Immunization Information System (IIS) Design Group

IIS Design Group Session 5 Meeting Summary

Meeting Date	Meeting Time	Location – Zoom Web Conference
August 4, 2017	11:00 am – 12:30 pm ET	**Webinar link:** https://zoom.us/j/132443323 **Telephone:** (646) 558-8656 **Meeting ID:** 132 443 323

Design Group Members					
Thomas Agresta, MD, MBI	X	Deirdre Gruber, MSN, FNP-BC			
M. Alex Geertsma, MD	X	Hyung Paek, MD	X		
Design Group Support					
Christina Coughlin, CedarBridge	X	Carol Robinson, CedarBridge	X	Nancy Sharova, DPH	X
Pete Robinson, CedarBridge	X	Greg Petrossian, CedarBridge	X		

Summary	
Approve Session 4 Meeting Summary	Design Group members unanimously approved the Session 4 Meeting Summary.
Update from IIS Program Staff **- Consortium** **- HIE Services**	DPH reviewed the current status of identifying the replacement IIS and explained that using a vendor on the General Services Administration (GSA) schedule will probably save a year in the process. DPH explained that there is an end date on the grant with the Centers for Disease Control and Prevention (CDC) and that it is critical to move quickly. DPH explained the IIS consortium model and shared information about which states and other jurisdictions are in each consortium, and which use a different IIS model (slides 8 – 12). A Design Group member commented that it was helpful to get this information and it is good to know that Connecticut will have the source code and be able to have flexibility for customization to meet specific needs. There was a Design Group question about the Wisconsin Immunization Registry (WIR) model, and the facilitator explained that there is not a common version or a way to share resources, so when upgrades are needed each jurisdiction has to handle the upgrade separately since each jurisdiction supports a standalone instance. It was explained that there are some conversations about exploring ways to share resources among states using WIR, but based on current conversations, if that does happen, it will not be soon. DPH explained that surrounding states are all on different vendor platforms. DPH shared some of the health information exchange (HIE) services that could help support the IIS (slide 21), especially to support interoperability, including data validation and transport mechanisms to support connections with provider organizations. A Design Group member commented that there is an important opportunity around the data validation that will be needed by several use cases beyond the IIS, could be funded through the Implementation Advance Planning Document (IAPD), and there are HIE services that should be implemented quickly to support the IIS but will have value across other programs and use cases.
High-Value Use Cases	A Design Group member suggested adding travel immunizations to the use case list, but would not put it in the top tier. The Design Group discussed and confirmed the following priority use cases: • An interoperable lifetime IIS (birth through adult) needs to be interoperable with EHRs and able to support both sending information to the IIS and the ability to query/receive

	information from the IIS

	• The IIS should be customized with templates for Connecticut-specific forms for school and preschool needs
	
	• The IIS should support the ability for clinicians and staff to determine what vaccines should be given at which patient visits (vaccine forecasting), including the following specialized cases beyond standard forecasting needs:
	
	    o "Problem solving" for catchup and other non-standard schedule needs
	
	    o Ability to manage immunizations for patients with chronic diseases and support targeted outreach
	
	    o Decision support for high risk patients who should not receive immunizations because of other treatments
	
	• The IIS should support vaccine inventory tracking to support ordering
	
	The Design Group discussed the importance and difficulty of capturing clinical comments on specialized circumstances. DPH explained that currently they are populating clinical comments manually, but with electronic reporting there are not national HL7 codes for those clinical comments, and that there is an ongoing national conversation about how to capture them. A Design Group member commented that if Connecticut was able to make clinical data available to the IIS in a standardized format, it would be the first state to do that, and something we should flag for future discussions.

Recommendations	The Design Group discussed and confirmed the following recommendation categories and elements which will be refined over email as the draft report is reviewed and finalized over the next week:
	
	Align and leverage HIE services
	• Recommend that a joint planning committee including HITO, DPH, and other relevant stakeholders be established as quickly as possible to ensure there is alignment beginning with the planning for the deployment of the new IIS platform and HIE shared services with a goal of expediting the deployment of IIS Phase 2 (bi-directional connections with EHRs). This group should explore the following:
	    • Identity management
	    • Short-term and long-term options for transport layer to connect to provider organizations
	        • SOAP, HTTPS, SFTP, API, etc.
	    • Need for data transformation through an intermediary system between providers' EHRs and the IIS
	    • Patient attribution to primary care provider/medical home with an understanding that this is an important aspect but can be challenging in some situations. For example, if someone gets an immunization at a pharmacy, that should not be linked as the medical home
	    • The IIS should be interoperable with other systems including surveillance and HIE services
	    • Develop SMART on FHIR APIs to help support easier deployment of tools, i.e. dashboards, within EHR environments and explore options to allow patients and

families to access records. The Design Group discussed the possibility of putting together a development team of people from Yale and UConn who might be able to do this

