



Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) PUBLIC HEALTH DATA SYSTEMS TASK FORCE 2022 MEETING

September 21, 2022, 10:30 a.m. – 12:00 p.m. ET

VIRTUAL





Speakers

Name	Organization	Role
Gillian Haney	Council of State and Territorial Epidemiologists (CSTE)	Co-Chair
Arien Malec	Change Healthcare	Co-Chair
Rachelle Boulton	Utah Department of Health and Human Services	Member
Hans Buitendijk	Oracle Cerner	Member
Heather Cooks-Sinclair	Austin Public Health	Member
Charles Cross	Indian Health Service	Member
Steven Eichner	Texas Department of State Health Services	Member
Joe Gibson	CDC Foundation	Member
Rajesh Godavarthi	MCG Health, part of the Hearst Health network	Member
Erin Holt Coyne	Tennessee Department of Health, Office of Informatics and Analytics	Member
Jim Jirjis	HCA Healthcare	Member
John Kansky	Indiana Health Information Exchange	Member
Bryant Thomas Karras	Washington State Department of Health	Member
Steven Lane	Sutter Health	Member
Jennifer Layden	Centers for Disease Control and Prevention (CDC)	Member
Leslie Lenert	Medical University of South Carolina	Member
Hung S. Luu	Children's Health	Member
Mark Marostica	Conduent Government Health Solutions	Member
Aaron Miri	Baptist Health	Member
Alex Mugge	Centers for Medicare & Medicaid Service	Member
Stephen Murphy	Network for Public Health Law	Member
Elieil Oliveira	Dell Medical School, University of Texas at Austin	Member
Jamie Pina	Association of State and Territorial Health Officials (ASTHO)	Member



Name	Organization	Role
Abby Sears	OCHIN	Member
Vivian Singletary	Task Force for Global Health	Member
Fillipe Southerland	Yardi Systems, Inc.	Member
Sheryl Turney	Carelon Digital Platforms (an Elevance Health company)	Member
Avinash Shanbhag	Office of the National Coordinator for Health Information Technology	Executive Director of the Office of Technology
Dan Jernigan	Centers for Disease Control and Prevention	Deputy Director for Public Health Science and Surveillance
Michael Berry	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Rosa Ergas	MA Department of Health	Presenter
Karl Soetebier	Centers for Disease Control and Prevention	Presenter





Call to Order/Roll Call (00:00:05)

Michael Berry

And good morning, everyone. I am Mike Berry with ONC, and I would like to thank you for joining the Public Health Data Systems Taskforce. We do have a few guest presenters with us today, and I would like to thank them for participating. All taskforce meetings are open to the public, and your feedback is always welcomed, either in the Zoom chat or during the public comment period that is scheduled at about 11:50 Eastern Time this morning. I am going to begin roll call of our taskforce members, so when I call your name, please indicate that you are here. Gillian Haney?

Gillian Haney

Here, good morning.

Michael Berry

Arien Malec?

Arien Malec

Good morning.

Michael Berry

Rachelle Boulton?

Rachelle Boulton

Good morning.

Michael Berry

Hans Buitendijk? Heather Cooks-Sinclair? Erin Holt Coyne?

Gillian Haney

She will be a few minutes late.

Michael Berry

Thank you. Charles Cross? Steve Eichner? Joe Gibson? Raj Godavarthi? Jim Jirjis? John Kansky?

John Kansky

Good morning.

Michael Berry

Bryant Thomas Karras?

Bryant Thomas Karras

Present.

Michael Berry

Steven Lane?





Steven Lane

Good morning.

Michael Berry

Jennifer Layden?

Jennifer Layden

Good morning.

Michael Berry

Leslie Lenert? Hung Luu?

Hung S. Luu

Good morning.

Michael Berry

Mark Marostica?

Mark Marostica

Good morning.

Michael Berry

Aaron Miri?

Aaron Miri

Good morning.

Michael Berry

Alexandra Mugge?

Alex Mugge

Good morning.

Michael Berry

Stephen Murphy? Eliel Oliveira?

Eliel Oliveira

Good morning.

Michael Berry

Jamie Pina?

Jamie Pina

Present, good morning.



**Michael Berry**

Abby Sears? Vivian Singletary?

Vivian Singletary

Good morning.

Michael Berry

And Fil Southerland? And Sheryl Turney, I believe, is not going to be able to join us today, so, thank you, everyone, and now, please join me in welcoming Arien and Gillian for their opening remarks.

Arien Malec

Good morning. I think some of you saw yesterday that one of our minor, little-known papers, *The New York Times*, did what I think was an above-the-fold, front-page report, though it is hard to tell because I work off the digital edition, on public health data systems and some of the failures thereof in both COVID and monkeypox.

We were having a brief chat prior to this meeting opening, and when you look at the root causes of the issues in that story, there is both the chronic underfunding of public health infrastructure and issues related to lack of digitization or incomplete digitization, and as much as we would want to in this taskforce, we are unlikely to address chronic underfunding and lack of state funding for public health digital infrastructure, but we can do something about the lack of digitization, and in particular, I think we can do something around the two most prominently noted issues in that report, 1). The lack of real-time, easily available demographic information sufficient to localize and assess burden of disease on particular communities, and 2). The great difficulty in getting appropriate information for case investigation that helps characterize disease, disease burden, and disease outbreaks, and conduct appropriate epidemiology.

I think the good news is we have already done much of the legwork in terms of what the next appropriate lift is, but it might be a useful test case for us to look at our recommendations and ask ourselves if universally applied through ONC in partnership with CDC, and assuming appropriate funding for STLTs nationwide, would we address the root causes that led to the outcomes in that report? That might be a useful test for us.

We are here to talk about an area that performed reasonably well in COVID times. I remember early, early, early on in the COVID pandemic noting Farzad Mostashari's thread looking at the New York publicly available dashboards on flu-like illness and being able to see, in real time or very close to real time, the epidemic spreading through New York. The benefits that we have had for particularly ADT ED data flowing into public health systems does not mean that there is not much more that we can do, in particular, getting more information for more settings of care, making sure that information is more universally available, and then, as has been a perennial issue, making sure that we have the right balance for privacy and security for universal access for this data. So, we have a good panel, and Gillian will lead us through the panel discussion. Gillian, anything more you want to do in terms of opening for this meeting?

