Q&A

The State of Health Information Exchange Today and Tomorrow:

Three New England Examples

Responses are provided by: Shaun Alfreds MBA (Maine), Allan Hackney CISM CRIC (Connecticut), and Neil Sarkar PhD MLIS FACMI (Rhode Island)

Q: Are the EMR of states compatible with sending or receiving data from HIE

By "EMR of states", I assume you mean state agencies. This is quite variable. In CT, the only certified EMR is in the Dept. of Corrections. In all other cases, specific adapters will have to be constructed to connect.

Some - but there is complexity to all both technically and legally.

Many, but not all. We connect to nearly 20 different EHR vendor systems, and sometimes we have to build a specific interoperability interface.

Q: Each EMR/EHR vendors has its own Master Patient Index. How does federated model solve this problem in order to identify a particular patient? How is the current ecosystem solving this problem? What is the role between HIE and the consortium Commonwell alliance to solve this MPI issue?

One of the primary value-add services provided by HIE's is the management of identity. This is also one of the hardest problems to solve. In CT, participating organizations will empanel their patients or members. Empanelment serves to declare a HIPAA relationship between an organization and a patient and triggers the patient matching algorithms in what we call the Identity and Care Map. In this model, Commonwell is expected to be another participating organization and treated similarly to any other participating network. At a national level, the Office of the National Coordinator has been charged with reporting to Congress efforts surrounding the possibility of a national patient identifier.

Q: Do you have capability to/or intend to include radiology images in addition to reports on your HIE's? If not, why not?

Image exchange was a use case that was prioritized in the "top 10" by the CT HIT Advisory Council. This use case will be taken up by the CT HIE Operations Advisory Council for requirements definitions as the HIE emerges from pilot data exchange into full production, likely early 2021. The probable architecture will be to connect the CT HIE's Identify and Care Map to prevalent Picture Archiving and Communications Services (PACS) vendors to facilitate location and retrieval directly between those service providers.

Q: Do health care provider organizations pay for integration with HIE? How much? Directed to all three presenters. If not, how do you support the HIE financially?

Initially, the operation of the CT HIE will be funded through the HITECH Act. Private sector funding for a portion of the services is anticipated during 2022+; however, the precise means has not yet been determined.

We have a business model where participants, State Govt and Medicaid pay a PMPY (per member per year) model to cover the operational costs of the HIE. We also go after grants and contracts for R&D. We use those funding streams to cover our costs.

RI has a PMPM (per member per month) that is a combination of payers and self-insured, which funds the core operations; we also have a growing portfolio of contracts and grants to fund a range of initiatives.

Q: For RI and Maine- are your HIEs tied to the Sequoia project for nationwide Health exchange? If yes, how and when was it done?

Yes. We have been working with the VA using Sequoia since 2015. We use their standard interface protocols.

No. We are considering a number of options for nationwide health exchange, including Sequoia

Q: Are most state/regional HIEs doing similar kind of [COVID-19] dashboards as far as you know?

Yes; however, the sophistication and use of the dashboards varies greatly.

Q:How can patients view their own data to confirm/validate and ask for errors to be corrected?

By statute, CT's HIE must allow patients to view their data. This feature will be added once CT reaches scale, likely to be during 2022.

Q: Is your HIE architecture a cloud based model or client server model?

100% cloud.

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Q: If part of the patient record located in the CDR of a different vendor than the one the care provider is using. How does HIE help to solve the interoperability problem now? What is still missing and what needs to improve upon.

One of the important functions of an HIE is the normalization of data. CT's HIE will require participating organizations to validate their ability to send and receive required data, and will apply normalization algorithms to ensure conformance to national standards.

Heterogeneous data integration is a major function of the HIE; in addition to providing clinical data as they are transmitted in CCDs, we also curate and harmonize the data using interoperability standards (mostly defined by the ONC).

Q: To Shawn Alfred's- You mentioned single sign on. Can you elaborate on it please? Single sign on to what systems and from where?

This is an API connection to the EHR application ecosystem. Many EHRs are making this available now.