- Attention should be paid to aligning and leveraging both technical and financial resources. As the Immunization Program considers financial sustainability, there should be consideration to how alignment with HIE services can support sustainability because the costs of some of the shared services, i.e., identity management, can be shared across many stakeholders as part of the basic technology infrastructure needed in the state

Collaboration and planning across federal programs

- The IIS Design Group recommends joint conversations be initiated, or continued if they are already happening, to ensure collaboration between Connecticut agencies including DPH, Department of Social Services, the HITO, and others with federal partners including CDC, the Office of the National Coordinator for Health Information Technology (ONC), and the Centers for Medicare and Medicaid Services (CMS). Collaboration supports transparency with the federal agencies about how Connecticut is approaching various health IT projects, including the alignment between the new IIS platform and the planning around HIE services in order to maximize the options available to Connecticut. This will be especially relevant for the IAPD Update.

High-value use cases

- The Design Group agreed that this section should include the priority list identified earlier in the meeting.

Establish stakeholder groups

- The Design Group agreed there should be an ongoing user group with key user types
- The Design Group also agreed there should also be a separate group or a subset of the User Group during the planning and implementation phase, perhaps using an agile development process with rapid cycle feedback on how features work to support the design, customization, and implementation of the IIS
- Design Group members expressed that different skills and knowledge might be needed so it would be helpful to have two separate groups
- DPH explained that they already have the Childhood Vaccine Advisory Committee and can also discuss this topic with them next month

Legislative Updates

- Introduce legislation for lifetime registry (not only through age 18) in 2018 that promotes a graduated approach so that when the IIS system can receive data from EHRs and pharmacies it can start without delay
- Consideration needs to be given about when to require the manual entry for those providers who aren't connected electronically
- This work should be coordinated with the Legislative Representatives on the Health IT Advisory Council

Funding sustainability

- Joining a vendor IIS Consortium is a good approach to help with sustainability by leveraging staff and financial resources
- Leveraging HIE services can help spread the cost of shared services

	• State needs to prioritize and support public health work – should invest in analytics to reduce health disparities. It is critical to support the infrastructure needed to support the health of CT's population There must be **technical assistance** provided to providers around working with their EHR vendors on connecting to the IIS, probably through HIE services. In response to a question from a Design Group member, DPH explained that the cost for providers is around the connection and testing. The Design Group raised concerns about the practicality of some of the customization that may be needed to providers' EHRs and the cost to do so. **Training and education** for clinicians, staff, and organizations about the features of the IIS and how to maximize the use is critical to the success of the program. The training should probably be stratified according to "need", with organizational or practice IT staff having the greatest level of knowledge, perhaps MD practice "champions" next most, and regular providers and staff simple functional knowledge. It may also depend on the functionality under consideration. For example, nurses may be the target audience for vaccine ordering. The **ability to query other IIS** to check immunization history must be available. In addition to the current recommendations, the Design Group identified the following longer-term topic: • Will it be possible for the IIS to provide necessary data to avoid having annual school forms in the future? Would it be possible for the school nurses to have a software program that could provide an analysis of which students need updates, and which are still up-to-date? The Design Group thought this was a different use case, and not specific to the IIS, but should be considered in the future.

Meeting Wrap-up and Next Steps	The following schedule was reviewed by the facilitator for the development of the Design Group's Final Report and Recommendations:
	    ○ August 4: Distribute report for review by email
	    ○ August 7 – 9: Receive feedback by email or Individual calls with Design Group members
	    ○ August 10 – 11: Final review by Design Group members
	    ○ August 14: Send report to Health IT Advisory Council
	    ○ August 17: Health IT Advisory Council presentation
	
	Design Group members commented this was a productive and worthwhile process. The facilitator expressed appreciation to the Design Group members for their participation.
	
	Dr. Paek and Dr. Geertsma will represent the Design Group at the Health IT Advisory Council on August 17. The facilitator will check with Deirdre Gruber to see if she is also available.