(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance (00:06:31)**Gillian Haney**

Yeah, I just want to briefly say that syndromic surveillance has been in place for quite a few years, and it is a much simpler feed than electronic case reporting. There is also an established HL standard, which, I





believe, is in widespread adoption and adherence to. Syndromic surveillance has proved to be extremely useful in the pandemic for situational awareness, and often, like the curve, we go up and see an increase in the curves, and then the case counts and hospitalizations would follow, so that is extremely effective. It is a partially deidentified data set, though, so names and full addresses are not included in the data set that gets sent up to CDC's BioSense platform for use, and so, this data set does actually not link directly with states' case-based surveillance systems, and I think that needs to be noted. And again, there is very widespread adoption in the United States, with a couple of notable exceptions.

I think the other thing with syndromic surveillance is that it really does have broader application in public health beyond infectious diseases, and I am going to be really interested to hear from our panelists in terms of their experience, in terms of data completeness, and utility, and any pain points that they might have experienced. So, I will pause there and introduce our first panelist, Rosa Ergas, with Massachusetts Department of Public Health, who I know extremely well and have worked with for many, many years. I am delighted to have her here, and she really is an expert in her field. And then, Karl Soetebier from CDC, who is a lead in the community of practice for syndromic surveillance, and lastly, Aaron Miri from Baptist Health, representing the provider community. So, welcome to the three of you, and Rosa, go ahead and kick things off, please.

Rosa Ergas

Good morning. Thank you, Gillian. Thanks for having me to discuss this important topic. So, I am just going to dive right in with some bullet points, trying to address some of the items that were requested in the taskforce. So, starting, I have been working in syndromic surveillance in Massachusetts for quite some time, in my current role for something like eight years, working to ingest the data, but also really to figure out the best ways to make the data useful for public health surveillance, and eventually action and hopefully improving the health of our citizens.

In Massachusetts, what I would report out is that we have a really good, robust network of emergency department syndromic surveillance providers. We have been really blessed in Massachusetts to have great relationships with our local partners. They are always really eager to participate and help us to do the work of public health surveillance. We have great relationships with the people on the ground, the local folks at the emergency departments, and they and their partners at the various vendors that represent them have done a really nice job with all the quality assurance and completeness that we have asked with respect to the current standards. Where we sometimes fall apart is where the vendors are sort of looking at the standards, and the standards sometimes do not directly connect the data elements, the technical specification of the data element, with what the public health department truly needs in terms of meaningful data for public health action.

The other challenge that we have has been onboarding urgent care locations. We think that those data are really useful for emergent trends and different kinds of surveillance, and we have had some challenges with the urgent care locations. I think it is largely because as I understand it, there is not an overarching agency that is in charge of regulating all of the urgent care data in the same way that emergency departments are managed, so, with emergency department data, we were easily able to tap into many different sources of information to understand the landscape of emergency departments, not only the facilities, but the visits that happened there and who the populations are who they serve, but with the urgent care data locations, it has been a little harder to get that landscape and understanding of the big picture.





So, I think one of the things that we could really use to improve the overarching utility of these data is to go beyond getting the specific data elements to the specific local jurisdiction, but rather, to do more to have a common understanding of the public health utility of those data, not only for the jurisdiction who receives the data, but also for a shared utility of the data. So, we are certainly able to use the data for many public health surveillance purposes, but we would be better able to use those data if we had a clearer understanding not only within our state and our providing facilities, but also across states, not only in terms of collection of the data, but the opportunities for sharing data with other local health partners, and there is a need for some clarification of which data are the most useful to public health, and potentially some evolution of the way that the data are ingested and processed within the NSSP ecosystem once they are received by public health, and we really are in need of a larger conversation about data sharing and communication within local jurisdictions and public health partners.

Gillian Haney

Thank you, Rosa. I am sure people will have questions following the panel presentation, so, Karl?

Karl Soetebier

Sure. Thanks for the opportunity. Background on myself: I am presently the acting program lead for the National Syndromic Surveillance Program, which has a long history, both in the state of Georgia and now a little bit at the CDC, in working with syndromic surveillance. I guess there were a few questions that I was asked to consider in presenting this panel, and to reinforce some of the things that Rosa brought up, I would agree that we have a fairly mature messaging guide in terms of the basic data that are a part of our feed. We have an incremental revision that is in process, and we are trying to get past COVID far enough to get that through the SVAP process and part of what can be used as a standard for the vendors to develop against, and hopefully, that will unfold over the next six to eight months.

I think in terms of gaps, we have observed that while parts of the data flow are certified, it is not always as close to the source as it could be, and when this occurs, sometimes we have a challenge because upstream data systems fail to provide something that is sort of key, and the certification drive might be at an HIE level or another place that does not necessarily drive compliance all the way back to where the data are collected. So, in terms of thinking about gaps related specifically to the F2 criteria, I think that is one place that we might be able to think about.

To think about some of the things that Rosa brought up in terms of data sources, we talked about resources early on, and the reality is that this work of syndromic surveillance, depending on the use cases that we want it to support, and I say “we” generally because it is a highly distributed activity around the country. While there is a national system, it is very much a collaboration of our state and local partners across the country to provide these data and generally have somewhat specific perspectives on the work, and that ranges from wanting syndromic to have a really broad focus where it is capturing ED visits, it is capturing urgent cares, it is capturing inpatient visits, and in some jurisdictions, they want identified data in their local system to be able to connect that back to their cases, and that happens in some places, while many other jurisdictions take a much more limited view. They do not want to carry the responsibility of onboarding urgent cares in their jurisdiction because they feel like the emergency department captures the portion of the data they are most interested in in terms of the surveillance activities that they do.





And so, it is broad range of perspectives on the activity. I think it is generally shared that it is something that, by being routine, by being timely, by being automated and casting a broad net in terms of the conditions that it can be applied to, it fills a niche that is different from a lot of the other surveillance activities that we have, and to the degree that we can address some of the completeness of the basic pieces, I think that is something that all would agree are worthy activities.

Just take race and ethnicity as an example. In the context of COVID, we have almost 92% completeness of race data in the emergency department data. Now, in the underlying quality of that and some of the challenges of how it is collected, there is a whole other range and discussion that can occur with that, but just on the base level of what is provided in the data, I think all of that is challenging to have certification drive. In other words, so much of this is based on the work of our partners having good relationships with their healthcare facilities and encouraging them to take a look at what they are providing and to improve it. I am not sure how much more can be done from a regulation perspective in terms of the guide and what ONC can bring to the equation in terms of certification, but I am certainly open to hear others' thoughts on that as well.

Gillian Haney

Thank you, Karl. Aaron?

Aaron Miri

Yes, good morning. Thank you for having me this morning. So, first, I want to take us back to something you mentioned earlier, Gillian, and that my colleagues here have also mentioned, which is that we have had syndromic surveillance for a while. Even for the public health fans here that can recall the mid-1800s with John Snow in London, monitoring the water pump and the outbreak of cholera, observatory, and observation, and making sure that that sort of tactile evidence is gathered, shared, and disseminated to get to a correlation has always been there and is part of the human psyche.

