Building Effective IIS-HIE Relationships

Findings from a nationwide telephone survey

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What was the purpose of the study?

- To examine the current status of IIS-HIE interactions, documenting both success stories and challenges

- To document the policy, political, operational and technical realities that either enable or impede an effective ("win-win") IIS-HIE relationship.

- To provide practical guidance to IIS and HIE managers on how to build effective relationships.

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What were our study questions?

- What is the value proposition for the IIS collaborating with the HIE?

- What is the value proposition for the HIE working with the IIS?

- What are the enablers and the obstacles for the IIS? For the HIE?

- What appears to be the critical success factors for creating successful ("win-win") relationships and providing the greatest value to IIS, HIEs and immunization providers?

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Who did we interview?

- CA IIS and PH HIE

- DE IIS and HIE

- IN IIS and HIE

- KY IIS and HIE

- MI IIS and HIE

- NY State IIS and PH HIE, HIE and HIE-RHIO

- NYC IIS

- San Diego IIS and HIE

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What were the main findings?

- Effective partnership is the key determinant to success
- No "one size fits all" technical solution for successful HIE-IIS data exchange
- IIS seen as the authoritative source of immunization information
- True bi-directional exchange through an HIE not yet generally a reality
- Both HIEs and IISs challenged to meet on-boarding demand

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Effective Partnership

- The most important factor in HIE-IIS success
- Requires active involvement of IIS staff (not just PHA leadership)
- Mutual respect and appropriate division of roles and responsibilities
- Partnership in the Planning Phase (technical solution) and in the Operational/Expansion Phase (onboarding support)
- Marketing/promotion and recruitment
- Issues: limited messaging capabilities, lack of partner interest/collaboration, laws and legal interpretations

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Technical Solution

- No "one size fits all" solution for success
  - Batch and real-time
  - Uni- and bi-directional exchange
  - HTTP/HTTPS Post, SOAP-based web services (preferred), FTP/SFTP, VPN
- MPI and authentication not a barrier
- IIS and HIE have differing capabilities – allowing interim strategies helps bridge the gap
- HIE and EHR – EHRs not ready or overcommitted

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Authoritative Source

- IIS is the respected immunization authority
- HIE often serves as gatekeeper to IIS (minimizes connection points)
- HIE not duplicating/consuming/altering immunization data or duplicating unique IIS functionality
- Messages generally pass through the HIE on their way to the IIS
- Issues: resolving the CCD

Bi-Directional Query Exchange

- Most EHR systems are not able to issue a query or receive and process a response

- Providers must login to the IIS to get a record

- Some HIE-IIS capabilities not totally in-sync (yet)

- Real time, bi-directional exchange not a priority due to limited demand

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Onboarding and MU

- MU resulted in increased demand to connect and report

- Concern about how Stage 2 and 3 will play out

- Volume of provider interest taxed HIE and IIS onboarding resources

  - Shared roles and responsibility very positive

  - Utilizing best practices (specs, RECs, clinical input)

- Issues: how to prioritize, levels of EHR readiness, streamlining process/timelines

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Future HIE-IIS Priorities

- Establishing a relationship/connection between HIE and IIS where none exists

- Improve and implement new technologies (bi-directional, web services, real time)

- Improve onboarding process

- Transition existing connections from IIS to HIE

- HIE: incorporate immunizations into CCD

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Opportunity #1: Provider Participation

- Single connection point through HIE
- Added value of HIE services and other data sets
- MU compliance AND immunization reporting
- Ultimately more potential data for the IIS

Opportunity #2: Provider Onboarding

- IIS and HIE can share the burden of provider on-boarding
  - Maximize resources and efficiencies
  - HIE: message construct and transport
  - IIS: message content and coding
- Share the burden of day-to-day data exchange operations

Opportunity #3: Immunization Expertise

- Investment/capabilities in IIS does not need to be reinvented by the HIE

- Mature IIS data set can be leverage to the HIEs benefit

- HIE can focus on the exchange; IIS can focus on the quality and completeness of IIS data

- IIS continue to support immunization program operations

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Challenge #1: Turf Wars

- Developing in a vacuum is counterproductive to both HIE and IIS

- Technical and clinical staff should collaborate early and often

- Failure to collaborate:

  - Expensive

  - Time and resource intensive

  - Loss of stakeholder confidence

  - Damages relationships

Challenge #2: Legislation

- HIE and IIS legislation/policies not always in sync

- Revisit language in existing and proposed legislation and policies – specifically:
  - Mandatory reporting
  - Consent
  - Privacy/disclosure

- Laws should not create barriers for reporting, participation or be cost prohibitive

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Challenge #3: Technology

- Challenge for all partners (HIE, IIS and EHR) to keep up with technology efforts/standards at the same pace

- Numerous competing priorities and demands from stakeholders

- Immediate Goal: Have interim strategies to fill the gap until the total solution is in place

- Long Term Goal: Support end-to-end user exchange through a single interface

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Recommendations

- When mutual value can be demonstrated, develop consistent and shared messages to providers of how the HIE and IIS are working together to support information exchange and enhance quality of care

- Agree upon the respective areas of expertise

- Don't compromise IIS (or HIE) functionality

- Identify mutually agreeable and appropriate roles for on-boarding providers

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Recommendations *(cont.)*

- Public health involved in HIE at both governance and technical levels.

- Carefully review the respective laws, policies and regulations related to health information disclosure and mandatory reporting requirements.

- Future IIS/HIE partnerships should prioritize comprehensive messaging strategies to minimize the impact on provider practices.

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Cooperation with Health Information Exchange (HIE) Programs
(adapted from July 13, 2011 email from Gary Urquhart to IIS Managers)

Immunization Information Systems Support Branch (IISSB) encourages grantees to work with viable Health Information Exchange (HIE) initiatives to seek areas of potential synergy. There is no doubt that a successful HIE could be a valuable partner in supporting Immunization Program efforts to maintain high levels of protection against vaccine preventable diseases with immunization information and a fully functional IIS. It is important to ensure that as these initiatives grow, the vital functionality provided by your IIS is neither compromised nor diminished.

While the level of pressure varies greatly, some grantees have reported expectations to contribute some measure of IIS financial support to the HIE effort. In this light IISSB compiled a list of known federal grants and cooperative agreements issued for the development of HIE infrastructure between 2007 and 2011, which indicated that over $1.5 billion* has been awarded to the states or territories for HIE development.

It may be appropriate to explore with some of the recipients of HIE development funds whether they might be able to support partnerships with IIS in which they assist in connecting more providers and provider networks to the IIS. Grantees' established IIS, experience with data quality and clinical workflow, may well be valuable assets to developing HIE networks.

∗   See http://www.cdc.gov/vaccines/programs/iis/meaningful-use/downloads/HIE-funding-summary.pdf for a list of known federal grants and cooperative agreements that were awarded.

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Q & A

Thank you!