizona was just speaking to in order to address the COVID-19 emergency. Public health should be able to leverage existing health information networks as mentioned, using existing standards adopted by the ONC, such as the C-CDA.

Provider organizations must abide by the HIPAA minimum necessary requirements for Public Health disclosures, and they need assurance that clinical data contained in C-CDAs and other electronic documents can be released for Public Health purposes. Healthcare providers need that assurance that sending a C-CDA or electronic equivalent document is consistent with minimum necessary requirements under HIPAA. This certainly facilitates timely sharing of information with Public Health, and it reduces the burden on healthcare organizations, allowing them to utilize existing infrastructure. Our recommendation: encourage the OCR to amend existing guidance regarding Public Health disclosures, and we have a consideration – could you go to the next slide, please? And we have a general consideration there. There's HIPAA language, and we're suggesting adding "during the duration of the COVID-19 Public Health emergency, the submission of a C-CDA equivalent electronic document or electronic data will meet the minimum necessary threshold for Public Health disclosure."

This allows Public Health to receive that critical data that I was mentioning earlier, such as the comorbidities, the admitting information, and things such as the patient on the ventilator or not. We are also suggesting to address the immediate and long-term needs to support the Public Health mission during the emergency immediately looking at deploying PULSE COVID to Public Health authorities. This requires little to no risk for Public Health.

We are working with Audacious Inquiry every day to deploy PULSE COVID to several states. It is being piloted in Washington state, and will soon be in Texas, Florida, some of the northeastern states, and others. Long term, ONC please convenes technology providers, health information networks, Public

Health, and related associations to focus efforts on evaluating Public Health systems and addressing gaps in infrastructure and systems. And we should continue to evaluate information sharing policy impediments. I'd like to end with the concept that a national emergency warrants a national response, and Sequoia stands ready to assist in any way we can. Thank you for your time.

Carolyn Petersen

Thank you, Debbie. We will now go to Janet Hamilton with Council of State and Territorial Epidemiologists. I will also note for the speakers that going forward, we will give you a one-minute warning verbally in case you're not able to see the screen as you make your comments to try to help us stay on track. Go ahead, Janet.

Janet Hamilton

Good morning, everyone. I'm Janet Hamilton, the Executive Director of the Council of State and Territorial Epidemiologists, and we represent Public Health epidemiologists at the state, local, tribal, and territorial level doing essentially the case investigations, contact tracing, and aggregating data across different data sets in order to make actionable, timely, policy-based decisions. Thank you so much for having this hearing today and for inviting CSTE. Our ultimate goal is that data moves seamlessly across these three main actors: patients, healthcare, and Public Health. I want to highlight the need for data to be sent to Public Health at the same timeliness that is available in the healthcare community. Unfortunately, some of the policies that we have had previously have implied that data to Public Health does not need to be as timely, and this response, with the speed and intensity with which the virus spreads, needs immediate timely, actionable data to arrive at the Public Health's door. Next slide, please.

Specifically, CSTE is interested in advancing these core areas to support and address all phases of the response: electronic case reporting; laboratory information management systems, specifically electronic laboratory reporting to Public Health or ELR; syndromic surveillance; and electronic vital records. I am going to be talking about the first two of those today, but I would like to be able to recognize and engage with the community on the last two topics. Next slide, please. For immediate needs, the biggest need that we have today is the data is not reported, or is reported with missing critical information, and those delays are leading to delays in contacting patients, identifying contacts, identifying those at high risk, and creating policies, as well as evaluating the control measures that we have in place. First, case reports, and we've heard some about case reporting, are either never made, or only able to be made by manual reporting methods, phone calls and faxes, leading to the need for Public Health to spend time digitizing the information rather than being able to immediately analyze and act upon it.

And the other piece is that laboratory reports, despite having an agreed-upon HL7 message standard with key components available in that standard are missing patient address, patient phone numbers, and demographic information like race and ethnicity. In talking with states, some states in some of those most highly impacted areas are reporting that the demographic information of race and ethnicity is missing 85% of the time. Patient address is missing as much as 50% of the time. Obviously, we can't locate or call someone if we don't have it. And then we're getting many requests for data at many levels and new requests that are uncoordinated. So, our immediate needs that we think ONC can help with are aligning requests for data and ensuring that there's support for data to go first to Public Health, where it's acted upon. We are concerned about the emergence of point-of-care tests, and we would like to engage and

ensure those point-of-care tests are able to be reported to Public Health immediately in automated fashion and with identifiers.

Laboratory orders need complete patient information, and that information needs to travel with the specimen, even if it's forwarded to other laboratories. And this is an issue not just for hospital labs, but we need this especially on the side of commercial labs. We would like to see ask on order entry questions be answered at the time of order. For example, if someone is employed in healthcare, symptomatic, hospitalized, ICU, pregnancy. Standard Public Health access to EHRs for individual and batch lookup after we have received notification of a case that needs to be followed up on to identify missing information. And finally, on the last slide, planning for the fall. We feel that electronic case reporting is the transformation we need. You have heard about this earlier, but it provides us the point-of-care tests, treatments, vaccination information, comorbidities, and the complete picture of information that we need to address this response. Thank you so much.

Carolyn Petersen

Thank you, Janet. Let's go to Liz Thomas with the American Clinical Laboratory Association.

Liz Thomas

Thank you for everyone's time today and hard work in responding to this global pandemic. My name is Liz Thomas and I'm the Director of Government Affairs for the American Clinical Laboratory Association. ACLA is the trade association for clinical laboratories that are on the front lines of the COVID-19 response. Our members include labs such as ARUP, BioReference, LabCorp, Mayo Clinic, Quest Diagnostics, Sonic Healthcare, and Exact Sciences, that are all currently conducting COVID-19 testing. Since FDA issued guidance on February 29th that removed barriers to commercial lab testing for COVID-19, ACLA's members have now conducted over 2 million COVID-19 tests. Commercial labs are working around the clock to test patients, but unfortunately, there are some burdensome and duplicative reporting mandates from all levels of government that have created challenges for labs. So, I'll now outline three Health IT barriers for COVID-19 testing, and you can move to the next slide, please.

First, commercial labs are facing multiple overlapping mandates for COVID-19 results reporting. Since the beginning of the Public Health emergency, ACLA members have been reporting results to state and local health departments to ensure proper case investigation. Additionally, CDC has requested that six ACLA member labs report results to CDC directly in accordance with the recently passed CARES Act. In addition to complying with these state and federal reporting laws, commercial labs have recently received duplicative reporting mandates from various entities, including state health information exchanges, governors' offices, Medicaid plans, and government contractors. We have concerns that each additional data request takes away critical resources from laboratory response and can lead to overlapping and duplicative data on the federal and state levels.

A second challenge, labs often receive incomplete patient demographic information collected by ordering providers. Labs do not typically interface with patients and can only report patient information transmitted by ordering providers when specimens are collected. As you know, missing or incomplete demographic information can hinder Public Health response. Labs are responding to this pandemic and do not always have time and resources to track down missing patient information from ordering providers, particularly when specimens are collected at drive-thru testing sites. And, finally, labs are facing barriers due to lack



of funding and support for multiple reporting mandates. Data reporting comes at a cost both to labs and patients by taking away resources from expanding test capacity and turnaround time. Administrative and congressional action to date have included no designated funding for commercial labs to support COVID-19 testing or the growing administrative burdens on labs' data reporting. Next slide, please.

So, ONC and HHS as a whole can take critical steps to address Health IT challenges in three ways. First, HHS should streamline laboratory reporting requirements on the local, state, and federal levels so that commercial labs can report COVID-19 test results in one standardized format. Second, HHS should work to educate ordering providers on the importance of collecting accurate and complete patient information, including demographics, when a test is ordered. And, finally, ONC, states and the federal government as a whole should invest resources in modernization of Health IT systems to promote interoperability without placing an additional burden on labs that are already stretched for resources. So, thank you again for your time and attention to these critical issues. ACLA looks forward to continuing to work with you in the COVID-19 response.

Carolyn Petersen

Thank you, Liz. We'll now go to Thomas Walsh and Tom Wagner with Quest Diagnostics.

Thomas Walsh

Good morning, everyone. This is Tom Walsh. Thank you for your time and this opportunity to present our viewpoint with you. At Quest Diagnostics, we believe in empowering better health through diagnostic insights, and this principle has guided our response today and points to some opportunities on the other side of this pandemic to improve U.S. healthcare. Quest mobilized quickly. We designed new laboratory tests and the data standards that go with it, allowing almost 15,000 employees to work from home. The test launched on March 9th and we have performed the results for more than 820,000 tests since that time. Tests are performed in 12 labs nationwide, which helps us balance capacity and it keeps tests close to customers, but we are challenged to accommodate hundreds of EMR connections which, lacking a standard, often require manual code build and validation. There's no question that when it takes one day to build a test and validate that code with us, we've lost about 40,000 opportunities at the rate that we can produce these tests. I'll return to this topic of interchange shortly.

To make testing widely available, we've created a new service that's to support county, state, federal drive thru centers, the schematic of which you see on the screen. The first iteration of these centers had no connectivity, used paper write orders and handwritten patient information. This led to confusion, errors, and local health agencies unable to ensure that every patient that was seen was a patient that was also cared for. For the next phase, we've adapted our electronic check-in process to work in the field, we secured mobile network stations to bring WiFi stations to the parking lot, we've successfully tested an OCR capture of identification cards through a car's window, and all this technology is just to know who our patient is without putting our team at risk. One lesson learned is the impact on technology on eliminating errors. While people do their best to record data, simple technology really reduces errors upfront and eases downstream operations.

So, as far as challenges, our ability to bring awareness to the individual. In this crisis, patients are asked to stay away from healthcare settings, get collected at a parking lot, and then go home. Telemedicine, personal health records and employee health connections need to be strengthened. So, the clinical lab



has been mentioned already. We are dependent on order quality to ensure proper delivery of each result. Although we champion providing test results directly and immediately to patients, we only see about 40% of our patients directly. And so, knowing who our patient is, is based on the data given by the order provider about 60% of the time. And in this pandemic, knowing is critical.

I'll begin to wrap on the next slide. I mentioned the need for interoperability. Complicated flow of reliable data is to many EMR and state exchange standards, and today I do know that Public Health officers are struggling to knit the disparate data streams to understand this quickly changing situation. We've responded to multiple requests from different states for different cuts of data output. The leaders are at their best when they connect on a complete picture, and providing that picture should be much, much simpler.

So, as Quest and other labs deploy new serology testing, ONC should consider ways for employers, individuals, and communities to return known safe individuals to the workforce. Real-time data collection is not yet achievable but ways to validate patients and close the loop to help agencies does exist. We recently built a process for patients to self-identify themselves as healthcare workers, provide symptom history, and that includes hooks to employer records if we need to do that. Since patients register electronically, errors are reduced, and patients can get test results directly. Every hour not waiting for a follow-up phone call is an hour sooner that a patient self-isolates or returns to work. With registration also comes some operational control. Supply chain reagents and swabs give visibility to actual demand. The benefits of end-to-end digital care is significant and should be a focus of ONC's agenda. Quest Diagnostics is proud to be on the forefront of diagnostic testing, and I'm grateful for this chance to share what we have experienced. Thank you again for your attention, everyone.

Carolyn Petersen

Thank you. We'll now move to Patina Zarcone with the Association of Public Health Laboratories.

Patina Zarcone

Yes, thank you. Can everybody hear me?

Carolyn Petersen

Yes.

Patina Zarcone

Thank you very much for the opportunity to speak with you all today. As you all know, laboratories across the country needed to mobilize quickly once COVID entered the U.S. In late January, APHL stood up its incident command system and activated its emergency operations center to allow APHL to coordinate with CDC and its partners. APHL's priorities during the response have been to ensure Public Health laboratories have timely diagnostics to perform timely testing in their jurisdictions, to support Public Health laboratories with reporting test results to sample submitters in CDC, and to provide technical assistance and credible communications to Public Health laboratories, partners, and the public. It was immediately apparent that the best path forward was to utilize existing informatics tools and infrastructure so that results could begin flowing.



Laboratories that reported their influenza testing results to CDC were able to integrate their COVID-19 result reporting into the Public Health Laboratory Interoperability Project feed, which is the influenza test results from all Public Health laboratories being sent to the CDC in a standardized fashion. To date, there are 58 Public Health laboratories sending data through the PHLIP feed to CDC; 180,000 messages were sent in March alone. As you can see in the graphic above, APHL's technical assistance team has been working across its partners to make sure laboratory and informatics infrastructure is in place, and to gather all blank information from new assays. APHL has provided updated encoding guidance, as well as specific guidance for ensuring messages continue to flow through the PHLIP feed. As of early April, APHL has updated coding for all commercially available tests within the U.S. APHL will continue to monitor the testing landscape and update its partners as quickly as possible to ensure that standards match.

It's particularly important that CDC, HHS, and APHL be made aware of new assays so labs can receive the proper informatic support to validate messages and make sure data is parsed correctly to CDC. Our ability to onboard 58 Public Health laboratories in a little over one month's time was enabled by having an existing implementation guide, resources and architecture that just needed some vocabulary extension. This is how interoperability Health IT makes a big difference. Next slide, please.

So, laboratories' ability to report COVID-19 results is only as good as their infrastructure. Making sure laboratories have the appropriate technology in place to respond to growing demands in data can be encumbered by outdated systems, staffing shortages, and funding limitations. A consistent approach to funding Public Health laboratories to keep their IT infrastructure current is a necessity. Many times our Public Health labs only have the opportunity to update their systems when they receive grant funding or there is a national or international infectious disease threat. Public health laboratories must receive a consistent stream of funding to keep these systems current. As we've seen in recent events, building the foundation for solid HIT infrastructure across the country matters now more than ever.

Flexibility, creativity, and expertise has allowed APHL to stay on top of the response effort. Using its technical assistance model for implementation assistance, the team has provided solutions in HL7 2.3.1 and 2.5.1, and alternate approaches for laboratories undergoing LIMS changes. Communication through FAQs, other channels like lab alerts, have helped to share important updates on the ever-evolving COVID landscape. The APHL informatics program continues to work with the CDC and partners on technical assistance projects and is pursuing opportunities to expand laboratory capacity to respond to COVID-19.

Recently, APHL, in partnership with the CDC and iConnect Consulting conducted outreach to gauge laboratories' interest in the use of lab web portal for SARS-CoV-2 during the COVID-19 response at no cost to Public Health laboratories. The lab web portal is a Public Health-focused electronic test order and results portal solution hosted on the AIMS platform. APHL Informatics Messaging Service is the acronym for AIMS. The lab web portal provides laboratories, epidemiologists, and providers critical information workflow support tools during the response effort, providing a secure, yet centralized solution to place test orders and share laboratory results. Other efforts to date that we've done include building a data repository on the AIMS platform for laboratory reporting other than Public Health labs, and the large six commercial labs for CDC's access.

Supporting and hosting an application for stay at home COVID-19 suspected patients – this is the Sara application co-developed with MITRE – creation of vocabulary files are limited, summarizing all FDA-



approved tests to date under collaboration with Regenstrief and FDA under the SHIELD project. Again, to the extent that APHL can take advantage of existing tools and resources, it is making a concerted effort to share its products. For example, APHL is collaboration with partners around the use of the AIMS platform to assist with convalescent therapies. Next slide, please.

While the number of both private and Public Health laboratories capable of testing is expanding, the country is still faced with testing challenges, including shortages of material required for testing. Given the sheer amount of data that has been requested of late, APHL must also be mindful of privacy, security, and other underlying legal considerations. Communications around who needs to report what and to whom seem disjointed, as we've heard previously. And this is one area ONC might be able to help coordinate in conjunction with CDC and other agencies.

There are a lot of data acquisition initiatives starting, which is good, with multiple places to get that information, which is not so good. Good coordination of all efforts around COVID-19 and a limited, centralized site to access all the information rather than distributed as it is now, would also be instrumental in keeping a national source of truth, avoiding the need for extensive data de-duplication and reconciliation efforts. As we have heard from our partners at CSTE, Public Health agencies are still receiving a lot of different file formats that have to be processed separately, which is a huge strain on them in the system.

Carolyn Petersen

Thank you, Patina. Thank you.

Patina Zarcone

Thank you.

Discussion (01:16:51)

Carolyn Petersen

So, we have now heard from our presenters. Let's head into the discussion. We'll start with Clem McDonald. Clem, are you on the line? Are you there, Clem? You may be on mute. Okay, it sounds like Clem is not on the line with us, so maybe we can circle back to catch him later. Let's go to Arien Malec.

Arien Malec

Thank you, yes. Two comments. And, actually, following some of the chat, that's really illuminating whether it might be an ONC role to look at information flows of demographics. Sasha's pointing out that in some cases information's flowing from the EHR to the lab, but not getting into the lab appropriately and looking at the ecosystem there might be a good way to collect more higher quality information from the electronic lab reporting initiatives. On the subject of additional guidance and flexibility from OCR, Carequality noted that declaring the consolidated-CDA or equivalent as minimum necessary would be helpful in opening access to data. Chicago recently did this. I don't know that it's even an OCR need. I think it's something that CDC could make a determination for, but that simple declaration would unlock and reduce the cycles of unlocking data in order to effectively fight this disease.

Secondly, a number of us are struggling with interpreting or putting into practice the existing guidance, because it notes, or it assumes that there's a direct connection between the business associate and the

covered entity. In some cases, there are many cases, business associates are business associates to other business associates who are themselves in conjunction with the covered entity. An additional administrative guidance that allows, for example, public notification or appropriate notification and best-effort notification of business associates who themselves would notify the end covered entities would be helpful in making sure that guidance has the maximal effect.

With regard to this lab infrastructure, I think there's a number of long-term things that ONC should take up. I'd note that the interoperability priorities task force extensively looked at the lab infrastructure, and one of our conclusions was that many of the standards are there, just not universally deployed, because we lack the policy levers in order to get better adoption. But that's not where we should be focusing right now. I suggest where we should be focusing right now is standardizing ask and order entry to make sure that it's collecting the information appropriately; making sure that there's good implementation guidance for how to implement COVID-related lab reporting; providing additional flexibility from CLIA and others in order to streamline the building of new interfaces; to the Quest point, making sure that there's a streamlined set of places for flowing information through; and then following up on some of Sasha's notes that let's make sure that we're tracing the full end-to-end cycle of demographics through electronic lab ordering, to resulting, to ELR reporting and make sure we don't have predictable failure modes.

Just want to, again, thank the lab community, for all their efforts. I understand that it's pretty chaotic setting up this infrastructure, but I do believe that there are some basic things, some block and tackle things, that we can be doing right now that would improve our response and improve data collection to provide better visibility and dashboarding and surveillance for addressing this crisis. Thank you.

Carolyn Petersen

Thanks, Arien. And let's go to Steven Lane.

Steven Lane

Thank you. I just want to follow up on something that Arien said about the need for guidance regarding the minimum necessary. I really want to highlight this, as a number of the panelists mentioned how important it is for Public Health to be able to gain standard access to clinical data that is contained within the continuity of care document, USCDI, whether that is in the form of FHIR resources, depending on the capability. Arien, you mentioned that you didn't think it was necessary to get the guidance from OCR, that it could come from states or municipalities like we've seen in the case of Washington or Chicago, but I think that that's a very inefficient approach.

And we've talked to CDC, I'd be interested to hear from Adi what he thinks, whether they'd be in position to provide such guidance. It seems that if OCR could provide that, it would be just a stroke of a pen and suddenly all providers across the country could be reassured that they could respond to these queries, whether they came via the Carequality Framework or any of those component networks. So, I hope that ONC will continue to do everything they can to support the HHS in developing some guidance in that area.

Carolyn Petersen

Thank you, Steven. I think Clem McDonald is on the line. Clem? Go ahead.



Clem McDonald

Yes, thank you. Sorry I had all these communication problems. But the process is really complicated, and it's somewhat of a mess. And as I understand it now, there's a private organization that's collecting better information about the infections from the test than CDC. And I don't think CDC is allowed to get identifying information, and I don't think they get the negatives. So, these things should be fixed tomorrow. And I think partly the fierce privacy things that have been put out has been making people afraid to send patient-identifying information on this so they can get to Public Health. So, I really think we should really go at it with an axe and try to fix these things tomorrow, because it takes just a few cases to keep the explosion going, and we've got to get the contact tracing working. Sorry, I'm a little emotional about it, but it's a big deal, as you all know.

Carolyn Petersen

Thanks, Clem. Let's go to John Kansky next.

John Kansky

Thank you. So, I think echoing some of the previous speakers regarding trying to focus on what the ONC could do to help; and listening intently to the presentation from the laboratory and the laboratory association, I'm certainly empathetic with the challenges that we have on all sides of trying to make the appropriate data move, but I would assert that ONC could probably work directly with some of the national laboratories to clarify policy positions that they seem to be making an interpretation of HIPAA that stands as an obstacle of sharing data with whether it be state health information exchanges or others. There are other problems, as acknowledged in their presentation, including being asked to send data in many directions at once. I certainly feel that one, but I think that ONC could work with the national labs to clarify that it's okay to share data with HIEs and others that can help and assist them or assist the situation. Thank you.

Carolyn Petersen

Thanks, John. Looking in the chat, I see that Laura Conn of CDC is making a response to Clem. I'm wondering if Laura or Adi want to take the mic and explain that further. Or bring that into the discussion.

Laura Conn

Carolyn, that was from a comment Clem made some time ago, I don't think it's relevant to the discussion immediately. I can follow-up with Clem. I don't have anything to add to this current discussion. I'm not sure if Adi is still on or not.

Carolyn Petersen

Okay. Thanks, Laura. Let's go to Les Lenert.

Leslie Lenert

Good morning. I want to really thank everyone for a brilliant discussion of the constraints and difficulties in this. I wanted to make a couple of points that I think are really critical. The first point is that collaboration with HIEs and clinical providers to fill in missing data on labs is very important, that if labs were forwarded through HIEs or other clearinghouse entities that have these names and addresses, a lot of this data could be filled in that's missing from the labs if the HIEs became the forwarding entity. Just something to think about with that.



The second point is that while electronic case reporting is going to be an extremely – it's going to be a huge win, keeping in mind that an electronic case report only sends information once, and that at the time of the test ordering or the time of the first result that comes back with electronic case reporting, much of this information will be incomplete, and that to understand the full case, that there's going to need to be an ongoing series of communications between Public Health and the healthcare provider. This is probably best handled by a pull mechanism, where the Public Health authorities have the ability to query electronic health records for the minimum necessary information for a patient as the case evolves, to be able to complete their access to data and understanding of the implications of a specific case.

