

Immunization Information Systems Current Status

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The Current Status of Immunization Information Systems:

- ☐ Ensure appropriate protections of privacy and confidentiality for individuals and security for information included in the registry
- ☐ Ensure participation of all immunization providers and recipients
- ☐ Ensure sustainable funding for registries
- ☐ Ensure appropriate functioning of registries

Immunization Information Systems Privacy and Confidentiality - State Legislation

IIS State Legislation (including Washington DC):

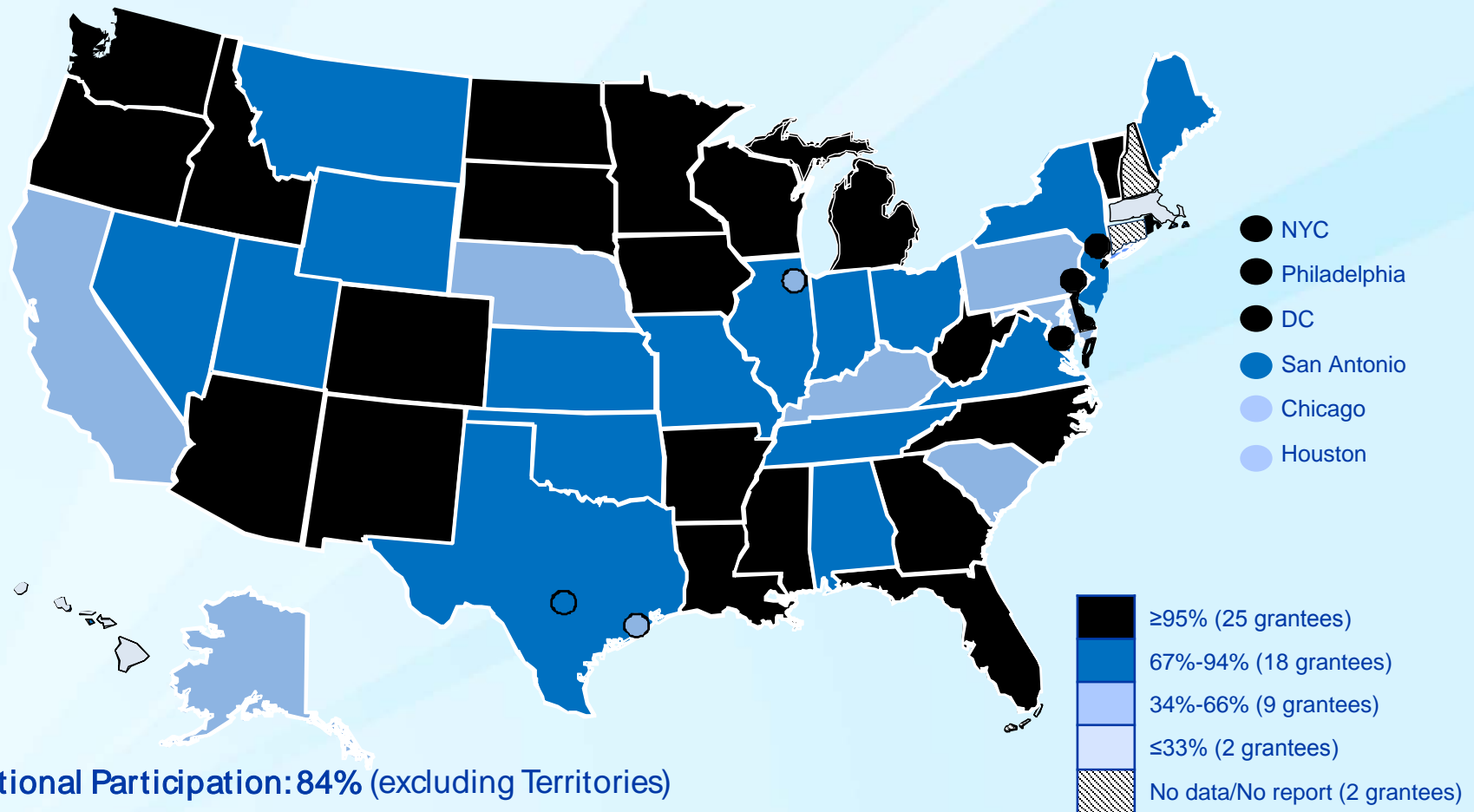
- Authorizes an IIS: 27 states (53%)
- Mandates reporting: 14 states (27%)
- Requires participation (Opt-Out): 44 states and Washington D.C. (86%)

