Immunization Information Systems and Adult Immunizations

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Discussion Points

- Immunization Information Systems and Adult vaccinations
  - Legislative impacts on adult immunization
  - Pediatric IIS participation impact on Immunization Information Systems (IIS)
  - CDC initiatives to support immunization programs
  - Other national IIS initiatives
  - Opportunities for improvement
Immunization Information Systems
Legislative Issues that Impact Adult Immunization

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.


Todos 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)
Percentage of children aged <6 years participating* in an Immunization Information System (IIS) – United States, five cities*, and the District of Columbia, 2012

- National child participation: 86% (19.5 M)

* Participation is defined as having two or more vaccinations recorded in the IIS
*Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.
Percentage of adults aged ≥19 years participating* in an Immunization Information System (IIS) – United States, five cities*, and the District of Columbia, 2012

National adult participation: 25% (57.8 M)

* Participation is defined as having one or more vaccinations administered during adulthood recorded in the IIS
*Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.

Local area analysis and use of GIS among immunization program grantees—2011*

* self-reported, self-validated data from 54 immunization program grantees as reported in the 2011 IISAR
Some Initiatives to Modernize the Immunization Program with IT Investments

* Barcodes

Doctor's offices

E-health records

4 Focus Areas *

* VTrckS

Health Departments and Immunization Information System

* Clinical Decisions

* Interoperability

For Children 19-35 months as of 10/21/2012. Series 4313314 includes: 4 DTP, DT, 3 HEP-B, 3 DOSE, 3 HIB, 3 MMR, 4 PNEUMO (PDT), 3 POLIO, 5 VARICELLA.


Map By: Isaiah Berg
Direct Current Initiatives that Impact Adult Immunization Capacity in IIS

1. Retail pharmacy reporting to IISs (example slide next)
2. Occupational health clinic reporting to IISs
3. Improving VA immunization by using retail pharmacies to report to IISs
4. Recent expansion of the Sentinel Site project to cover adult populations and report during pandemic response
5. Proposed expansion of the adult ACIP Clinical decisions support schedule for EHR and IIS systems
Adult Specific Strategies for Continued Improvement

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

- Increase participation in IISs by federal agencies, e.g. IHS (patients are already participating), federal occupational health clinics, VA health systems, Department of Defense-run clinics, etc.

- Disseminate information regarding state IIS-specific barriers that may be reduced (opt-in versus opt-out adult IIS participation for adults).
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 roles and responsibilities for federal, state, local and private partners because of new technology advancement and 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.

IIS adult specific challenges immunization and documentation

- Challenges with resources must be addressed.
- Adult provider identification and onboarding is a specific challenge.
- Change value of an IIS for adult immunization tracking (priority groups, occupation, non-traditional providers etc.) during public health emergencies.
Thank You / Discussion

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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.

Extra Slides
Number of public and private vaccination provider sites enrolled and participating* in an Immunization Information System (IIS), by year — United States, 2006–2012

* Participation is defined as having submitted data to the IIS in the past 6 months. Data include 48 grantees consistently reporting data in every year.

Percentage of U.S. immunization programs† meeting NVAC Functional Standards** for IIS—2012

†Total number of grantees is 52 for all FS except FS2 and FS 4, excluding New Hampshire, DC, Chicago and Houston. *FS2 and FS4 calculate the number of grantees out of 54, including Chicago and Houston. **These data measure the 2007 NVAC Functional Standards. Functional Standards were updated for 2013.
Functional Standard 1:
Percentage of IIS records complete with NVAC core data elements for children <6 years of age, U.S. national average—2012

*Average taken of 52 respondents. Excludes Chicago, DC, Houston, and New Hampshire