Health Information Technology Advisory Committee (HITAC)

Public Health Data Systems Task Force 2022 (PHDS TF) Meeting

Meeting Notes | August 31, 2022, 10:30 a.m. – 12:00 p.m. ET

Executive Summary

The Public Health Data Systems Task Force 2022 (PHDS TF) is a joint task force that consists of HITAC members, federal representatives of the HITAC, and several other subject matter experts (SMEs). The focus of the meeting was to review and discuss the F1 Criteria: Transmit Immunizations and Immunizations Query. Gillian Haney and Arien Malec, PHDS TF 2022 co-chairs, provided opening remarks and reviewed the agenda for the meeting. The TF received presentations on the F1 Criteria and held a discussion period. The co-chairs presented the topics worksheet for use in developing TF recommendations to the HITAC. There were no public comments submitted verbally, but a robust discussion was held via the chat feature in Zoom Webinar.

Agenda

10:30 a.m. Call to Order/Roll Call
10:35 a.m. F1: Transmit Immunizations and Immunizations Query
11:00 a.m. Discussion
11:25 a.m. Topics Worksheet
11:50 a.m. Public Comment
11:55 a.m. Next Steps
12:00 p.m. Adjourn

Roll Call

Mike Berry, Designated Federal Officer, Office of the National Coordinator for Health IT (ONC), called the August 31, 2022, meeting to order at 10:31 a.m.

Members in Attendance

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
Hans Buitendijk, Oracle Cerner
Heather Cooks-Sinclair, Austin Public Health
Erin Holt Coyne, Tennessee Department of Health
Charles Cross, Indian Health Service
Steven (Ike) Eichner, Texas Department of State Health Services
Joe Gibson, CDC Foundation
Rajesh Godavarthi, MCG Health, part of the Hearst Health network
Jim Jirjis, HCA Healthcare
John Kansky, Indiana Health Information Exchange
Bryant Karras, Washington State Department of Health

Steven Lane, Sutter Health
Jennifer Layden, CDC
Leslie (Les) Lenert, Medical University of South Carolina
Mark Marostica, Conduent Government Solutions
Aaron Miri, Baptist Health
Alex Mugge, CMS
Stephen Murphy, The Network for Public Health Law
Eliel Oliveira, Dell Medical School, University of Texas at Austin
Jamie Pina, Association of State and Territorial Health Officials (ASTHO)
Abby Sears, OCHIN
Vivian Singletary, Public Health Informatics Institute
Fillipe (Fil) Southerland, Yardi Systems, Inc.

MEMBERS NOT IN ATTENDANCE

Hung S. Luu, Children's Health
Sheryl Turney, Carelon Digital Platforms (an Elevance Health company)

ONC STAFF

Mike Berry, Designated Federal Officer
Brenda Akinnagbe, Program Staff
Liz Turi, Program Staff

PRESENTERS

Mary Beth Kurilo, AIRA
Aaron Bieringer, MN Department of Health
Hans Buitendijk, TF member and HIMSS EHRA Chair

Key Specific Points of Discussion

Topic: Opening Remarks

Gillian Haney and Arien Malec, PHDS TF 2022 co-chairs, welcomed everyone and reviewed the agenda for the meeting. Gillian described the three SME presentations, and Arien welcomed the presenters.

PHDS TF 2022 members who were not able to attend the first meeting of the TF were invited to introduce themselves:

- Bryant Thomas Karras, Chief Medical and Informatics Officer for Washington State Department of Health, has 22 years of state service and a background as a physician, biomedical engineer, and a National Institutes of Health (NIH)/National Library of Medicine (NLM) trained medical informatician.
- Eliel Oliveira, Director of Research and Innovation at the Dell Medical School, University of Texas-Austin, serves on the HITAC. He has over 20 years of experience and previously served as the Chief information Officer for the Louisiana Public Health Institute. He supports the health information exchange in Central Texas.

Topic: Current State and Overview of Public Health Informatics Projects

The co-chairs welcomed SMEs to present on recent improvements to public health immunization data flows and invited TF members to take note of gaps, opportunities, and what has worked.

