**CDC Health Information Innovation Consortium (CHIIC)**

**August Forum Meeting Notes**

**Chamblee Building 106, Room 1A**

**August 11, 2015, 2:00-3:00PM**

**Meeting Agenda**

1) Introduction – Brian Lee – 10 minutes

2) Early Hearing Detection & Intervention Interoperability Pilot Site Project - Xidong Deng, CDC and Dina Dickerson, Oregon Health Authority – 20 minutes

The Early Hearing Detection and Intervention Information Systems (EHDI-IS) are state-based public health tracking and surveillance systems capable of collecting and reporting hearing screening, diagnostic, and early intervention data. The goal of this project is to enhance the existing EHDI-IS and the EHDI surveillance processes through standardization and to advance effective use of emerging Electronic Health Record (EHR) interoperability technologies in public health.

3) EHR E-Surveillance Toolkit - Dave Ross and Jim Jellison from the Public Health Informatics Institute (PHII) - 20 minutes

The Public Health Informatics Institute (PHII), with funding from CDC, is working with surveillance and informatics experts from federal, state and local levels to develop an online toolkit to support thoughtful, comprehensive planning for surveillance programs using health care data from EHRs. The toolkit, slated to ‘go live’ in June 2015, will contain practical, field-tested guidance materials, worksheets and other tools, hosted in an accessible, online repository.

4) Discussion & Suggestions – 10 minutes

**Attendees**

The meeting was well attended - one hundred and twenty four people attended in person or via webinar. Participants were from NIOSH, OPHSS, ONDIEH, OID, OCOO, OADS, CDC OD, CSELS, ONDIEH, OSTLTS, CGH, OPHPR, NCBDDD, NCCDPHP, NCHS, NCHHSTP, NCIPC, NCEZID, and ATDSR. External participants attended the Lync session, but Lync does not allow us to capture people’s location or organization. Participants from these states were represented by phone: California, Georgia, Indiana, Louisiana, Maryland, Oregon, Tennessee, and Virginia.

**Introduction – Brian Lee**

Two projects were the focus of the August 11, 2015 CDC Health Information Innovation Consortium (CHIIC) forum. The first presentation, Early Hearing Detection & Intervention Interoperability Pilot Site Project was presented by Xidong Deng in the National Center on Birth Defects and Developmental Disabilities (NCBDDD) at CDC and Dina Dickerson with the Oregon Health Authority. The completed project was funded by the CDC Surveillance Strategy as part of the 2014 CDC Surveillance Strategy Innovation Project Portfolio. The second presentation, EHR E-Surveillance Toolkit was led by Dave Ross and Jim Jellison from the Public Health Informatics Institute (PHII).

**Presentation - Early Hearing Detection & Intervention Interoperability Pilot Site Project – Xidong Deng, CDC and Dina Dickerson, Oregon Health Authority**

Xidong Deng and Dina Dickerson presented from their completed CHIIC-funded EHDI Interoperability Pilot Project. They shared information on the challenges, successes, and recommendations for future implementations and standards development. This pilot project focused on information exchange between the hospital EHR system and the state public health information system.

**Presentation - EHR E-Surveillance Toolkit – Dave Ross and Jim Jellison from the Public Health Informatics Institute (PHII)**

The second presentation featured information on EHR adoption trends and the public health response, EHR Toolkit, and public health surveillance and the business of population health.

The EHR Toolkit is free and is designed to support thoughtful, thorough system development by providing the planning questions users need to address to be successful in designing a surveillance program using data from EHR systems. The tools in the EHR Toolkit are adaptable to a wide range of health conditions in infectious and noncommunicable disease. In addition they reinforce foundational informatics practices that can be adopted by agencies large and small.

**Presentation Q&A**

**Do you see a digital divide between high resource public health departments that have access to EHR clinical sources and public health departments that lack the resources, and, if so, how do you fix that?**

[Dave] Yes, I see the divide. Look at the difference between urban and rural. You have large numbers of small health systems or hospitals serving broad geographies and the cost for those people to craft an active data exchange is large. The only possible solution is for CDC to do things that help harvest examples of how things are being done, things that work, so people in the smaller locals can learn from the things that work. And, there is a need for people to know the technologies required to support clinical IT. One of things that may change is that vendors are begging public health to have one public health, not fifty different state models. I think we are moving quickly to the day where vendors are going to say, public health is what you get, you didn’t give us one public health, here’s what we’re giving you. Clients who pay the vendors are not willing to pay to customize everything for their local public health agency. That may become one solution, because then the vendor tells the health systems, here’s your one product, this is what it does and public health is what you get.

[Dina] Until we have a position like Chief Public Health Informatics Officer position within states that is a physician to work with their peers (Chief Medical Information Officer, Chief Health Information Officer, etc.) at health systems, I don’t see how we’ll ever get there; because even states have digital divides between programs that are well funded and have resources and those that are not well funded or barely have anything, which is also true at the county level.