IIS Progress to Improve Participation

	U.S. - 2000	U.S. - 2011
Participation of U.S. children < 6 years in an IIS with 2 or more immunizations.	21%	84% (19.2 million children < 6 years)
Participation of U.S. adolescents 11-17 years in an IIS with 2 or more adolescent immunizations.	-	53% (15.4 million adolescents 11-17 years)
Participation of U.S. adults ≥19 years in an IIS with 1 or more adult immunizations.	-	24% (56.7 million adults ≥19 years)

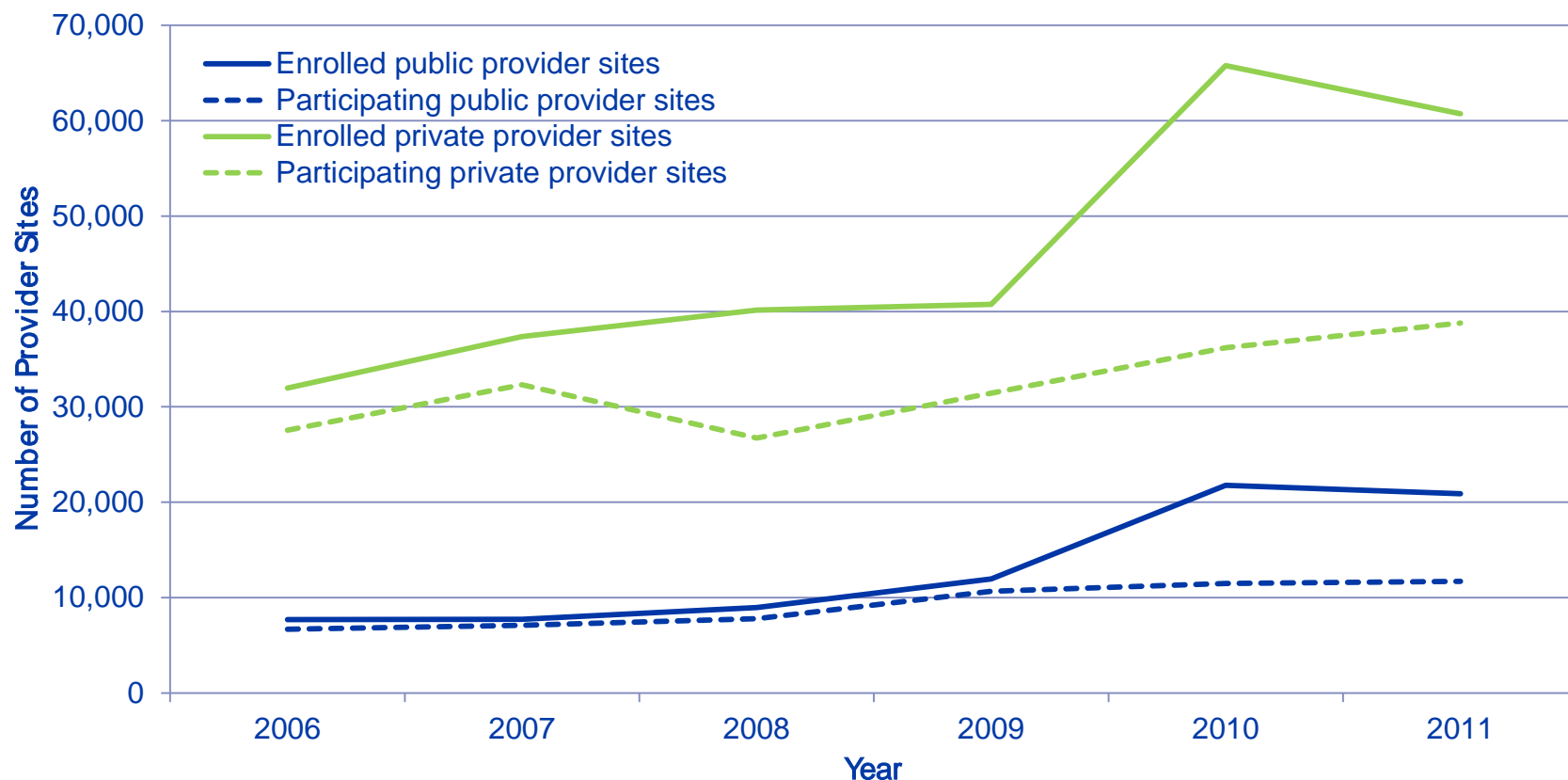
Children < 6 Years Participation in IIS, 2011