I think what has happened here, though, from the provider side is obviously, we have gone down the digitization of records, and I have had now the pleasure or pain of dealing with COVID-19 in two different markets, both in Austin, Texas and here in Jacksonville, Florida and the northern Florida market, so, seeing two very different states and how they handle it, but yet, the similarities from the provider side of the challenges.

So, let's talk about benefits first. I am a positive guy; let's start with some benefits. No. 1, as we mentioned a little earlier, the HL standard is there. It works well, it leverages LOINC, and it actually does a decent job. Is it perfect? No, but it does a decent job, and we are able to correlate and cascade events. Arien, you will probably remember this from our policy committee days. I remember the Zika outbreak very clearly, and we were not tracking pregnancy as a status of a mandatory field, and that caused a little bit of a kerfuffle, and we were able to get in front of that, so we are constantly learning. and updating those standards, and making data fields mandatory, and having to track that down.

The second thing: The broad data that we are gathering has the potential to identify emerging diseases quickly and potential large outbreaks. At UT, in my prior life, we were doing this before the vaccines were available to exactly figure out the hotspots specifically with the students and the dormitories and apartments they were living in to figure out who to isolate and how to make sure you break the chain of transmission.





And then, of course, the other benefit here with the large data sets that are coming out particularly are focused on the emergency departments, which is interesting. You think about how many people show up to either a rural medicine clinic, or ambulatory setting, long-term care, and others that could have disease elements, and that data is not shared, but right now, we do have large data sets available to us, again, focused primarily on those emergency departments, freestanding EDs, and so forth, and going through there, so that has a ton of upside in being able to track and trace out what is going on.

Let's talk about gaps. I think that is part of the challenge here with syndromic surveillance. So, No. 1, for emerging illnesses, we are often dependent on the addition of new data elements and updates. I recall even in the early days of the COVID-19 outbreak, the CDC was changing the requirement of data needing to be sent in and gathered. This was different also than what Austin public health was asking us and what Florida was asking us. As we learned more about the disease, that information was "Okay, we need to update this, this case form needs to be changed, these data types need to be added," etc.

We were very dependent on the vendors, the electronic health record community, to help jump in and create those new fields or whatever needed to happen there, so it was really a long, drawn-out, laborious effort, but we got there through blood, sweat, and tears, but that is something that could absolutely be accelerated, is how do we get those new data elements propagated and disseminated immediately? Even with some of the updates we have done with USCDI and some of that taskforce work, again, that Arien, Dr. Lane, and others have led, which is sort of that fast pass track, how do we get those data elements accelerated in case of an emergency like this?

Second thing: Internal to hospitals on the provider side, we do not have the resources to be able to build new labs out or emerging labs to enable monitoring, which is really dependent on availability of resources. Case in point, when you are fighting COVID-19, even just a few months ago as we had the latest wave go through Florida, half of my IT department was out at some point in time, give or take, at the same time with COVID, so your resources are limited. So, is there availability of resources from the CDC or other funding sources to drop in to major tertiary care centers, academic medical centers, and others which are taking part and helping a large population of people? That is another possibility there.

Another item: We have a much less common, highly specialized testing process, which is still on paper and fax at essential laboratories, and thus has delayed-notification manual processes. Again, I forget who is from Austin, Texas, but maybe they will remember this. It was around May or June of 2020 when there was a very public thing on the news about the fact that fax machines were causing a bottleneck of COVID-19 testing and resulting which hampered syndromic surveillance efforts because it is all paper-based. It is not discrete data. We have to enable those data elements to be enabled, and that is not the fault of public health. They just do not have funding.

Third, lack of feedback on community or healthcare provider data that could help inform clinical operations. Oftentimes, the hospitals are trying to share information with each other, going, "What is your census, what is your bed count, what are people presenting in your EDs?" Particularly in the early days, we were looking at things like high blood pressure, temperature, and others as those leading indicators, and it was very difficult to get that data. The hope is that information blocking, or information sharing, as we lovingly call it now, will allow for that to be easier in the future. Not so. I will tell you, I am still continuing to hospitals saying, "We have to share data easily, guys. This cannot be this difficult."





Fourth, lack of bidirectional information on community surveillance measures. Local internet searches on symptoms, wastewater surveillance: All those components could aid in the richness of data collection and drive insight. Those are not routinely built into EHRs and/or routinely sent out as items to track. If you are lucky to live in a locale like, I believe, Massachusetts, New York, California, these very robust states that have a good infrastructure for that, you may have access to that data via a local HIE, but generally speaking, that is not available to folks.

Next, we would really like to help incorporate standards for home surveillance testing to add to the richness of surveillance data sets. We need to create those standards for self-testing and self-reported testing. Today, that is a big gap; we rely on that. I think there are some personal health records out there that claim to be able to store your data, but does that have the veracity necessary for a clinical decision? Probably not, because it is not an official data element.

And then, of course, quality and surveillance monitoring programs are highly dependent on this little thing called HIPAA, and we have to make sure that we look at maybe making this a congressional action here to solidify in statute that covered entities would not be liable for HIPAA penalties for sharing patient information pursuant to patient requests to share that information and making sure, for syndromic surveillance purposes, that that is permissible. There has been a tremendous amount of confusion surrounding how much data we can share legally without breaching HIPAA and the attendance around that. That needs to be codified into law.

Next, really developing that streamlined, simple authorization for patients to share their information and researchers, at their discretion, connecting the EHRs to research tools to offer clinical trials and so forth and so on, all around patient privacy, and all about making sure that HIPAA is modernized to that. I also want to thank the health Innovation Alliance for some of those bullets because I found them to be very insightful and spot on, and I support that from a provider perspective, but net net, there is a lot of upside here for syndromic surveillance, we need to get in front of the ball quickly, and we need to be able to turn this around. Otherwise, the next COVID outbreak and novel outbreak is just around the corner. Thank you.

Gillian Haney

Thank you, and thanks to all of our panelists. I am reading the chats, and I just want to clarify one thing about syndromic surveillance data. The data are query-based in the sense that there is no need to develop syndromes from which to trigger the data to be sent to the BioSense platform. The feed actually contains all the ICD-10 complaint data that are necessary for public health to actually write those queries to be able to determine data trends in that way, and the community of practice is extremely robust in terms of sharing those queries that states and locals are running and making those data available at the local level in a very granular way, so I just want to really clarify that, whereas electronic case reporting or electronic laboratory reporting are very much based on LOINC and SNOMED or in concert with ICD-10 codes, so it is really a different set of information that is being sent, and the way that the data are actually accessed for public health use with syndromic surveillance.