Hans Buitendijk, TF member and Healthcare Information and Management Systems Society (HIMSS) Electronic Health Record Association (EHRA) Chair, presented on the HIMSS Electronic Health Record (EHR) Association Immunization Reporting Certification Criterion. He explained that substantial progress has been made regarding sharing immunization data and highlighted key areas of progress. He defined and expanded on key concerns/challenges and opportunities related to the (f)(1) Transmission to Immunization Registries certification criteria, which were included in the presentation slide deck. He explained that EHRA, in its role as the "sender," has seen improvements in some spaces around immunization registries but also believes that more progress can be made going forward. He asked that suggestions for additional opportunities be manageable and not contain excessive overhead.

Aaron Bieringer, Interoperability Lead and Implementation Coordinator, Minnesota (MN) Department of Health, presented an overview of standards-based immunization messaging. He briefly reviewed background information, which was detailed in the presentation slides, and then discussed the current state of immunization messaging in MN and current implementation gaps. He explained that MN has a "functioning" HL7 2.5.1 r1.5 endpoint and discussed gaps and issues caused by MN's implementation being "off standard." He shared several recommendations because of MN's experiences, which included:

- Don't certify software, certify use
- Leverage existing testing program
- Fund changes to State, Tribal, Local, or Territorial public health agencies (STLTs) and their effected partners
- Expect slow but steady improvement

Mary Beth Kurilo, American Immunization Registry Association (AIRA), introduced and AIRA and presented an overview of AIRA's Immunization Information System (IIS) Measurement and Improvement (M&I) Initiative. She described the M&I (a collaborative effort with the CDC) and explained how they conduct their testing; the details were included in the presentation slide deck. She commented that they have seen great engagement in voluntary measurement and provided a brief review of the Aggregate Analysis Reporting Tool (AART) User Interface, where results from the M&I are made available for review and sharing. She provided an overview of the current content areas and the areas the content moves through in their measurement stages, noting that the ones that most closely are Submission/Acknowledgement and Query/Response. She shared progress and trends related to Submission/Acknowledgement, noting that IIS diverged from standards due to policy and laws and trends related to Query/Response. The M&I Workgroup met recently and determined that, over the next year, they will focus on provider participation, patient and vaccine matching, patient and vaccine saturation, onboarding, and security. She described the Immunization Integration Program (IIP), which is a collaboration between AIRA, CDC, HIMSS, and others, and reviewed their goals, strategies, and vision/pipeline approach to funnel solutions into IIS and IIP. Their recommendations are to consider testing implemented systems rather than vendor products, build on test cases and processes already in place, involve and engage the public health community, consider the role of state law and policy and its influence on interoperability, and allow adequate time for changes while providing funding.

The co-chairs facilitated a discussion session following the SME panel presentations.

Discussion:

- Arien shared several questions and comments, including:
    - He asked Hans to share information about vaccine terminology that validate the immunization

and HL7 message and asked if there are criteria for getting a CVX update. Hans stated that the criteria focus on the actual transactions with the right terminology included. The test method tests that there is the correct terminology. They discussed an example of how a vaccine registry could fail when it does not recognize a vaccine message.

- Mary Beth and Hans noted that there are issues because updates happen continuously, but this is not a major focus. Mary Beth commented that they are launching a project to review code set implementation and to streamline the process while ensuring collaboration across the ecosystem.

