Health Information Technology Advisory Committee

Interoperability Standards Priorities Task Force 2021 Virtual Meeting

Meeting Notes | April 1, 2021, 2:00 p.m. – 3:30 p.m. ET

Executive Summary

The focus of the Interoperability Standards Priorities Task Force 2021 (ISP TF 2021) meeting was to identify opportunities to update the ONC Interoperability Standards Advisory (ISA) to address the HITAC priority uses of health IT, including related standards and implementation specifications. Audacious Inquiry presented on the recent work by its SANER Project and fielded discussion questions. The co-chairs reviewed the initial scoring and prioritization of the TF's areas of focus and recommendations, and TF members briefly discussed the recommendations. A list of potential experts and presenters who may share input at future meetings was shared.

There were no public comments submitted by phone, but there were several comments submitted via the chat feature in Adobe Connect.

Agenda

02:00 p.m.	Call to Order/Roll Call
02:15 p.m.	Introductions
02:20 p.m.	Audacious Inquiry SANER Framework Presentation
02:45 p.m.	Results of Prioritization Voting
03:05 p.m.	Obtaining Additional Expert Input
03:15 p.m.	Homework
03:25 p.m.	Public Comment
03:30 p.m.	Adjourn

Call to Order

Michael Berry, Designated Federal Officer, Office of the National Coordinator for Health IT (ONC), called the meeting to order at 2:00 p.m. and welcomed all members to the first meeting of the ISP TF 2021.

Roll Call

MEMBERS IN ATTENDANCE

Arien Malec, Change Healthcare, Co-Chair
David McCallie, Individual, Co-Chair
Cynthia Fisher, PatientRIghtsAdvocate.org
Jim Jirjis, HCA Healthcare
Ken Kawamoto, University of Utah Health
Victor Lee, Clinical Architecture
Les Lenert, Medical University of South Carolina
Clem McDonald, National Library of Medicine

Ram Sriram, National Institute of Standards and Technology
Andrew Truscott, Accenture

MEMBERS NOT IN ATTENDANCE
Ricky Bloomfield, Apple
Valerie Grey, New York eHealth Collaborative
Ming Jack Po, Ansible Health
Edward Juhn, Blue Shield of California
Raj Ratwani, MedStar Health
Sasha TerMaat, Epic
Scott Weingarten, Cedars-Sinai and Stanson Health

ONC STAFF
Michael Berry, Branch Chief, Policy Coordination, Office of Policy (ONC); Designated Federal Officer

General Themes

TOPIC: AUDACIOUS INQUIRY SANER FRAMEWORK PRESENTATION
Presenters from Audacious Inquiry provided an overview of Audacious Inquiry's (Ai) work on the Situation Awareness for Novel Epidemic Response (SANER) Project.

TOPIC: ISP 2021 TF PRIORITIZATION & SCORING
Arien and David described the proposed framework for prioritization of the ISP TF 2021's areas of focus and work. TF members submitted feedback, and Arien completed an initial ranking using Delphi scoring. Initial scores/sums were presented.

TOPIC: OBTAINING EXPERT OPINIONS
Arien and David described the ISP TF 2021's plan to continue to obtain expert opinions and feedback to better inform the TF's recommendations to the HITAC.

Key Specific Points of Discussion

TOPIC: WELCOME AND ISP TF 2021 OVERVIEW
- The co-chairs, David and Arien, welcomed ISP TF 2021 members to the fourth meeting of the reconvened TF, and Arien reviewed the agenda, noting the following items:
  o New participants were welcomed to the virtual meeting and were encouraged to request clarification on terms or other concepts, as necessary.
  o The ISP TF 2021 mandate was included in the presentation materials on slide #4.

TOPIC: AUDACIOUS INQUIRY SANER FRAMEWORK PRESENTATION
Keith Boone, MBI, Project Lead and Enterprise Architect, Lauren Knieser, DrPH, Director of Emergency Preparedness and Response, and Scott Afzal, President, provided an overview of Audacious Inquiry's (Ai) work on the Situation Awareness for Novel Epidemic Response (SANER) Project. The presenters briefly discussed their backgrounds in interoperability standards work and situational awareness.