Healthy People 2020 IIS Objective Status



Source: State and Local Health Departments via the 2011 Immunization Information System Annual Report

Number of Public and Private Vaccine Provider Sites Enrolled and Participating* in IIS† 2006-2011



* Participation is defined as having submitted data to the IIS in the past 6 months

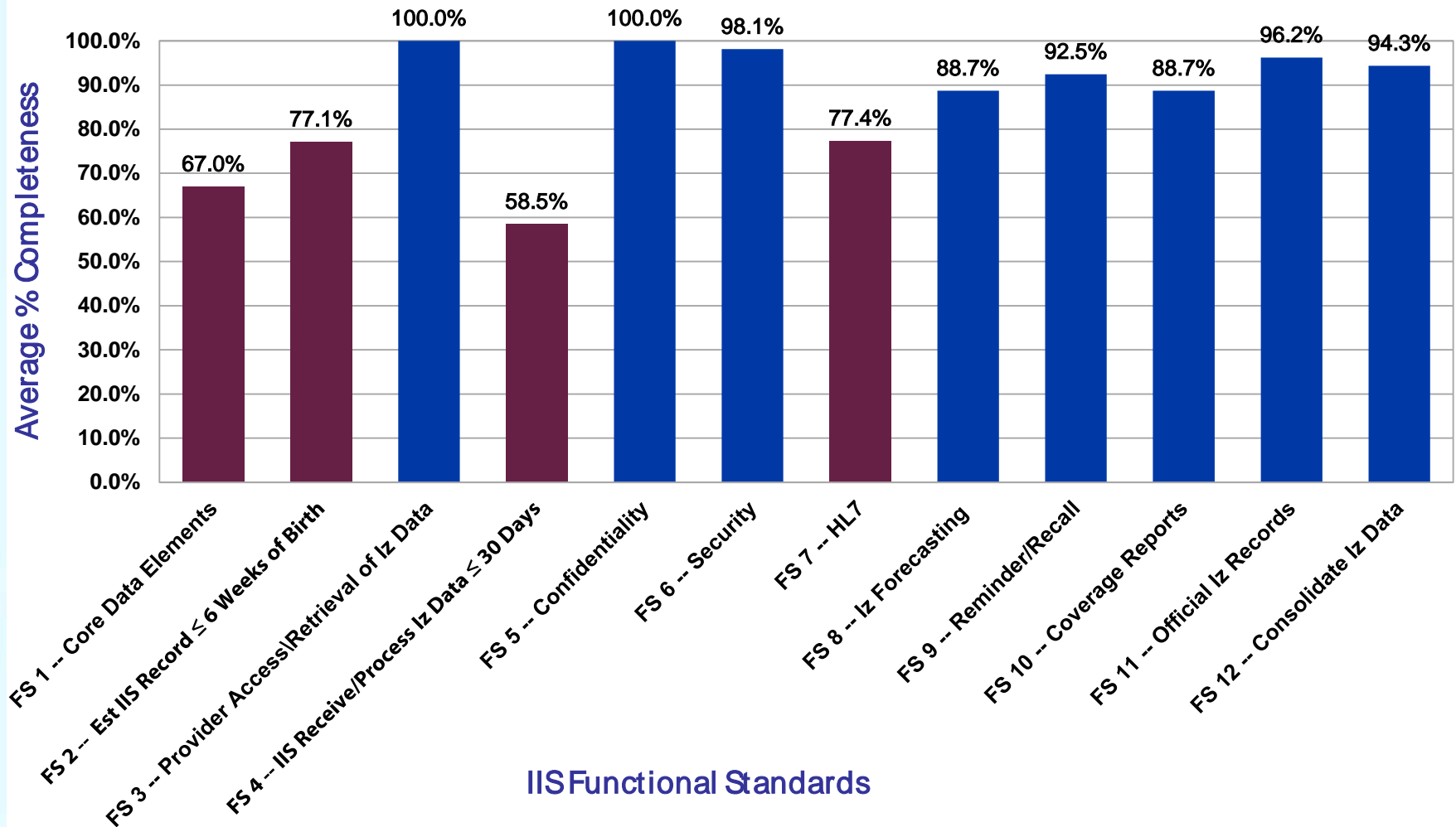
† Among 48 grantees reporting each year from 2006 - 2011