There are a number of approaches for doing this. I've worked with Jon Duke, who is on the call, and may be speaking later on the use of FHIR technologies to query electronic health records using SQL and filtering for the minimum necessary data. This type of approach, I think, that combines the pushing of detailed data and with Public Health being able to pull additional information from records via standard-based approaches is going to be critical for investigation in a dynamic outbreak like this. So, I think, again, we have highlighted both aspects of this; 1.) more data coming to Public Health, potentially through HIEs to complete missing information; and 2.) allowing the data to be pulled from electronic health records through FHIR transactions or other means so that they can complete the records as they evolve in time, because a single push of information is likely to be inadequate. Thank you.

Carolyn Petersen

Thanks, Les. Let's go to Tina Esposito.

Tina Esposito

Good morning. I'm sorry if these comments perhaps are a little bit dated based on the conversation and how it's going, but a little bit of a view from the ground as it relates to some of the data requests that are hitting health systems amid the pandemic. I would strongly affirm that what we have seen are multiple, multiple requests, no less than 20 external asks or requests for information from external entities. Many of them duplicative, many of them slightly just different, that we certainly try to respond to, but often we find ourselves following up on to make sure that there's a need and an understanding that perhaps the data may sit a little bit differently in sort of a state database or a local database. And so, a good amount of effort and resources have been put forth by health systems amid this crisis to make sure that external entities have the information. To the extent in which we can automate that, I think that it should be a huge concern and/or a huge opportunity for ONC and for the group more broadly.

The other thing I was going to comment on that we have also seen, and I think this is due to privacy concerns, there is a role that both local and state agencies could play to better paint and highlight the situation that gives a bit of an insight to healthcare workers beyond just their healthcare system data. So we're very large, and we have quite a bit of data and take care of many patients, but our ability to understand more broadly what might be going on in different geographies and how we would then respond to that is limited, because we only see our own information. And so, what we've seen within this, and, again, I think this is due to privacy concerns, is there's an opportunity for a county, in particular a state, et cetera, to better highlight hotspots or areas where we might be anticipating a surge based on lab results, et cetera, so then we can as a healthcare system either better react within our own facilities, but also perhaps even in certain areas coordinate much better with other healthcare systems to ensure that





we're meeting the demand. Thank you.

Carolyn Petersen

Thanks, Tina. Let's go to Jim Jirjis.

Jim Jirjis

Yeah, I just wanted to support some of the comments she made. With our system having 185 hospitals in 30-some states, what's really come out through this is the cost of not having the kind of interoperability capability we're all envisioning. Right now, we have California, for example, with our hospitals there, almost down to a county level. There is not only different data being asked, but with the same data, the data definitions are different, and what we're seeing is an accelerated number of not just states, but municipalities, regions, and others that are asking for information through a variety of transport mechanisms, variety of data definitions, and it's just overwhelming our ability to respond, even though we want to and are willing. And what we're also seeing is an acceleration of sort of language. In some of what's come out from the states, we're seeing language like "fines," or even "imprisonment" we're beginning to see. So, the real problem is not having – to Clem's point, let's get on this. Not having some of these standards in place to make it easy to comply when we all want to.

Carolyn Petersen

Thanks, Jim. Arien, I see your hand is up. Do you have another comment?

Arien Malec

No, I'm sorry, I should have just put my hand down. Thank you.

Carolyn Petersen

Okay. Are there comments from HITAC members who are on the phone?

Cynthia Fisher

Yes, this is Cynthia Fisher.

Carolyn Petersen

Okay, great. Cynthia, go ahead.

Cynthia Fisher

I represent PatientRightsAdvocate.org, and on the HITAC, really have the voice of the consumer and the patient. And also being the American worker and employer. And I would go back to Clem's point that with the sense of urgency of each American in a stay-at-home order who is now their own healthcare manager. And what's missing in this dialogue is the role of the patient and the role of the employer. And so, we cannot afford a single chokepoint, which we are experiencing now, of having to go to the labs or the hospitals for testing through the funnel. And the more rapidly we deploy in-place testing, whether it be at-home testing or at the place of employment testing, we can readily have the information engaged from the patient.

So, I would beg you to first, look at, one, privacy, as right now, people want to know whether they have COVID or not. And we've had so many calls coming in that they have been denied testing, told to stay



home if they suspect it, and they'll only get tested at the hospital site if they feel severe respiratory systems to come to the hospital. So, they've been denied care also even for drug treatment, until after waiting the seven to eight days for the lab reports for the nasal swab to come back, even under stress or duress until they have confirmation.

So, the other part of it is that we are totally misreporting to the public every day, we're deceiving the public because of the hundreds of thousands and millions of people who may actually be having this virus, who have been denied testing. So, the death reports are egregiously overreported, and then also for the suspected coding being another issue versus confirmatory because of the chokepoints of the testing. So, I would beg we have the wrong people in the room, and this is an absolute national emergency. We have a workforce that's in the food supply chain, and we would love to test our workers to know who is safe and who's not safe and who needs to stay home. And they want that security too, to keep delivering food supply to our country.

So, my question to us I believe it behooves us to have what are the critical factors of positivity and negativity and reporting? And people give up their privacy every day to get an Uber, to buy from Amazon, to buy groceries, to get their CVS deliveries of their pharmaceuticals delivered to their door. There is no reason why we can't actually put the Apples of the world and the Microsofts of the world and our great tech companies like Uber into a room with ONC and CDC and the lab companies to also say what are the critical criteria that we need? And let's deploy it through standards and have a standard mobile app, that within a weekend, within a weekend we could deploy to our country. And then, the other chokepoint is the FDA, because right now there's only one test, so the primary care physicians in the field and the many surgeons that are on furlough because they can't do elective surgeries are all able-bodied and wanting to test with no access to deliver at the top of their game or even in their nursing staff, to deliver test results to the patients who are in great need to know.

So, I believe that we are looking at putting together clunky built systems for disparate enterprises. It's taken years and we haven't gotten there. We have to catapult beyond the world in which we know and put the patient first and put the care of the patient first. It is criminal to tell people to stay at home and to wait seven days for a result. And patients have driver's licenses, patients have mobile apps that could do a confirmatory rapid test, that through the reporting could then provide their confirmation. They would be motivated to be a very active, engaged recipient to give you this information at the ready. So, we have the ability, we just have the wrong people and wrong enterprises working on it from disparate ways from old systems. So, we can get this done, but in order for our economy to come back online, employers like us and our family businesses, we have to have access to testing to protect our workers, to protect our food supply chain.

Carolyn Petersen

Thanks, Cynthia. Are there other HITAC members that are just on the phone who would like to speak?

Clem McDonald

Pardon?

Carolyn Petersen



I was just checking to see if there were other HITAC members that were only on the telephone, Clem, for comments, and then I'll circle back to you.

Clem McDonald

Okay. Thank you.

Carolyn Petersen

Okay. Go ahead, Clem.

Clem McDonald

So, I'd like people to pay attention to what Chicago's done. April 8th they made an announcement that all COVID-related cases for all hospitals in the city would have to send the CCD report, which is currently made available, available everywhere, and what we really need to do something nationally to know what's going on. And I asked in the previous thing about sort of the fragmentation, I don't think CDC is allowed to know what it needs to know. Like, what are the negatives? We should fix that tomorrow. This darn thing, it's killing us. It's not just an expression. By the way, there's more than one test available for COVID, so I think that was a misstatement in a previous statement, a previous call.

Cynthia Fisher

Yes, Clem, I meant the one test that's under UA, the Cellex test, which is under the EUA, but the others were pulled back, and there's a lot of different testing in the wings waiting for FDA approval. So yes, I know we have nasal swab, but there is a chokepoint on testing.

Clem McDonald

Well, I don't want to prolong this, but I think the FDA has given permission, so lots of companies have it. And LabCorp and Quest, they could speak to that, but I think they are now able to do them. There's other chokepoints. Transport media, the time it takes to get dressed up to take the test, and I think for identification at a drive-in, take a picture of a license like they do at hotels and doctors' offices and then later on, that can be automatically scanned and figured out.

Cynthia Fisher

Well, that could also be part of the mobile app. I don't want to digress, but there are very easy ways to get access to complete information in the patient participation in that. We just need to be able to get it – get the right people to develop the mobile app, to develop the mobility to get in it, and even independent serial number of the test itself, along with a license.

Clem McDonald

You got it.

Carolyn Petersen

Great, and I see Les Lenert has his hand up. Go ahead, Les.

Leslie Lenert



Just wanted to echo the sentiment that the next phase that we need to get ready for is this re-awakening of American industry and getting back to work as a country, which will move contact tracing from the realm of Public Health to the individual and to employers, and that we've not really thought through the healthcare data standards needed for this, and particularly strategies for anonymization of data. I think we do have progress from Google and from Apple working together on smartphone-enabled anonymous contact tracing for the public, and that using our patient web data exchange strategies where health data are downloaded to your phone and then uploaded elsewhere, there are new opportunities and new ways to manage this outbreak.

I think every employer is going to need help with developing a Public Health infrastructure, including the informatics infrastructure to track who is seropositive and has antibodies and is protected, who is vulnerable and maybe we disclose a little bit of their health information that they are vulnerable and need special protections, securely so they cannot be discriminated against because of those things. And then also, how we can help people rapidly stamp out outbreaks in the workforce by sharing data, both among employees and employers to get us all back to work. I agree that apps are going to be part of this. I disagree that they'll be built in a weekend, and I do feel strongly for the comment that, gee, we have to do more for the people at home.

At MUSC, we developed a home health monitoring project for COVID-19 patients to track their symptoms, and we're just deploying mobile sensors from home care environments to look at their pulse oximetry at home and temperature and things like that to try to detect the deterioration earlier. But I don't think anybody should be at home alone with COVID-19, that we should be focused on the telehealth resources to make that possible for people, even if they are living alone, to be followed in the community.

Carolyn Petersen

Thanks, Les. We'll go to Robert Wah now.

Robert Wah

Thanks, Carolyn. I just wanted to join in this conversation about some of the things we think are coming, both immediately and a little bit in the future, and what I hear are concerns about privacy and the public's ability to keep their information private and who should have it, and where it should be stored. It's very much part of the conversation that we've been having at the Commons Project. As I said, I'm a board member of that group, but that's why we believe there's a value to having this nonprofit entity that can sit between the private sector and the public sector and do things that neither sector can do. Because this issue of, "Should private companies have this data? Should government have this data?" is an ongoing question, not only here in the U.S., but globally. And we've certainly seen a lot of discussion about this across media in other countries.

So, the reason why we're trying to set up the Commons Project is to make a place where people would be more comfortable having their data flow through and stored, if we're mission oriented about protecting privacy and being interested in the people's individual rights as a primary goal. So, these are the reasons I bring this up, is that there may be a sort of third place where we can do these things, and we're trying to build our structure in a way that can accommodate either private company or public tools, but they need a place to reside or to flow through. We're going to probably be setting up a data store that's going to be



based through Switzerland, as an example, in trying to find the most neutral place we can build these kind of places.

And I would also agree that we probably won't see these things built in a weekend. They are quite complicated, particularly in contact tracing. The Bluetooth technology to do that is available, but it is not a weekend project that you can do. But contact tracing and identity management, this idea that we could give out certificates of your antibody status or your ability to go back to work or things like that, those are all going to require some fairly significant identity management tools that, again, there's a lot of hesitancy to put those identity management data sets either in government hands or private sector hands of the commercial entities. So, I just wanted to bring that up from the point of view of the Commons Project.

Carolyn Petersen

Thanks, Robert. Let's go to Aaron Miri.

Aaron Miri

Good morning, thank you. I appreciate the conversation this morning, particularly as it relates to contact tracing and home monitoring and all the various caveats around privacy and security. As the committee knows, I'm pretty passionate about that. I don't want to belabor any of the points that were already brought up, but I want to talk about a few items we have noticed as we have been given a charge by the Office of Public Health here at the University of Texas at Austin to help them with contact tracing, help really do this on a wide scale and some of the things that we have run into that I think speak to some of the barriers we've already been alluding to. Number one, we scaled up our contact tracing team to about 200 individuals remotely working an HCDQ from their houses. And then, of course, we have a platform that's deployed to do contact tracing that we pretty much built out in about three weeks, and it also does home monitoring and symptom checking via chat bot and leveraging some AI and machine learning upfront.

So, to the degree that we've been doing this now for a couple weeks – and a few of the challenges that we have noticed, number one, I think Arien even eluded to it earlier with things like smoking cessation and others, not one electronic medical record, even in Austin, is the same as another. So, when you look at trying to match up contact records with people that came into a hospital or came into a clinic and got a COVID test and are awaiting test results, the way that's been coded and the way that EMR even has the ICD-10 code for COVID-19 is hit or miss. And when you look at a wide area to this, and again, Austin is the 11th largest city in the country, we are really having to do a lot of data reconciliation and normalization behind the scenes. And a lot of that is exactly what we've been speaking about, which is there's not a uniform set of standards on how to do this. I will publish a link to everybody on the public chat that goes into detail all of these things.

I published a blog about this yesterday that gives specific examples, but to the degree of it there's a couple of things we could be doing right now. Which is, number one, make sure that everybody adopts a common standard framework and we're all using the same terminology and all using the ICD-10 and LOINC and other codes in our EMRs. Two, that ambulatory care settings, inpatient care settings, and independent practices all have a standardized common data format. All of this matters when doing contact tracing, because without a unique patient identifier, without other dynamics that you would normally find in a systematized database, we're having to link commonly other elements of the records



together to say, "Okay, this really makes up the contact of Aaron. This is really what's happening with him, this is really where he lives." All of these things are now playing out, which are impeding our progress to be able to do this at scale.

In addition to, of course, we're looking at Bluetooth tracking and others. Robert already alluded to it; it's not that easy. I realize press releases are very simple and beautiful, but it's not that simple, and I think if you look at what Europe and other places have done, they've done a fantastic job, but they have a very different form of government. So, to a degree that there's a lot to do here, I think it's important. Clem, I agree with you in your comment about the charge of the commissioner being able to empower institutions. That is true. Our commissioner here in Austin has done a great job of doing that and helping to exchange data, but even with that you would be amazed at the reluctance of people to share COVID data without a CDC or a Public Health entity or whatever else, even if you're given that charge. So, there are a lot of challenges here that I think the HITAC and the ONC can talk about. Again, I will not belabor some of the points that were already brought up, and I will post the link to some of the details so you all can read in detail what we're seeing here in Austin. Thank you.

Carolyn Petersen

Thanks, Aaron. Let's go back to Clem.

Clem McDonald

Yeah, so this all revolves around sort of the fear of letting an outpatient get in trouble or get sued, and I think we don't have time to be that nervous about it. I would love to know if there's a survey of people who have COVID, if they are worried about anyone else knowing. If I had it, I would want everyone to know to stay away from me, so they don't catch it. I mean, this is a different disease than HIV. In part, you get COVID, you're dead or you get better. It's not going to hang around and trail you for the rest of your life. We're just hanging up agonizing over things while Rome burns.

Cynthia Fisher

Hi, this is Cynthia Fisher. I agree, Clem. You know, what I was trying to suggest was that we bring the best and the brightest into a room to create a CDC mobile app with standards that everybody can agree upon, so no matter what test or what type of test is deployed, here is the information that is needed. And that could be easily done by the individual. So, we have passports, we have licenses, we have cameras, and we have the ability to ask the patients to participate to give up privacy by being identified. And to Clem's point, patients, employers, and employees want to know. They want to be able to save the lives of their relatives; they want to be able to move in society, and they want to be able to get back to work.

This is a critical crisis, and I think what is really disturbing is to hear even at the county level, we have disparate disagreeing parameters of what's needed for data entry. And so, I believe it behooves us under national emergency to have a national standard and to provide the reporting that goes in. And people do want to report into CDC. They want to get the test done. And this is urgent. So, that's where I'm saying in the weekend, put the right people in the room, come up with the standards, and we can iteratively make it better, but let's get the bear minimum of what this country needs to get back on saving lives, better outcomes, and back on track as an economy.

Clem McDonald



Could I get one more point in? Chicago is not having the hospitals taking responsibility. They are defining this new database as a Public Health database controlled by the Chicago Public Health. So, I think it could be done nationally at all the Public Health areas. Similar thing, and we'd have all the information we needed. Might take some work to clean it up.

Carolyn Petersen

Okay, thanks, Clem and Cynthia. Do we have other HITAC members with comments? Please raise your hand or tell me over the phone if you're just on the phone. Okay, go ahead, Aaron.

Aaron Miri

I would say one more thing. I think it behooves all of us as a HITAC to really think, are there ways that we can cross-pollinate information even across state lines? Perhaps we work together as institutions and HIEs and payors and others, and say are there things that we can do to show the rest of the country how to move the ball forward and work our internal discussions a lot quicker than perhaps moving the needle nationally on some of these challenges? And so, I would welcome any HITAC member who wants to partner together across state lines to match up and look at common data elements that are identified, how many COVID-positive, how many POIs, how many suspected, how many tests have you given out, all of these things.

And we develop perhaps a HITAC-level dashboard of common data elements to show people this can be done and then go to the next level and say contact tracing wise, are there types of indicators that we can share with each other? Are there ways to do this in the name of Public Health that can really move the needle? So, we have an opportunity here as a HITAC to lead by example. I just wanted to say that that's an opportunity.

Carolyn Petersen

Great, thanks, Aaron. Being that we have some time, I think I will circle back to our presenters to see if they have any additional comments. And I'll start with Krystal Collier. Go ahead, Krystal.

Krystal Collier

Thanks. I really appreciate being able to sit in on this part of the discussion. I want to circle back to some of the things I was hearing from all of our panelists today. Looking at timeliness, talking about a number of the different issues of getting some of the same data elements being collected in the electronic health records systems, I'm wondering with a lot of this discussion if there are more opportunities instead of looking at creating some of these larger databases or having more repositories of all this information, we have some of these systems already created. Are there opportunities to leverage some of the systems that are already doing a good job collecting this for Public Health, so that rather than overburdening our partners with all of these data requests for the same information – demographics came up quite a bit during the discussion and some other things. They are all being collected at one point in the patient's visit or in these systems already, and a lot of these systems are asking the same questions.

So, is there a way that we could work together more so that we're utilizing the information that's already collected and leveraging those systems to be more interoperable and connected on the Public Health side?





Krystal Collier

I don't have anyone in mind. I'm less familiar with all the committee members, but if there is someone that could maybe respond to it, I'd appreciate it, or anyone that would like to work together on some of these things, I'd be more than happy to work on answering some of these questions. Because it's a very large need that's being expressed not just on today's call, but I think many of us are struggling with, and it's a very timely issue with what's going on.

Clem McDonald

I think there is no such database yet. There's talks about them in different context, there are studies that are trying to organize things together. CDC would be the closest, but they have these restrictions about what they can collect. Which I think we should do what has to be done to fix that tomorrow.

Carolyn Petersen

Are there other comments from the HITAC members?

Were you directing that question to anyone in particular, Krystal?

Arien Malec

Hey. Yeah, this is Arien. I do note that it would be useful for the – I think this is an area where the federal government has a significant role in providing air cover. So, with respect to Clem's point, we have the system we have right now, which is a set of local Public Health agencies who are the feet on the street. And the typical way we do is this is we pair them with the CDC, and I think ONC has a significant role to play here in providing air cover. But with respect, we can't go everywhere all at once, so I would suggest or recommend that we sit down and chunk through our national priorities and get more focused effort in fewer places whether that's Aaron's point that we need to upgrade the terminology and standard systems that exist, provide implementation guidance for the feeds that already exist. Aneesh was commenting via Twitter that we already have the consolidated CDA, and that's what eCR is leveraged on top of, but to the extent that we can use the infrastructure that already exists through BioSense 2.0, the infrastructure that already exists in the interoperable EHRs.

In some cases, we may just need to provide better guidance, better implementation guidance, better feet on the street. But it all needs a sense of priority and organizing so that we're not working on all of the same things all at the same time. So, if there's a theme for me that comes out of this, it's the need to sit down, prioritize, and have fewer, better done efforts, help consolidate points of integration, and do some of the basic block and tackling, like fix how demographic information flows into orders and then into ELR. We may be able to get a lot more progress by fixing some of the basics and consolidating some of our efforts. So, thank you.

Clem McDonald

So, this is Clem. I agree. I think, though, there are also some obstacles that are regulatory, legal, or emotional that are slowing us down. CDC can't get negative result. What the heck is that? How will anyone know the incidence rates? I mean, that seems like it could be fixed with the stroke of a pen. Maybe not.





Thanks, Clem. Let's go to Janet Hamilton. Are you on?

Janet Hamilton

Thank you all so much. This is Janet Hamilton, and I appreciate and value the discussion today. I think I wanted to just highlight a couple of points. I hear the intensity of the discussion. I would also say that a number of these issues have been identified and known for a long time, and there have been proposals, but maybe not the will to correct some of them. And so, while I hear that there's a, "Let's maybe create something new and different that can fix everything," I would really encourage a thoughtful dialogue with state and local Public Health, as well as other federal partners, so that we can prioritize key pain points, and I think some of those could be resolved relatively quickly.

I really want to underscore this pain point around the missing demographic information on lab results. That's a space where even if there are other opportunities to query back and obtain that information, it still means lost time, which means lost lives, and that is not something that I think we can afford. And this is not a new problem. We see it with other reportable diseases, where there's missing information, but it is now very much exacerbated. And I think if the committee is going to do one thing immediately, tackling that is something that I would strongly recommend. And then, I just want to underscore that there's been some great discussion around electronic case reporting, but as we move forward, that is going to be critical. Right now, there are challenges around point of care tests. If those are implemented in today's world, those results will never make it to Public Health, other than through maybe a piece of paper that gets sent.

So, when you're talking about being blinded by decision-making, fixing these issues is just so critical. So, again, working with the companies of those products so that we can ensure there's an identifiable electronic feed. And I would also say, I mean, right now there aren't treatments available, and there isn't a vaccine, but as soon as there are, we need good ways to get that information. And, again, the electronic case report would provide that. So, I would just encourage as the committee thinking about priorities and how they can help leverage and incentivize those things to please consider that.