So, in terms of lining up our first questions here, I do want to get back. I just want to make sure that people note Steve Lane's comment in the chat about potentially using CMS to propose some recommendations for certification. I think that is a really important point. So, Arien, I see you have your hand up first. Please.





Discussion (00:27:46)

Arien Malec

Yeah, so, I was going to go in the same direction. Just to clarify, I am going to summarize and repeat back what I heard in the panel session. No. 1, the existing implementation guide is good. We have not heard significant issues with the implementation guide itself. No. 2, what data we put into the implementation guide in particular, the conversation we have had around better granularity of demographic data, better ability to subsegment race and ethnicity beyond the five OMB codes, etc., would be useful. In some cases, we are getting the ADT feed that feeds syndromic surveillance downstream from the actual originating system, and it would be useful to make sure that we have got the incentive system/certification system/policy system that ensures that regardless of who the intermediary is or the actor is that is involved in the chain of transmission, we are able to capture the information as it originates at source rather than taking secondary downstream systems, for example, off of an HIE that may not be the actual admit information that came into the ED.

I wonder whether our CMS counterparts on the panel can clarify this. So, we have certification criteria that are broad. I believe we plug that certification program into a promoting interoperability program that is associated with acute care, and so, one of the reasons that we are not getting urgent care or ambulatory care data is because we do not actually have CMS programmatic hooks into ambulatory or urgent care in the way that we have CMS programmatic hooks into acute care. So, I would request clarification from ONC, CMS, or anybody else on that topic, but I believe that we have an opportunity to make recommendations for broader use of the syndromic surveillance implementation guide and certification criteria in ways that would assist our ability to get emergent information from urgent care or from primary care, where that is the primary location where patients are being treated. So, that was more of a reflection, thoughts, and some questions, either to ONC staff or to CMS, just to help us clarify, but that is what is coming to me as the conclusions out of this panel.

Gillian Haney

Thanks, Arien. Is there anyone from ONC or CMS that could clarify or respond to Arien's question?

Rachel

Gillian, this is Rachel. I am going to actually punt it to Steve Eichner because I think he can [inaudible – crosstalk] [00:31:07].

Gillian Haney

Okay, great. Good morning, Ike. Go ahead. You are on mute, or we cannot hear you yet.

Steven Eichner

Is that better?

Gillian Haney

Yes, hi.

Steven Eichner

Sorry about that. I double muted myself. The implementation guide actually does support reporting from urgent care, and specifically calls that out in the implementation guide. However, current federal regulations





for promoting interoperability do not provide financial incentive for non-hospital providers to participate in syndromic surveillance reporting.

Gillian Haney

That is very clear, so, thank you, Steve.

Arien Malec

Thank you.

Gillian Haney

Did you have another comment you wanted to make?

Steven Eichner

Yeah, I did, just a couple points. Just to clarify, the querying of syndromic surveillance data does not happen with public health querying information systems hosted by the provider. Instead, the ADT messages are forwarded to public health and the complete database is queried by public health that consolidates data from multiple providers, so it is not querying for an individual record coming directly out of a provider's system.

I think we also need to be cognizant that if we are looking at changing how we are using syndromic surveillance data, which generally has been used at the population level, which was some of its origin level, looking at data in aggregate coming out of the Department of Defense [inaudible] [00:32:55] for health risks in that space, if we are looking at changing usage, we are recommending things like clinical trials, and likely, we also need to probably look at addressing provenance issues as well because if I am a patient with a rare disease, if somebody is asking me about my rare disease, I want to know where they got my name and why exactly they are asking me about it, and if that data is being harvested off the syndromic surveillance report, I would like to know that at the end of the day.

Gillian Haney

I think that is an important point to note. Thank you, Steve. Mark?

Mark Marostica

Yeah. From my understanding of syndromic surveillance, the receipt and ingestion of data by public health is of the utmost importance and is the main concern. I wanted to introduce a possible other element that we may want to consider, and I think Aaron alluded to it in bidirectional because in talking with our public health clients, when they receive syndromic data, they are also interested in converting that data into actionable information in communicating what they have seen to the reporting hospitals. If they see a potential outbreak in the community, they would like to communicate that to all the hospitals, who may not see it as a community looking at just their hospital-based data. I wanted to ask the panelists and the panel if that is something that is a valid concern, that the bidirectional communication from public health to the reporting agencies is something that we should consider in this scope or is outside of this scope in this consideration.

Gillian Haney





So, I am going to turn it to Rosa in a second, but I believe that one of the beauties of the National Syndromic Surveillance Program is that all of the data are hosted by CDC in the aggregate in what are called lockers, and these lockers can be divided up with various filters on it to determine access, so the state would have the broadest access to all of the information contained therein, but hospitals and providers can query their own data so they will have access to the data that they are reporting. Rosa, do you want to address that more?

Steven Eichner

I would like to elaborate on that because Texas most certainly, for all hospital providers that are participating in our syndromic surveillance program, has direct access not just to unified data, but to all of their data that they have contributed to the system, along with all the analytical tools that public health has developed. We were very careful about limiting access to hospital data to only the contributing hospital so that other hospitals cannot see data from other hospitals within their marketplace. We do publish statewide data, and local health departments can see data from entities within their jurisdiction, but that is one of the potential balance points, is that there is a lot of very valuable data that would let people understand what a hospital may be focused on, and that is a consideration in looking at the release of data and how we balance that from a system perspective.

Mark Marostica

So, Ike, that is interesting. With an understanding that hospitals can access the data if they want to, do you see value in allowing public health the ability to proactively alert hospitals that there might be an outbreak in their community and to access that data rather than do it passively?

Steven Eichner

Absolutely. That is part of why the system exists in the first place, going back to the original concept of syndromic surveillance, was to look at an early warning detection system where you might not be aware that it was a particular disease or a particular risk, but that we were seeing an abnormal number of gastrointestinal concerns in a particular hospital, being able to track that not only back to the originating hospital, but other hospitals and other entities in the area, and it is really a matter of how much information one pushes out at what level with what identifying information associated with it is a question that is on the table that can be revisited and updated. From a technical perspective, it is easy to open the data to additional users and...

Gillian Haney

That capability exists.

Steven Eichner

It is a matter of what is proper, what is legal in the select context.

Karl Soetebier

I think it is important in that, too, to not remove the human dimension. Syndromic surveillance as a practice is highly automated in that the data flow happens from the point of generation in EHR all the way through to the analysis, and part of that is alerting algorithms and all of the like, but it still needs to be interpreted, and when you think about case data and the investigative process that goes to build up the case report, unless you have some similar process in your syndromic data flow or you manage the information





management stream of syndromic practice, you will not be able to have consistently interpretable information.