Lauren presented background information on challenges faced by hospitals and public health authorities related to visibility of hospital capacity/supply/staffing, complications related to absorbing surges in patients, load balancing, fragmented technical infrastructure, and the lack of a national/federal standard for exchange of healthcare situational awareness information during disasters and public health emergencies (PHEs). She explained that the importance of situational awareness has been highlighted many times before the COVID-19 pandemic occurred, including following the September 11 attacks, Hurricane Katrina, H1N1, and Hurricane Harvey and provided supporting information from within the presentation slide deck. She emphasized the

need to share data across state boundaries within the United States.

Lauren described enabling legislation to establish a near real-time, electronic, nationwide public health situational awareness capability through an interoperable network of systems to share data. Related pieces of legislation were highlighted in the presentation materials on slide #8. Also, she discussed the small amount of progress on this work made by HHS, as described by the Government Accountability Office (GOA).

Lauren explained that in March 2020, as part of COVID-19 response efforts, Ai learned that Admission, Discharge, Transfer (ADT) Notification networks were being considered as a mechanism for national healthcare situational awareness, but she explained that, several years prior, Ai wrote an analysis commissioned by the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) that Fast Healthcare Interoperability Resources (FHIR) may be a superior methodology for ADT hospital capacity reporting. Ai began collaborating on this issue with industry partners, which led to the SANER Project.

Keith described the roots of the SANER Project's work, which started with challenges presented by the need for manual reporting for bed and ventilator availability that hospital staff were required to do in the early days of the COVID-19 response. He discussed the history of previous federal advisory committees and their work on standards and use cases, while referencing detailed information in the presentation materials. He listed and discussed the specific challenges related to the COVID-19 response efforts that were examined by the SANER Project. The SANER Project discovered that there are essential elements of information that are measurements, and they included capacity/utilization, event counting, queue lengths, service time, and categories of facility types/status.

Keith explained how SANER examined the entire workflow and determined how to best communicate essential elements of information (EEIs) for situational awareness needs through the aggregation of data into a combined report to public health and emergency response agencies, including state and local health information exchanges (HIEs). He discussed several observations and complications SANER examined as part of their work and how they worked to address issues to appropriately share data at the local, regional, and national levels. He described the complete reporting approach achieved by the SANER SMART on FHIR App and SANER Server, which were detailed in the presentation materials. He gave an overview of SANER's piloting work done in conjunction with the Texas Health Services Authority through the STAR HIE cooperative agreement and added that Ai supports this work as the technical vendor. He elaborated on the key features of SANER, which were included on slide #21 in the presentation. The SANER Project was included in ONC's Interoperability Standards Advisory (ISA) process. The standard will be published as a standard for trial use (STU) by HL7 with the estimated date of May 2021, and Keith discussed related needs for adoption, federal requirements, cost (will be free), and test tool availability. He discussed the strong industry support for SANER's work. Future considerations included:

- Continued support for development and piloting by federal agencies
- Promote greater collaboration among the health IT and disaster response communities to better align subject matter EEIs and technical standards
- Ensure that efforts around pandemic response include recognition of needs in other public health emergencies and disasters
- Ongoing integration of social determinants of health (SDOH) data requirements to better understand health care disparities
- Foster engagement with healthcare supply chain and workforce vendors

DISCUSSION:

- Arien thanked the presenters and discussed the creation of a standard that solves the capability needs for situational awareness in emergency responses, which is an independent need from COVID-19. He asked which policy levers/alignments are required, how they would be funded, and how they would be distributed nationally versus at the state level. He also inquired about mechanisms for standards adoption deployment.
  - o Lauren responded that levers included:

- ▪ Many states and territories already spend grants and cooperative agreements on their situational awareness systems, and these systems could be used to implement standards.
  - • Arien suggested connecting grant programs to the standards adoption process.
- ▪ Policy for national adoption is challenging, but existing legislation that requires funding to go to state health departments could be changed to direct funding to other stakeholders (like hospital associations or healthcare systems) to get around state boundaries.
- ▪ Get health systems to view standards as useful for routine, daily use cases and expand from there. This could lead to the adoption of more electronic methods.