And then one thing there has been a tremendous amount of success with is the Meaningful Use program and I think that Public Health was very pleased to see electronic laboratory and reporting on syndromic surveillance included on that, and that was great. And I think without it, we wouldn't be where we are today. However, addressing issues around responding to Public Health in a timely fashion so that – right now, we have some locations where despite that there are identified issues with feeds and other things, the response back to Public Health to correct those things is really not happening. And so, I would encourage the committee to think about some standards around that. It's great that we ask, but, again, if we aren't actually providing some coaching on how quickly some of those things need to be responded to, that's a problem, too.

Carolyn Petersen

Thanks, Janet. I think we'll now go to Aaron Miri.

Aaron Miri



Yeah, one more thing. Janet, thank you for your comments there. I want to sort of also talk about some real-world lessons played out, and I think it's important for folks that maybe in different parts of the country that this wave maybe hasn't hit you yet, or it's just starting or whatever else. A couple things that we've seen, boots on the ground. I'm just going to give you some real-world examples. Number one, as you deploy any kind of app to your community to do home monitoring and contact tracing, we went full steam ahead working with Apple, working with Google, putting stuff on the Apple store and Google store, all of that. A great platform built on Amazon. But we realized that as we were working with the at-risk community here in Austin, even though a lot of them had smart devices, they did not know how to download an app, they did not have a connection to an app store, so we quickly had to pivot and be able to open up a case record on their behalf.

Number two, make sure you're multilingual off the bat. We were trying to go fast, and so obviously, we built it in English. Then we looked at it, and oh shoot, 60% of our population here is Hispanic-speaking only. So, don't overlook that importance. Next, make sure that as you are working with the various data sets that you're reconciling against the medical record. It's amazing how many people are actually going to different places and getting tested for COVID or showing up with symptoms, or they were looking at what they thought were allergies week one and then week two they had a temperature and they came back, or they had GI problems or others. So, that reconciliation of data that I alluded to earlier is very, very, very important.

And then, last but not least, what I want to share with you all is that the contact tracers that you select that are volunteering, make sure you train them, that they know how to talk to people. It's amazing how much, and a wonderful job that our mental health professionals here at UT have been doing to work with people, because there's a lot of people that we're calling to that are scared, that don't know what they have, that don't understand, and even though they are getting a phone call saying, "Hey, you may have been exposed," or whatnot, that's an important element. So, I just wanted to share those battle stories with you all and I'm happy to share more offline.

Carolyn Petersen

Thanks, Aaron. Let's go back to Debbie Condrey with The Sequoia Project. Did you have any follow-up comments?

Debbie Condrey

Yes, a couple of items, and I thank you all for this discussion. It was really great. A couple of things that come to mind as I was listening to the discussion. First off, around the data sharing issue and Public Health authority declarations. So, we are seeing, as was mentioned, the Public Health declaration in Chicago, as well as one in Washington state. Having come from Public Health myself, I would say that might be a bit of a tedious approach if it's territory by territory or state by state. And we would really advocate for a national response or a national declaration around Public Health receiving CCDA information, that demographic information, the clinical information that Public Health has mentioned that they needed.

One recommendation we might think about is ASTHO or some other organization that represents states perhaps coming up with some template language for states that could be shared. If that would be the approach, that would be more timely for states to utilize. I would also mention that as I mentioned in the

discussion in my presentation, that the PULSE COVID tool does provide some demographic capabilities, as well as querying for clinical information. But in order to make these tools as efficient as possible, we would really advocate for some clearer language on the data sharing piece for Public Health. Thank you.

Clem McDonald

Please do it. Please, do it.

Carolyn Petersen

Thanks, Debbie. Let's go to Liz Thomas. Did you have a follow-up comment? Are you on mute, Liz? We can't hear you. Okay, we'll circle back later. Tom Walsh with Quest, do you have a follow-up comment?

Thomas Walsh

Sure. I'll echo two themes and add a third log to the fire maybe. Nationally, the variation in state regulations is a problem. We have to maintain today different registries just to send patients their test results, because some states do require holds, others don't. And so, even that variation was a problem before this crisis. And again, we're happy to report the data we get, and so I wanted to address my comments, how we're trying to do better in getting patient information. But if an EMR is sending us a single medical record number to tie everything back to, to reduce their transmission load, then we as a lab can't provide that patient demographic data, too, even if we wanted to. So, I agree on those points that have been hit. The one thing I don't want us to overlook is cybersecurity. No question. We've seen targeted attacks on large databases. We're sort of echoing a theme here. If we had all the data in one place, we could do so much better and that query is going to be a richer target and so somehow, design for security has to be part of the future discussions. Thank you.

Carolyn Petersen

Thanks, Tom. And we'll now go to Patina Zarcone. Do you have a follow-up comment?

Patina Zarcone

No, I don't at this time. Thank you.

Carolyn Petersen

All right. Thank you. And looking at hands from the HITAC members, I see Clem, you had your hand up. Go ahead.

Clem McDonald

Yeah, but I don't know if you can hear me. I've had trouble. Can you hear me?

Carolyn Petersen

Yep.

Clem McDonald

Oh, okay. Well, I'd just like to second that idea that we get a national approach to sending the CDC, to whatever agency. And that's going to be regulatory legal. This stuff is now done. It comes out. Every institution can generate those things. It may not be perfect, but that we can do almost tomorrow. But we have got to get past the regulatory and the legal barriers. So, the suggestion just given is excellent. I'd like



to support them very, very strongly.

Carolyn Petersen

Thanks, Clem. I see Aaron Miri has his hand up.

Aaron Miri

I have a question, actually, and it's in relation to this. So, in early January, the ONC put out a brand new five-year federal Health IT road map which was really, really well done and really well-articulated. We spoke about it here at the committee multiple times. Of course, that was pre-COVID. Now that we've surfaced a lot of these items, is it worth re-looking at that quickly to make sure that the priorities and timelines make sense or if there are things that should be moved ahead of others, just to reshuffle the deck a little bit to get some of these other items that we brought up more readily addressed?

Carolyn Petersen

Great, thanks, Aaron. Any other comments from HITAC members? Either on the phone or on the Adobe, please raise your hand. I see Denise Webb. Go ahead, Denise.

Denise Webb

Hi, Denise Webb. Just recently I was in an e-mail conversation with several CIOs, and the discussion was around what tools they were using to help get their employees in to work and understand whether they are well to come to work. And as I thought about the conversation that was going on, it's not just the healthcare systems that need these tools, but if we're going to really get our economy going again and getting people back to work, I think these other industries can learn from what the healthcare systems are doing to screen their employees and assure that they have a work force that's ready and able to work. So, maybe we as a committee can think about how we might share some of that information from the health systems and come up with a set of resources and tools that employers can use to help return people to work.

Carolyn Petersen

Thanks, Denise. Any other comments? HITAC members?

Cynthia Fisher

Yes, this is **[audio cut off] [02:13:38]** responding to Denise. I couldn't agree more. However, I would say that should be there be a national standard for reporting both positives and negatives that the employers themselves are more than ready and more than capable of putting through a mobile app on deploying reporting. In fact, we stand at the ready trying to keep our workers safe, those of us that are still able to have our workers work to help support the supply chain. So, it is absolutely urgent and imperative. We have medical teams standing at the ready, willing and able to test our workers, but we have no tests, and we have no access, and these individual physicians and their staff are not able to do the testing because the testing is now been funneled to the high complexity labs for the rapid virology.

So, as long as you're choking the system and not allowing it to be done at the employer site, or in the field with a very national standard and national ability for mobile apps, you could put teams together to try to develop what is absolutely critical to get back to work in this type of reporting that CDC needs, then later link into your health systems once you guys all have your acts together to be able to do that with the



standard that you agree on. Then allow for that interoperability. But right now, the most urgent thing we need to know is do the people have COVID or do they not, and then what is the protocol. So, once you have the ability and you link it to the employee's phone or link it to the individual's phone, you now have a two-way broadcast of communication back and forth as standards and protocols for treatment come about. Where awareness of hotspots come about. But the only way we can do that is to allow those smartphone devices to be utilized and employers to go deploy it immediately.

We do not need the health system to tell us how to manage each of our employees. That we can do very, very well, and we're set up to go. We need the testing system to function, and that's why I would beg, like Clem, for a national standard. And we are at war, we are at war with a virus. Why can we not through a national emergency put together a national emergency standard for CDC to have what you need and let the patient and let the employees be responsible to put in the data in order to get tested? They are more than willing to do that, and in this mode we can allow them to opt in for this at the privacy level. But this is so urgent that we just cannot afford for days and weeks and months to wait to get this together. So, that's my ask of Dr. Rucker, is to say where is this on a national level that we can trump – no pun intended – we can trump localities and their iterative, duplicative requirements. But let's go to the technological world in which we live and ask the Gates Foundation, ask the technology companies to come in and help on this case. I think it's urgent and it's a national emergency.

Carolyn Petersen

Thanks, Cynthia. I see that Steven Lane had requested time for ONC staff to respond, and so I will ask if we can bring Elise, Steve, or Don to the line.

Donald Rucker

This is Don, I'll defer to Steve or Elise if they want to comment.

Steve Posnack

Okay. Thanks, Don. I'll go first. Working backwards, there's certainly opportunities in the listen mode that we're in right now, and I appreciate all the dialogue and excellent questions and back and forth. There are opportunities that we can work with our colleagues at CDC and other federal agencies inside of HHS. There are ways in which I think we're contemplating how we can either gather together or convene the right stakeholders that maybe it will advance some of these in a community practice type of situation or the like. And there are other areas where I think we're still gathering our own insights from the conversation. Today, I'm looking forward to the latter parts of the agenda, as well, which I think will help round out some of the gaps or other questions that we equally have as well as you all, too.

We are actively collaborating with colleagues at OCR. They've issued a number of enforcement discretion notices and any other additional guidance that we have played a role in helping them with understanding the Health IT component and interoperability aspect. So, that's an active engagement, as I think we mentioned last month, and we'll continue to do things like that where we can provide our subject matter expertise to our other federal colleagues. There is a dynamic for us in terms of working with the respective parties across the nation that have the direct or specific authorities in their jurisdictions to put things in place or provide a level of compulsory requirements, and we would be looking to work with them directly if there were a need to move things fast and trickle those out.

So, there are a number of organizations that we have great relationships with, some of which have been on the panels today, so thank you, again, on behalf of ONC. You know, there's the National Governor's Association, there a number of other groups that have that type of connection across the states, as well, which from a Public Health perspective is something that we're sensitive to. So, I very much appreciate everybody's time today and perspectives and look forward to the discussion later.

Elise Anthony

Yes, and this is Elise, and I echo what Steve said, as well. And I think this hearing is extremely useful for us at ONC. Not just hearing the kind of larger scale or the broader issues, but the amount of specificity that the participants are providing is really helpful for us to think through what coordination can look like and where we may be helpful putting on our coordination hat and working with CDC and others, so I echo everything Steve has said and really thank the panelists. Also looking forward to some of the discussions this afternoon, as well. And I also want to thank everyone for providing not just the challenges, but some of the identified successes that they have had in terms of ways they are approaching COVID-19, because both sides of that coin are helpful for us at ONC to understand what's working and where from a Health IT perspective we can contribute best.

Carolyn Petersen

Great, thanks, Steve and Elise, for stepping up and sharing some perspectives in response to the discussion. I see we're getting close to the time when we will move to the next panel, so I will ask the HITAC members if you have any additional feedback on this panel. Go ahead, Clem.

Clem McDonald

I'm sorry. I don't have anything more to said.

Carolyn Petersen

Okay. Aaron Miri.

Aaron Miri

Yeah, I would just really like to say one more thing. I want to thank the ONC and all of HHS. I said it last time and I'll say it again, as more rigor and more restrictions are loosened, even as we go through and do contact tracing, and do triage, and do support, and you have patients on vents and whatnot, it's made a difference. It's made a difference, and I know there are still challenges to overcome, but I don't want to lose sight of what Steve alluded to and what Dr. Rucker alluded to, which is a lot of work has been done and I can tell you that it is translating to the front lines, and we appreciate it.

Carolyn Petersen

Thanks, Aaron.

Clem McDonald

Yeah. Hear, hear.

Carolyn Petersen

And Seeing no other hands raised by HITAC members, I will thank our panelists for coming today to facilitate this conversation for us, and I hope we'll be able to hear more from you in the future as we go



forward with our work. Thank you. Robert, do you want to take the mic over to start the next panel?

Robert Wah

Great, thanks, Carolyn, and thanks everyone from the last panel. We really appreciate the discussion, and I hope many of the panelists will be able to stay on for the rest of the meeting, as there may be other questions coming up in your area. You're certainly welcome to do so, but not mandated to, because we know you are all quite busy.

So, let's move on to the next panel, which we titled "Health Information Exchange Perspectives." And on this panel we have five folks from different health information exchanges around the country. I'll introduce them each before their individual presentations. As you see on the schedule, we have this series of presentations scheduled, along with a discussion, and we tried to leave an adequate amount of time for discussion. It's always hard to predict exactly how much time we need for that. We really appreciate the discipline that all the presenters are having in terms of staying with our five-minute limit and our slide limitation. And that allows us to have a very rich discussion after the presentation. So, with no further ado, if we can go to the next slide. We start with Jaime from Nebraska. Go ahead and start your presentation. Thank you.

Health Information Exchange Perspectives (02:23:54)

Jaime Bland

Can you all hear me okay?

Robert Wah

Yes.

Jaime Bland

Okay. So, Nebraska's collaborative effort around the COVID-19 is a collaborative between NEHII, that's the Nebraska Health Information Initiative, which we are the infrastructure for health information exchange and the prescription drug monitoring program in Nebraska. We work collaboratively with the Department of Health and Human Services, which includes both Medicaid and Public Health, as well as other HHS agencies like SNAP, Child and Family Services, and the like programming. Also part of this collaborative, is the governor's office, so we are actually producing this information for the governor's office, as well.

So, when we started the task force and standing up the infrastructure for the COVID-19 response, we really focused on the four bullets you see there, the ability to forecast and hotspot, to understand community spread, focus on establishing real-time laboratory testing and information to facilitate accurate numerator/denominator information, and leveraging the enterprise master patient index that we have between the HIE and PDMP infrastructure, and the real-time insights into hospitalizations. So, what happens in the long tail of the disease process and what happens once folks are discharged, what's the follow-up, as well as any decease information, as well. For the purposes of understanding how this disease is progressing in the community. Next slide.

So, we're able to do this quite rapidly because we've focused on the HIE infrastructure for close to a decade. So, we have really about 90% of all acute care that happens in Nebraska is flowing through the

health information exchange, and then we have 100% of all prescriptions dispensed in the state. So, not only the opioid prescriptions, we actually have chronic disease medications, and that's how our statute was evolved over the past five years. And this has really helped us understand exactly what is happening around COVID, or in addition to COVID, and truly drill down into the capacity understanding. And through understanding both the urban issues and the rural and in the clinical and ambulatory space, what labs were happening, again, leveraged that master patient index infrastructure so that we could get to true numerator/denominators. We connected rapidly to the labs through a laboratory hub that we have established, that also ties identity to lab test. And then, a focus on the non-data sharing.

So, the governor's office was very helpful to us to reach out to critical access hospitals and ambulatory organizations to get this information. We established a rapid onboarding infrastructure for really just looking at ADTs and labs, not being a higher connection to those that were not connected to us, and I focused on hub and spoke model for the connection of long-term post-acute. So, when I did these slides, you can see we had 22 live. We actually brought on another 40 this week, so we're moving about 40 a day in the long-term post-acute space, and that's actually coming along nicely so we can understand the capacity and what's happening in that space, as well. Next slide.

So, for the short term, it's really just getting all in collaboration with moving those connections forward, understanding the data as a whole. We are focusing on a one source of truth dashboard, so we are layering the dashboard on top of the HIE/PDMP information. We are looking at what communities are at risk based upon a number of factors, like the number of immunosuppressants in a community, the number of chronic conditions that are in a community, bringing that into our model, so we know specifically the modeling for a community versus a statewide perspective based on a large number. So, we can really drill down to a county understanding because we do have the comprehensive information and also the other information that's available in the model, and we're adjusting that daily, as well.

And really for the long term, just continue to focus on our HIE/PDMP efforts as a population health infrastructure. We talk about our infrastructure as being Public Health infrastructure, because we do so much to minimize burdens on providers for reporting requirements, as well as focus on this master patient indexing and making sure we're building a longitudinal health record in addition to an HIE and PDMP infrastructure.

Robert Wah

One of our new members from HITAC, John Kansky from Indiana.

John Kansky

Thanks, Robert, and I'm grateful to follow Jaime Bland, and I'm hopeful that some common themes may emerge. So, I'm going to talk about, highlight, four things that we've done to support the response in Indiana. But a couple of comments I wanted to make before I did that – if you could go back, please; thank you – is that this is four out of about 18 requests that we've gotten from state governments and customers. So, I think part of our story is not necessarily the four things that I'm highlighting, but the fact that there's been a lot of requests of the HIE. We've pretty much dropped everything that we were doing and blown up our plans from March through May to support the response.

The other thing that I wanted to stress is that I wanted to acknowledge that while "platform" is kind of an overused word, what's emerged is there was some prerequisites that I wanted to acknowledge that had to be in place in Indiana for us to do some of this work. So, having greater than 90% of data sources connected, having a normalized repository to serve as a unified source was critical, and, obviously, having trusted relationships within state government and other stakeholders needed to be in place before the pandemic. In our case, our state has been telling many data sources, "Send it to IHIE, they'll route it to us." So, next slide, please.

So, a lot of words, too many, frankly. I'll just quickly highlight these four initiatives. There's the logos of the partners that have been involved in this. This is not solely the Indiana Health Information Exchange. Our Department of Health, our department that runs Medicaid and other health programs, the Regenstrief Institute, the School of Medicine, and the School of Public Health have all been engaged in the response. The first row there that says notifiable condition detector, I referenced it earlier, it's sort of electronic case reporting enabled at the HIE level. We had this in place before the pandemic, and we were able to pretty quickly incorporate 52 different codes that were detectable in lab streams. Some of those were codes that were specific to COVID, and some that were related to similar conditions or even things that we thought might be miscoding of COVID. But we were able to add those to the existing notifiable condition detector and software and send those on to the state.

The second row represents a dashboarding support. We are not presenting the dashboard. Our role as the health information exchange proved to be the single source of clean data, or as clean as possible data, to support dashboards being run by the state and by Public Health researchers. The third row, population-level surveillance reporting, was interesting in that it was recognized pretty early on that the HIE infrastructure was the best single source of the data that was needed, but not every source of data in the state participates in the exchange, so we very frantically worked with state authorities to identify which sources, including the state's own laboratory, had not been previously plumbed into the exchange, and a couple of key hospital systems that were not participating in the statewide exchange, and we just dropped everything, worked over the weekend, and have plumbed those data connections.

Fourth row really refers to a results delivery infrastructure that we had in place that we're able to utilize to deliver results from the state lab on to physicians and incorporate that in the patient's community health record. Last slide, please. So, in terms of messages to ONC and HITAC, there's some common themes here. In the near-term pandemic response, first of all, thanks for helping to remove regulatory obstacles to data sharing that had been noted earlier. It's important to note that I think that in markets and states where there was ready and capable HIE in advanced, they were much better prepared to respond to the pandemic. And similar to the themes in the long term is just noting that HIE assets, this pandemic, even for me as an HIE leader, has underscored the value of having these assets in place, and just stressing to ONC that considering HIEs as part of the national interoperability landscape will be important going forward. Thank you.

Robert Wah

Thanks, John. Our next presenter is David Kendrick from Oklahoma, and Chief Executive Officer of MyHealth Access Network. Go ahead, David.

David Kendrick



Hi, thank you all for this opportunity to present. So, I want to talk about the current activities we're doing, but before I do that, I'd like to echo in just the most striking way I can that both John and Jaime have highlighted this critical nature of having this infrastructure pre-existing, and that means for us at least a decade-plus of governance and policy and trust relationships and building this infrastructure to do these things so that when the need arose, we could flip some switches and do what I think are some pretty magical things.

First of all, on the data-in side, as they said, evaluating all the feeds, identifying the new and novel COVID-19 tests. I see at least five new codes every day coming from different hospitals and clinics. Also starting to recognize antibody testing coming in, as well. That's making sure the water is clean, that we have the supply out to our users. And then, we're also finding ourselves expanding new data sources, including things like health departments that are popping up mobile testing and making sure they code the test appropriately and that we have a feed. The reference labs I'll come back to in our needs, but they feed and making sure that their codes are all interpretable as well, and live. And then, we're starting to see groups like Walmart, various entrepreneurs and others standing up lab testing all over the state, and we've made a really concerted effort to make sure that if you're testing for something, it needs to come to MyHealth. So, the next slide, please. So, this is the locations of MyHealth across the state. Next slide, please.

So, on the data-out side, in terms of getting this clean water out to users, we've found a particular need to get accounts in the hands of the pre-hospital communities of first responders, long-term care, anybody who encountered the patient before they get to a place where the test is sampled, because as you know, test results are only returned to the ordering provider, even from the state lab. So, making sure that we get a broad distribution of user access to the lab results has been critical, and that's actually been a rallying cry for more interoperability to occur. We're doing COVID-19 result alerting reports for attributing patients directly to the providers who they're attributed to. We are also doing a community-wide Public Health reporting and reporting to Public Health. Our results are about 48 hours newer than anything else the state knows about, and that 48 hours of lead time is critical as you know to directing someone into or out of quarantine to avoid more spread. We're also doing disease course monitoring, which is tracking the timing from the symptom to the detection, to admission, to ICU, vent, to off vent, to discharge or death.

And, finally, next slide, additional services. Oh, this is a dashboard. I won't spend any time on that. Our additional services, as part of Accountable Health Communities program with CMMI, have launched mobile device-based screening for social needs, and that's been more important than ever now that people are sheltering in place, possibly with the person who they are suffering domestic violence from or they've lost their job and they have a shortage of food or access to transportation. So, that social needs screening, even though we've got a 50% reduction in clinical visits where those screenings would normally be triggered, we've had a 30% increase in patients responding affirmatively they have had a social need to be dealt with. And then, we've also parlayed that into a daily symptoms screener which in a world where your best lab testing may have a 30% false-negative rate, symptoms and the history of the patient are equally as important to deciding what they've got and giving them guidance, so we've rolled out a symptom screener to enable patients to report in regularly. Next slide, please.