IIS Funding Sources, 2010

Funding Source	Amount	%
CDC immunization 317 grant funds (includes VFC and DA)	\$36,922,434	55.3%
State	\$11,714,326	17.6%
Local	\$2,159,779	3.2%
Private	\$304,624	0.5%
In-kind	\$200,000	0.3%
CMS/ MMIS	\$1,674,465	2.5%
CMS/ HITECH	\$1,595,410	2.4%
HRSA	\$25,273	0.0%
Other federal programs	\$5,475,131	8.2%
Emergency preparedness	\$1,488,983	2.2%
Non-Profit	\$0	0.0%
Other	\$5,157,606	7.7%
Total IIS Funding	\$66,718,031	

Source: State and Local Health Departments via the 2010 Immunization Information System Annual Report

IIS Functional Standards, 2010



Source: State and Local Health Departments via the 2010 Immunization Information System Annual Report

Selected CDC IIS Initiatives

- 1. Enhance EHR-IIS Interoperability**
- 2. Clinical Decision Support**
- 3. Implement the Use of 2D Bar Codes**
- 4. IIS Sentinel Sites Project**
- 5. Trends in Immunization Practices System (IIS-TIPS)**
- 6. VTrckS and EXIS**
- 7. IIS Functional Standards Revision**

IIS Initiative 1:

