State Level Advocacy for IIS

FREQUENTLY ASKED QUESTIONS

What is an IIS? An immunization information system (IIS) is a confidential, population-based, computerized information system that collects vaccination data about all children within a geographic area. You may have also heard these systems referred to as vaccine registries.

What are the advantages for physicians to contribute to an IIS?
• Maximizes opportunities to administer all recommended vaccines
• Minimizes unnecessary administration of duplicate vaccines
• May help with forecasting and recommend needed vaccines
• Can assist with ordering/management of Vaccines for Children (VFC) program vaccines, ensuring adequate supplies in the office
• Can assist physicians in recalling patients based on vaccine lot number
• Can assist physicians in identifying incompletely immunized patients
• Can assist physicians in identifying vulnerable patients during an outbreak of a vaccine-preventable infection
• Can send reminders to patients due/overdue for immunizations

What are the advantages for patients of an IIS?
• All physicians and health care facilities can have access to a child’s records and make optimal health care decisions based on that information.
• When physicians and health care facilities have immediate access to a child’s vaccine history, it can minimize the need for a return visit to receive vaccinations that were deferred due to incomplete information.
• If a vaccine is recalled, the IIS has first-hand access to this important information and the Department of Health can contact patients/parents directly.
• If there is a local outbreak of a specific infectious disease, the Department of Health can notify patients who may be vulnerable to that illness.

What are the advantages to the public of an IIS?
• Reduction in health care costs: minimizing unnecessary duplication of vaccines.
• Reduction in infectious illness outbreak burden: incompletely-immunized patients can be identified and targeted for vaccination.
• Reduction in disease burden: Optimizing immunization rates creates a healthier population with decreased expenditure for health care related to preventable illness.
• Improved quality measurement targets which may directly affect funding from governmental and other sources.

Why a state-level IIS and not a national immunization registry?
• Most of the legal statutes related to and funding for IISs are at the state level and not the federal level.
• Accurate identification of patients with similar names/demographic information is difficult. There have been multiple stakeholders who have spoken out against the use of a national patient identifier due to privacy concerns.

Why is advocacy for IIS important now?
• The technological standards are sufficiently developed to allow for widespread use.
• Exchange of information with a state IIS is one of the key elements of Meaningful Use of Electronic Health Records (EHR) that physicians must demonstrate in order to receive Medicare/Medicaid incentive funding for EHR adoption.
• EHR vendors must support exchange of immunization information according to HL7 standards in order to become ARRA certified.
• Additional monies are currently available through the American Recovery and Reinvestment Act (ARRA) to support widespread adoption of robust exchange of data with state IISs.
• In the current economy, there is significant focus on reducing unnecessary health care costs and optimizing quality improvement. Widespread adoption and use of IIS technology is suited to address both of these goals.

OPTIMAL FEATURES FOR AN IIS

Bi-directionality: An IIS should be able to receive electronic immunization information from and deliver it to a electronic health record (EHR) in a physician office or health care facility.

Real-time retrieval and near real-time delivery of information: If a patient is at an office or facility and there is an opportunity to immunize a patient, the information regarding that patient’s vaccination history should be retrieved when the query is asked. Immunizations administered should be sent to the registry within a few hours, or at the end of the day. (It is often easier and more efficient to send immunizations in a “batch” format after multiple immunizations have been delivered to one or more patients.)

Uses current standards: The current standards for exchange of immunization information are defined by HL7 guidelines, and more specifically either the 2.5.1 or 2.3.1 version of those specifications. In addition, EHR vendors are required to support exchange of immunization information according to HL7 specifications.

Integration with EHRs: As use of EHRs by physician practices and health care facilities becomes the norm, the ability of an EHR to exchange data with the IIS is critical. In the optimal case, information on immunizations delivered within the office or health care facility are automatically sent to the IIS without any additional work on the part of the health care provider. When a query is sent to the IIS it should be performed within the EHR, without the need to open a web browser, or leave the EHR itself to ask/receive information. In addition, the user who generates the query should be allowed to review the result for accuracy and then import relevant information directly back into their EHR without significant additional work. This is critical, as every time a person needs to hand-enter information regarding immunizations, there is a potential for human error.
**Support for vaccine forecasting logic:** Some states currently forecast only vaccines that are covered under their Vaccines For Children (VFC) program. The most robust IISs provide vaccine forecasting according to guidelines from the Advisory Committee on Immunization Practices (ACIP) of the US Centers for Disease Control and Prevention. This allows healthcare providers to receive from the IIS specific information regarding what vaccines are due or overdue, as well as what vaccines are up-to-date.

**State law that supports “opt-out” consent:** The more eligible patients in a geographic area that participate in an IIS, the more useful the information becomes. State legislation for patient participation ideally should require every patient to be enrolled unless there is specific refusal of consent to participate. This is preferable over requiring the patient/parent to specifically give informed consent in order to have information sent to the registry. Studies have shown that there is significantly less uptake in the amount of complete data, and at greater cost, with “opt in” registries.

**Development of Memorandums of Understanding (MOU) with neighboring states/regions:** While IIS exchange of information is controlled by state legislation or regulation, patients regularly move across state lines and physicians practice medicine along state borders. It is critical that state IIS leadership work with their counterparts in neighboring states and regions to allow for meaningful exchange of data across state borders.