- Gillian asked about using the National Institute of Standards and Technology (NIST) tools for certification and validation for data quality and syntax.
  - Hans responded that these tools focus on the adherence of the EHR side to the message coming across with the minimally required data (does not test for everything) and a certain set of test data. This does not include optional fields of data and does not pick up everything due to differences between what is certified and what is actually used. Mary Beth supported Hans' comments.
- Bryant shared several comments, including:
  - He asked Aaron Bieringer to comment on what he meant when he described MN's implementation as "off-standard." He noted that implementations could be standard while not being the same due to variations of or optional components within implementation guides (IGs). Aaron responded that due to a lack of concrete language in parts of the IG and MN's status as an early adaptor, MN made assumptions that are "off-standard" in comparison to how the rest of the community uses the IG. In other scenarios, they just do the wrong thing (e.g., sending the wrong code), but they can determine areas that need to be fixed now that they have the NIST tool and other resources. Arien commented that the NIST tool checks HL7 syntax and not data semantics.
  - He emphasized the need for vocabulary standards for vaccines to be updated. Could the TF recommend to the CDC that it needs resources to keep reference vocabulary tables up to date?
- Arien asked if a certification guide exists for packages that recommend transport standards and associated test methods and content.
  - Hans responded that this has been created, and Mary Beth confirmed that transport is tested; this was the first content area the IIS community and the CDC chose, though it is not specified in the (f)(1) criteria. Health information exchanges sometimes stand in between and mandate a different kind of transport, but the community is mostly in alignment. Arien commented that he served on the CDC task force that made this recommendation in 2011, but there is still no consolidated set of certification criteria that includes content and transport.
- Arien asked the SME presenters to share an example of jurisdictional variation in data that would allow certification to a floor with ceiling implementations that are compliant with standards and IGs. Can eCR or other improvements to standards be used to improve information in the vaccine message?
  - Gillian described variations in state laws around the level of granularity that must be captured around race and ethnicity data and shared an example from her experiences in Washington State. Bryant described how the Washington State Board of Health enacted a law (in effect January 1, 2023) that requires race and ethnicity to be collected and reported at a very granular level. The law exceeds current federal requirements and came about because of Washington's early experiences with COVID-19 pandemic responses. If they are held to the national floor, they will need
  - Arien commented that this situation allows for the establishment of a floor and ceiling at the same time and asked if there is a way to certify to a floor that also allows for jurisdictional ceilings to be raised. Hans responded that this should be possible, though the standards must support it with clearly defined vocabulary, and he shared specific examples. He

highlighted the need for clarity around how different jurisdictions can coordinate efforts when something is optional in standards. Arien explained that the ideal state would be a certified system that can send a message the IIS can understand, even if it does not contain all the jurisdictionally specific data (while the actors work on adding information).
    - Arien asked if there is a need to update standards to accommodate data collected from varying jurisdictions (e.g., more granular race and ethnicity data, state-based consent rules, redisclosure rules). He suggested that the TF work to call out themes around implementation variations in their homework.
    - Hans commented that some data streams are beginning to include extra data (not specific to that vaccine) and asked how this information could be collected and shared. Does the TF have to rethink data flows?
    - Mary Beth explained that data from 2020 showed that, of about 125,000 active HL7 interfaces in place, about 65% were bidirectional (able to query and submit data). She explained that the amount of bidirectional data exchanged has increased due to responses to the pandemic. Aaron commented that in MN, 80% of real-time messages are query messages.
    - Mary Beth asked Arien to comment on the ad hoc CDC-established task force that focused on this topic in 2011. He explained that it was a two-day summit that included STLTs, IIS vendors, and technology experts that focused on making recommendations on the transport side of the topic. At the time, they made a recommendation to align on a single transport standard, and CDC put together an IG to carry HL7 content because of this recommendation. Mary Beth responded that nearly all IIS systems are compliant to that IG now, while some have a health information exchange (HIE) as an intermediary.
- Mary Beth invited attendees to comment on the suggestion made in the presentations to certify the use of EHR systems and not the systems themselves.
    - Hans agreed that this approach made sense but added that the impact would be easier for providers if less certification was required. He added that programs in place seem to be yielding greater consistency. Where possible, the TF should focus on the testing and certifying the fewest number of critical points rather than certifying everything (lots of variation). Streamlining the process is most important.
    - Aaron commented that the concept of certification varies based on what is being measured and discussed MN's experiences with certified EHR systems that still were unable to generate standard messages that meet the IG. Hans responded that real-world testing could address these concerns and could allow them to close the loop. He asked about the change in the idea of certification and how it would impact the volume of connections that need to be examined.
    - Mary Beth explained that they differentiated the following ideas when measuring public health jurisdictions' interoperability: "Can you do it?" "Do you do it?" "Do you do it well?" The quality and content of the interface should be the top priority, and the finite number of public health jurisdictions being measured should ease this process. Arien added that certification should be cleanly associated with the idea of "You can do it well in practice."
- Arien shared final feedback with Mary Beth, and the co-chairs thanked the presenters.

TF Topics Worksheet

The PHDS TF 2022 co-chairs shared a worksheet to facilitate data collection for PHDS topics. TF members were encouraged to add topics and to include information on background/supporting references, observations, and recommendations, and everyone was reminded to include label their additions with their names.