Most of our focus in terms of the system is focused on how we get the public health analysts who are trained and understand the practice to focus on the most important things so that they can then turn that into actionable information. I think that is probably the way to think about this. We technically, possibly, absolutely could send unfiltered alerts to healthcare providers, but the potential for alerts to go that are not really of value or use to the particular... There is a lot of risk there, and I do not know how actionable that will be.

Gillian Haney

Karl, I think you are making a really, really important point. There is an art to the science of interpreting syndromic surveillance data. I remember my days investigating what I thought were five botulism alerts, and it turned out that it was a family of five that had actually gone to a care center to have their eyes checked, and blurry vision was coming through on the alert, so there is definitely a need to have the experts really look at those data and review. Bryant, I think you had your hand up next.

Bryant Thomas Karras

Thank you. It got inadvertently lowered. I really like the suggestion of expanding beyond emergency departments and wanted to share our experience in Washington state. As many of you know, it tends to pioneer some of these concepts. We have been collecting ambulatory care, primary care, urgent care, and even some select specialty care settings data for years now, and it is very, very useful and insightful, and I think was used heavily during... As you know, the first year that COVID hit, our epidemiologists created a specialized query not for flu-like illness, but COVID-like illness. I think we called it SARS-like illness in the early days before COVID became the name.

We then shared that query out with our partner states so that they could then monitor their data feeds, but just to give you some idea of the power of making that expansion, and I would love for our taskforce to make that expansion become a nationwide practice, we received from emergency departments over the past three months 730,000 visits, which sounds like a lot until you compare it with the ambulatory clinic and urgent care visit numbers, which, in that same period of time, numbered 3.3 million records, so it gives you a much broader view of what is going on in the community, but we have also gone beyond that. This speaks to that HIPAA cover. We have put into rule actual guidance for those hospitals and ambulatory care, giving them permission to participate in what the feds call a voluntary effort, not required, and the participation and partnership with our clinical providers to do the right thing and to participate has been phenomenal.

The other one that I want to mention that has been really useful in these recent months to differentiate between severe COVID and COVID requiring hospitalization is the ability for us to have inpatient records incorporated into our syndromic surveillance feed, so it is not just the emergency department visit, but being able to track that person actually being admitted to either intensive care or the regular wards, and the numbers are much smaller, of course: 157,000 records in that same three-month period that we were able to track to see what was happening with those cases, so it was incredibly valuable, and I think more states should take advantage of the science.

Gillian Haney





Thanks, Bryant. I very much agree. Arien?

Arien Malec

Thank you for that. So, maybe a clarification on that particular point, which is does the implementation guide currently support inpatient data collection? Is this, again, an issue of the policy hooks that are attached to syndromic surveillance where the implementation guide supports broader use, but it is only used in practice in EDs because of how we define our incentive program? Do you happen to know the answer to the question?

Bryant Thomas Karras

Inpatient and ambulatory are both covered in the implementation guide.

Arien Malec

Perfect. So, I think, again, the case here is that we have a certification program and implementation guidance that are appropriate, but we hook that certification program into programmatic hooks that expose it only in a limited use. It would be important to get both inpatient data and ambulatory and urgent care data. On the subject of alerting back, what occurs to me, and again, I am just thinking about our charge and charter, is that we do not have an implementation guide. One could imagine, for example, decision support hooks being used as an implementation guide inside EHRs to be able to expose public health alerts. One can imagine other technical means to expose public health alerts into EHR systems.

We do not yet have an implementation guide, and so, it might be appropriate to draft recommendations that ONC work with the community to create and test such a guide to enable public health alerts, and then, to the previous points, one would imagine that those public health alerts would be used by public health for validated alerts, not be used blindly to send unfiltered alerts back into settings of care, but to the extent that we can translate this discussion into recommendations, that is the thought that I have for how we might do this, is to note that there is a need for bidirectional communication, note that there is a lack of an implementation guide, and then make a recommendation to ONC to facilitate development and testing of such a guide.

Gillian Haney

Karl?

Karl Soetebier

Thanks. I just wanted to weigh in on the urgent care discussion, and not to be an anchor on progress, but I think something really important to keep in mind, and I think one of the reasons why urgent care has not become a required reporting measure, is that it can be resource intensive. In order to establish the connections needed from a technical perspective to move the data to have the dedicated personnel to review and ensure the quality of the information coming in, and then, ultimately, to have the analysts available to review and act on it from a surveillance perspective, and I think different jurisdictions around the country are in different places with respect to their ability to put resources towards this activity, and so, anything that we would do needs to be sensitive to that reality in that it may not be tenable for a given jurisdiction to receive data from urgent cares and onboard them given the way that they are funded and the priority that this particular activity is given from a public health perspective within their health department. So, just a note of caution on that.



**Gillian Haney**

Rosa, I am going to let you have the last word before we turn it over to Arien to look at our task worksheet. Rosa?

Rosa Ergas

Thanks, Gillian. There have been a few threads that I wanted to respond to, so I am going to try to capture them all. The first one I want to talk about is this idea that we have discussed and I think is really clear, that the implementation guidance does, in fact, allow for urgent care, ambulatory, and inpatient, but as I was starting to describe at the beginning, it seems like even those implementation guides do allow for the transmission of those data. There is not a lot of really clear, common, shared understanding of exactly which data elements are necessary in order to identify those visits, and importantly, to appropriately aggregate those visits across the patient care experience.

So, one of the challenges that we have had, and this is where I am thinking about really clarifying not necessarily the letter of the law, but the common understanding and some of the processing of the data that happen in the NSSP ecosystem has to do with the capture of what happens to a patient when they come to an urgent care center, perhaps, and then are transferred to an emergency department, and then become an inpatient, and then are seen in follow-up, and the way that we have operated in Massachusetts is that we are an NSSP-only state, so we are really leveraging the great work that CDC has done, and we are not collecting any additional data locally, and so, we really want that system to function in a way that integrates the information across the patient care experience.

The one other thing I will say, and I am aware that we are wanting to change topics, is that that idea of bidirectional flow and the utility of these data to hospitals... We have really struggled to engage our providers. As much as they want to provide us data, we spent many years trying to create some sort of data product or engagement with our data providers, and for the most part, there are many other places where they can get similar data, and certainly, the idea of any kind of automated alert, which is what I think Karl was saying, too, is...I was going to say dangerous, and it is probably not dangerous, but it risks overwhelming our data providers with information that is not going to be particularly useful to them. We continue to find that our astute public health professionals and clinicians are the ones who first alert us to things, and then, what the syndromic surveillance data allow us to do is to dig in and understand what is going on.