So, the needs we see on the data-in side. MyHealth in contrast to say, Jaime's group in Nebraska, it is not affiliated with the state and doesn't receive any funding from the state other than for standard

participation. We never receive the 910 fees, and so we're not, quote, unquote, "A part of the state," and don't have formal relationships other than when they need a service from us. So, the state health lab results are critical and necessary to send to the HIE, and there are many other HIEs in the same situation as MyHealth. The reference labs, we would appreciate help getting them to send us all of the results they have in Oklahoma, and not just those for organizations that order through MyHealth. We need to make sure one-off testing sites are encouraged to be connected, as well, and ensure antibody testing is available. On the data-out side, making sure that we feel like we're in a situation of, "Put us in, coach, we're ready to play." And on the long term, I think the most important thing is that HIEs are critical national infrastructure and we have roles not just in clinical care, but across the board. Thanks.

Robert Wah

Great. Thank you. So, our next presenter is Jan Lee, CEO of the Delaware Health Information Network and a former colleague from the Department of Defense. Jan?

Jan Lee

Hi, Robert. So, I'll launch right in. I represent the Delaware Health Information Network, DHIN, and I'll discuss our current efforts and the progress to date. First of all, as my colleagues from other HIEs have already mentioned, we as a normal part of doing business deliver test results and other clinical data to the ordering providers on behalf of the performing labs, imaging groups, et cetera. We have clinical data in our repository going back to 2007, and since 2013, every acute care hospital in the state, plus some around our borders and neighboring states, have been sending data to DHIN, and we've been delivering results on their behalf. So, we truly have saturated the state with our core service of clinical results delivery, and we continue doing that in this crisis. We also aggregate the data that we receive into a longitudinal community health record. We continue to do that with the COVID data that we are receiving, so this is also business as usual.

Some things that are not business as usual is that we have been collaborating with the University of Delaware Center for Applied Demography and the Delaware Emergency Management Association regarding collection of essentially census data for modeling. They have been collecting census and ventilator availability manually by spreadsheet each day to plug it into the modeling efforts, and we've kind of been waving our hands saying, "Hello, we're getting ADTs from all the hospitals, we think we can help with this." And, finally, the dots are getting connected, and we're exploring whether there's a role for DHIN to play in collecting and reporting this information in a more automated way. We also have heard the need for Public Health to receive in particular race and ethnicity data, and we said we could help with that. We know it's missing in many cases from the feeds that you get, but we have an NPI, and we have a huge repository of clinical data, and we can enrich the feeds that are coming to you.

And so, we are in the midst of a twofold project right now. One, to modify our normal ELR feeds to the state repository with race and ethnicity, if it's not provided in the original message sent by the performing lab. And then, we're also going to retrospectively enrich the data that they received where that information was not already provided. So, we expect to have those two initiatives complete by the end of this week. We also are diligently partnering with the Public Health public relations people. Our external affairs wing is partnering closely to ensure we are amplifying the Public Health message through our social media, and we have seen a more than tenfold increase in the number of hits and interactions with our social media efforts, and we're really very pleased to be able to direct those who come to us for information to

authoritative sources coming from our state Public Health and CDC sources. So, we're very pleased with that. Next slide, please.

Challenges. There are some on the technology side. None of our hospitals and labs are using the codes that CDC promulgated and recommended. Every one of our hospitals and labs are using different codes, and we've seen that some of the hospitals have changed their codes in midstream. So, all of this certainly adds to the challenges of normalization, but we're trying to stay on top of that. The real issues have been human factors, not technology factors. There has been some turf guarding. We're also dealing with agencies and organizations that have never worked together before and therefore don't know each other's capabilities. And so, not that there's any nefarious intent, but I think DHIN has been overlooked, because some of the entities working on COVID just didn't know about us.

There's also been an issue of standing up new and unfamiliar workflows in place of existing. As I mentioned, we have been doing results delivery for the last 12 years, and yet in this crisis, Public Health is faxing results to ordering hospitals, and I'm just pulling my hair out over that, going, "How crazy can that be?" Next slide. I think I'm out of time, so I have to quit. How can ONC help? I think we that we could use a nationwide strategy for management of health data in emergency situations. But I would implore leverage existing organizations and workflows. We have the largest repository of clinical and claims data in the state, and no matter who else is aggregating data, when you've got a state, community, regional health problem, having aggregated data in one place for the state, region, and community is critical to getting on top of it. And so that concludes my remarks. Thank you.

Discussion (02:46:11)

Robert Wah

Thank you, Jan, and thank you all for great presentations. And as I said before, great discipline speaking within the time limits. As the HITAC begins to raise their hands for the discussion, I want to give each of you an opportunity to go back, if the timer limited you, because we still want to hear what were your successes, what are your challenges, and where do you think specifically the ONC and HITAC can help us? So, why don't I give you one chance, each of you, to comment on that, and see if there's anything that the timer cut you off from during your discussion. I guess I'll go in order. Jaime, I'll give you the first chance.

Jaime Bland

So, I would just add that recognizing HIE as Public Health infrastructure, community health infrastructure, would be where ONC could assist. And also helping, as Jan pointed out, what I've discovered is labs are faxing voluminous amounts of data over, and if we connect them, we can eliminate that and also ensure that identity is matched to lab tests. So, I think that's also something that the ONC can assist us with in communicating with national labs, regional labs, to ensure that we are connecting in a digital way, because it's really hard to pull that information out of a PDF and then match it to a person and then make sure the provider gets that information. And multiple providers have access to that information throughout the care experience.

Robert Wah

Great, thanks. John, anything from Indiana?

John Kansky

Thanks, Robert. Real quickly, I'm going to amplify Jaime a little bit. I would urge ONC that when they sit down to think about how to solve a problem and they look at their assets on the table, one of those assets should always be health information exchanges. The other comment that I would make is related to the national labs. I worked on a comment earlier, I think there's probably some misunderstanding or disconnect in terms of what the labs believe the government would like them to do in terms of sharing. I think ONC could probably reach out to some of those large laboratory data sources and clarify the interpretation of HIPAA under the circumstances. Thank you.

Robert Wah

Good. David?

David Kendrick

Yes, I would just echo, obviously, what John and Jaime have said and add to it that the reason for doing that is no longer just, hey, so the HIE has a complete data set and can do identity resolution, but it makes a big difference to providers in the field on the ground. There are almost as many providers that don't use an EHR now handling these patients or are not a part of a formal health system and EHR because of pre-hospital and first responders that need to be included in the access of the information in order to address this and other issues, disasters, et cetera. So, I would just emphasize that, and also we really do need the VA, the Department of Defense, any health services participating with us in our patient-centered data home model so that we can push and route data between us actively, rather than sitting back and waiting on a result to come out.

Robert Wah

Great, thanks. Jan?

Jan Lee

I don't have a lot to add that my colleagues have not already said. Again, I would really put stock, we are critical infrastructure to supporting Public Health initiatives within our own state and our own communities, and I think that recognition of that at every level would be very helpful. I would also echo the issues with the national labs and those that have a presence beyond any one state. The patchwork of regulations and participation rules, if you will, do create some barriers.

The other thing that I'm very interested in is how the new information blocking rule may play into all of this. Part of what we have had to do is scramble to get amendments to our data sharing agreements with all of our data sources to address sharing data with Public Health in ways that are not sort of business as usual. And it's been a distraction at a time when nobody needed that, and I wonder if there is an opportunity for some rather more forceful imperatives, that you really don't have the option of saying no when there's a Public Health need for data and analytics surrounding that data. You just can't say no to that and save ourselves from having to do scrambling and calls with lawyers at a time we all need to be focused on addressing the enemy, which shouldn't be each other.

Donald Rucker

Robert, could I make a comment? It's Don Rucker.





Robert Wah

Sure. Yeah, Please.

Donald Rucker

To Jan's comment and some of the other ones, I think it would be very helpful if folks can put in – I know there have been a number of comments, including some slide language - but if folks want to send us specifics on the acts around what we might work with the Office of Civil Rights in terms of clarifying what is in HIPAA and what should be in HIPAA and what might change in HIPAA in relation to the COVID epidemic. That would be very helpful, and you can either send it – well, probably the easiest for folks is to send it to me directly at Donald.Rucker@HHS.gov. Conversely, if you want to send to either Elise Anthony or Katherine Marsh, the Senior Chief Privacy Officer, that would work, as well. Or all three of us. And we're researching some of these things in terms of the IT implications to work with the Office of Civil Rights but are certainly interested in specific asks here. So, thanks, Robert, for letting me put that in.

Robert Wah

Thanks for offering up your e-mail. All right. So, we have a number of HITAC members with their hands up. Thank you for being patient while I went through that. I wanted to give the presenters a chance to just round out their presentations, since they were all so very good about staying right on time. Clem, why don't we start with you? Clem may be having difficulty on the audio again. Clem, leave your hand up and we'll come back to you. Steven?

Steven Lane

Yeah, I was just going to say, and I just put it in the comments, as well. Debbie Condrey's presentation earlier, Don, included very carefully crafted and succinct language that a number of folks have put together as a suggestion to the OCR for how they could amend, modify, or issue additional guidance to help with the minimum necessary challenge that provider organizations are facing. So, we've got that in our presentation materials, and I'm sure Debbie can resend that to you.

Donald Rucker

Yeah, I would like to get more economically, Steve, other folks, as well. Just so we can reflect on as many circumstances as possible here. But thank you. Yes, I did realize that that was out there and precise, and I appreciate that.

Robert Wah

Clem, I think you're back.

Clem McDonald

Well, I think I was on. Can you hear me now?

Robert Wah

Yeah, we can hear you.

Clem McDonald

Okay. Well, I wanted to kind of just do a big round of cheering for these HIEs, and I'd also like to kind of hope that I could elevate their importance in the whole process of this networking, because life is easier



when you start with something that's done instead of starting from scratch. These guys, I was really impressed by all that they are doing. They haven't really been given much spotlight, I think, over the last five or ten years.

Second thing is that I think some of them have tools, but I don't know if they are easy to share the one I heard from Indiana about the reporting to the Public Health sounds like a pretty cool one. They are not always easy to move around, but I hope that those things can be shared across the other HIEs. And then, this problem of the politics and fear of HIPAA is killing us. I keep bringing that up. So, how quickly we can fix those barriers. I was involved in the HIE in Indiana way, way back, and we spent a lot of time with lawyers, although Indiana is a friendly place; it wasn't as bad as maybe some other states. We've just got to cut through the chaff here. Thank you. I'm done.

Lauren Richie

Okay, thanks, Clem. I think we may have lost audio for Robert. I will call – are there any other comments from committee members that are on the phone?

Carolyn Petersen

Yes, please, do jump in if you have other thoughts.

John Kansky

This is John Kansky. I'll just go behind Clem and say that he underestimates his work in laying the groundwork for what we have in Indiana today. Just giving credit.

Terry O'Malley

Hear, hear for that. Hi, this is Terry O'Malley. Just a comment as we look down the road, as to sort of what critical assets are needed to be in place for the next pandemic. I think we should remember these presentations. They were spectacular. Thanks to everyone.

Carolyn Petersen

Thanks, Terry. Are there other comments or questions from the HITAC members? Les Lenert, go ahead.

Clem McDonald

Maybe another question about what can we do. I mean, Don asked to get from the HIE people to get cases to help solve the problem of the tangles with HIPAA, but what could we as members do? Could we just argue for something? Because I just feel like I've got a patient who is out of breath and I can't get oxygen in him, because that's what the situation kind of is right now. We got to get some oxygen in this problem right away. Don and the HITAC people, what should we do to promote simpler solves?

Robert Wah

Thanks, Clem, and sorry to the group. I got cut off somehow. So, I'm back. And I see Les, you have a microphone and a checkmark up. Not sure if that's a hand or not.

Leslie Lenert

Yes, I have a hand up.





Robert Wah

Okay.

Leslie Lenert

So, I just wanted to make two comments. One was I appreciate the work going on in Delaware about the use of GIS in this, and the issue is to what scale of de-identification should be allowable in this kind of effort. I think that the current HIPAA standards are too large for geographic entities. It's about 20,000 is what we have. We need to push it down to smaller locales, where we still protect privacy, but get usable data for people. So, I think Census Tract might be a better unit that we'd be pushing things down to with the HIPAA level that would allow, still anonymized data but useful to responding to outbreaks.

Second comment was that I just want to highlight the importance of regional HIEs as response tools for this. They are the ones that are connected to the hospitals and to the communities that are taking the social distancing efforts, and without the ability to bring together data for a region, for a coordinated response, we're really fighting with one hand behind our back in this type of a situation. So, we've heard the great successes that HIEs have been able to achieve in response. The third thing I'd like to point is out is we're still missing one critical type of data often in HIEs that we haven't really talked about, which are about patient preferences for limiting care in this. COVID-19 is a lethal disease, and many of our most ill people are stricken with it, but we do need to be able to record and distribute their preferences for end-of-life care in this outbreak. And HIEs are probably a great place to store those preferences so they can be distributed across the community and then also go on to the first responders and those types of people who might be engaged in resuscitation efforts. Thank you very much.

Robert Wah

Thanks, Les. Jan, did you want to respond to Les' question?

Jan Lee

Yes. I just wanted to echo the issue of the level of deidentification. And so, it's not just an issue of geography, although I do agree being able to push it down to Census Tract would be quite helpful. But it's also the issue of how many individuals within that group. And so, we have the ability to track things down at an extremely granular level, but if we follow the CMS cell suppression rules and say we only report if there's ten or more, then the whole state lights up, because we can't take it down to the level of granularity that we would like to without violating that cell suppression size.

So, I do understand that in a non-COVID world, there are privacy issues that are perhaps different than when you're in the middle of a Public Health emergency, and maybe there should be some latitude that specifically addresses situations where the Public Health is at stake. What is that balance between individual rights and the needs of the community? That's a philosophical debate that many greater minds than mine have tackled, but I think that's fundamentally the heart of the issue here.

Robert Wah

Thanks. And, David, if you want to comment on the advanced directives, some people are not on the web app, so they only have the audio. So, maybe you could add to that, as well.

David Kendrick



Sure. Definitely in our standard message as we get the indication of the existence of advanced directives, and the HIEs are absolutely, I think, the right place to centralize that sort of information and the best way to honor patients' wishes by making sure that those records are available wherever and whenever they need to be. Even in the hands, I will reiterate again, of a pre-hospital provider, someone who wouldn't traditionally be able to look in the EHR to find results.

The other thing I would add is social needs data is another unique component area that many HIEs have engaged with now. I started to give you some of that in my talk and I have slides about it, but that really, given the one-two punch of people stuck at home with their families or whoever they live with for a long period of time and the economic downturn that's hitting everyone as a result of it. More than ever now, the social needs, connecting clinical care with social services is going to be critical, and HIEs, especially with their identity resolution and partnerships with many social service agencies are going to be critical.

Robert Wah

Yeah, thanks for that. I mean, in my conversations with some people from the WHO, because we're talking about establishing this two-way communication link with the public they said you really need to think bigger than just asking people about their health status, which is typically our focus. But if the epidemic gets particularly bad in an area, we may come to a point where we think about life status. Do you have essentials, water, food, public safety, and civil order in your area? So, I think that's another dimension of what you're talking about. I would like to hear from all of you about how you view this two-way communication between the public and Public Health organizations and how you see that working through your particular HIEs or just HIEs in general.

Jan Lee

This is Jan. I don't mind addressing that. In Delaware, we have been very, very careful to amplify the message coming from Public Health and not to in any way appear that we are a separate or an independent authority. It is their job, not ours, to guard the Public Health. It is our job to collect, transfer, aggregate, curate data to support their work and to support the work of the clinical community, and so we really want Public Health to be seen as the leader of the band on this, and we want to support their efforts in any way that we possibly can with good data.

Jaime Bland

This is Jaime from NEHII. I would say it's the same messaging for us in Nebraska. We are deferring to Public Health for messaging, but we are definitely communicating we are the data backbone, and wherever data needs to move, we will do that on the behalf of Public Health. Focusing on how we can support county health departments, people doing contact tracing, any of that infrastructure and where we can help and assist and empower and enrich that with the information that we hold, we will do that.

David Kendrick

This is David. I echo both of those sentiments and I would call out again a challenge, and that is that many HIEs are not formally their statewide HIE or named by their state governments as the one, and that means they have no less data or role to play here. For us, we started offering data and solutions about five or six weeks ago, and only in the last few days have we heard back from the state saying, "Oh, yeah, you're right. You do have some unique things that we could use." But again, we made great efforts not to just go to the press or work around. We really felt this was important to work through the Public Health



effort. So, helping states to recognize the assets they have, even if they don't happen to belong to the state, is important.

Robert Wah

Could you specifically say how you're connecting with individuals? Is it by e-mail, by text, by phone? How are you connecting?

David Kendrick

You mean individual humans?

Robert Wah

Yeah.

David Kendrick

So, in my health context, we spent the last couple years building out the social needs screening, such that we take the data that's coming into our systems with registrations and every unique event in healthcare and we realized we were sitting on an incredibly rich source of triggers, right? Meaning that we know when somebody registers for care and we can take the phone number from that registration and it's almost always a mobile device now, and with the right permissions in place from the clinic and hospital or the source, we're able to deliver a text message directly to the patient that leads them to a social needs screening or now we're doing a daily COVID-19 symptoms screener with direction into services. And this is kind of a new thing for us, at least as an HIE, and that is direct to patient communication, but we're finding it to be very positive for patients. It's a one-stop-shop, because we're aware of everything that's going on with them, and it's also a one-stop-shop for the social service agencies to get their referrals through, which greatly simplifies the process. This is MyHealth asking you the question in a text. In Oklahoma.

Robert Wah

Yeah. And is that being done across all other HIEs? I'd be curious about the other speakers, is that something you are also using?

Jan Lee

This is Jan Lee. Go ahead, Jaime. Sorry.

Jaime Bland

This is Jaime in Nebraska, and we are actually, we just started with the social needs platform this quarter. We're still moving that forward, but that's something that we just started this year.

Jan Lee

This is Jan, it's on our road map, but we do not have a tool like that in place yet. However, we do have a personal health record that we offer directly to patients that enables them to see the same aggregated data that we present to the provider community through our community health record. The patients can see the very same data through the personal health record, but in a user interface that is geared to laymen, not to healthcare professionals.



David Kendrick

This is David. I might just add one more thing to this topic. Early on when we proposed the symptoms screener, one of the things we thought would be a great channel for delivery because it's not just to help patients triage themselves into the right place for care, but also to do Public Health measurement and assessment. We proposed using the emergency response system to deliver a once a day assessment to the population. So, that would be sort of geographically targetable, it could be de-identified and anonymous, but would be a great source of information, especially in the absence of universal lab testing. We were unsuccessful in getting people convinced to do that, though.

Robert Wah

Clem, I see your hand is up, as well. Do you have a question?

Clem McDonald

Well, a comment. I wanted to come back to the discussion about the individual versus society and deciding how we manage the data. I think if you did a poll of the public today and you ask, "Which is more important, your privacy or your life?" They would vote for life. And so, I think we've really got it unbalanced right now in the context of this emergency. And again, I would urge trying to find ways to simplify the flows, because this privacy is just sort of a third order thing compared to anything else, life, happiness, et cetera. And it's good, we don't want to get rid of it at all, but when you start to balance the two, I don't see that there's any competition.

Robert Wah

All right. Other comments from the HITAC members? Looking to see, people on the phone from HITAC that can't raise their hand that want to speak? I'm only looking at the hand raising part. I wanted to give an opportunity to people on the phone, just in case there's ones on the phone that want to speak that can't raise their hand. Okay. Other final comments from our HIE presenters?

John Kansky

Robert, John Kansky, just appreciate ONC offering us the opportunity to share our experiences. It was super helpful to put this in the context of the discussion, and I'm taking away some good stuff. Thank you.

David Kendrick

This is David. I would also echo, thank you for looking at us and for considering MyHealth and HIEs as a part of this solution. I'd also just say to Clem, I remember a day long ago sitting in your office discussing the beauty of watching HL7 messages flow by and what an impact that's had on my career. Thank you.

Clem McDonald

You're welcome. Thank you.

Robert Wah

All right. Anything else, Jan?

Jan Lee

Nothing from me, thank you.



Robert Wah

Okay. Well, we're running a bit ahead of schedule, and where we are in the schedule was after this discussion was finished, we were going to open the public comment period. So, on the chat earlier, I anticipated we might be ahead of schedule. Those of you that have been on many of these calls know I'm trying to be very mindful of when we open a slot for public comment, that we honor that slot, because I know people make plans around that. That's why I tried to give a little bit of advanced notice. So, what I'd like to do is open the public comment period early. I recognize that we're ahead of schedule, but ahead of schedule is always a happy dilemma to have. It's much better than being behind schedule. So, on the screen, you see the dial-in number for public comments. Lauren, I'm going to let you manage this through your way of doing this as our federal liaison.

Lauren Richie

Sure. Thanks, Robert. Before we opened up for public comment, did you want to just make a mention about the timing adjustment and the break in coming back?

Robert Wah

Yeah. Thank you, Lauren, for that. Because we are ahead of schedule we only initially scheduled, I think, a 15-minute break in here, because we wanted to maximize our times available to discuss. It looks like we're going to have more time for a break, and after this public comment period, we'll give you the timing of the break and when we'll be back. We have to match this up with availability of our speakers, because we gave them specific times when we expected them to be on the line to speak, so understand that we're juggling a couple things here, but after this public comment period is over, we will give you direction about when the break will be, when it will end, and when we'll resume our conversation. So, stay tuned for that.

Public Comment (03:15:45)

Lauren Richie

Okay, thanks, Robert. With that, operator, can we please open the public lines?

Operator

Yes. If you would like to make a public comment, please press *1 on your telephone keypad. The confirmation tone will indicate your line is in the queue. You may press *2 if you would like to remove your comment from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys.

Lauren Richie

Thank you, and any comments in the queue?

Operator

No comments at this time.

Lauren Richie

Okay, we'll leave the number up just for another minute or so. Robert, I'll turn it back to you before we break.

Robert Wah



Thank you, Lauren. I think what we will do is we have a fair bit of time here, but as I said, we made up our schedule with when the next set of presenters will be back online. Again, because we gave them a particular time when we expected them to be on the call, so what I'd like to do is have us resume the call at 1:20 p.m. Eastern. Knowing your schedule, that says when we're going to start the break, but, in fact, we're going to end the break at 1:20 p.m. Eastern time. And I think that will give us a chance to our last panel on Health IT provider executive perspectives. They will all be available at that time, and we can start our discussion after that, after we all return from the break at 1:20 p.m. So, I hope that's clear to everyone.