Arien shared background information on how the format for the document was devised and explained how it

would be used to create a final draft recommendations report for the TF to present to the HITAC in November 2022. Following this presentation, the report will be transmitted to the National Coordinator for Health IT. The recommendations will focus on ONC as the actor (possibly in coordination with other federal partners), and the common practice for creating recommendations is to start each one with the following text: "We recommend that ONC…"

Jamie recommended adding a column to allow TF members with similar ideas or recommendations to indicate that they endorse someone else's content. Arien invited members to add their endorsement to the observations column or to add an additional row for new/diverging comments. TF members should tag comments with their names and may also endorse each other's comments during discussion sessions in TF meetings.

Next Steps

Homework for September 9, 2022, Meeting – due by Thursday, September 8:

- Please review the attached Word document for comments posted in the Zoom chat during the August 31, 2022, meeting. These comments can be used to inform your initial comments in the Topic Worksheet (see #3 below). The video from this meeting can be found here: https://www.healthit.gov/hitac/events/public-health-data-systems-task-force-2022-0
- Review the AIRA IIS-EHR Interoperability Common Areas of Variation document on areas of expected variations in immunization data exchange.
- Begin reviewing and adding comments to the Topics Tracker worksheet. Instructions on how to use the worksheet can be found on the instructions tab within the spreadsheet. The spreadsheet is accessible through Google Docs.

If anyone has any questions, please feel free to reach out to the co-chairs or the ONC program team.

Public Comment

Mike Berry opened the meeting for public comments:

QUESTIONS AND COMMENTS RECEIVED VERBALLY

There were no public comments received verbally.

QUESTIONS AND COMMENTS RECEIVED VIA ZOOM WEBINAR CHAT

Mike Berry (ONC): Welcome to the Public Health Data System Task Force. We will be starting shortly. Please remember to set your chat to "Everyone" so that all can see. Thanks.

Mike Berry (ONC): Meeting materials can be found at: https://www.healthit.gov/hitac/events/public-health-data-systems-task-force-2022-0

Jim Jirjis: Jim Jirjis Joined

Jim Jirjis: It seems with immunizations the data is more focused and one can get their head around measuring variation in completness *[sic]* of data or its structure. With the broader USCDI, it seems that analyzing variation is harder because it is hard to deduce from the received CCD what the sender parameters are (is all dat, *[sic]* like EKG's for example part of their payload or not? are they sending one month of information or 3 years, etc etc. We have. looked at 100 different senders of CCDs and found it challenging

Arien Malec: We started with Iz b/c it's more focused and could be a good model for exploring certification.

Gillian Haney: Some general comments on the presentations - again common agreement on the need and importance for adhering to standards while having to recognize necessary divergence for STLT law. Also the focus on data quality and syntax. Impressive progress todate. *[sic]*

Erin Holt: including for LOINC and SNOMED

Arien Malec: Thanks Eric -- that's a consistent piece of feedback -- syntax *and* data in practice are key for real interoperability.

Vivian Singletary: @Jamie. I too agree with certifying use vs. certifying systems. This is such an important distinction.

James Daniel: I would love to hear more about CDC's role in enabling the work that AIRA is doing. Are there things that NCIRD does that other CDC centers could learn from?

Mary Beth Kurilo: @joe, here are the recommendations I mentioned: Consider testing implemented systems rather than vendor products

Build on test cases and processes already in place
Involve and engage the PH community in the process
Consider the role of state policy and law, and its influence on interoperability

Allow adequate time and funding to see improvement

Vivian Singletary: So if I am hearing this correctly, the testing tools cut down on the implementation interpretation variation?

Mary Beth Kurilo: AIRA has a document that summarizes expected areas of variation, including consent, vaccine eligibility/funding source, etc. -- happy to share.

Arien Malec: @Mary Beth -- very much interested! thank you.

Vivian Singletary: Thats *[sic]* great news!

Mary Beth Kurilo: Document on expected variation can be found here: https://repository.immregistries.org/resource/iis-ehr-interoperability-common-areas-of-variability-based-on-jurisdictional-law-policy/

Vivian Singletary: Thanks, Mary Beth!