So, my perspective is that syndromic surveillance has somewhat limited utility as an alerting mechanism, but it does have a huge amount of utility in terms of situational awareness, digging in to understand, especially in the... We have had a lot of focus on health disparity, so, really understanding who is affected, where they are affected, and thinking about resource allocation and prevention activities. I think there were a few other items, but I will leave it there.

Gillian Haney

Put them in the comments. Those get recorded as well. A huge, huge thank you to our panelists today, much appreciated. Arien, I will turn it over to you to start walking us through the worksheet. Thank you.

Task Force Topics Worksheet (00:51:30)**Arien Malec**



Awesome. Yeah, we continue to have good engagement into the worksheet. I do not know if Liz is on, but we are starting to color-code the worksheet to at least get some visibility into where we have work that we have discussed and that is turned into recommendations, and then, where we have open items for discussion. Since we have already gone through the immunization registry content a couple of times, I would suggest that we go to the reportable lab as our filter and go through and discuss the extant recommendations for discussion here. I do not think Hans is on, but I think Hans is noting that there is a next-generation LRI guide, and we probably should be transitioning the ELR guide to the next-generation LRI guide as opposed to the bespoke ELR guide.

Just for point of reference, the LRI guide was originally published 10 years ago, and the goal was to unify reporting to the ordering provider as well as reporting to public health and make sure that we had a comprehensive guide that addressed both needs that then mapped and married to an LOI guide. I neglected, but I will go back in here and add reference to our addendum in the ISP Taskforce on broad recommendations for lab and order, which were intended both to create a better ecosystem for bidirectional communication of orders to labs for ordering providers as well as address some of the root cause issues associated with public health reporting.

So, again, Steven and Hans are saying basically the same thing in 19, and I think we should consolidate this down to a single recommendation that we go to a consolidated LRI guide. All right, are we going to explain the color scheme that we are using? Oh, ouch, that hurts! Anyway, there we go, perfect. Good, here is the color scheme that we are using. Green is locked, we have sorted consolidated down to the recommendations text itself, yellow is in progress, red is a duplicate, and so, we are going to try to find the right color scheme and keep it pretty simple, but if you are looking through and you have this reddish color, not so heinous on the eyes, we potentially have a duplicate.

All right, Les is noting that ONC should work with CMS to provide financial incentives for LOINC coding and incentive for pretext reporting, and again, I am an advocate for re-endorsing and re-recommending related activities that we contemplated already in the ISP Taskforce because we spent a lot of time constructing that text, and it addresses, for example, the ecosystem issues associated with LOINC encoding, making sure that we have information fully through from IVDs, etc. Again, I think this is an area that is duplicative of the information that Hans already was a huge help in the ISP Taskforce guide, so I would, again, just recommend people read that. I will make sure that it is linked into the spreadsheet itself, and there may be things that we would want to add to those recommendations, but I would want to re-endorse those recommendations because they already went through the HIT Advisory Committee, they are already in ONC's hands, and I think it would be appropriate for us to re-endorse and re-recommend those recommendations.

Structurally, they were not exactly recommendations just based on the structure of the ISP Taskforce, so I think we have the opportunity to turn them into recommendations in this taskforce. Again, this Hans comment on 53 was a note that we also made in that report, that as we include ECR and the ECR implementation guide as the certification criteria associated with the existing ECR certification guide, we want to get to a world where we are relying on ECR for capture of the contextual information, and we want to keep the ELR report specific to the actual laboratory findings in most cases rather than overload ELR with additional clinical contextual information that makes it hard to implement ELR. One of the nice things





about ECR is that it is already trigger-based, and you can already add and modify trigger conditions in order to pull or to make sure that public health has access to that information.

So, Hans notes recommending that ONC and CDC work toward a common standards-based lab reporting submission process that can work through more reduced hubs or networks rather than the current point-to-point processes. I would note that AIMS already exists, so maybe when Hans is back, we can talk about that one. Hans notes that we should create a shared process through which enhancements to standards can be managed to recognize the need for variation, so this is really around setting a floor, and what I do not think we have heard is where the common variation is in ELR state by state.

What I am seeing Hans point to is, again, the jurisdictional variation in terms of the contextual information that goes along with the lab result and using mechanisms like AOE as the place to collect contextual information. I wonder, Gillian or anybody else on the call, whether we have a view about where there is state-by-state variation in terms of the actual ELR content. I think we have heard loud and clear the need to collect complete demographic information, complete contact information, I think we have heard loud and clear the need to be more granular in race and ethnicity, but in terms of deficiencies or variation in the ELR guide, I have not heard. Erin, your hand is up.

Erin Holt Coyne

Hi. Erin Holt, Tennessee Department of Health. So, one comment I would make to that as far as variation that I think is detailed in both the ELR R.1 implementation guide as well as more completely detailed in the various LRI implementation guides is the method in which we document parent-child relationships, which are particularly important for microresults. There can be some differences of interpretation of what that guidance or expectation is from the implementation guides, and I suspect that that could be some of the source of variation across jurisdictions and how that is implemented.

Gillian Haney

Erin, would you recommend tightening that or providing a little bit more context to it? What would you recommend?

Erin Holt Coyne

Well, in LRI, there was some intentional time and energy spent in clarifying the syntax around supporting parent-child relationships, and so, if one of the recommendations is to be able to more widely adopt LRI, we might be able to see some of that variation resolve because of that additional context, guidance, and clarity provided.

Arien Malec

Perfect. Yeah, that was my intuition as well, that we put a ton of work into the LRI implementation guide, and that much of the ELR reporting issue is secondary to just not having gone to the latest version of LRI, as well as overloading ELR with case investigation, where if we had broader use of ECR, we would be in better shape there. So, Hans again notes we should use the latest LRI implementation guide, so I think we can get that message pretty loud and clear. Let's keep going down. All right, so we are done with the current set of comments on for reportable lab tests and results. I owe the taskforce a set of recommendations secondary to re-endorsing the ISP Taskforce recommendations on lab and order.





I went back and re-looked through our ISP Taskforce recommendations, which was an oversight on our part there, but one of the other things we need to make sure to re-endorse or make sure is loud and clear in our recommendations is the need for the lab result that is sent to public health to contain complete and accurate both demographic and contact information that is sufficient to start a case investigation as well as sufficient for person matching, and I think given the infrastructure that we outline in the ISP Taskforce recommendations, we have a broad platform for doing that, but we just should make sure that point is heard loud and clear. Anything else on LRIs? Ike, you have your name up. We are going to go to ECR next. Ike, go ahead.

Steven Eichner

I think we need to also ensure that we address the ask-at-order-entry questions in that same space and look at how we want to treat that.