**Is [Electronic Case Reporting – Individual Push and Distributed Query – Aggregate Pull] technology currently in use?**

Yes, the diagrams (see slides titled, Electronic Case Reporting – Individual Push and Distributed Query – Aggregate Pull in the PowerPoint presentation) come from our friends in the Denver and Massachusetts public health departments. New York City is also running a similar concept. So, we are learning of these approaches from working with people at state and local health departments. To learn more about these approaches, visit these web sites: <http://www.cste.org/group/RCKMS>, <http://www.thephcp.org/committees/case-reporting>, [http://esphealth.org](http://esphealth.org/), <http://www.denverhealth.org/for-professionals/clinical-specialties/public-health/colorado-health-observation-regional-data-service-chords>, <http://www.nyc.gov/html/doh/html/data/nycmacroscope.shtml>

**To what extent is the Oregon process scalable to other health and public health jurisdictions?**

We believe the process is scalable to other states and clinical partners, with some local modifications along the way. The data and value set maps will change according to the data required by the state public health agency and collected by the clinical trading partner. Similarly, the transport method to send the data will likely vary according to the policies of the clinical partner. However, we expect that the process of mapping and transforming the data would be the same.

We strongly recommend that the clinical partner send HL7 content required by the IHE EHDI profile and that can be natively produced by the EHR to the State, who would be responsible for transforming the data to be EHDI-compliant and creating the HPoC for distribution to others as needed and authorized. Figure 1 below shows the recommended data flow for future implementation.

*Figure 1. Phase 3 Recommended Data Flow*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Capture & Share** | **Send** | **Receive, Consume & Repackage** | **Ready to Send** | **Ready to Receive & Consume** |
| **Participant** | OHSU Audiologists | sFTP | OHA EHDI | sFTP | EI, Primary and Other Care Provider |
| **Data System** | EHR | EHDI-IS | Other EHR |
| **Role** | Device Observation Reporter | Device Observation Consumer/ Content Creator | Content Consumer |
| **Content & Rules** | Diagnostic Hearing Data | Decision Support Rules | Data Maps |
| **Format** | EHR to HL7 v2 w/o EHDI-compliant transformation | HL7 v2 to CSV to HPoC | HPoC to EHR |

**Shared infrastructure with Clinical providers and PH agencies is a great idea. What were the major barriers that you had to overcome to get this collaboration going?**

In speaking on behalf of the folks in Massachusetts and Denver who implemented these things, these are new tools that they were not familiar with. However, we have observed that there were epidemiologists who were comfortable with the technical aspects of implementing the platforms. On the clinical side, it takes salesmanship and appealing to the altruism of the clinical providers, which maybe more of an opportunity than a barrier. I don’t want to give the impression that those distributed query platforms are widespread and Denver or Massachusetts knows everything that’s going on in their state, but they have a handful of providers that implemented these and may have a 10-20% coverage rate for the queries their running, so there’s still a long way to go.

**Upcoming CDC Health Information Innovation Consortium Forum**

The next date for the consortium is scheduled for November 10. The November 10 Forum will include a presentation from one of the completed 2014 CHIIC project and information on the CHIIC Evaluation and 2016 CDC Surveillance Strategy Innovation Project Portfolio Innovation Portfolio process. The 2014 CHIIC presentation is on the National Antimicrobial Resistance Monitoring Service (NARMS) WATCH-Public Access to the Most Up-to-Date Data on Antibiotic Resistance in Foodborne Pathogensby Regan Rickert-Hartman from the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID).

**Items of interest**

* Next Forum – November 10, 2pmEST – NARMS CHIIC Project + Evaluation + 2016 Innovation Portfolio
* HHS IDEALab now hiring Entrepreneurs-in-Residence [[link]](http://atdc.org/atdc-news/atdc-weekend-hackathon-seeks-creative-problem-solvers/)
* 18F Digital Services Delivery [[link]](https://18f.gsa.gov/) [[Github Projects]](https://github.com/18F)
* Advanced Technology Development Center at Georgia Tech Weekend Hackathon – August 28-30 [[link]](http://atdc.org/atdc-news/atdc-weekend-hackathon-seeks-creative-problem-solvers/)
* Coursera / Johns Hopkins Statistical Reasoning for Public Health 2: Regression Methods– August 31 – October 24 [[link]](https://www.coursera.org/course/statreasoning2)
* Microstrategy Analytics Symposium – September 23 [[link]](http://www.microstrategy.com/us/events/symposium/atlanta-2015)

**Additional information**

If you would like to review other CHIIC projects visit the phConnect site on this link: <http://www.phconnect.org/group/chiic/page/surveillance-innovation-projects>

We invite you to share your ideas with the group on the phConnect CHIIC Community website, <http://www.phconnect.org/group/chiic>.

Please contact [balee@cdc.gov](mailto:balee@cdc.gov) to be added to the CHIIC distribution list and future communication.