- David asked Keith about the scope of SANER's work, and David responded that output items will include:
  - o An implementation guide that is being developed with HL7,
  - o The broader SANER Project that drives work in HL7 (putting together ballots, editorial work, convening meetings), and
  - o Building open-source tools (a tool built on open source FHIR server has been released, further support for STAR HIE pilots).
  - o Arien asked if networks (like a state HIE or an aggregator) would be associated with SANER to provide a destination for situational awareness and regional dashboards. David confirmed that HIEs and other networks are involved and can support this work.

- Les discussed his experiences with situational awareness and preparedness working at the CDC. He stated that COVID-19 has not been a fast-moving disaster, like a hurricane, so it has not disrupted infrastructure. It has drawn focus, so improvements were made to reporting infrastructure. Incentivizing the creation of a syndromic surveillance message brought many hospitals into the BioSense program through the use of one standard. He discussed another part of the BioSense infrastructure that put a server as each hospital suffered from mapping errors which did not include state/local resources; this led to data that were not interpretable. He suggested focusing on outbound HL7 v2.x communications to a central authority while continuing to learn from syndromic surveillance.
  - o Keith responded that BioSense and other HL7 v2. based solutions are good at getting clinical data, but it is difficult to get all necessary information (e.g., bed capacity) from ADT notifications.
  - o Les encouraged immediate action and agreed with the suggestion of placing a searchable FHIR server at each institution for public health.
  - o Keith stated that they are using these, which they call the "SANER server," but noted that it is not meant to be an all-purpose server for the hospital. Other network appliances can be used to support public health reporting, to collect data, and forward it.
  - o Les discussed the need for governance around these servers/appliances and referenced related work done with Georgia Tech and architectural models for large, federated networks capable of doing secure, dynamic queries of databases.
  - o Keith responded that some of SANER's work is derived from Query Health's work and that each hospital could have a cloud-based, segmented repository for their data.

- David highlighted the variety of paths data may take via aggregators and asked about efforts to deduplicate the data.
  - o Keith stated that duplication is a common challenge, and it can be solved with provenance information and the incorporation of line-level information to record identifiers associated with the accounts. It is a deep topic, and TF members highlighted its importance.
  - o David asked if the competition for successful adoption is just fax machines or if there are competing approaches, proprietary or not.
  - o Keith explained that some states support reporting through their emergency operations centers through Juvare Public Health Solutions, but there is a break between emergency operations and other health IT communications. Other feeds are running but not reporting COVID-19 data. ADT has challenges, and SANER identified them in a report for ASPR. Some including deduplication challenges in the ADT stream and capacity information that does not show up in the feed.
  - o Clem commented that FHIR should be useful for deduplication.

TOPIC: PRIORITY SCORING & RESULTS OF PRIORITIZATION VOTING

Arien explained the ISP TF 2021's approach and priority scoring process. TF co-chairs and members submitted input via email, and scoring was tabulated. Arien shared the approaches, weighting mechanism, and scores (including a weighted sum) across the categories of priority, impact, levers, and burden. All information was included in the TF's presentation slides. Several TF members did not yet provide feedback. Arien suggested a potential initial plan of work, based on the scores/clusters, and asked TF members to provide feedback on the initial sums/scores, which included (from highest to lowest):

- Health Equity Standards – 49.3
- Real-world evidence (RWE)/comparative effectiveness/RECOVERY-type data use – from electronic health record (EHR) systems – 40.7
- Care plans and chronic disease burden management – 34.7
- Vaccine/Immunization registry reporting – 31.3
- Data sharing between federal & commercial health care entities – 30.7
- Clinical/Administrative data & standards harmonization/burden reduction – 28.7
- Syndromic surveillance – 25.3
- Contact tracing and exposure notification – 18.7
- Public health (PH) situational awareness – 16.7
- Adverse event (AE) reporting – 16.0
- Patient to device (mobile, medical device) linking – 10.7