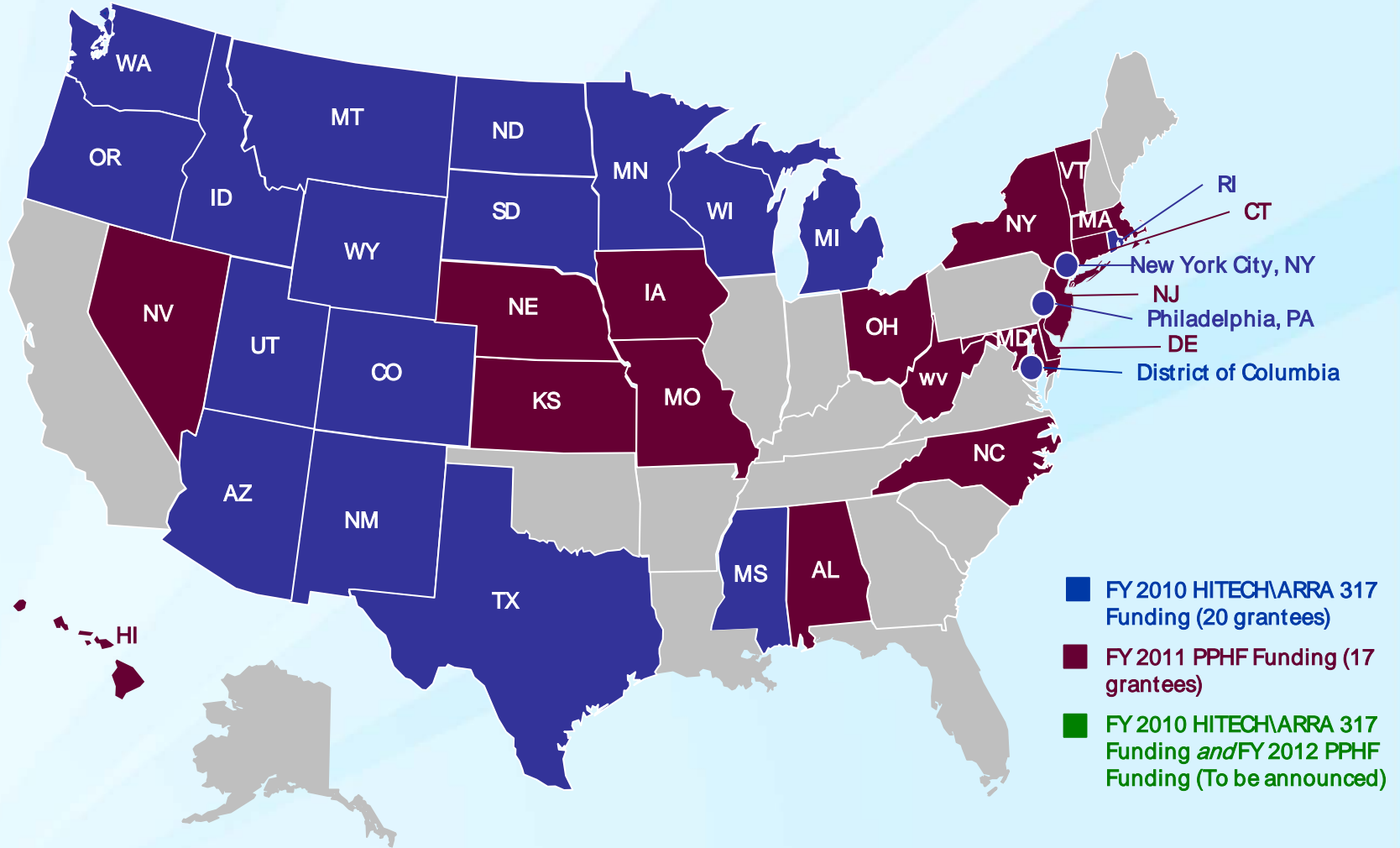
Enhance EHR-IIS Interoperability

EHR-IIS Interoperability

❑ National HIT Initiatives will facilitate EHR-IIS interoperability by:

- Promoting the development and use of certified EHR systems that use national standards for interoperability with IIS and other healthcare systems
- Incentivizing clinical practice interoperability to improve overall patient care.
- Promoting the development and implementation of Health Information Exchanges (HIE).
- Promoting consumer e-health that empowers patients to access and review their own health care.