Arien Malec

Yeah. So, the issue with AOE is that there is a time lag between wanting to get... So, Zika was the poster child for use of AOE, and there is a time lag between wanting to get better context around the lab and getting AOE more broadly deployed. The thought process is that as we get broader use of ECR that we can address, for example, travel health history, pregnancy status, the things that vary from outbreak to outbreak more directly by broader use of ECR than by mandating use of a more flexible AOE system. That is an opinion that I know Hans had when we were putting together the ISP Taskforce recommendations. I think it came across in the ELR conversation that we had that a lot of the work that ELR is doing could be better served through broader use of ECR, but that was the thought process that I had there. We may need more discussion on that point.

Gillian Haney

Can I just ask a quick point of clarification when we are talking about ask on order entry? We are not speaking about the same thing as electronic test order entry, ETOR. I just want to make sure that we are clear that those are two very different things.

Arien Malec

Maybe you can explain ETOR, and then we can...

Gillian Haney

So, ETOR is from the provider to the laboratory with the test order, containing all of the information that is relevant to go to the laboratory and potentially expanding that to make sure that we are including the information that also would need to go to public health, and also is the return message from the laboratory to the provider. Correct me if I am wrong, public health colleagues, but I believe ask on order entry was something that came up during the pandemic specifically and would contain very specific questions that were outside of what would normally be included on ETOR.

Steven Eichner

The evolution of ask at order entry has been around for a long time, but it was first looked at in practice, I believe, looking at Zika response, not COVID-19, and it was an identified need to get very specific information regarding people that were being tested for Zika, including pregnancy status and things like that. I think the bigger issue going forward in looking at experience with COVID-19, where ask at order entry





pretty much needs to be on the table, is looking at how a lot of testing actually occurred for COVID-19 with drive-through testing without a recommendation coming from a person's normal healthcare provider, and if you are relying solely on ECR from a healthcare provider, you are missing that information gathered at the point of testing in that particular circumstance, so I think it is something we very much need to be concerned and cognizant about.

Arien Malec

Cool. So, Hung is going to come on and educate us all, but I want to emphasize that AOE is a generic capability that serves the need for orders to capture additional contextual information relative to the lab order itself, so it is not a public health capability, it is a general lab ordering capability to allow an order to contain additional information that is contextual in nature and intended for the lab, and I think we have used the AOE capability for capturing some contextual information that is associated with the order, but also contextual information that is associated with the person and the clinical context for use.

Gillian Haney

But, we would want the ETOR to contain all of the relevant demographic information that is standardized upon asking for a test versus the contextual... So, I just want to make sure that we are talking about those things in two very different...

Arien Malec

Hung, you had your hand up, and maybe you were going to make the same point I just made or you have additional information you want to drop on us.

Hung S. Luu

Yes. So, I was just going to say that ask on order entry has been around for a very long time, such as fasting lipid, where we want to know whether a patient has been fasting, and so, it was kind of a workaround used during the COVID pandemic to get additional information that currently could not be pulled automatically, but ideally should be gleaned from the patient's information rather than having the clinician input that information because there is a wide range of providers who order these, like it could be a trainee who is not familiar. And so, it is really not a very controlled or standardized process, so if there was a way to pull in that information and convey it later into the reporting, that would be ideal versus ask on order entry, which could be very prone to error.

Steven Eichner

Again, the risk point here is looking at having no information if the patient's first encounter or first major seeking of care, treatment, or testing is directly with a laboratory provider, thinking about all the drive-through testing that went on in COVID-19. Without collecting that information ask at order entry at that point, the information is lost to public health, and to Gillian's point, even the ETOR data is not really there either. You do not have the patient demographic data unless it is collected by the laboratory.

Arien Malec

This is a fantastic point. Bryant, can you do us the favor of posting that observation into the spreadsheet itself so that we can then turn that into a recommendation? It is sort of similar to the lateral flow, sort of rapid test consumer test issue, where as we get more convenient testing options, we run the risk of reducing the contextual information that we have and reducing the reportability of that issue, so I think that is a really





important issue. Thank you for that, and we certainly do not mean when we want to rely on ECR for providing contextual information and not overloading AOE in the way that Hung notes the issues associated with that, we are not intending to lose context in places where lab is the first point of contact. Let me go to case reporting and do a rapid run through our case reporting. Thank you, Liz.

So, this is a generic comment, and I heard it come up again in the syndromic surveillance issue, that for whatever reason, healthcare has this obsession with OIDs. I am not entirely certain where this OID obsession came from, but we heavily use OIDs, which were originally adopted around a standard that is used for signing certificates and encryption certificates and are used in cases where you need to have highly compressed information, and for some reason, we have decided to use them very heavily in healthcare. We need to have directories that better associate these rather opaque identifiers with the actual settings of care where they are received, so we want to turn this one into a recommendation that is tied both to ECR as well as to syndromic surveillance and potentially ELR as well, that we have access to directory information that helps us disambiguate settings of care.

So, I think the next one, which is from Vivian, is duplicative with something that I put in, so I will mark mine as duplicative, is include in EHR certification the ability to access and update... Maybe what happened is I took Vivian's and actually turned it into a recommendation. I recognize my own writing style here. So, the observation is that we see in practice some systems that have up-to-date access to trigger codes, trigger value sets, and actual triggers, and some systems that are stale with regard to their updates to triggers, so the proposed recommendation here is recommending that we include in the EHR certification program for ECR not just the ability to send an ECR, but also the ability to update associated value sets and triggers dynamically and periodically, that we create operating rules for those updates, and that we create the appropriate mechanisms that encourage provider organizations to adhere to the operating rules. So, I am going to pause there. Okeydoke. Vivian, "Establish a nationwide common floor for...something." Go ahead.

Vivian Singletary

Aaron, I may have started this, and I never came back to it, so I absolutely apologize about it.

Arien Malec

No problem, cool. We have all been there. So, I think the recommendation here would be, in fact, that we standardize the ECR criteria. I am not sure if I addressed this in the recommendation text itself, but I think we want to actually recommend the ECR standard and implementation guide. I think I do someplace. And, that should serve as a means for broader adoption and onboarding to ECR.

So, 28, I think, turns into a recommendation that we certify public health data systems for the corresponding ECR requirements that their systems have the ability in a more automated fashion to receive the ECR content as opposed to building workarounds to turn it into, for example, faxes that then get manually reentered into systems. Twenty-nine is duplicative with 26, and in 33, Les notes that we should work to create a single harmonized standard for triggering ECR reports and a single harmonized standard for initial reporting. I think we have that, so I think that is just re-endorsing the work that is already happening and making sure that we have ongoing access to it. I see people nodding. I am not sure ONC can create legislation, Les, so where I would recommend that we...