DISCUSSION:

- Clem asked for clarification on the Health Equity Standards, and Arien explained that it includes SDOH, Gravity Project work, and basic demographic information. David added that the Gravity Project will likely present to the ISP TF 2021 at its next meeting.
- David suggested that the TF may use the scores to prioritize its work and could use higher scores as a measure of where to obtain more information or expert opinions. Also, the scores could be changed as the TF's work progresses.
- A clarifying discussion around whether TF members were allowed to rank multiple items as high/medium/low or if they were asked to

TOPIC: POTENTIAL EXPERT INPUT

The ISP TF 2021 will continue to gather input on its recommendations from a variety of experts, and David discussed a list of scheduled and potential experts/affiliated groups which could present to the TF, including:

- Health Equity: Project Gravity (HL7) – presenting at the April 8, 2021 ISP TF meeting
- RWE/comparative effectiveness/leveraging EHR data: Argonaut, OHDSI/HL7 collaboration?
- Data sharing across federal and non-federal boundaries: someone from CommonWell, DirectTrust, and/or eHealthExchange?
- PH Data Flows (Syndromic Surveillance, Vaccination Registry, Exposure/Contact Tracing): Craig Newman (Altarum)?
- Clinical and Administrative data and standards prioritization: Intersection of Clinical and Administrative Data Task Force (ICAD TF) and/or the Da Vinci Project?

DISCUSSION:

- Les emphasized the need for a presentation from Observational Health Data Sciences and Informatics (OHDSI) on the RWE topic and will send suggestions for presenters from Patient-Centered Outcomes Research Institute (PCORI/PCORnet) to the co-chairs.
- Clem asked if Duke is the organizing center for PCORnet and suggested inviting someone from Duke. Clem and Les discussed related projects and work underway.

Action Items

ISP TF 2021 members who have not submitted feedback will review the proposed ISP TF 2021 frameworks for prioritization and recommendations and will use Delphi scoring to rate the topic areas by the prioritization attributes. The final composite scores will be calculated to rank the recommendations.

TF members will volunteer suggestions for additional expert presenters to the co-chairs via email.

Public Comment

QUESTIONS AND COMMENTS RECEIVED VIA PHONE

There were no public comments received via phone.

QUESTIONS AND COMMENTS RECEIVED VIA ADOBE CONNECT

Mike Berry: Hello everyone, and thank you for joining the Interoperability Standards Priorities Task Force. We will be getting started soon.

John F Travis: Just a good afternoon to David! I am listening live so will be mulling if I want to ask anything....

Andy Truscott: David lives for questions :)

Leslie Lenert: I know how to raise more--how about $1 fine for excessive sarcasm?

Leslie Lenert: not on the phone yet

Leslie Lenert: FHIR vs. ADT is somewhat artificial--ADT are existing feeds

Clement McDonald: FHIR observation resources in clude a unique key that should persist when moved to other organizations and should permit eady deduplicatoin if it is supported generally

David McCallie: Thanks Clem. I expected him to mention that. Maybe for line level reporting that works better than for aggregated data?

Keith W. Boone: Juvare

Leslie Lenert: Juvare is perhaps better known by its major product, WebEOC

Resources

ISP TF 2021 Webpage
ISP TF 2021 – April 1, 2021 Meeting Agenda
ISP TF 2021 – April 1, 2021 Meeting Slides
ISP TF 2021 – April 1, 2021 Meeting Webpage
HITAC Calendar Webpage

Adjournment

The co-chairs of the ISP TF 2021 thanked everyone for their work at the current meeting. Arien asked members to vote on the prioritization framework and noted that he would not attend the next meeting. David will lead the TF through the presentation by the Gravity Project.

The next TF meeting will be held on Thursday, April 8, 2021, from 2 p.m. to 3:30 p.m. E.T.

The meeting was adjourned at 3:26 p.m. E.T.