Status: EHR-IIS Interoperability Cooperative Agreements*



*** As of August 2012**

Successes: EHR- IIS Interoperability

- ❑ Almost 29,000 practice sites with an EHR have been identified by HITECH\ARRA 317 grantees.
 - ❑ These sites serve almost 6 million children <6 years of age.
- ❑ About 3,000 practice sites with EHRs in 17 states and 3 cities have been selected for interoperability enhancements to enable real-time exchange of immunization data.
 - ❑ An estimated 2.4 million children <6 years of age will benefit.
- ❑ 96% of grantee or their designee are now able to send and receive HL7 messages

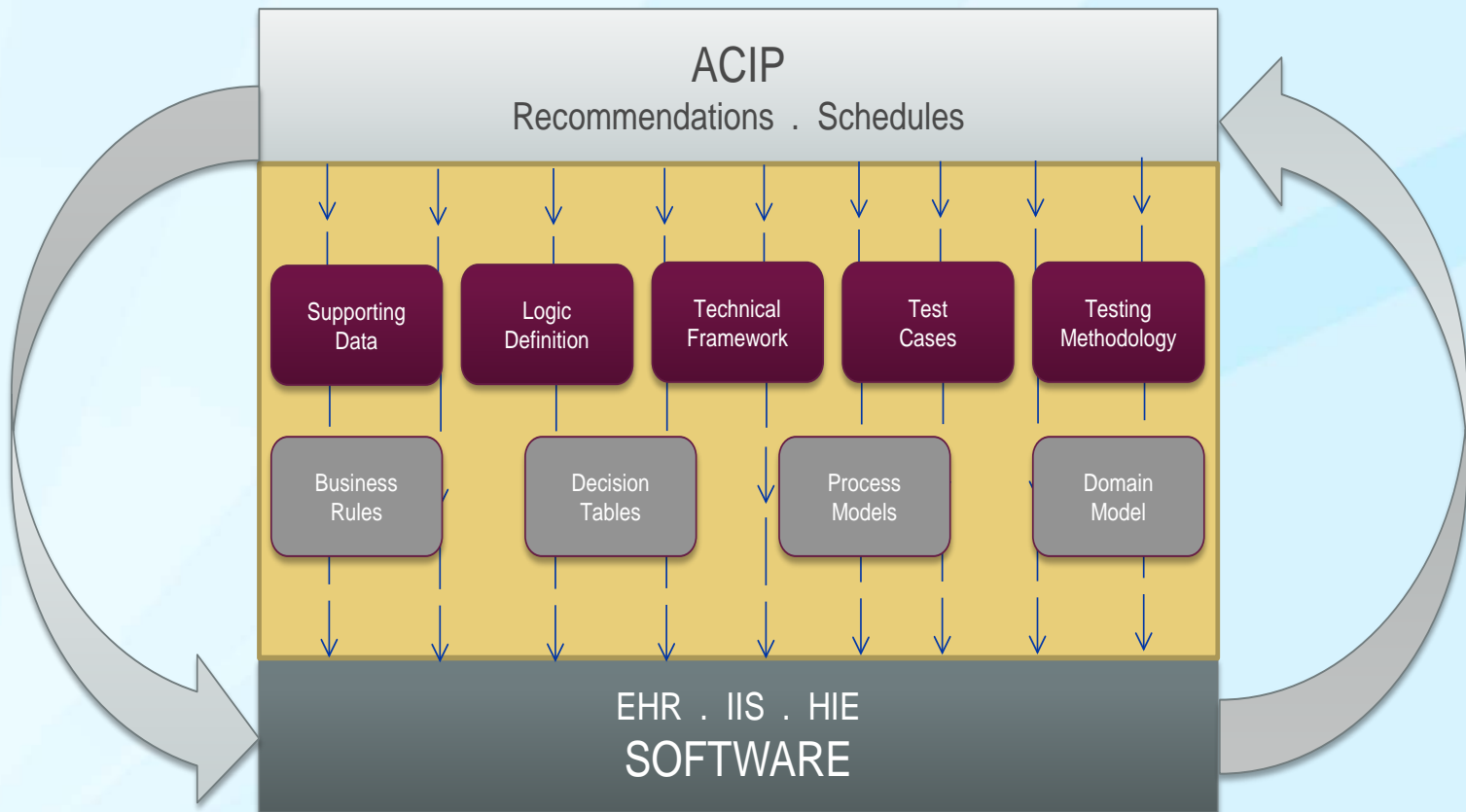
Impact: EHR-ITS Interoperability

- ❑ Enhancements may assist practices in receiving Meaningful Use incentives.
- ❑ Enhancing EHR-ITS interoperability will improve data quality challenges by addressing:
 - Accuracy
 - Timeliness
 - Completeness

