Immunization Information Systems and Adult Immunizations

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Discussion Points

- Immunization Information Systems and Adult vaccinations
  - What is an IIS?
  - Participation in IIS
  - Modernizing immunization delivery and documentation
  - National IIS initiatives impacting adult immunization
  - Opportunities for improvement
  - Challenges
  - Potential action items
What is an IIS?

Immunization information systems (IIS), previously known as immunization registries, are confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area.
What is an IIS?

At the point of clinical care, an IIS can provide consolidated immunization histories for use by a vaccination provider in determining appropriate client vaccinations.
What is an IIS?

At the population level, an IIS provides aggregate data on vaccinations for use in surveillance and program operations, and in guiding public health action with the goals of improving vaccination rates and reducing vaccine-preventable disease.
IIS Functional Standards, 2013-2017

- Support the delivery of clinical immunization services at the point of immunization administration, regardless of setting.
- Support the activities and requirements for publicly-purchased vaccine, including the Vaccines For Children (VFC) and state purchase programs.
- Maintain data quality (accurate, complete, timely data) on all immunization and demographic information in the IIS.
- Preserve the integrity, security, availability and privacy of all personally-identifiable health and demographic data in the IIS.
- Provide immunization information to all authorized stakeholders.
- Promote vaccine safety in public and private provider settings.
Percentage of children aged < 6 years participating in an immunization information system -- United States, five cities§, and D.C., 2013

National Participation: 90% (excluding Territories)
Source: CY2013 IISAR

§ Chicago, IL; Houston, TX; New York City, NY; Philadelphia, PA; San Antonio, TX.
Percentage of adolescents aged 11 – 17 years participating in an immunization information system -- United States, five cities§, and D.C., 2013

National Participation: 64% (excluding Territories)
Source: CY2013 IISAR

§ Chicago, IL; Houston, TX; New York City, NY; Philadelphia, PA; San Antonio, TX.
A recent CDC legislative survey of all states plus Washington DC revealed that:

- 47 of 50 states plus Washington DC are lifespan IISs;
- 42 of 50 states plus Washington DC are opt-out IISs for adults.
- IIS interstate data sharing remains an issue for all immunization data.

Percentage of adults aged ≥19 years participating in an Immunization information system -- United States, five cities§, and D.C., 2013

National Participation: 32% (excluding Territories)

Source: CY2013 IISAR

§ Chicago, IL; Houston, TX; New York City, NY; Philadelphia, PA; San Antonio, TX.
Todays Children are Tomorrows Adults

- Births in the U. S. - 2012: 3.95 million live births (10,830 births every day).*
- Every year, a similar cohort of children age into adulthood.

* U.S. National Center for Health Statistics, Vital Statistics of the United States, annual; and National Vital Statistics Reports (NVSR)
IT Investments to Modernize Immunization Delivery & Documentation

* Barcodes

Doctor’s offices

E-health records

* VTrckS

Health Departments
and Immunization Information System

* Clinical Decisions

* Interoperability

4 Focus Areas

* Clinical Decisions

* Interoperability
IIS Initiatives that Impact Adult Immunization

1. Retail pharmacy reporting to IISs
2. Improving VA immunization by using retail pharmacies to report to IISs
3. Expansion of the adult ACIP Clinical decisions support schedule for EHR and IIS systems
4. Expansion of the Sentinel Site project to cover adult populations and report during pandemic response
5. Funding IIS to implement EHR-IIS Interoperability
# Expanded IIS Sentinel Site Activities

## FY2014 Pan Flu Preparedness CoAg

<table>
<thead>
<tr>
<th>Sentinel Site</th>
<th>Adult Providers Groups Targeted for Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>Family Practice, Urgent Care Facilities</td>
</tr>
<tr>
<td>Minnesota</td>
<td>ObGYNs</td>
</tr>
<tr>
<td>New York City</td>
<td>ObGYNs, Long Term Care Facilities</td>
</tr>
<tr>
<td>North Dakota</td>
<td>Long Term Care Facilities, Local Public Health Units</td>
</tr>
<tr>
<td>Oregon</td>
<td>Hospitals, Mass Vax, ObGYNs, Pharmacy</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Long Term Care Facilities</td>
</tr>
</tbody>
</table>
CDC Immunization Program Awardees for EHR-IIS Enhanced Interoperability Cooperative Agreements
As of October 2014

Philadelphia, PA
New York City
District of Columbia
TX
AZ
NM
MS
MI
WI
MN
SD
ND
ID
UT
CO
MT
WY
WA
OR
RI
NE IA
KS MO
NC
AL
VT
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wv
MA
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CT
MD
HI
NV
OH
DE

Total awardees funded: 38
Strategies to improve the reporting of all immunizations for all the population

• **Organizational and institutional interventions**
  • Consider incentives for reporting all immunizations to an IIS.
  • Strengthen the collaboration between federal, state, local and private partners to leverage new technology and current initiatives.

• **Technological service interventions**
  • Explore new opportunities/capacities for interstate data exchange and/or routing services to get data from single points of data collection for distribution to state networks.
  • Consider developing regionalization and or shared services approaches.
  • Promote e-consumer access to adult immunization histories.
Specific challenges in adult immunization and documentation in IIS

- Adult provider identification, outreach, and onboarding
- Operational and technical changes in IIS needed for adult immunization tracking (priority groups, occupation, non-traditional providers etc.)
- Additional resources needed to support IIS technical and operational activities for the adult population
Potential Action Items for Summit Group

• Encourage use of IIS for adult immunization activities among clinics/health systems already entering pediatric data, e.g. FQHC-funded clinics, HMO, etc.

• Work with federal agencies, e.g. IHS (patients are already participating), federal occupational health clinics, VA health systems, Department of Defense-run clinics, etc. to promote participation in IIS

• Disseminate information regarding state IIS-specific barriers that may be reduced (opt-in versus opt-out adult IIS participation for adults).

• Work with EHRs to make their products more compatible with IIS.

• Work with the IIS in your jurisdiction to implement Adult Clinical Decision Support for immunization, when available.
Thank You

For more information please contact Centers for Disease Control and Prevention

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E-mail: cdcinfo@cdc.gov  Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.