You're welcome to stay online. The system will maintain you. You'll have some beautiful music to listen to instead of us, but I think there will be music during the break. You can also break off and come back in. I suggest if you're going to break off and dial back in, that you dial in maybe five to seven minutes early, so there's not a rush in the last 60 seconds before 1:20 p.m. that everyone's trying to dial in, because the operators will try to connect everybody at the same time. So, with that, Lauren, unless we have anything else we need to cover over, I think we'll take a break until 1:20 p.m. Eastern time.

Lauren Richie

Okay. Nothing else from me. Thank you, all.

Robert Wah

All right. Have a good break. We'll see you back at 1:20 p.m. Eastern. Thank you.

Break (03:18:31)

Operator

All lines are bridged.

Lauren Richie

Hello, everyone. Just a couple minutes before 1:20. Just wanted to acknowledge that the line is now open, and we'll start in a couple of minutes. And just as a reminder for those already on the phone, if you could mute your lines in the meantime. Thank you.

[Silence] [04:17:18 - 04:19:55]

Lauren Richie

Okay. Hopefully everyone is starting to rejoin us here. I hope you had a nice break. Just a quick audio check, do we have Carolyn on the line?

Carolyn Petersen

Sorry, I'm here. I was muted.

Lauren Richie

That's okay. Okay. It sounds like we still have a lot of folks that are joining us, still trying to get back into the line, so maybe we'll give it just another half minute, and then we'll get started.

Carolyn Petersen



Yeah, that sounds good. I can see the notes that people are trying to get in.

Robert Wah

Okay.

[Silence] [04:20:36 - 04:21:28]

Lauren Richie

Okay, it looks like we still have people dialing in, but I think we may have enough of a group to go ahead and get started again. So, Carolyn, did you want to introduce the next panel?

Health IT Provider Executive Perspectives (04:21:45)

Carolyn Petersen

Sure. Thanks, Lauren. I think we will get started with our third panel. This will be a panel involving Health IT Provider Executive Perspectives, and with us today, we have Robert Buckingham, Senior Director of information Systems with Presbyterian SeniorCare Network; Greg Carey, Director of Government Affairs at athenahealth; we have Dick Flanigan, Senior Vice President of Cerner; and also Jackie Gerhart, physician with Epic. We have Charlie Harp, CEO of Clinical Architecture, and Cherie Holmes-Henry, chair of the Electronic Health Record Association. We have Peter Johnson, CIO of Beth Israel-Lahey Health, and we have Andrew Rosenberg, the CIO of Michigan Medicine at the University of Michigan. And with that, I will invite Robert Buckingham to take the mic.

Robert Buckingham

Okay, can everybody hear me?

Carolyn Petersen

Yes, yeah.

Robert Buckingham

All right. I'm going to buzz through these pretty quick here, because the timing is a little tight. But yes, at Presbyterian SeniorCare, we are right on the front lines of everything dealing with this, because we have very susceptible residents. As you can see, we have about 6,500 seniors every year across 53 different communities, with seven major campuses, and you can see all the different levels of service that we provide pretty much the whole continuum of everything. We are a nonprofit, quite literally, we do between \$2 million and \$3 million a year in benevolent care. Once a resident is with us, they stay with us for as long as they need care, basically. Next slide, please.

Some of our COVID-related activities, from an IT standpoint, there was one positive out of this. We've been trying for over two years to get our physicians to do more online ordering and approving, and so we have been to get them to do that. We've been doing more telemedicine. We've been kind of thrust into that. We've been working on it for a couple years to get ready for it and do little things, but because of the reimbursement issues and who would pay for the cost, it was very difficult to get that inbound and accepted very well, but we are doing it now. Unfortunately, it is still manually entered into our EHR system, and we are working with our vendor and some of the IoT devices to see about getting that to be automated going forward.



been very few.

We do use MatrixCare as our main EHR system, and we have entered standard orders so that when residents come in, there are certain things that are automatically done, extra monitoring for symptoms, et cetera. We have procedures for isolation for any new admissions. We have also set up automatic alerts based on temperature or other changes in levels of things, and it's been a constantly changing target for us because of the CDC, HHS, and CMS guidelines keep changing just about every day. So, we have to keep changing our procedures and our settings and everything, as well. As I said, we have extra reporting requirements with the residents, daily auditing and managing of those things. We have had increased remote access. However, we consider all of our employees basically essential, so we are still at work even from an IT standpoint and everything, because we have to be here if something breaks or be able to support things. We have had a few people for various reasons that are allowed to work remotely, but it's

We use our internal intranet to distribute a lot of information about the coronavirus incidence, and we have things like dedicated taking of forms, tracking procedures, things like that across that. We also have a daily conference call with 40 to 50 people, and we do have increased communications with residents to their families, because they are not able to visit. We have been locked down for over a month now with everything, and we've got additional iPads we've had to purchase and doing FaceTime and Zoom, et cetera, and that's been interesting to train both our residents and our caregivers to provide that. We have had many projects that have been delayed or postponed overall.

Also, from a non-IT related standpoint, we do daily screening of all of our employees. Everything is tracked. If somebody is absent for any reason, we track it and check them before they come back. Of course, we have the PPE issues in terms of getting everybody the right things, the changing guidelines every day, but we are at the point now where everybody is wearing masks anywhere they are even in common areas, let alone resident care. Different levels of PPE, depending upon where they are in that care. All of our support services and things have mostly been locked down and minimized transport between sites, less moving around. We've dedicated people to wings or departments or areas, and, of course, we haven't had any visitors for family or vendors and things like that.

Some of the ongoing challenges, next slide, please. Some of the ongoing challenges you've seen. We have Telephony and Internet increasing some speeds. We're going to need lines. Peaks are just crazy for some of the things. Increased security for remote access. More telemedicine, of course, as I said. We're going to be doing more and more of that. The fact that the rules have been relaxed lately would be a good thing to be done permanently. Getting payments straightened out with that was the biggest thing. PPE availability and employee stress has been interesting. It's been tough to get supplies, of course, but we have been able to do well with ours for the most part, because we did have some stored and ready for things, because we go through this every year with the flu, so it's a similar process for a lot of the things when we were up front early on. What the workplace is going to be like in the future, nobody's sure.

But the biggest thing we have right now is money. All of our resident costs have gone crazy. We've had more supplies and more people, of course. There hasn't been changes in the reimbursement rates because of this, and we've basically spent our entire annual budget on supplies in the first quarter. It always ends up that the acute care people get additional money for hospitals, et cetera, but everybody seems to forget the long-term care and especially the nonprofit side of it, and it gets excluded. Next slide,



real quick, I'll show them to you and you can figure them out. Data availability, telemedicine interoperability, and remote work standards would all be things that we would talk about more that could be future help, so we'll be able to do that later maybe.

Carolyn Petersen

Thanks, Robert. Now we'll transition to Greg Carey from athenahealth.

Greg Carey

Thank you, and good afternoon, I'm Greg Carey, Director of Government Affairs at athenahealth. Athenahealth is a cloud-based revenue cycle management EHR and patient communications platform Servicing more than 150,000 providers across the country. Additionally, we also have the clinician reference tool, Epocrates. Through this pandemic, our 5,400-plus employees remain focused on our company's mission, to create a thriving ecosystem that creates accessible, high quality, and sustainable healthcare for all. Because of our Cloud-based infrastructure, we're actually able to mobilize quickly on a number of different initiatives at the same time, and I'm going to walk through four of those briefly.

First, as soon as the CDC made guidelines and screening questionnaires publicly available, we integrated that information across our products and the Epocrates reference tool. This provided a way to monitor usage of those guidelines and screenings early on. Second, the network. Our network visibility is really unparalleled, and we have created a COVID-19 high-risk dashboard. As COVID spreads across the nation, our publicly available dashboard map of de-identified data displays information about the percentage of patients who are at a higher risk of severe illness if they contract COVID-19. Third, our physician practices are increasingly seeking opportunities to keep their patient population healthy. They are engaging with the 27 different telehealth platforms available in the athenahealth marketplace for fast onboarding. We have also enabled providers to start a FaceTime call with patients directly from our mobile app.

And lastly, for the purposes of today's conversation, we've assembled a COVID-19 task force of athenahealth employees. This task force harnesses the collective knowledge and expertise of our entire employee base through a crowd sourcing ideation page. These inputs are actually helping inform and prioritize product and R & D updates to ultimately deliver expedited value to our customers in the healthcare ecosystem. Next slide.

So, as we navigate these changes alongside our physician customers, we've naturally encountered some challenges. First, as a Cloud platform, we roll out functionality throughout the year. In partnership with our customers and thanks to their feedback, our scheduled spring release has actually been postponed to later in the year. This is to allow our providers to focus without distraction on treating patients. Second, our near-term goals are laser focused on supporting physicians and patients. So, we have a range of customers, from single practitioners in rural America, all the way up to large health systems in major metropolitan areas. These businesses are being faced with difficult decisions daily. Put simply, they are making decisions about whether or not they can keep their doors open. We're appreciative of the rapid changes HHS and others are instituting and we're digesting and serving that information up in a useful way to our customers. Helping providers adapt and see opportunities to keep their patient population healthy has been core to the industry's success so far. Next slide.



So, how can ONC and HITAC help? Above all else, put physicians and patients first. HITAC should support ONC and CMS in ensuring that funding from the Provider Release Fund flows beyond the hospital setting to the ambulatory providers. These providers are the front door of healthcare and can help ensure our population stays healthy during and beyond this pandemic. Additionally, I think ONC and HITAC should work with CMS to consider extending the CMS advanced accelerated payment through the end of the year. I believe right now it's a three-month extension. I realize these initiatives extend beyond the typical role of ONC and HITAC, but really as the agency that's the backbone of healthcare information flow in the U.S., it's critical that ONC continues to act as a convener and partner across all of HHS.

Second, patients still need healthcare. The only way for the system to stay open for many right now is through telehealth. HITAC should work with ONC and CMS to further incentivize and promote the adoption of telehealth services. And there's a few different pieces to expanding telehealth. One thing we're learning very quickly is not all patients have smartphones with video capabilities. Governments should consider expanding reimbursement of audio-only telehealth to cover these encounters. Going beyond that, consider reimbursing all telehealth at greater than 100% of the rate. In addition to the funding from the FCC for the technology adoption, this will actually help support that initial investment physicians need to make to adopt and deploy the technology necessary.

Again, patients still need healthcare, and telehealth is how healthcare will stay open during this pandemic. Lastly, ONC should do their best to ensure COVID-19 does not jeopardize proper implementation of the information blocking rule. We are convinced that a delay is appropriate. The pandemic is underscoring the importance of information sharing now more than anything we've ever seen; however, it's far more important that ONC and private stakeholders implement the rule properly, rather than quickly. In the near term, it's critical to devote the collective power of the healthcare technology industry to actually fighting COVID. Thank you for your time today, and I also want to thank all the healthcare workers out there that are battling the COVID disease on the front lines.

Carolyn Petersen

Thanks, Greg. Let's move now to Dick Flanigan, Senior Vice President with Cerner.

Dick Flanigan

Hi, everybody, and thank you again for the opportunity. I'll focus on a few items here, and if I could get to the first slide on Cerner's response. I'm thinking about this in kind of two angles and building on some things we've heard. We did create a couple of task forces, one was really very focused on our 27,000-28,000 associates around the world and really taking kind of a clinical view about protecting the health and the safety of our associates as they also work to meet the needs of our clients. And then, I co-lead a second task force that was created about a week later which was really to focus on the response in support of our clients and their front line work of addressing the needs presented by COVID.

So, secondly, a large number of our clients utilize our cloud hosting and traditional hosting facilities, and the thing we heard right away was, "Don't mess that up. Don't make any changes. Minimize any chance that our networks, that our core systems, our telemedicine systems, would be compromised during this period." So, huge amount of focus on maintaining real-time, 100% access to those systems. Thirdly, as you heard about from the gentleman from athenahealth, there is a huge amount of work to begin curating



what it is that we can respond quickly to and what we would call deployment-ready capabilities, things we can harvest from early learning in Seattle and New York and Louisiana and Philadelphia, and some of these markets that are early hotspots. How could we very quickly learn? And we've seen this very interesting ability to both collaborate with our large number of clinicians that are employed at Cerner and partner up with our clients and across the industry.

And number four, the response is focused very much on supporting the national data collection needs. As you know, there's been many different initiatives out there and lots of people that have wanted to help, so there's been a bit of coordinating across, whether it's initiatives from the CDC, the White House Task Force, the MITRE coalition. So, we essentially said, "We're here to help." We put the resources and capabilities of Cerner, whatever data collection analytics program wins the day, we're here to support that, and we have participated with CDC on both some of the disease prevalence, but also as importantly, basically looking forward to understand what the supply considerations and supply chain constraints that exist out there.

So, the next slide, we put face-up on our Cerner.com site. Really, we learned very quickly that clients wanted how-to, they didn't just want the kind of theoretical. They wanted to be able to get it very quickly into their systems, but they had very practical questions. How do I do caregiver preservation? How do I use certain technologies for in-room observation? How do I use Ring doorbells? How do I use this? And just the creativity has been incredible, but being able to actually get those solutions curated, get them documented, and then getting them face-up. And, at the same time, we found our clients wanted some safe harbor collaboration in an internal site that they use today, and then to harvest as much as that information to put that back out face-up to the community at large. Next slide.

The challenges I think you're hearing from many of my colleagues here. Early on, we had some issues around how do you support clients when there was a big inconsistency of guidelines about whether you could come on site or not come on site. You've heard about the challenges in our clients are being hit with lots of different requests for Public Health reporting and surveillance. We definitely see a need to consolidate and be able to hit our clients in partnership with the IT companies to very much allow that reporting to be done, if you will, one time for collect once and to use many. In addition, you've seen some of the challenges with consolidating a national view of supply chain with vents and PPE and other things. So, we're looking for some clarity and durability on the relaxation of the regulations, which things do we think will last? As was noted by the first speaker, we're very much focused, as well, on supporting the non-acute and behavioral health. We see those as being large unmet needs within the current initiatives.

I think which will become obvious for all of us, it's strengthening the Public Health reporting. We still have work to do on the electronic case reporting. We're committed to completing that work. We all understand the interoperability standards need to continue to morph around preparedness, and what we'd ask really from this group is to continue to engage folks like us and others on the industry side as part of the recovery phase, and we'd like to say one place we can do that together is on to accelerate the vaccine development, testing, and deployment, where we could all work together. So, there are my thoughts. Thanks for the opportunity.

Carolyn Petersen



Thank you. Now let's move to Jackie Gerhart with Epic.

Jackie Gerhart

Great. Thanks, Carolyn. Good afternoon, everyone. I'm Jackie Gerhart, a physician at Epic. My background is in family medicine and primary care, and I continue to practice, so figuring out how Health IT can improve medical care, especially on the front lines, is dear to my heart. Let's go to the next slide. So, one of the first things we notice at Epic is Public Health departments and health systems are scared, and this might be obvious, but as many of you mentioned earlier in this meeting, health systems and departments of Public Health are wearing so many hats during this COVID pandemic, and they need help with testing and triage and capacity management and telehealth and compiling data and so on, and they need that help all in addition to their normal day-to-day work of seeing patients.

So, what did we at Epic do to respond? Well, first we made an app. In partnership with OCHIN and Washington State Public Health, we built a self-triage workflow through our MyChart app, and it allows patients to use their cellphone and put in symptoms and then be triaged to, say, a white tent clinic, or a drive-thru testing facility, and this is also available for people that don't have a MyChart account, so they can just download the app and then sign in as a guest.

We also responded to help with hospitals and nontraditional care facilities to expand their ability to care through extensions and through surge centers. In an extension, a health system using Epic could extend software to an additional area to, say, gain more beds with an existing hospital, or to convert some non-acute care beds into critical care beds, for example. A surge center, on the other hand, is like a conference center or an auditorium. So, currently Epic has 175 unique health system customers that are in expansion projects to make more beds available, and also we have 50 surge projects, including the Javits center, which is in the middle on the bottom of the slide.

And what was really key to this, we found the successes were that we need to do it fast, we need to do it free, and we need to make it easy. We've also been working with the FDA, CDC, and the White House COVID-19 Task Force on national data collection, and we've been developing tools. And what was really clear to us is that we need to work together with HITAC and ONC and others to ensure that we have standards-based data for those metrics. Go to the next slide.

So, what are we learning? Well, first, telehealth is huge, and the adoption is going to continue to grow. We encourage ONC to continue to support the reimbursement and adoption of telehealth during and beyond the pandemic. For example, previously at UC-San Diego Health, they only did about 6% of their primary care visits virtually, and now today it's more than half. And NYU Langone Health now is doing more than 70% of its visits virtually, so we see this as a huge need. We're also learning we need consistent standards, and so during a national health emergency, our clinicians need relaxed guidelines on what is essential to document for billing and coding purposes, and we encourage the continued use of Health IT to help try to decrease that administrative burden and documentation requirements for our clinicians.

Regarding tracking and reporting, we need electronic case reporting. To be clear, all Epic sites have electronic case reporting functionalities available without needing to change or upgrade their software. And we appreciate the work of pioneers in this area, like Steven Lane from Sutter, and we really



encourage ONC to work with healthcare systems and us as EHR vendors to move forward with this important work.

Now for data queries, we also need standardization, so we encourage ONC to endorse the HL7 standards initiative to standardize data requests and measures. And finally, a quick note to shifting leadership and needs. As was mentioned before, our customers have been telling us that they have multiple masters to report to, and sometimes that's confusing and burdensome, so we need requests to be consistent and prioritized with clarity around the standards and formats. Let's go to the next slide.

So, in summary, what can ONC do? The greatest thing is to help convene and coordinate experts in Health IT. I agree with many that have spoken up today saying that ONC should bring the best and brightest together to create standards-based solutions, and the solutions will not only help during this pandemic, but also help post-pandemic. So, I feel the three things that ONC could do now are to 1.) adopt electronic case reporting; 2.) promote development of standards where there are gaps, and 3.) continue to use your website and to communicate the different resources that we need to have our health systems be able to comply with so that it's clear. So, we also ask ONC through these efforts to continue to coordinate with EHR vendors and Health IT vendors, and again I just want to thank and applaud everyone on the phone in the discussions that we're having. We're very grateful for those that are on the front lines to be able to use Health IT to remove barriers to get them back to what they do best, which is patient care and caring for their communities. So, thank you.

Carolyn Petersen

Thank you, Jackie. Let's hear now from Charlie Harp, CEO of Clinical Architecture.

Charlie Harp

Good afternoon. I appreciate the opportunity to participate in today's meeting. For those of you that are unfamiliar with Clinical Architecture, we're a healthcare software and services company that focuses on supporting large-scale quality, interoperability, and analytics. In our role, we often bridge the gap between healthcare solution providers, the standards community, and our clients on the front lines of healthcare. This provides us with a different perspective on many of the topics and ideas that are being discussed today. Next slide, please.

The COVID-19 pandemic did not fundamentally alter our role, but it did shift our focus to COVID-19 and how we could have a positive impact on our clients and come off the sidelines and contribute for the public good. With respect to our clients and partners, the following support areas became acutely relevant in this Public Health emergency. The first was the ability to deliver standard codes to support the exchange of patient information. For most of our clients, we are the source of standard terminologies. Our first initiative was to ensure that the new codes and coding guidance were being put into clients' environments as quickly as possible. And as the standards release new codes, we accelerated delivery through our distribution channel. This meant that for many of our clients, the COVID-19 specific codes were available in their systems by March 19th.

The second was to enable semantic organization of local codes to standard codes. We support the semantic interoperability of many clients for both clinical and administrative codes. We enhanced our solution to understand the semantic variability around COVID-19 related concepts, to facilitate term

mapping from proprietary codes to standard codes. The third was to enhance the awareness of enterprise capacity and utilization. We've begun to study and design models to facilitate better data governance of enterprise topology, equipment and supplies from a public good perspective, understanding that the need to measure and evaluate patterns related to COVID-19 would require curated value sets and other data resources. We looked around the industry and found a handful of initiatives that were being pursued in parallel.

In order to conserve resources and reduce confusion, we partnered with Logica Health, Regenstrief, MITRE and Apple and established the COVID-19 Interoperability Alliance, our objective being to engage with the industry and collaborate on initiatives and data resources that would provide value and make them available for public download. To date, we have released COVID-19 related subsets and value sets for SNOMED CT, LOINC, and RxNorm for lab results, diagnoses, exposure, symptoms, medications, and risk factors. The link for the alliance is on the slide. Next slide, please.

As far as suggestions for ONC, the first one is a short-term suggestion that may sound basic, but it could be very impactful and should be fairly easy to accomplish. This suggestion is to consider establishing a mechanism that would officially provide semantic guidance during an emergency situation like COVID-19. Health care information evolves from the edges. This means that when something new happens, like COVID-19, healthcare institutions need to react immediately, and very often that involves creating local proprietary codes before the standard codes are introduced. Without semantic guidance, these local codes are created with a great deal of variability, or worse, with a meaningless internal name. While this variability may not impact what happens in an individual facility, it can have significant impact when we try to aggregate that patient data and normalize it to the standard codes as they become available.

Providing semantic guidance could be as simple as having a designated place where advice is given on how to name emergent concepts and any relevant guidance on general use, like how a qualitative lab test should be resulted: positive/negative, detected/not detected. This type of guidance could significantly reduce the effort and confusion related to mapping locally created codes to whatever standard codes get released. My longer-term suggestions will not be an epiphany for anybody on this call, but I thought they were worth articulating. The first is to provide best practices on data quality improvement and stewardship, and the second is to do the same for high fidelity semantic interoperability. We spend a great deal of time focusing on how we move information from place to place, but not enough on the data itself. Receiving information from elsewhere is not helpful if the quality is poor or it cannot be understood. This issue impacts everything we try to do with the data, from quality measured reporting to artificial intelligence initiatives.

The scale and volume of healthcare information make quality improvements and semantic operability both non-trivial exercises. This is further exacerbated by antiquated approaches that require direct human effort, which is expensive and time consuming. As the information in healthcare continues to transition from being a by-product of the process to an invaluable asset, we need to consider new perspectives and innovative approaches to ensuring what we are sharing adds value. I think ONC could be a powerful catalyst to help drive this transformation. Thank you for your time.