Q: Curious, how much % of your population [Rhode Island] actively uses CurrentCare?

Roughly 4-5%, and this is increasing as more are interested in their COVID-19 results.

Q: Are all HIE's moving toward the notifications, alerts with patients via email, phone, text?

The ONC Interoperability rules that were published in the Federal Register earlier this year mandate increased patient access, including through mobile devices. HIE's will continue to evolve and increasingly offer this type of service.

Many offer this as a service or partner with another organization to provide the service.

Q: Are state HIE looking into providing CMS submission services?

Yes, CT's HIE is prepared to provide electronic Clinical Quality Measure (eCQM) submission services.

Q: Are All HIE's providing secure direct messaging for patient CCD's to and from facilities and ambulatory offices?

I can't say that all HIE's offer DSM; however, it is very common. CT's HIE will offer this service.

For HIEs that have a patient portal, this is a major function of that system.

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Q: As a use case, what group of patients is your HIE most useful for; where does the cost payoff the most?

To list a few: patients with co-morbidities, patients with chronic conditions, the elderly, patients suffering from health inequities, care transitions, patients with gaps in care, emergency room super-users.

Q: WRT Privacy & Security, all is fine on the slide, but there are multiple touch points on each system and within each institute there are many systems. How do you mitigate the risk of malicious ransomware attack from users at these touch points?

We cannot control what happens at the point of care; however, our legal framework allows for mutual periodic assessment of security controls. CT's HIE will be HITRUST certified. HITRUST is the gold standard for security controls in the health care industry.

We cannot control what happens at provider sites; however, the HIE has multiple layers of security. We do not store SSN or direct medical identifiers, so not a typical target for many.

Q: Have you considered the addition of oral health/dental care delivery into this effort?

Up to this point, CT's HIE has not considered either oral or eye care as priorities. This is not to say that it won't consider these functions in the future.

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Q: Does each HIE have a vendor who provides the centralized medical record that resides on the HIE? A vendor who extracts medical information from individual EMRs? If so, who is that vendor?

- CT HIE's has a purpose-built core service to manage identity, consent and analytics. The architecture is built purely on Application Program Interfaces (API's). By using API's, CT's HIE can "plug and play" with a myriad of vendors.
- Maine uses a mix of vendors and home developed software systems to deliver our services

Q: WRT Covid-19 results in dashboards. In all reported results section. Are all those facilities/med centers using the same EMR? What if one of them don't? How do you share reports?

- CT's dashboard is based on input from many EHR's and labs. Reports are available online.
- The dashboard service is a separate stand-alone service. Some facilities get text files that can be imported into other systems.

Q: Is opt-in all or none or can patient choose on a la carte basis?

- CT is currently silent on Opt-out/Opt-in; however, the initial regulation will most likely be that basic clinical data will be shared unless the patient specifically opts-out and protected data will not be shared unless the patient specifically opts-in.
- Opt-in is done as an a la carte for who can access the data for what purpose.

Q: Could any of the panelists perhaps comment on the costs these HIE's may charge researchers and academics for access to de-identified data for study purposes?

- It is too early to answer precisely for CT's HIE; however, access for research is a consideration when the HIE reaches scale, likely during 2022.
- RIQI partners with Brown University to provide de-identified data for research use. We have an NIH grant that helps to offset the cost (most often little or no cost for simple data extracts)

Q: Why did [Rhode Island] adopt the opt-in model? Has that choice had an inhibitory effect on enrollment?

- Patient privacy. It is definitely had an impact, but we do have more than 50% of the population enrolled (amongst the highest of Opt-In HIEs).

Q: How long does it take for Covid 19 test results to get reported from the place of testing in to Current Care?

- COVID-19 results are available as soon as the results are transmitted (i.e. within minutes in most cases).

Q: What is Tom Agresta's contact info for us to send best practices?

- Any further questions or suggestions or comments, including examples of best practices, can be sent to either Ryan Tran, rytran@uchc.edu, or Thomas Agresta, agresta@uchc.edu.

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