Leslie Lenert





ONC can draft standardized legislation, not for states. That is something that CDC does all the time too.

Arien Malec

Model legislation... Maybe the ONC team can comment, but I am not sure that ONC has historically been in the game of doing model legislation. If we think it is worth turning that into a recommendation, that would be fantastic. The other thing that I think we can contemplate is making sure that the way that certification is framed for ECR allows for modular certification in ways that would allow, for example, a state HIE to serve as the hub or intermediary for ECR.

Gillian Haney

Also, not every state has a robust HIE, so I think we do need some flexibility there, and I think also around electronic case reporting, there certainly is a centralized approach for that, so how would this impact that?

Arien Malec

My proposal here would be to turn this into a recommendation that we have modular certification for ECR reporting in ways that would allow a provider organization to use their EHR as the module or use their partnership with the state HIE as the module, and that level of modular certification is already in use across ONC and allows flexibility for provider organizations to sort of mix and match capabilities to address the certification requirements that they might have attached to programs.

Steven Eichner

Arien, this is Steve Eichner. I think it is important that public health determine what opportunities it wants to provide to the healthcare providers for connecting into its system. In Texas, for example, participation in health information exchanges is voluntary by providers, and we support connections both through HIEs and through other networks. Other states may have different requirements or different components, and giving the health departments the ability to specify what they can support and what they are certified against is critical because some health departments may not be resourced to support multiple types of connections.

Arien Malec

It is a great point. Again, the recommendation here is to make sure that we have certification on both sides to make sure that the certification criteria is modular in nature and that it allows us to make sure that we can plug compatible units in ways that address state needs.

Steven Eichner

But the difference here is that on the provider's side, they may need to support all of the capabilities on the receiving-side system, where the receiving system may only need to meet one criterion for receiving that data.

Arien Malec

That is right, and typically, the way we do this in the EHR certification program is that providers need to note the systems that they are using to address the certification criteria. We have gotten away from all-in-one certification criteria where a provider has to adopt any EHR that has every single criterion because in actual practice, providers have multiple systems, and so, they may be using their native EHRs, their ECR reporting system, or they may use a different module for that.



**Steven Eichner**

But again, the module, whether it is standalone or not, needs to support all the mechanisms that public health may use to receive the data. On the public health side, certification need only be one of whatever the set is. That way, the provider is not going to end up in a bad position where the state of Texas uses one format, Oklahoma is using a different format, and the provider needs to send data to both.

Arien Malec

Yeah. So, ideally, we would have certification criteria that would address the format so that we do not actually have format mismatches, although we do have both a CDA and a FHIR-based implementation guide, which can get confusing in practice. Okay, 36. So, this is about probabilistic, AI-based, or ML-based recognition of notifiable conditions. Les, I do not have a sense for how to turn this into recommendation text.

Gillian Haney

And actually, I am going to strongly disagree with this, to put it out there. The role of establishing case definitions is the role of the states and jurisdictions through CSTE, and the beauty of RCKMS is that it has the flexibility of establishing what the trigger codes are for reporting so that we can have the varying degrees of sensitivity, depending on where we are with a certain stage of disease, in order to have that flexibility of what we need reported to us. So, I really think that that is the role of the state and the jurisdiction through CSTE to determine what is nationally notifiable and what is actually reportable within those jurisdictions. Erin, do you want to comment as well?

Erin Holt Coyne

You took the words out of my mouth. I would just echo in particular the difference between nationally notifiable conditions and state reportable, and if we do recognize that there is a variation across jurisdictions, only focusing on nationally notifiable does not necessarily address that variation across the jurisdictions, and may even perpetuate it.

Steven Eichner

Absolutely. This is Steve. It is not just at a state level; it can be local as well.

Arien Malec

Yup, and again, we will not belabor this. Les, if you can do some thought about how we could turn this into a recommendation that would address the concerns that Gillian, Aaron, and our public health folks have raised, that would be fantastic, and we could consider it at that time. So, 40. This is basically the meat of how we turn... So, let me give you a little bit of the lay of the land for ECR. Right now, ECR does not have test methods associated with it. It does not point to a standard implementation guide. And so, I did a potential reword on Abby's proposal that we actually endorse the existing ECR implementation guide, ECR standard, and the CDA and FHIR-based implementation guide and establish associated test methods so that we name a standard for the ECR F criterion. So, Abby, I do not know if you want to comment on how we unify my wording and your wording and how we get to a consensus statement there. I do not know if Abby is on.

Michael Berry

No, Abby is not with us today, Arien. We should get to public comment.



**Arien Malec**

That is right. We have successfully gone through both ECR and lab, and we are going to go to public comment at this point.

Public Comment (01:25:02)**Michael Berry**

Great, thank you so much. So, we are going to open up our call for public comment. If you are on Zoom and would like to make a comment, please use the hand raise function, which is located on the Zoom toolbar at the bottom of your screen. If you happen to be on the phone only, press *9 to raise your hand, and once called upon, press *6 to mute and unmute your line. So, let's wait for one moment to see if anyone raises their hand. Not seeing any hands raised, I will turn it back to you, Arien and Gillian.

Next Steps (01:25:37)**Arien Malec**

All right. So, I think we are making really record time progress through this work here. It is a substantial amount of work. I really appreciate everybody's digging into the spreadsheet and making sure that we have good source material to turn into recommendations. We are going to try to complete the schedule of looking at the last couple back topics, review them in the spreadsheet, and turn them into recommendations over time, and going forward, we should be looking both at the recommendations text as well as the information in the spreadsheet and turning more of the recommendations in the spreadsheet to whatever color it is that we have chosen to finalize recommendations and lock them. We have cancer registries next, is that right? Yeah. So, we are heading towards the end of the F criteria. We have gotten through the bulk of the most significant and widely used F criteria. We are going into cancer registries and going into HAIs, and I believe that is it. Gillian, do we have anything else on the docket in terms of F criteria to go through?

Gillian Haney

The healthcare surveys.

Arien Malec

Thank you. So, we have cancer, HAIs, and healthcare surveys to get through, and then we are going to be deep into writing the draft recommendations for review.

Gillian Haney

So, we are almost at time. I just really want to thank all of our presenters and all of the comments as well, both verbally and within the chat. Again, it has been a really robust conversation, and I feel like we are moving forward toward common goals and consensus here, so, thank you very much, everyone.

Arien Malec

Indeed. Thanks to our panel and thanks to the taskforce members for all the [audio cuts out] [01:27:46]. Let's keep it up!

Gillian Haney

See you next week.



Arien Malec

Thanks.

Michael Berry

Thank you all.

Karl Soetebier

Bye, guys.

Adjourn (01:27:57)