Carolyn Petersen



Thank you, Charlie. We will now hear from Cherie Holmes-Henry, the Electronic Health Record Association.

Cherie Holmes-Henry

Thank you all. Appreciate the invitation today. I want to make sure that you - [audio cut off]

Lauren Richie

Cherie, I think we may have lost your audio.

Cherie Holmes-Henry

Can you hear me now?

Lauren Richie

We can. There's a bit of an echo. You may want to -

Cherie Holmes-Henry

Sorry, thank you, is that better?

Lauren Richie

Yes, that's better.

Cherie Holmes-Henry

Sorry. Again, I'm here today representing the Electronic Health Record Association. Next slide. The EHRA is a division of HIMSS, and it's made up of 29 different member companies that support the majority of the United States' hospitals, clinics, and practices that manage relevant data requirements to address this COVID-19 pandemic. I'm proud to say you've heard from three of our members already today, between Athena, Epic, and Cerner. The EHRA, obviously, like many organizations, formed a COVID task force in response to this pandemic and created on our website, and we're providing a link to you an organized effort of our members and what each of them are doing respectively, as well as different activities with different agencies and organizations that we've been acting as a convener for, so that you can drive coordination of data, coordination of requests, and coordination of information. Next slide.

So, the association's new task force has been identifying provider and Public Health data needs, as well as developer questions and pathways to sharing relevant metrics. We've had significant engagement over the last several weeks with many federal agencies, the CDC, and one of the things we learned in working with them is there are multiple projects within the CDC within multiple divisions of CDC. Therefore, once again, we tried to act as a convener and a coordinator. We also have been working directly with Athena and in various HHS organizations such as obviously ONC, CMS, and CTO for HHS, as well as to a certain degree the White House Task Force.

We've also had engagement with state and local organizations, who I will say these are unsung heroes that we don't often hear from until we're dealing with a Public Health crisis, but these are those Public Health front line agencies that really get activated during this time. The Council of State and Territorial Epidemiologists or CSTE, the Association of State and Territorial Health Officials or ASTHO, and the National Association of County and City Health Officials, NACCHO. These organizations are working



tirelessly on the front lines, and we're very happy to coordinate with them and provide resources and data where we can. We've also had engagement, like others mentioned on the call, with certain private sector initiatives: the MITRE project with the COVID-19 Healthcare Coalition, and most recently we're very actively involved with the HL7 SANER Implementation Guide Project. You'll see information coming out on that in the next few days. Next slide.

So, data needs and challenges, which we've all talked about on this call today, are highly prevalent. The data requests to providers from public health agencies and research initiatives have included information like obviously admissions data, hospital capacity, bed availability, testing, whether or not we can really show positive, negative, or pending. Obviously, ventilator utilization, demographics, comorbidities, and vital signs. The challenges that obviously we've encountered around getting access to this information is aligning these measures across requesters. Obviously, we've seen many requests for duplicate reporting both going into our individual member companies as both on the call, as well as to EHRA directly, where we then try to act as a convener to communicate the information. As many of you have discussed today, there's still a need for standard definitions. There's also the requests, these are short-term turnaround requests for large volumes of historical data, and we really need to ensure consistent and complete reporting and always, always look at these minimum necessary definitions.

Our recommendations for ONC, we'd very much appreciate, whether it's through this pandemic or for one going forward, that we try to create out of all of this either a phone book, directory, whatever we want to call it, of the key Public Health contacts. We've learned that we spend a lot of time trying to run down information on individuals that we should be dealing with who have authority on a certain project, and also introducing and coordinating different associations and organizations within each other in a coordinated effort regarding this response. We also would request that ONC continue to promote and encourage network participation as useful for Public Health response, as well as day-to-day interoperability. The discussions that Dick from Cerner mentioned regarding case reporting, the other needs for syndromic reporting and other levels and layers of interoperability that really support and promote the often underfunded Public Health needs are imperative for us to be successful in this going forward.

I also want to commend all the front-line providers and health responders, first responders out there, and the EHRA remains committed to our members, our clients, and our patients in supporting their needs. Thank you today.

Carolyn Petersen

Thank you, Cherie. Let's now hear from Peter Johnson with Beth Israel-Lahey Health.

Peter Johnson

Thank you so much. Good afternoon, everybody. I'm a seasoned healthcare CIO, and it is a very exciting and challenging time to be in the provider community. We have over 500 COVID-positive patients in our hospitals, and we have another 3,000 under our care in eastern Massachusetts, as we serve. We're a large system that came together a year ago that fundamentally is the combination of Beth Israel Deaconess Medical Center, its affiliates, and Lahey Health. Next slide.

I don't think there's anything particularly unique about sort of what IT's response is as an IT leader. Everything that happens in our response for the COVID-19 has implications for IT. I would just comment a



couple things. We have over 12,000 employees, that's up from about 100, that are now working in a remote way, and I will tell you that we have focused nationally around broadband as being a rural issue. I would tell you that it's not just a rural issue, that we are stressing all of our infrastructure throughout the country today, as everybody has moved to a remote workplace and work at home.

Surge capacity. Again, very significant across. Everybody has extended that both within their organizations, Boston also has a convention center. We have closed one of our hospitals in order to free up capacity and have that capability within our system. As we move patients and equipment from one place to the next to make sure we're meeting the needs of our clinicians and our patients. COVID testing. We had the slow start, like everyone else did, we are now in the business and are the third largest testing site in Massachusetts, and we are in the swab manufacturing business on site as we move forward. Our PPE has done better than others because we're in a re-sterilization and are working with Mattel to make that happen. Of course, we're looking for the cure and vaccines and all the rest as part of our activities and have implemented symptom checkers. Next slide.

So, when I sort of think about the barriers and the challenges, I think the recommendations are for ONC to continue what it has done in the past, which has been focus on standards, coordination, and a convener and policy form. As a former FACA member, we spent a lot of time on the standards side, and we would tell you that clearly, as others have said, this video standards and the video in telehealth is something that is here to stay with us forevermore we think, and will fundamentally change the world on a go-forward basis to what we have today. We've had significant work to move forward and think that there could be more work for ONC in helping us around timeliness of guidance. As we all know, both at CMS and OCR, some of our rules and interpretations have changed over the last 30 to 45 days. Having greater clarity around that is an area that we believe ONC can assist as we move forward.

Impact on the future. Again, I think others have mentioned that telehealth is here to stay. We would think that if that's going to happen, we're going to need appropriate broadband to do that. Implications for hoteling of our staff on the non-clinical side is an important piece as we move forward. And then lastly, just a comment, although most IT vendors have been very positive and supportive, this has not been uniform across the board, and we would at least echo, or I would echo that some of our vendors have taken advantage of this in a price or opportunistic way, and that's something that we think ONC could assist us with. And then I look forward to answering questions with members of the FACA and as we change from – I guess we have one more presenter before we have the interactions. So, thank you so much.

Carolyn Petersen

Thanks, Peter. And, yes, we now will hear from Andrew Rosenberg, CIO of Michigan Medicine, the University of Michigan.

Andrew Rosenberg

Thank you, this is Andrew Rosenberg. I'm the CIO of the health system, as well as the medical school. I'm also a critical care anesthesiologist, and I wanted to choose three areas to focus my observations, both as a CIO, but also as a practicing intensivist in our COVID ICUs. I was in the unit last week, I will be back in our units for two more weeks next week, and so I wanted to choose topics that I thought would emphasize comments that you have already heard from my colleagues. The first will be about remote



work. That's separate from telehealth. The second will be telehealth, and the third is more around unified communications and mobility. And I've chosen, frankly, to use data from the University of Michigan, not that it is necessarily exemplary for every area, but I do think it may help give a little bit more substance to some of our conversations. Next slide.

On the top, you can see the enormous expansion of workers using our remote capabilities, particularly our VPN, and in and of itself, that at least fourfold increase in number of users is something we all have dealt with. But I think that as some of the previous comments have mentioned, there will be long-term sustained benefits of having a more hybrid workforce for a variety of reasons. But the reason I wanted to show you that expansion is the graph at the left bottom is now where we're focusing some efforts. Who are those remote users? How are they the same, and how are they different? Because we can't have solutions that fit everyone. One example that may be hard to see on these slides is that the large blue increase are employees. They tend to work during the weekday, not as much during the weekend, but on the weekend, the number of providers and managers appear to be fairly similar, so we have to think more what are the tools and capabilities to do that remote work.

One of the points is that remote work will also mean remote support, and that pie graph is to represent some of the novel approaches, including the use of AI, chat bots, and other tools that may help us be able to support this large expanded remote workforce, including things like virtual desktop and other telecommunications. Next slide.

The second thing I wanted to focus on, and you've heard a great deal about, is the rapid expansion of telehealth. These slides now are already very old for us, even though I sent them in just a few days ago. We've essentially gone from about 400 visits a month to now over 9,000, and I've heard of other health systems that have increased even multiple fold beyond that. What I think might be more interesting for the ONC to think about, as this lower graph tries to demonstrate, is now we're trying to determine what areas are we seeing growth in telehealth, because not all specialties are amenable to telehealth, even with specific disciplines. And so as we start to dive into who has expanded and how they've expanded, we need to look at, one, what are the barriers keeping some groups from expanding more quickly. We've set up, for example, 50 home radiology viewing stations. We probably have another 60 that we could do if we have the time and money to do that, but I think the granularity of who is working in telehealth, how they are working, will support many of the comments that my previous panelists have made.

Final slide, please, to slide three. Slide three, please, the next slide – is around communications. On the left, one of the interesting things as we stood up one of our new ICUs, it was interesting that there was an immediate need and ask for pagers. Not just the virtual number or the dummy pager or the ghost pager, but the physical device itself, even though that is an absolutely legacy technology that we're desperately trying to get away from. And so, there still a lot of workflow and change that needs to be done to get to what you see in the middle, a more unified approach. And while I've tried to be somewhat agnostic to our vendors – we happen to be Epic EHR – I would say that the integration of the EHR, in this case Epic, with other critical needs and unified communications, enterprise communications, telephony, but also alerting are so important.

You can see on the right one of our intensivists actually cut an IV bag to hold one of these new unified communication tools to do that kind of alerting. Also, we can move away from more legacy systems like



desktop phones to more mobile devices. And on the right, although that's a picture from Cedar Sinai that's public, it demonstrates the use of novel communication tools like smart devices, Alexa and others, that we're also rapidly deploying. So, those are examples of the things that we've been doing. Thank you.

Discussion (05:07:26)

Carolyn Petersen

Thanks, Dr. Rosenberg, we appreciate that. So, that concludes the presentations we have from our panelists today. I would ask that the HITAC members use the hand raise function in Adobe, so that we can keep track of you and make sure that we get everyone's comments. And with that, I will start with Clem McDonald.

Clem McDonald

So, yes, a great presentation, and I'd like to focus my questions on the nursing home people and Dr. Petersen. So, I think that the idea of airborne COVID has been way underplayed and I'd just like to wonder whether the nursing home and places are worried about filters in the air systems which will filter 98.7% of particles in viral size. Now to Dr. Johnson. My daughter is a nurse anesthetist and I'm keenly aware of the risk and the danger of the cauldron in the ICU. There, there's a big issue about negative rooms, where you get negative air pressure, and I don't think there generally are enough of them, but also whether HEPA filters are installed in them. Also, on that line, I'd like to bring up the snarky comments you read about doctors being these nasty people buying up the drugs like hydroxychloroquine. It may or may not be helpful, but these guys are into the cauldron, so won't you forgive them and trying to get some backup to save their butt or family's butt if they come down with the disease? So, there's just a couple comments particularly about air filtration systems which are really quite good if you have the right ones.

Carolyn Petersen

Thanks, Clem. Did you have a question related to Health IT?

Clem McDonald

Well, I guess not. I guess not, but just would like to know whether institutions are worrying about air filtrations and negative air pressure rooms to keep people from catching this thing. I guess it's not an IT question. Maybe I should withdraw it.

Carolyn Petersen

All right, thanks. Let's go to Arien Malec.

Arien Malec

Yeah, so maybe one is not an ONC-related item, but just want to underscore the need for better reimbursement standards for telemedicine and better flexibility for telemedicine providers, particularly given some of the disparity in terms of tools and technologies that are used. More flexibility for telephonic and for secure messaging-based telemedicine, particularly the secure messaging that follows the interoperability program, would be useful. Maybe a question for the panel and particularly for EHRA, is what additional support could ONC and could the FACA provide in terms of helping you manage some of the duplicative imbalance that you're getting, and then maybe any recommendations that you had about reducing burden for duplicate requests, duplicate data requests, which is something that we've heard something about.



And maybe number three is maybe a little bit of an explainer for the SANER project. It's a project that Keith Boone launched a few weeks ago, we talked about it in our last FACA meeting. There's been a huge amount of momentum behind it, so I think it might be worthwhile for you to provide a little one-on-one for this panel and also for the public. Thank you.

Cherie Holmes-Henry

Thanks, Arien, good to hear from you. Yes, we've had several discussions and calls with different resources with ONC about our need to help coordinate the request for data and request for resources, and we are being heard. We do believe we've made progress there. You'll also note that on our site we've put this link to a Google document and a lot of this work is being done by that committee as you know well from Cerner, to try to aggregate and coordinate the requests. So, I'm driving people to that link on the first slide so everyone knows that we're posting all the requests we're getting and we're trying to do alignment both for resources and the kinds of data so we can respond as expeditiously as possible and then communicate that back to our members.

Also, specifically on the SANER project, I'll just give a high-level overview of that. Obviously, HL7 is involved, Audacious Inquiry has also been involved. We are specifically involved from the EHRA with the implementation guide component for the FHIR requirements. So, this project is really aiming to have kind of a single FHIR-based definition of COVID-related measures, and the measure report starting with CDC/FEMA measures, and it really welcomes other local, state, national, and global jurisdictions for COVID measurement reporting and as well as private research initiatives that are using a distributed approach.

So, EHRA is actually sending a letter out today to a number of organizations encouraging them to support the participation and help create a common approach that aligns and can be rapidly expanded that includes ONC and various resources that will get this letter. And it's not only meant to focus on FHIR-based APIs, but FHIR-formatted files such as XML, JSON, that can work as well. And we're looking at having one common library to understand the measures, regardless of the technology deployed. So, that's kind of a high level. There are a number of you on this call today that will actually receive the letter and we'll provide some additional detail there.

Arien Malec

Thank you.

Cherie Holmes-Henry

Thank you.

Carolyn Petersen

And let's now move to Michelle Schreiber.

Michelle Schreiber

Hi, thanks so much. So, I'm Michelle Schreiber from the Center of Clinical Standards and Quality at CMS. First, I want to thank all our presenters and for HITAC for gathering this great group together. So, most of you I'm sure have seen at CMS we've done a lot of work to expand telehealth capabilities, as well as



ONC

many flexibilities to allow organizations and providers to be focusing on the COVID epidemic. But I have a specific question, especially I think for the EHR vendors around telehealth. We agree that telehealth is here to stay, but one of the challenges I think in documentation that I'm curious how you see addressing in the future is that we can't really very easily do a physical exam. You can't get the vital signs, for example. You can't listen to the lungs. So, how do you see capabilities for doing that in telehealth going forward? Thank you.

Cherie Holmes-Henry

I'll defer to my colleagues with either Cerner, Epic, or Athena and then I'll be happy to chime in. This is Cherie.

Dick Flanigan

This is Dick Flanigan, can you hear?

Carolyn Petersen

Yes, go ahead.

Dick Flanigan

Okay, with the raise your hand, wasn't sure if I had to be acknowledged or not. So, this is Dick, and I'm with Cerner. Yeah, what I think's been really interesting for us on how far this goes, I think we're using the often overused expression, "It's gonna be really hard to put the genie back in the bottle." And when you hear from University of Michigan and others, and we have clients around the country using many, many different platforms, some of them it would have been shocking to think that Zoom and FaceTime and other platforms would have been used. Not that they are bad platforms, but there's lots of other providers out there that have worked very hard to create the privacy safeguards and things. So, we've created an environment where there is so many different technical platforms that emerged. And we worry about the privacy piece, I think, as consumers and patients, and I know CMS is concerned about that, as well, and I know you're also concerned about abuse of the platform.

We are finding with the Internet of Things technology and a lot of the technology that can be put on the other end of those devices, that some things that we didn't think were possible before seem to be working okay. Now, I'm not a physician, and there's other physician colleagues on the line, and they can really speak to how realistic it is for some physical exam items to be done from afar. We don't think necessarily they all get done by using your mobile phone or the screen camera, but we think there is deployable technology very quickly in advance of a visit, or patients that you're monitoring for chronic disease where you're going to be continuing to be monitoring and these visits make sense. We do think there are a set of assistive technologies that complement the telehealth and the televideo that probably should persist, but we would like to see this wrapped into the overarching framework that it should have some levels of strong support for maintaining privacy of the platform, that it should have an onramp into integrating with the rest of the information ecosystem.

It should be standards based. It should be supported, so that not just in communities that enjoy good broadband, and folks that have mobile phones and other at-home technology. So, I think really the speakers covered a lot of the concerns, but we think this is actually going to go, I won't say much further than predicted, but this is going to be a real hard one to pull back in. That would be our observation. You





know you'll have to deal with that, so.

Carolyn Petersen

Thanks. And Jackie?

Jackie Gerhart

Yeah, I'll chime in, too, this is Jackie Gerhart from Epic. Being a primary care physician, I have thought a lot about how one could use telehealth, not only during times of COVID, but also during times of caring for chronic illness and behavioral health, and so forth. And to your specific question regarding physical exam, you're absolutely right. It is difficult to figure out how to do physical exam via telemedicine, and that's why up until now a lot of the telemedicine has been reserved for some of the less complicated cases or perhaps more urgent care cases, simply to allow for a type of visit that would be reasonable with telemedicine. I think what we've learned now is that some of those visits that we thought previously weren't going to be okay or weren't going to be as successful with telemedicine have become so, and really a lot of the barriers are ones that we can tackle.

So, I think some of the clinicians felt, "Oh I really value that face-to-face patient interaction and laying of hands on the patient and really making sure I'm always there and at the bedside," and I think that that is still extraordinarily valuable. There's also some ability for you as a clinician to see some of those things via telemedicine, so you can see your patient's environment and understand where they live and understand a little bit more about their family. And some of that decision making can actually really help you. So, I think I would really applaud the CMS's efforts. In fact, on April 6th, you guys put out that telemedicine in the state of emergency and reducing the barriers in terms of fees, and I think if you can continue to extend that forth and really try to encourage telemedicine to be approachable and doable not only from a technical perspective, but also from a reimbursement perspective, I think you would be surprised at how many people that are in different areas like rural health or underserved communities would really be able to get some amazing healthcare that they may otherwise not be able to.

So, I'm actually really excited about it. I hope that the thought of how one previously documented a physical exam is something that is open for discussion on the new ways that we can better care for our patients.

Carolyn Petersen

Thanks, Jackie. Do we have any questions from our HITAC members who are just on the phone?

Arien Malec

Hey, this is Arien. I'd like to follow-up since I asked the question on telemedicine. I got started in my career in healthcare longer ago than I want to admit in connecting patients to physicians virtually and electronically. There's a ton of research in this space that says things like managing chronic conditions is quite achievable to do and actually better outcomes.

So, for example, there's good studies on management of hypertension, good studies on management of diabetes. There is no substitute for physical exam in certain circumstances, but it's a shame. So, obviously, right now there needs to be a substitute, and it would be a shame if we destroyed the institution of primary care because we can't figure out our reimbursement flexibility. But longer term, in



many cases we're driving physician encounters, patient encounters into the physician office, not because it's clinically necessary, but because the reimbursement rules and coding rules require certain activities to be performed that are really very honestly being done for reimbursement reasons and not reasons for good clinical medicine.

So, my hope is that as we exit this crisis, we increase the amount of flexibility and documentation requirements for E&M codes to allow for longitudinal patient care management in ways that are more efficient for the U.S. healthcare system and better for patients. So, first of all, a shout-out and plea for additional flexibility in reimbursement rates in the short term, but then I just want to endorse this notion that a flexible set of tools can actually provide for better patient care more longitudinally, and additional flexibility would be required in terms of fine-tuning E&M codes to the kinds of work that are performed. Thanks.

Carolyn Petersen

Thanks, Arien. I see Robert Buckingham has his hand up. Go ahead, please.

Robert Buckingham

Hi. Yeah, hi, Carolyn, it's Robert Buckingham. I wanted to also address a little bit on the telemedicine part. My last slide there I got a little bit cut out of time, but with the interoperability of telemed, the biggest problem that we've had getting it adopted across our whole network has always been the reimbursement problems. Who's going to get the money, how are they going to get the money, how are they going to bill for it, et cetera. And with the relaxed rules right now, that's been very helpful for us to be able to implement that in a lot of different ways. And I think that is one of the things that could be used to help it stay in place a little bit later and being able to use it more going forward, which I think is going to be important. And along with that then, any kind of way where we can find a way to automate the interfaces to the EHR system is going to be a whole lot better, as well, too.

Because right now, of course, if they do any vitals or anything while they are on the phone with a physician, we have to manually enter those into the EHR system separately and then the diagnosis or orders go separately. If there was a way to tie that together, it would be a whole lot better. Also, one other thing I wanted to mention was the data availability thing. We've talked to multiple people earlier in the day and everything else about flagging people who are previously positive or who have the immunities or whatever. And I think that's something that we need to be very careful of from a security and privacy standpoint, but also if that is stored in the HIEs as some people had discussed and it's available to other caregivers through the HIEs, we're all covered entities. So, I don't have as much of a problem with it in that world. But getting everybody tied into HIEs, cost has always been a problem with that, too.

And going back to the meaningful use idea, the acute care facilities were given money to do that, but it's been tough for long-term care and nonprofits to get the money to do that with. And any of these things, I think that one of the things that you guys have to do as an organization is not just make them guidelines or recommendations. As much as I'm anti having rules put down from above in the government in a lot of ways, I think that the fact that we, as well as a lot of the actual healthcare providers out there, don't do any programming anymore in all these EHR systems. You know, I mean look at the folks from Epic and Cerner and everything else, or MatrixCare that we use. We don't code that stuff. We can't be in there



messing with the code, because it's a standardized thing, it's out in the cloud, it's whatever else. So, the providers, the software providers, have to make those changes.