**Incorporating data through the lifespan:** While vaccine information is critical for preventive care of infants, children, and adolescents, adults also receive vaccines. An optimal IIS maintains data on patients throughout their lifespan. This can be critical for elderly patients and for adults who come in contact with infants and children.

**Eventual goals:** Other important stakeholders, including early childhood centers, daycare facilities, and private and public school systems should have access to IIS information. This removes the need for physicians and health care facilities to complete multiple forms which require vaccination records, and allows other stakeholders direct access to this critical information. Parents/patients should also have direct access to complete vaccination records.

*Note: the CDC defines a “fully operational” IIS as one that includes 95% enrollment or higher of all catchment area children less than 6 years of age with 2 or more immunization encounters administered according to ACIP recommendations. Ideally an IIS should have ALL data on ALL children immunized for a complete vaccine history, except for patients who have opted out.*

**SUGGESTIONS FOR STATE IIS ADVOCATES**

Thank you for your efforts to optimize use of this powerful platform to exchange health information. Each state has their own unique set of concerns related to the IIS. Below you will find some suggestions and first steps.

**Coordinate.** The AAP chapter is the primary advocacy voice for pediatric practice and child health issues in your state. Be sure to reach out to your chapter’s leadership and executive director, and offer yourself as a resource and advocate on issues related to promoting IIS issues.

**Identify key contacts.** AAP chapter executive directors may be able to assist you with the history of IIS development and efforts to date. In addition, the CDC has a list of IIS contacts for each state at: [http://www.cdc.gov/vaccines/programs/iis/contact-state.htm](http://www.cdc.gov/vaccines/programs/iis/contact-state.htm).

**Do a current assessment of your state.** This includes:
1. Does my state currently have one or more registry?
2. If there is more than one registry, what is the history and what is their current relationship?
3. What is the name of the vendor that my state IIS is using? Is there a key contact?
4. What is the current flow of information with the registry (bi-directional or one-way)?
5. In what timeframe is the information delivered? Is it batch or real-time?
6. Is the current IIS only web-based, or have EHR interfaces been developed? (if so, which EHR vendors?)
17. Does the IIS currently exchange information with other agencies within the state? Which ones?
18. How does the IIS exchange information? If it is not using the standard HL7 v2.3.1 or v2.5.1, are there plans to update to more recent standards?
19. What support do the state and IIS have to increase use of the IIS by physicians?
20. Is the state policy require patients to opt-out or opt-in?
21. How does a patient get registered in the IIS (often through vital birth records)?
22. What percentage of licensed physicians in the state currently use the IIS?
23. How much data is currently in the IIS?
24. What is the current age range for the IIS?
25. Are there any MOUs with neighboring states in place or in development?
26. What is the state legislation or regulation regarding access to information in the IIS? Does the state require that a physician have a valid state license to practice medicine in order to participate with the registry? Are there provisions for emergency access if needed by an out-of-state physician? Who else is allowed to enter or view data in the IIS (e.g., nurses, pharmacists, schools)?
27. Is the state receiving funding from CDC to support enhanced interoperability with EHRs? What specific updates are being made?

Introduce yourself to the IIS contact, perhaps with another member of your Chapter leadership. Offer to partner with the IIS to increase adoption and optimize use of your IIS.

Reach out to your state legislators, find out who in state government is interested in health care technology, and who can best assist you in your efforts to expand your state IIS. When meeting with legislators, considering leaving behind the “Optimal Features of an IIS” article and/or other articles/references.

**IMPORTANT ARTICLES AND LINKS**

- AAP policy on IISs: [http://aappolicy.aappublications.org/cgi/content/full/pediatrics;118/3/1293](http://aappolicy.aappublications.org/cgi/content/full/pediatrics;118/3/1293)
- IIS information at the CDC: [http://www.cdc.gov/vaccines/programs/iis/default.htm](http://www.cdc.gov/vaccines/programs/iis/default.htm)
- Information for Providers: [http://www.cdc.gov/vaccines/programs/iis/providers.htm](http://www.cdc.gov/vaccines/programs/iis/providers.htm)
- Information for Parents: [http://www.cdc.gov/vaccines/programs/iis/parents.htm](http://www.cdc.gov/vaccines/programs/iis/parents.htm)
- State level information and contacts: [http://www.cdc.gov/vaccines/programs/iis/states-territories.htm](http://www.cdc.gov/vaccines/programs/iis/states-territories.htm)
- HL7 Standards: [http://www.cdc.gov/vaccines/programs/iis/standards/standards.htm#hl7](http://www.cdc.gov/vaccines/programs/iis/standards/standards.htm#hl7)
- The Success of an Immunization Information System in the Wake of Hurricane Katrina, (Boom JA, et al): [http://pediatrics.aappublications.org/cgi/content/full/119/6/1213](http://pediatrics.aappublications.org/cgi/content/full/119/6/1213)
- American Immunization Registry Association (AIRA) [http://www.immregistries.org/](http://www.immregistries.org/)
- Every Child By Two Model Information Sharing Agreement: [http://ecbt.org/registries/modelinterstate.cfm](http://ecbt.org/registries/modelinterstate.cfm)