IIS Initiative 2:

Clinical Decision Support

Overview: Clinical Decision Support for Immunizations (CDSi)



Status: CDSi

- ❑ First complete draft of Logic Specification has been circulated for expert panelist review

Publishing on September 25, 2012

- ❑ 900 Test Cases to accompany the Logic Specification have been completed and are currently in peer review

Publishing on September 27, 2012

- ❑ Training plan is being finalized and 4 training courses are being developed to support the release of the Logic Specification

Delivery in October 2012

Successes: CDSi

- ❑ Developed a consensus-based expert panel approach for collaboration amongst EHR and IIS communities;
- ❑ Established a partnership with EIPB to provide clarifications to ACIP recommendations;
- ❑ Positive community feedback and interest:
 - Early use of the draft specification by some in the community
 - AIRA, AIM, CDS Community of Practice, HL7, and leading Informatics groups have all expressed support for and excitement about the project

Impact: CDSi

- ❑ Provides logically clear guidance for immunization evaluation and forecasting systems:
 - ❑ Can be used by any system that performs evaluation and forecasting: IIS, EHRs, HIEs and others
 - ❑ Increases accuracy and consistency
 - ❑ Improves the timeliness of accommodating new and/or changed ACIP recommendations in CDS engines
 - ❑ Makes it easier to develop and maintain immunization evaluation and forecasting products



Ensures patients receive proper immunizations
“The right immunization at the right time”

IIS Initiative 4:

IIS Sentinel Sites Project

Overview: IIS Sentinel Site Project

- ❑ **Competitive supplemental 317 funds to IIS with high data quality**
- ❑ **2004-07 (6 IIS); 2008-12 (8 IIS); 2013-17 (6-7 IIS)**
- ❑ **Sentinel Sites and IISB activities:**
 - Conduct IIS-based operational evaluations
 - Conduct vaccine use studies
 - Present and publish findings
 - Sentinel Sites report data to IISB for additional analyses (~ 4 weeks after end of reporting period)

Status: IIS Sentinel Site Project

❑ 2008-2012 cycle

- 17 Sentinel Site & 9 CDC publications to date (more in process)

❑ 2013-2017 cycle

- Cooperative agreement administered by IISB separate from 317 administered by POB
- 6-7 sites will be awarded fall 2012 to begin January 2013
 - 15 LOIs received including all incumbent Sentinel Sites
- Sentinel Sites required to evaluate IIS-specific methods for vaccine use studies, IIS-EHR interoperability, IIS operational best practices, or use of IIS to support other immunization program activities and external partners, and report data to IIS-TIPS (see next slides)

Successes: IIS Sentinel Site Project

- ❑ Increased IIS-specific analytic capacity at CDC and among grantees to provide support to larger IIS community;
- ❑ Elevated visibility and importance of evaluation in IIS community;
- ❑ Promoted value of IIS as evaluation tools;
- ❑ Enhanced partnerships with other CDC Divisions and partners

Impacts: IIS Sentinel Site Project

- ❑ Primary source of new IIS evaluation methods, implementation of IIS data quality and operational best practice approaches;
- ❑ Contributed ~50% of the IIS literature reviewed by the TF on Community Preventive Services;
- ❑ Increased capacity at Sentinel Sites to plan and conduct IIS evaluations and vaccine use studies;
- ❑ Timely vaccine use investigations

Thank You / Discussion

For more information please contact Centers for Disease Control and Prevention

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