And good or bad, if they don't have the incentive to do it because it's a regulation that they have to do something, then we either can't get it done or we have to pay for it separately and that in turn costs a whole lot more money, that may or may not be adopted by other providers. So, making regulations to that would be a useful thing, I think, in my mind, sometimes. So, that's all. Thank you.

Carolyn Petersen

Thank you. And Jackie Gerhart.

Jackie Gerhart

Yeah, I'll just add to that. Thanks so much for adding the piece about EHRs and responding to telehealth. When Epic leadership talks a bit about telehealth and its expansion, I don't have the references off the top of my head, but we've seen studies where health systems save about \$25 per year per patient in using telemedicine, and others that have shown about \$89 every three years per patient. And those two were done just on hard costs, so hard savings alone. If you take in some of the softer savings or the implied return on investment that you could get from not just the service of telemedicine itself, but also from saving other ancillary services, it could definitely be a lot more.

So, I think there is an incentive for healthcare systems to want to do this, and to the points that have been made, we do as EHR companies want to make those as seamless of an experience as possible, again, so people can really get care in communities that may – and especially in this case, where you're not allowed to go to a clinic in some cases. So, again, trying to reduce barriers and whatever we can do to do so is something we're interested in. Thanks.

Carolyn Petersen

Thanks. And Greg Carey?

Greg Carey

Thanks, Carolyn. I just wanted to add onto the conversation on telehealth, and I think we all agree here on the power of telehealth. And COVID-19, this is going to be going on for a duration of time that's uncertain, and it's not going to be an on and off switch when it's done. The appointments that are backed up from March and April and May, telehealth is a great function to start triaging those once we get later in the year, so we can reduce the number of people that actually need to physically go to the office. We think there's real value there. I would also encourage those on the call to look at how quickly the usage has jumped and innovation around telehealth has happened in the past weeks and months. I would caution against regulating in an area where there's clearly market incentives and market drivers that are actually working in real time, and we can see them in a very short period of time to incentivize adoption both for physicians and electronic health record and other technology vendors.

Carolyn Petersen

Great, thank you. Let's go to Jim Pantelas. I know you've been waiting patiently for a while now.

<u>James Pantelas</u>



Thanks. I've kind of got a question that's might be geared towards Andrew Rosenberg. Dr. Rosenberg, you work in a location that has been challenged in the past by power limitations. Electrical limitations and communications limitations in Ann Arbor have been a significant factor in the past. With the move towards telemedicine, towards EHRs that are not necessarily all that efficient, are you seeing any negative impact on the performance of your systems or strains on your platforms when you couple those environmental factors to a new requirement for telemedicine, where workers are calling in and communicating remotely with systems? Are you seeing an impact there?

Andrew Rosenberg

That's a great question. Turns out we're not. Maybe a few comments. One is that the local, the two biggest power companies have been adding redundancy in the Ann Arbor and southeast Michigan market. You may be referring to a pretty spectacular windstorm that occurred here several years ago, but from the enterprise level, especially those institutions like the University of Michigan, large health systems with a fair amount of power redundancy, we haven't. But the point where you may be going, which I thought was very interesting, is as we have a more distributed workforce, where frankly now the power at their homes or the last mile issues when we do have large power outages, that may become an issue that was not one before. And I think that will be something we all have to pay attention to, but that was an example of some of those items we were talking about of how do we now support a more remote workforce, whether it's the telehealth items that obviously has a great deal of attention. But frankly, all the other work that also needs to be done for a remote workforce.

James Pantelas

Thank you.

Carolyn Petersen

Yes, thanks. And let's go to Clem McDonald.

Clem McDonald

So, I wanted to return to the question of the physical exam and how it maybe can't be done with telemedicine. I think that's mostly wrong on a couple counts. Firstly, vital signs can be taken remotely. It's trivial, and there are fairly inexpensive devices. The fingertip oximeters are now \$50.00 or so. Blood pressure machines are probably that or below. So, it may be a question of finding ways to get funding for patients to buy them. Maybe they're already possibly covered by Medicare. The other part about it is in my own practice, and I have been doing it for some years, increasingly I've been depending on imaging and lab tests probably more than the physical exam. That's just the starter to help you decide some things. And a lot of those physical exam things you can see on video. You can see the nasal flaring, you can see the accessory muscles, you know they are having trouble breathing.

But so, the problem is going to be maybe if people don't come into the central institution, how do you get that done in a new world where people are distributed and not coming to a place where they might catch something? That's a question to the clinical people on the committee, I guess.

Jim Jirjis

Can you hear me, it's Jim Jirjis.





Carolyn Petersen

Yes, go ahead.

Jim Jirjis

Yeah, hey. As a clinician in this space, I agree that the challenge in the past has always been the payment. But televisits have a place in encounters that don't require physical exam. For example, somebody with hypertension, of course, periodically needs to come in for physical exams, in addition to verbal encounter and laboratory tests. But in between, there's value to having encounters where telemedicine has a role in touching base with the patient to question them about side effects, adherence to medications, maybe observe how they are talking blood pressure. And if we have a rigid view that an encounter can't be paid for unless every one of them has some aspects of a physical exam, then that's not honoring where video encounters fit.

Right now in medicine we have paid-for physical encounters, and we have not-paid-for telephonic touch-bases with patients. And the challenge with the video conferencing is that neither it nor audio touch bases, which have a tremendously high value role for the doctor-patient relationship and adherence, those are not valued enough to be paid for. Certainly, in a world where there's value-based care, it's no longer the insurance company deciding in what theater the physician decides any particular encounter what method was used, but it's sort of an artificial construct because of payment. You know, people keep saying it's not just going to go away, but I'd be curious to know what people mean, because if in fact, payment does go away, because the pandemic is, quote, "over," however varied the finish line is, wouldn't that go back to similar dynamics because of lack of payment?

Andrew Rosenberg

This is Andrew Rosenberg, can I add a comment?

Carolyn Petersen

Yes, go ahead, please.

Andrew Rosenberg

To Clem's point, I would agree, but I do think this is also an example where it comes down to both the specialty and potentially even the specific items. Some items are very amenable to telehealth. I just recently joined a VA tele-ICU program, and we'll start doing that in the summer. That's an expanding and very successful example of a form of critical care. Telepathy, teleradiology, those all make sense. But interestingly, ophthalmology, which has enormous amount of imaging, requires a lot of very special devices and techniques in order to get the images. So, I think that when it comes to what parts of physical exam and what parts of that physical side of healthcare, it's very heterogeneous, and I think ONC may consider how to find frameworks to promote those discussions in that more granular manner.

Clem McDonald

That's a good idea.

Carolyn Petersen

Great, thank you. And I have a question also. Just thinking back about all the things we've talked about today, particularly the Public Health panel and some of what we just talked about now with regard to the



technology, Dr. Rosenberg, I'm wondering if you can share thoughts about the Michigan Alert Network, and how that kind of an arrangement might be useful in bringing all the players together, and what that setup looks like.

Andrew Rosenberg

Actually, I'm not really very knowledgeable about it. What exactly are you talking about? Maybe I might know in a different name.

Carolyn Petersen

I think the acronym is MIHAN?

Andrew Rosenberg

Oh, certainly. Yeah, the Michigan Health Information Network. I'm sorry, I heard "alert." So, I would say MiHIN, the Michigan Health Information Network, is finally, after about ten years of consolidation a variety of substate HIEs that have finally consolidated into one substate HIE. And in that regard, I think it would be very similar to some of the other exemplary state HIE examples: Indiana, Maryland, and others. With that in mind, I think there are two things that come to mind that might be specifically relevant to this conversation. The first is MiHIN has always been an extremely good unifying platform for a variety of types of data, particularly for the health systems and the state of Michigan to be collaborating around Public Health data, reportable diseases, and things like that. So, in that regard, it particularly is helpful as a consolidating source for disparate health systems, whether they are sophisticated or not, whether they are very digital or not.

But then to get that data especially to individual and smaller practices and providers, so that they are still part of this larger ecosystem. I think we tend to spend time, of course, on the large health systems and their interoperability, all of which makes a great deal of sense, but then there are those smaller practices, as well as the non – as we heard before from one of our speakers – the non-acute care settings, where that type of data exchange is less robust. So, MiHIN has been helping with that. The other one that's been very interesting in talking to MiHIN's director Tim Pletcher three weeks ago was how they are trying to help practices very quickly go to telehealth platforms, those that had been doing none at all, did not have an IT infrastructure to scale like many of us did. And MiHIN served as an expert adviser and accelerator for a lot of those small, quick, web-based tele-presence initiatives, and I thought it was a very innovative and cool and in line with their mission type effort that I think has helped a number of practitioners continue to provide care in the community.

Carolyn Petersen

Great, thank you. I appreciate that. I'm wondering if we have other questions from HITAC members who are just on the phone, where I can't see your hands?

Clem McDonald

Well, I had one more comment, but I don't want to dominate any more than I have.

Carolyn Petersen

Go ahead, Clem.





Clem McDonald

So, apropos of the question about getting the individual small providers hooked up, especially in Indiana where I was working on it, there was a major problem in authenticating and getting to a trust situation with them, because when they were part of a hospital, they got to get staff – there was a whole lot of things they have to do until it feels comfortable. That's another thing that regulations or a systemic approach could help with if it's still a problem. The hospitals didn't want providers to sign in and look at data if they didn't know who they were, and that can be solved today, I think, if it's still a problem.

Carolyn Petersen

Thanks, Clem.

Clem McDonald

I guess the question is, if it's still a problem.

Carolyn Petersen

Thoughts from any of our panelists?

Dick Flanigan

This is Dick Flanigan at Cerner. Maybe it's responding a little more broadly, but getting small providers engaged, we heard on the opening, so like probably some of you on the call, you have a loved one. My mom is in a nursing facility in Baltimore, and you really begin to appreciate how much you're depending upon caregivers to keep safe and thinking of all the ways they've implemented their approaches, and yet my mom still needs medical care, and the specialists coming into the sites and that. So, there are so many new use cases that have emerged literally in the last 30 days. And so, when I made my comments in response to the question from CMS around where do we think this goes and providing about not putting the genie back and then concerns, obviously, in the public comments, is hey, if we stop getting paid for this, we stop.

What we're hearing from clients is, look, there's no return to normal. There's no return to work, where everybody just shows back up at the clinics. We don't have universal testing. We're not even sure that the testing on whether or not someone's been exposed to the disease and whether they have the serological testing for antibodies is going to be accurate enough. And so, we think this telemedicine thing is not only here to stay, it's actually going to be an absolute requirement to reopen healthcare in something that begins to approach normal. And so, I think it's an imperative that we work together to come up with a provider-friendly, private so people can protect their privacy, and that we embrace the technology that's available at home and begin to blend. I like the suggestion that was made by one of the questions or the responders that sure, there's still a need for an on-site visit, but if a health system could reduce by one-third or one-quarter or half or more the number of required visits to come in, it improves on social distancing.

We can't have waiting rooms filled with people anymore, whether they be office waiting rooms or EDs, so think of all the new ways we're going to have to incorporate technology. And then add in the subacute, post-acute, home, rural providers, and the infrastructure necessary to support that. I think we've just



turned a corner on a new era. I love the discussion that said we all thought the barrier was going to be payment. Well, we lift the payment barrier, and it turns out that this thing is exploded with use cases. And, frankly, some incredibly good stories. And I'm sure there's some potential for fraud, and we all need to be mindful that we're good stewards of the dollar here, but I think we turned a corner, and I think we together need to embrace what is going to be part of the new normal. So, that's how I would respond. I know it's a little broader than Clem's more narrow question, but chance to tap in on a few other questions that have come.

Clem McDonald

It was a good answer.

Donald Rucker

Don Rucker. Carolyn, can I make a comment on some of the payment things?

Carolyn Petersen

Sure. Go ahead.

Donald Rucker

I agree with what Dick just said. Basically, having been involved in CPT coding things and software for literally now 30-plus years, what I think we're going to find out is there's going to be refinement of the when and the where, and I agree that our new normal is different than our old normal. And as with all of the CMS programs, it's a very thoughtful group, and they are going to come up, they'll be thinking, and they have a lot of data on this, on what things are appropriate, what things maybe have components of fraud which as we know is always an issue you have to consider in master programs.

I think the beauty of it is that a lot of this will increasingly be self-documenting, as we look at the nature of the visits, parties of the visits, the use of resources in the visits. So, these things are documenting in ways that may be very helpful to what was made in some of the prior comments on just burden, as well. And there are lots of technologies that can be put in the middle here. So, I would. This is not an official statement, because I'm not part of CMS per se, and this is obviously evolving, but I think we'll see that because all of these tele things, other than maybe pure simple audio, have a technical overlay, that will give us a lot of options. So, just something to think about for folks here in terms of building tools and building environments. Thanks.

Carolyn Petersen

Great. Thanks, Dr. Rucker. I see Robert Buckingham has his hand up.

Robert Buckingham

Yeah, thanks, it's Robert. Yeah, just to kind of pile on a little bit on the telemedicine stuff, as we mentioned before, our stopper to it all the time had been the reimbursement. Not so much the equipment, because that's relatively cheap, but it was more of a matter of how do the physicians and caregivers on the other end get reimbursed and how do they do the billing, and since that is freed up a little bit with this and the equipment became a little bit easier to find for some of the things that we needed, we've jumped into it with both feet in all of our locations. But what we have found is that we have certain providers that right now are requiring their equipment be used. You know, we have one provider here in the area that if



you're going to do this with their physicians, you have to use their equipment, and I have another one who just is like, "Okay, just get me anything that does video and I can chat with my patient."

You know, there's different things, and they are locking it down in the one that oh, you can only deal with their physicians and providers. So, we need some sort of standard where we can cross the providers, as well, and interoperability for multiple providers for this as it goes forward, too.

Carolyn Petersen

Great, thanks, and Aaron Miri.

Aaron Miri

Yeah, I wanted to echo on exactly what was just said. A few things that we have noticed here as we shift to pretty much a telehealth, telemonitoring from all of our clinical and ambulatory clinics and whatnot. And a couple things. 1.) Not everybody has high speed connectivity. It's amazing how many times you'll start a telemedicine encounter, you'll have to try a couple times, and suddenly there's an equipment failure or a connection drops, you have to do it telephonically or other to be able to see the patient. So, I think the comment earlier about broadband investment is definitely being highlighted in this whole pandemic. 2.) I think there is an opportunity for provider reeducation and patient reeducation on how to use technology. We spend a lot of time trying to work with folks that maybe have been in the workforce for a long time, but don't understand how to use telemedicine.

Maybe we take for granted how to use FaceTime. "Everybody uses FaceTime." Well, maybe not everybody dose, and so there's been a lot of retraining that we've had to do for various clinicians to make sure there's a standard there, which could be an opportunity. It could be a workforce retraining opportunity that we could look at. But above all else, I remind folks all the time that it wasn't too long ago we were looking at x-rays on light boxes. It wasn't too long ago you were removing silver, doing silver reclamation on x-ray machines. It wasn't too long ago we all had paper charts. So, the only reason this has been successful has been because of the investments and what ONC has done for the past decade plus with Meaningful Use and the previous policy committee and centers committees all the way to now. And so, to the degree of it, I think we can sit here all day long and poke holes things at things we need to get better, identity management, all sorts of things. But we have come a long way in a very short period of time, and so it would be remiss to look at that and say that's nothing. That's my comments.

Carolyn Petersen

Thanks, Aaron. Robert, I don't see any hands in the queue. Wondering - hello, yes?

Robert Wah

This is Robert, I'm here.

Carolyn Petersen

I don't see any hands in the queue. What are you thinking about discussion on broader topics across all the issues? Things like what HITAC can do?





Yeah. Exactly. Thanks, Carolyn. Carolyn and I have been chatting on the other line. You know, I think this has been a great discussion today, and at this point, maybe it would be useful to share from everyone, including panelists and the HITAC to go back to that last question that we asked everybody to address. What is it that ONC and HITAC can do to help facilitate, accelerate, overcome issues that have been brought up? We've had a very broad discussion today, and I just thought maybe this was a good time to review all the things we've talked about today and think again about articulating what are the things specifically that ONC and HITAC could help facilitate and overcome here? So, I wanted to put that out to the group. We've had a number of suggestions, and we've recorded those, but I thought it would be worth bringing up specifically at this point to see what people think about that today. If you have perspectives.

Carolyn Petersen

Looks like Arien has his hand up. Arien Malec.

Arien Malec

Thank you.

Robert Wah

Yeah, Carolyn, do you want me to run this or you?

Carolyn Petersen

Sure. Go ahead.

Arien Malec

Okay. So, some of the themes that have come out today – and this has been a fantastic panel. I really appreciate all the work that went into it and all the speakers and presenters. My biggest takeaway right now is we need to bucket the short term and then the medium and long term and stay focused on the short term, and in particular, stay focused on what it takes to support the system in dealing with a crisis and also support the system in a return to semi-normalcy until we have vaccine, cure, and other technology in place to put us beyond the crisis. And the big theme that comes out with me is more with fewer arrows. We have a lot of programs in place, and it would be useful for the ONC to take a role in helping to not just connect people across the U.S. federal government and in public and private initiatives, but also to streamline focus and convene.

There's a lot of things we could do. There are a fewer set of things that matter and putting a framework in place for prioritizing and putting more wood behind those areas would be useful. Number two is I think we've heard a lot about some of the basic block and tackling of infrastructure that's already there in place, but isn't necessarily getting wired or connected correctly. We heard about the critical role of patient demographics and other contextual information, electronic lab ordering and the difficulty in doing contact tracing if a lab order gets to a lab, gets tested and resulted, and the resulting ELR feed doesn't have sufficient information either to do basic surveillance or the sufficient information of doing contact tracing. We heard from Aaron about some of the gaffes related to terminology, and I think we heard from a number of the panelists that re-enforced that point, that we have terminology that's been selected. We have curated terminology sets, but we have some gaps in making sure the documentation requirements, terminology requirements, are getting promulgated.



So, theme number two is supporting the systems that are already in place so that they can be more effective and supply better signal for biosurveillance and better mechanisms for contact tracing, so that we can return to quasi-normalcy. And I think we heard obviously just now a ton on telemedicine. Some of the stuff is a non-ONC activity, but a lot of comments – including Dr. Rucker's on some of this stuff is actually auto documenting – but a lot of comments on the role that smart reimbursement strategy can play in supporting longitudinal care and care management and reducing the number of people who absolutely have to be in clinics or in EDs or in hospitals with hands laid on, and that being more flexible here both creates a lower cost to the U.S. healthcare system, but also increases our flexibilities to return to work and prepare for the next crisis.

So, I think the big things for me are how do we support the ecosystem as it is, support to making it more effective, and then as we start thinking about this crisis, there's clearly going to be another set of lessons learned and root cause analysis on how do we better prepare for the next time this goes around. I keep thinking about, for example, the work group Steve Lane convened on standards interoperability and the note we had all the orders and results interfaces up there, ready, willing, and waiting, but not adopted. So, we're going to have to have another panel like this that just takes a look at what's the stuff that's ready that we have not yet adopted across the system, but in the short term, I think it's all about putting more wood on fewer areas and supporting the systems that are in place. Thank you.

Robert Wah

Thanks. Aaron?

Aaron Miri

Thank you very much. So, a couple of things. Number one, I've been trying for the past couple of meetings to bring back stories, stories from the front, stories from real-time positive, negative, things that are good, things we could still use assistance on. I think that's been one of the most valuable components of the past few meetings is just hearing from everybody, what really is working, what really is not. So, I would say there's a couple of things that we could do as a HITAC. 1.) I would like to hear more. I would like to hear from patients. What do patients think of the recent shift to telemedicine? And I mean different socioeconomic status patients. Those that have commercial payor versus those who are at risk.

2.) I would say that we should really listen to the Public Health agencies. I think we have heard that loud and clear, that there are those out there, like Chicago and here in Austin and others that are taking a leading role, but maybe there's parts of the country, rural parts of the country, that don't have that luxury. Are there things we can do as a HITAC to help maybe make things more common so that everybody could take advantage of those pieces of infrastructure? Next, I would say that we really need to double down and look at how can we accelerate research? Here at UT-Austin, we have some resources that we were able to contribute to the fight against COVID. We joined the White House's High Performance Computing Consortium, the HPC Consortium, but not everybody has access to that, so how can we extend those resources so all of the country could tap in and help accelerate cures or look at various aspects of things and accelerate that research for a cure and vaccines and whatnot in various trials?

I think for us, our perspective here that we've heard on data standards, data promulgation, normalization, and really levelling the playing field is really where this is going to get going and how do we extend



fit? And for all of those,

resources like again, we have here at UT-Austin, so that everybody can benefit? And for all of those, those at UCSF, those across the country, we can all band together so that this whole country can benefit. I think as a HITAC, we should look at that and we should really take advantage. Thanks.

Robert Wah

Great, thanks. Clem?

Clem McDonald

So, I think in the spirit of ending information blocking, we should tackle as quickly as we can the legal regulatory things that make people hesitate to deliver the data to where it's needed without all kinds of overhead. And there, I think the Civil Rights and all that, those guys can help with this, and I think some of that's underway, but if we poked around, I think we could find lots of ways. I think some of the fact that the big labs only get excessive numbers is because they don't want to mess with the risk of having patient-identifiable data. So, that's one thing.

The second thing, I happen to be living right near Chicago, not in it, and I think that that's a spectacular idea and that could be implemented countrywide. It exists. This standard has been around since 2014 and all medical records systems have it. I can't say the data inside will be perfect, but every Public Health organization could set up kind of a protected environment with a medical records system that could take that data and then later, it could be integrated somehow. We have to get that data. So, those are maybe the two big threats. I agree with all the other comments, too. The more the better, and also we have to focus to get something done now, because it's going to be nine months, it should be – the fear should be gone, I'm hopeful in nine months, but we have got to do it now to stop all the deaths.

Robert Wah

Thanks, Clem. Jackie Gerhart?

Jackie Gerhart

Thanks, so I wanted to go back to what Aaron was saying about telling stories. I think often that is the most inspirational and sometimes just most boots on the ground way to figure out what's going on. And I would say having practiced at urgent care and swabbed people with their nasal pharyngeal swabs, when I first started doing that, the one really annoying thing coming back to what we were discussing with the CDC early on was that you have to get gowned and gloved up, and then you would realize, "Oh, darn, I need to fill out this front and back CDC page and the Wisconsin State Lab of Hygiene page and do this on paper, and then also fill in information into the EHR and so forth." And just trying to figure out how to stay quote/unquote "sterile" or even safe from transferring any kind of a virus in any kind of world of paper was quite daunting and scary. So, just another reason to become more electronic in general.