Erin Holt: Maybe its a matter of teasing out differences between use vs implementation

Steven Lane: As we consider modular certification for public health data systems we will want to consider both the workflow of data exchange directly between HCPs and Public Health as well as the workflow where data transits an HIE/HIN/HDU along the way. We also should consider how this needs to align with potential future exchange of these messages via the TEFCA framework, i.e., via QHINs.

Aaron Miri: +1 with what Dr. Lane said. Furthermore, I would think we should contemplate a way for the general public to easily be able to access that data via some mechanism without having to track down provider organization X to get a copy of their public health data (immunization, etc.)

Vivian Singletary: Thank you all! This was excellent

Gillian Haney: thanks everyone - very thoughtful discussion!

Steven Lane: Absolutely agree Aaron. Individuals should (eventually) have both a right and a means (without special effort) to access their personal data held by public health agencies as well as an accounting of the provenance of that data and how and by whom the data has been accessed/used. We need to (re)build the public's faith in our public health institutions and practices. Shining the light of Information Sharing on this data could go a long way in that direction.

Steven Lane: @Bryant - Yes! We should always make recommendations with an awareness of the long term goal of global interoperability of health data. There is probably no better use to benefit from this perspective than immunization data exchange.

Mary Beth Kurilo: @Steven and @Aaron - agreed - about 25 IIS participate with VCI to allow consumers to access their COVID data and download a QR code for their vaccine credential. There is lots of work and interest in expanding this to all vaccines.

Joe Gibson | CDC Foundation: +1 @Bryant. Likewise, we need effective exchange and use from state to local PH agencies.

Mary Beth Kurilo: @Bryant +1 - a global vaccine code set is much needed.

Hans Buitendijk: @Aaron Miri: There probably would be multiple paths as the patient's primary providers likely would want to have their full immunization record thus have it available through their portals/APIs, personal apps are gathering such data for their customers, and IIS registries are starting to enable access effectively to patient apps effectively considering access to COVID vaccine data.

Vivian Singletary: I like this idea that Jamie is proposing

Steven Lane: An efficient solution would be to allow the immunization registries to serve as the identified source of truth and then build EHRs and other systems to link to, utilize, and update the data maintained there rather than to keep independent copies of locally and externally administered immunizations. The current model of searching for, copying external data and maintaining local copies of immunization histories and other health data leads to discontinuity of care, unnecessary duplicative care, patient safety concerns, wasted resources, error promulgation and individual/provider burden.

Vivian Singletary: I can select but not copy from the chat

James Daniel: FYI STC and Docket both provide portals/apps for consumer access to Immunization Information Systems. These are already live in many states (many even prior to COVID).

Hans Buitendijk: @Steven: For various use cases, efficiency, performance, duplicate storage will be with us and we have to work on how to make that reliable, complete, efficient for the user.

Eliel Oliveira: Chat content are available in the records here: https://www.healthit.gov/topic/federal-advisory-committees/hitac-calendar-type/7061

Mary Beth Kurilo: Thank you, all!

QUESTIONS AND COMMENTS RECEIVED VIA EMAIL

There were no public comments received via email.

Resources

PHDS TF 2022 Webpage

PHDS TF – August 31, 2022 Meeting Webpage
PHDS TF – August 31, 2022 Meeting Agenda
PHDS TF – August 31, 2022 Meeting Slides
HITAC Calendar Webpage

Meeting Schedule and Adjournment

Arien and Gillian thanked everyone for their participation and the presenters for sharing their expertise. The co-chairs summarized key achievements from the current meeting and shared a list of upcoming PHDS TF 2022 meetings, including dates of presentation to the HITAC. They asked TF members to focus on homework in between meetings.

Arien described the work that has been put into the state immunization information systems, which includes a lot of special effort, and he asked that the TF focus on creating recommendations that will ensure that the next EHR that gets implemented across jurisdictions is switched on, by default, to send vaccine administration data and to query for immunization records with no special effort. Gillian thanked everyone who submitted comments in the chat via Zoom and highlighted the need to develop specific tools to address data quality, considering the lessons learned by AIRA and others.

The next meeting of the TF will be held on Friday, September 9, 2022. The meeting was adjourned at 11:48 a.m. E.T.