And to your point about wanting to hear from patients from different areas and underserved areas, there's been a lot. We've seen from Epic customer perspective, I'll use Stanford in North and South Dakota for example. They've been doing telehealth a lot already, even before COVID, because they are so remote in many of their areas. And so, they use things that were mentioned like the blood pressure cuff and otoscopes and stethoscopes and so forth that they are able to use through telemedicine. So, I think there is some opportunity, if there was payments in place or the ability to give or get these resources to those



patients for them to be able to use those and then not have them have to transport to a clinic, for example.

I also agree in terms of boots on the ground with stories about Public Health agencies. Seeing them try to figure out different guidelines from local, state, and national authorities, much less also figure out how to get data from testing and so forth, has been fascinating. Watching Wisconsin's Department of Public Health try to figure out who's testing and which area they are testing, if it's testing done locally in the hospital, or if it's a state lab, or if it's being sent out, and constantly changing on a day-to-day basis. I think they are just craving something that is not typing into a spreadsheet that is interoperable with other healthcare organizations, and I think this really brought that a lot more to life.

And I guess finally I'll say sometimes in leadership at Epic we talked about a chief imitation officer rather than a chief innovation officer, and I think some of you on the phone have alluded to not recreating the wheel and making sure that we're using the resources and the standards and such that are already in place. Because I think there is pockets throughout the country that are doing certain things really well, and what kicked off this meeting today was discussing which stakeholders can do what and how can we come together as a team to be able to make this work well together, and I really think if we can learn from each other in what we've already done, sometimes that's the best innovation.

Robert Wah

Thanks. Andrew Rosenberg?

Cynthia Fisher

My hand doesn't seem to get recorded on the screen.

Robert Wah

Yeah, yeah, yeah. Sure. Go ahead, yes. That's all right. Go ahead, Cynthia.

Cynthia Fisher

This is Cynthia Fisher, representing the patient point of view, employer, and taxpayer. You know, there's a tremendous amount of stimulus money in the hundreds of billions of dollars that is going to go to these hospital systems and to the laboratories And all that we've been speaking about today are all well and good, but I would urge us all in ONC, really strongly recommend, Dr. Rucker, that the testing problem and the data access and widely distributed access be deployed, and I think what's missing at the table is we for years have struggled on interoperability. Four years ago, Congress came after it with a Cures Act because of the information blocking intentionally to protect turf and keep patients within a health system and keep data, because it could be brokered five ways to Sunday. We're in a pandemic, we're in an absolute crisis, and front and center, I think I'm dismayed by how much I heard about telemedicine only working based on how it's built and how the revenue generation can be done.

And that's the very problem with the electronic health records. If it's all built on billing and coding and not solving the problem of really providing, flip it on its head, what is the best quality access of care that we empower at the physician and patient level? And patients now are their own doctors. They are now digitally standing at the ready, but they don't have access to their own health information, as Dr. Rucker began this call. We don't have access to it. We cannot get our complete information. And thank goodness



CMS and Secretary Azar has helped to push to have doctors have expanded licensure on a national basis so that we can deal with our physician shortage and our caregiver shortage and have access telemed to doctors anywhere. That still needs to be played out, but at the end of the day, patients need access nationally to care wherever they are, from their device.

And so, the very first thing we need is to have the doctors that we can get to in telemed, or the doctors that can go to the parking lots of our businesses that are trying to feed and be critical supply to our country, can actually do testing. No longer can many of them get enough supply to do the nasal swabs, which we know has 20% false-negatives and probably 30% bad technique. So, the accuracy of a nasal swab test is not all there. So, now we have serology, and let's deploy it. But I think what is really critical of this is to have a very – like, not talk about it, but get a task force together that includes innovators, young developers, innovators from the best of the best of class, as well as our tech companies to come together with already mobile apps that are developed and convert them much like we're converting factories to create ventilators. There's no reason why we can't take great mobile apps and convert them to be able to deploy access to patients where they are in their homes and where they are at work to test.

And it doesn't need to be an Epic-based MyChart system, or it doesn't need to be one that's already – we can create a new and broad one that's with standards, that is plug and play to everybody's software. And that's my fear, that what I've seen in this process is that the testing and care has gone to the large oligopolies. And there's a huge slew of physicians and nurses and staff and primary care docs at the ready that can't get access to tests and in many cases even medicine, because they are being reported. And some states are declining their access to the hydroxychloroquine and the Z-packs to distribute care in the field. They want it only in intensive care. So, this is actually insane. In the meantime, patients are not informed. We hear from them constantly that a lot of companies already had teledoc services and have ways of guote, unquote, "paying." So, don't worry about that.

What's really important is to give patients access to be able to test so know whether or not they have COVID and they know what the protocol is, and that they can have that ongoing communication. Yes, it can go through the state automatically through a mobile app and it can go to the CDC, but I think we really need leadership, and that's what's missing, is leadership from an information standpoint takes down all the blockades and all the barriers and deploys the information for the testing. Let's start there. Then you all can plug and play and open your kimonos and allow the standard application interfaces to come into play. But the most important thing is the results of those tests right now. And being able to get our economy back on track so people can get back to work.

Clem McDonald

Hear, hear.

Cynthia Fisher

And so, Dr. Rucker, I would recommend that we have a task force that has a very tight deadline. Very tight deadline and that brings the best of programming players into the field and have a national way of having mobile app ability for whatever type of tests that FDA approves. And I would also pressure FDA to open up the pipelines to allow these tests to go out. They may not be perfect, but we can iteratively improve. And that's what my recommendation is. Done is better than perfect.





Thanks, Cynthia. Andrew?

Andrew Rosenberg

Thanks, Robert. I wanted to give you two more stories since that was requested of me, and they follow some comments that Jackie just made. But also, I'm hoping that they are also in line with things that are actionable for the ONC. The first from a patient point of view are these new tools, whether it's Alexa or tools like that, that not only are we, many of us, racing to try to implement right now during this particular crisis, but frankly they even get to comments that Cynthia was just making. A number of patients just need better tools that allow them to engage with their providers when it's difficult to otherwise call them. I'm thinking more the inpatient side, but there are a lot of examples in the ambulatory space, as well, but also ones that just help them themselves. The example that one of the patients told me was having the Alexa just so that they didn't have to turn over after having leg surgery, because turning to look at the clock was painful. Just to be able to say "what time is it?" Those sorts of things.

Another one, of course, is to give music or other relaxation tools that are very patient-centered kinds of things. And I think the crisis, like other things we've discussed, are just highlighting where those tools have value that go way beyond just this one crisis. So, to the extent, whether it's privacy or other interoperability, or even communications standards that may get in the way of accelerating those kinds of implementations, that may be an area where those patient stories and uses are very helpful. Similarly, these kinds of communication tools help other providers be able to help communicate with families. We've seen this a lot where one of the real tragedies of COVID right now is the inability for families and providers to talk with each other around extraordinarily important topics, including even end of life. And so, I think that there are probably a few other examples where these stories can inspire more rapid barrier elimination, and I'm particularly thinking about privacy issues that we have to deal with. So, maybe those might be helpful for the committee to also consider.

Robert Wah

Great, thanks. I also want to make sure, people that are on the phone that don't have access to the app and raise their hand, if any of you would like to speak, please let me know. Just speak out now, because there's no other way for you to identify yourselves. So, if we have committee members or a panelist that are on the phone that want to speak, I'll let you do that now. While I'm waiting, I'll also observe that at 3:20 we have our dedicated time for public comment, so when we come to that point, we'll take a break. If there's time after the public comment period, we can resume our conversation, as well. So, just to let you know that's my plan at 3:20. So, another last call to see if there are other folks on the phone that wanted to speak that can't raise their hand on the app. Okay, not seeing anybody, not hearing anybody. Clem?

Clem McDonald

I want to kind of re-enforce Cynthia's comments. We're going to end up having to test 300 million people in the next year probably, for one thing or another. And these on-site really simple machines that run something in a couple of minutes, they are going to be distributed all over the place and they will be in places that don't have any computer infrastructure for direct interface would be my guess. You know, it might be it all gets funneled to some central place. If that's the case, then the app she's been talking about, you can take a picture of a driver's license, you can take a picture of whatever prints out on the machine, you know, the little strip. And certainly, the driver's license we see is already done. It happens at



the airports automatically, and the other wouldn't be hard to develop. And so, I think we should give some

Robert Wah

Thanks. All right. Other comments or questions? I guess the other part of the three questions we've asked that I think we had a chance to reply on, but to make sure, are there issues that we haven't discussed so far that people want to bring up that are barriers that are close-in barriers, not long-term barriers, that people have thought about but not articulated? We've talked a lot now about what are some of the things ONC and the HITAC can do to address those barriers, but maybe we need to step back a second and make sure that we have got all the barriers identified. So, I just wanted to ask the panelists or HITAC if there are other barriers that maybe we have not yet surfaced or articulated.

real attention to that, because testing is really the entry point for identifying all the people that have it.

Dick Flanigan

This is Dick Flanigan. The one I think deserves maybe a little more attention. So, first off, Cynthia, thank you. I think it was a great perspective of both the consumer perspective, and, frankly, the perspective around unleashing broadly innovation across American society, so I think well said and I think for ONC to be a convener in the national task force is a great idea.

The part that we haven't touched on, and I did it briefly at the tail end of mine, which is around how do we accelerate vaccine development and deployment. So, you heard me comment in response to Clem's question around we think it's a new normal, we don't think it's great. We think the clients are going to have a lot of difficulty getting back to even the rates of activity. And so, we say we get back to normal when there's a vaccine and it's been widely deployed, and it's created the type of immunity that we'd expect to see from a vaccine, whether that's 2021, 2022, I'll let the healthcare professionals and epidemiologists suggest. But whatever we can do as a community, utilizing this testing infrastructure which we have described, but using EHR-plus, meaning beyond just the big guys, but all the places we have information infrastructure, how do we accelerate vaccine development, testing, and deployment? How do we utilize the accelerated programs we've seen in some drugs in this country, and mostly in other markets, this kind of phase 4B or the post market surveillance, black box warning, the progressive approval?

And I know that goes beyond ONC particularly, but I think we have a huge role to play as purveyors of standards and information, and I'd like to see us step up and take a role in putting the resources of America's information infrastructure at the hands of America's vaccine development and partner up. You see Sanofi and Glaxo partnering up in an announcement this morning, and I think we have to play an incredibly important role to accelerate what you'll hear 12 to 18 months. You read in the paper, and they're saying we won't have manufacturing capacity until '22. I mean, that's pretty scary. So, I'm saying what can we do to be partners in accelerating the testing and the deployment of the vaccine? So, I'd love to see that get onto the ONC agenda, is how we could support that.

Robert Wah

Thanks. Any last comments? We're approaching my 3:20 time period for the public comment. Happy to take one more comment before then if there is one. Otherwise, Lauren, you want to start the process of getting the public comments lined up?





Public Comment (06:18:00)

Lauren Richie

Sure thing. We are just getting the phone number pulled up here now. While we are doing that and giving members of the public an opportunity to dial in, just going back to the very top of the call, I will put in the public chat two links. One just kind of going back to mention about public webinars and the final rule. I will put that link in there, so you all can be sure to register. And for those that did not get the link to our monthly TEFCA calls, I will put that link in there, as well, just to remind folks to register ahead of time. So, I'll put those in the chat shortly. With that, I'll ask the operator to open the public line.

Operator

If you would like to make a public comment, please press *1 on your telephone keypad. The confirmation tone will indicate your line is in the queue. If you would like to, you may press *2 if you would like to remove your comment from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys.

Lauren Richie

And do we have any commenters in the queue?

Operator

There seem to be no comments at this time.

Lauren Richie

Okay. Let's leave the phone number up just to give folks additional time to dial in and get into the queue. But in the meantime, I'll just turn it back to Robert and Carolyn and I'll check to see if our ONC staff have any additional comments.

Robert Wah

All right. Thank you, Lauren. And we can continue to be open to have a public comment break into the conversation. So, obviously, this has been a very long day. I thank all of our presenters that took the time to make these presentations and really appreciate the discipline that they displayed in staying to the time and the format that we asked them to. We did this in a way that we tried to get as much information out to the group to stimulate and have the basis for a rich conversation, and I hope you all felt that we were somewhat successful in doing that, but it really required a lot of organization and discipline on the part of the presenters, so we really do thank all of you for that.

I heard a number of times that the group was really looking to the ONC and somewhat to HITAC to be a convener to bring together the industry, to surface issues and ideas. I hope you saw some of that in what we tried to do today, because when we had the last call, that was what we felt would be a good use of our time and our resources at the ONC and at HITAC. So, this was an attempt to be in that convening role, bringing together all parts of industry in the health information technology side to hear again, what the successes are out there, what the barriers are, and what the issues are that we believe could be solved or at least facilitated and worked on by the ONC and the HITAC. So, I hope this has been useful to all of you and the public that has dialed in. We've had a couple hundred people on the app and a lot of other



people that are not on the app, just on the phone. So, pleased to see that kind of interest and participation here.

But I wanted to open it up to the group. We have a few minutes here before we close the meeting, to see if there's anything else we haven't talked about today, if folks have other issues that have come up, or barriers. Again, things that the ONC or HITAC can address. We've had very vigorous conversation on the public chat line, too. Is there a public comment?

Cynthia Fisher

Robert, this is Cynthia Fisher. A recommendation, and thank you, and I like the foresight of right around the corner is the need to deploy a vaccine. So, let's right now deploy tasks and put that as numero uno priority for people being able to report their three unique identifiers, their address, their cell phone number, and to be able to get those mobile apps developed and make that ASAP in the sight of knowing that the same people that are negative and as we come down the pike, we need to capture that data so we know who needs to be vaccinated and who isn't immunized. So, this is critical, and I think we need to focus there.

Second, I believe that it would be very helpful. There's rumors being said that because of COVID, the actors for information blocking and the interoperability want delay of game. Well, I think we're seeing the regrets of not honoring interoperability years ago. It's going to cost us lives, and not just the lives we've lost so far, but more lives, and it's going to cost us our own personal finances, our businesses, our economy because of the lack of our interoperability tools and lack of a functional healthcare system.

So, I would say how important it would be that this group come together, because each of the major players is in this room, on this phone call, to put an honor system together to do the right thing. And if ONC could have a reporting mechanism that through an honor system, if we can't get access to critical information that needs to be shared, that we can have a live communication system just like we have a chat room today, that we hold each other accountable to do it and not try to bake in price tags or competitive edge against your competitor. This is a time for our country's security and our health of our nation. So, I would say this is more importantly a time when we can all come together as patriots and go into a chat room where we honestly hold each other accountable to be interoperable, and I think there's an opportunity for ONC to lead that.

Robert Wah

I wanted to see, as we're wrapping up, we'll obviously go back, but if there's anyone from ONC that wanted to comment, as well. There is no good way to recognize the ONC team that's on, so if there's anybody from ONC that wanted to make a comment at this point, please let me know, as well.

Donald Rucker

Hey, Robert, it's Don. I certainly heard Cynthia's comments, and those are spot-on in terms of what the American public need. I think we've had a lot of good and thoughtful discussion today on a number of aspects of making key parts of this information more available and making the entire, for want of a better word, Public Health infrastructure, making that more responsive, more efficient. And some of these things obviously have all kinds of complexity to them. I think that's implicit in the fact we spent the entire day talking about it. But I think there's certainly some takeaways here that we will work on, as we have with



the number of things that we, as the administration, have already done here. Most notably, actually getting telemedicine paid for in a fundamental way for the first time. And I think some of the takeaways on the different data feeds, the complexity there, that will need to get sorted out.

There's some early work there. So, I would like to both thank you and Carolyn for running a wonderful meeting. Thanking all of the participants who put in very informative presentations here. I don't know if Steve or Elise have any other comments, but I'd like to thank folks and I found it to be a very valuable use of a day.

Elise Anthony

Yes, this is Elise, and I echo Don's sentiments. During a very hard and busy time, just to have so many folks come together and share with us the challenges that they've seen, as well as the successes they've seen in responding to COVID-19. I really appreciate everyone's engagement. Also, much appreciation to my team, to Lauren and Cassandra in particular, for all of their work coordinating this and working obviously with the chairs, and for the chairs for leading such a valuable meeting. It truly has been very informative, and particularly for the ONC team, it shines a light on some areas we can look at as well. So, thank you.

Robert Wah

All right. Clem, you have your hand up again.

Clem McDonald

Yeah. I almost apologize for it. So, firstly, I think I would like to compliment the ONC team again, because the progress made in the last three years has been spectacular, and especially compared – I won't go into that, but they deserve a high round of applause for all what they've done. But the second thing, I think Cynthia's last statement put a real point on the issue. She said we should put these specific patient identifiers on all the test results and get them to places where they need to go. That will raise the hackles of all the people worried about the personal identifying information. So, if we could fix that problem in terms of regulatory things and the legal things, we've solved most of the problem. So, that would be a focused problem to solve through the regulatory passage, where everybody who does it, doesn't have to be terrified they are going to be sued and lose their house and everything else. Thank you, thank you.

Robert Wah

Thanks, Clem. And I guess I'll say, for a moment, I'll take my chair's hat off and put my Commons Project hat on to say this has been a very useful conversation that I want to take back to the Commons Project team as well, because we've had these discussions about the discomfort people have with putting private information in the hands of either a private corporation or a government agency, and we have been trying to find a way to have a third place for those kinds of things to reside to facilitate the kind of Public Health work that we all think is necessary here. It's been identified a number of times now that some of these identifiers would be great for Public Health purposes but make people pretty nervous from a privacy and personal perspective. So, I think that I will be taking some of this back to my group at the Commons Project to think hard about how we can optimize that third place where things can be. Sorry, was somebody else try to say something?

Clem McDonald



Well, I was going to respond. It's that we've been so trained to be terrified of personally identifying information, whereas people put stuff up on the web all the time that's both embarrassing and stupid. I would love to see a survey done of what the public thinks today about what the tradeoffs are and which way they'd be happy to go, because I think the balance is really severely skewed to saving lives.

Robert Wah

Yeah. I mean, I think there's a fair bit of information out there. You know, when you're very, very sick, privacy is not necessarily your highest priority at that point, and we've probably seen that play out many, many times in other areas than just the pandemic. Other comments or questions by the group? We're coming close to wrapping up here, so I wanted to give everyone one last chance. Okay. Carolyn, final comments?

Carolyn Petersen

I just want to thank everyone for investing the time today in these conversations. I know it is really hard to carve out this much time with all that's going on now, and I greatly appreciate all the thoughtful conversation. I think it has really put something on the table for ONC to think about and to help them in determining how best to go forward with their part of the world and what they can do. I also want to give a great vote of thanks to all the ONC members, the folks we see regularly in our meetings, and also the many people and leaders behind the scenes who help to make this work go forward and have brought this presentation to us today so we can provide deliberations that we hope will help them. Thank you so, so much.

Robert Wah

Sheryl, I see your hand up, as well.

Sheryl Turney

Thank you, Robert. I also wanted to say I really appreciate everybody's contributions today. As you all know, I represent a payor, Anthem, and all of the points that were made today I think are very important and really emphasize the fact that standards are not easy, and they are very complicated, especially when you have many stakeholder groups. As many people mentioned today, in the Public Health reporting space, you have cities, you have counties, you have states, you have federal, and then you have regional requirements, and they are all looking for data, but they are not looking for the same data, nor utilizing the same standards for that data, and it is a challenge. I wish it was as easy as creating an app over the weekend to resolve it. I think that's something that's a good goal, but not going to happen in a weekend.

And I think that we've heard a lot of this in the work that the ICAD is doing, the Intersection of Clinical and Administrative Data, as well, that we really need to find a way to align on standards quickly so that we all can utilize the information that's being gathered more robustly, and it also is available to the groups that need it in a timely way. And so, whatever we can do from the ONC and advising HHS and OCR to try to help us through those hurdles I think is really important. And I do agree with the points that people have made, when your life is in danger your need for privacy goes out the window. And people today are very worried about it. We had people locally in California where public spaces were still open within condominiums and homeowners' associations, and people were worried about it. Because they were still spreading the disease, and not everybody follows the rules.



So, at the end of the day, there's no data available to tell you it's in your community, you have seven people who have been impacted and, oh, by the way, they were all just in the jacuzzi. Probably not something we're ever going to get to, but people would probably want to know that who live within 50 yards of those types of facilities. So, I think that the work that is being done here is very, very important, and whatever we can do to try to help accelerate those standards and get them adopted by all the stakeholder groups I think would be extremely valuable and very important. So, thank you.

Wrap up and Next Steps (06:35:15)

Robert Wah

Thanks, Sheryl. Other members of the committee that maybe haven't had a chance to speak today? I won't call you out, but there's a number of folks on the committee that I haven't heard from today, but just wanted to close up the meeting here. Before we did that, though, we wanted to give everyone a chance to speak up. Okay.

Many thanks to all that made this day possible, the ONC team, the presenters, you the HITAC committee. It's been a very robust and I think great conversation, and we very much appreciate everyone's time and talent and attention to this. These are very, very busy and crazy times for all of us, and to carve out a day for this is really important to see you do. As your chairs, we're again happy to take any input and suggestions on how to make this better. We hope we've been able to be responsive to your requests. A lot of this started out as a comment that was made at our February meeting, and it's grown into these last two calls. So, hopefully, it's been helpful for all of you. I believe we've been able to provide good information for both our committee and the ONC. But again, please keep your chairs informed of issues and ideas and suggestions that you have. We want to make this the most effective and efficient process as possible.

Last call for any other comments. Presenters, committee members, ONC. All right. Well, Lauren, I'll turn it out to you to do your last federal liaison close-out of the meeting and remind everybody of our next meetings and the other links that you put up for future webinars.

Lauren Richie

Yeah, thanks, Robert. I didn't have anything else besides just reminder to the public. Our next scheduled HITAC meeting is May 13th. We will certainly be in touch with the HITAC members as a result of this meeting and prior to the next. So again, my thanks to everyone, and we will adjourn and have a great day and be well, everyone.

Robert Wah

Be safe out there and take care.

Adjourn (06:37:54)

