Immunization Information Systems Functional Standards Update

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September 19, 2012

Registry Functions: Results from Immunization Program Managers Meeting Survey, 1997*

	Registry function	% Program managers thought core function
	Functions Determined to be Core Functions	
1	Consolidate all immunization records from multiple providers	93%
2	Electronically store data on all NVAC-approved core data elements	91%
3	Link electronically with birth data to automatically populate the registry	91%
4	Permit providers to electronically retrieve information on all immunization records at the time of encounter	91%
5	Ensure accurate and complete immunization records through automated de-duplication and edit checking	91%
6	Protect confidential medical information (security)	91%
7	Recover lost data	90%
8	Exchange immunization records using HL7 standards	87%
9	Automatically determine the immunization(s) needed when an individual presents for a vaccination, based on current ACIP recommendations	85%
10	Produce authorized immunization records	85%
11	Identify individuals late for immunizations and produce recall notifications	84%
12	Permit providers to electronically submit information on all immunization encounters on the same day as vaccine administration	81%
13	Enable identification and flagging of the definitive record	75%
14	Automatically produce CASA-like immunization coverage reports by providers	75%

Registry Functions: Results from Immunization Program Managers Meeting Survey, 1997*

	Registry function	% Program managers thought core function
	Functions Determined *NOT* to be Core Functions	
1	Link electronically with death data to remove records from the registry	63%
2	Identify individuals due for immunization and produce reminder notifications	58%
3	Link electronically with adoption data	36%
4	Collect information on contraindications	33%
5	Enable vaccine-associated adverse event reporting	16%
6	Enable automated vaccine inventory management (ordering)	13%
7	Provide for access to the internet	12%
8	Perform surveillance for adverse events (i.e. vaccine safety)	8%
9	Perform electronic laboratory surveillance	5%
10	Automatically provide data for geographic information system (GIS) analysis	3%
11	Provide for E-mail connectivity	3%
12	Perform electronic reportable disease surveillance	2%
13	Enable electronic ordering of immunization education materials	2%
14	Coordinate immunization visits with health appointment of other family members	0%

*N=67

Source: Pediatric Annals, 27:6/June 1998

Immunization Information Systems in the U.S.- IIS Minimum Functional Standards

1. **Electronically store data on all National Vaccine Advisory Committee (NVAC)-approved core data elements:**

- Patient's first name
- Patient's middle name
- Patient's last name
- Patient's birth date
- Patient's sex
- Patient's race
- Patient's ethnicity
- Patient's birth order
- Patient's birth state
- Patient's birth country
- Mother's first name
- Mother's maiden name
- Mother's last name
- Vaccine type
- Vaccine manufacturer
- Vaccination date
- Vaccination lot number

Immunization Information Systems in the U.S.- IIS Minimum Functional Standards

2. Establish an IIS record within 6 weeks of birth for each newborn child born in the catchment area;

3. Enable access to & retrieval of immunization information in the IIS at the time of encounter;

4. Receive and process immunization information within 1 month of vaccine administration;

5. Protect the confidentiality of health care information;

Immunization Information Systems in the U.S.- IIS Minimum Functional Standards

6. Ensure security of health care information;

7. Exchange immunization records using HL7 standards;

8. Automatically determine the routine childhood immunization(s) needed, in compliance with current Advisory Committee on Immunization Practices (ACIP) recommendations, when an individual presents for a scheduled immunization;

Immunization Information Systems in the U.S.- IIS Minimum Functional Standards

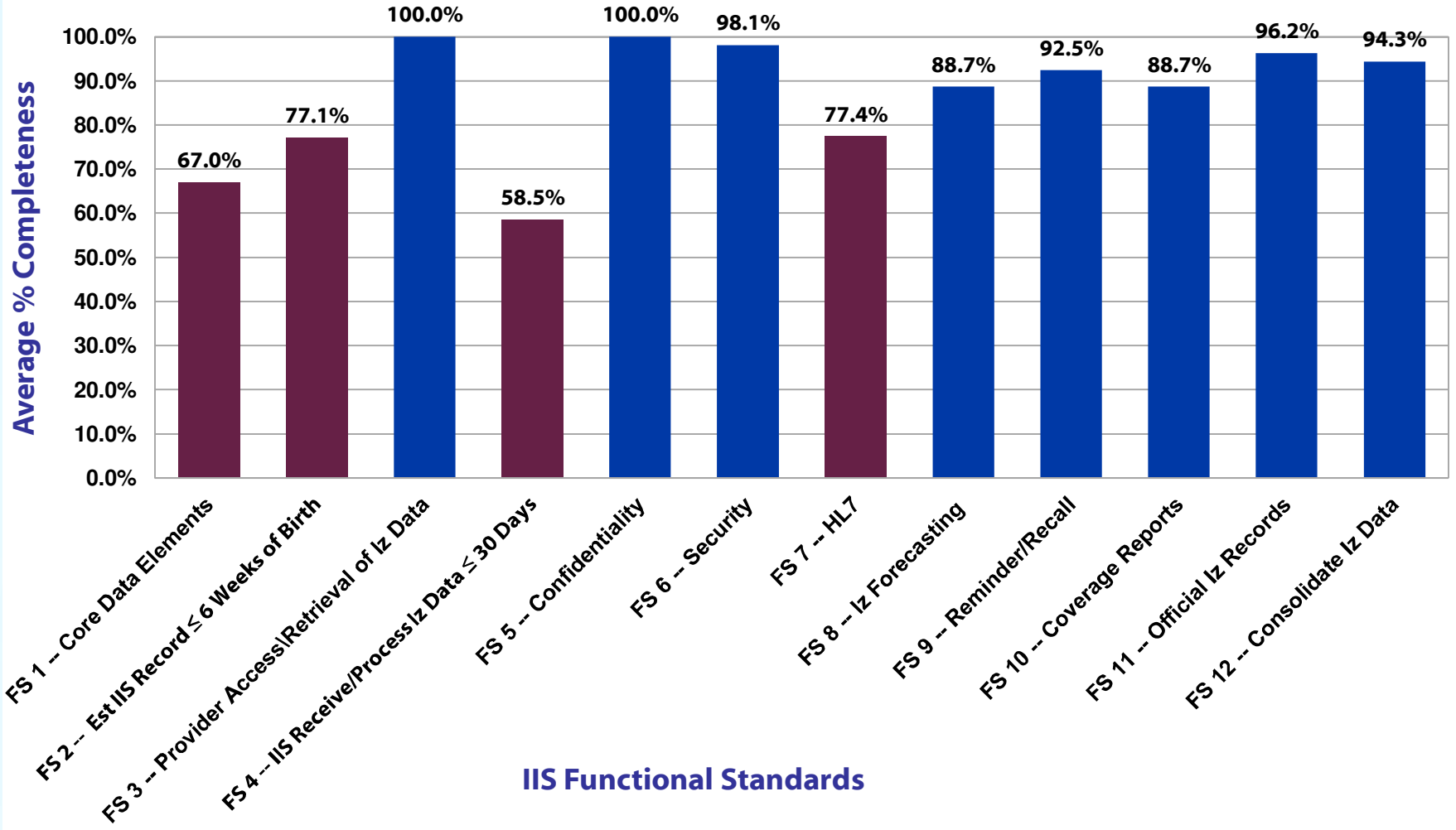
9. Automatically identify individuals due/late for immunization(s) to enable the production of reminder/recall notifications;

10. Automatically produce immunization coverage reports by providers, age groups, and geographic areas;

11. Produce official immunization records;

12. Promote accuracy and completeness of IIS data.

IIS Functional Standards, 2010



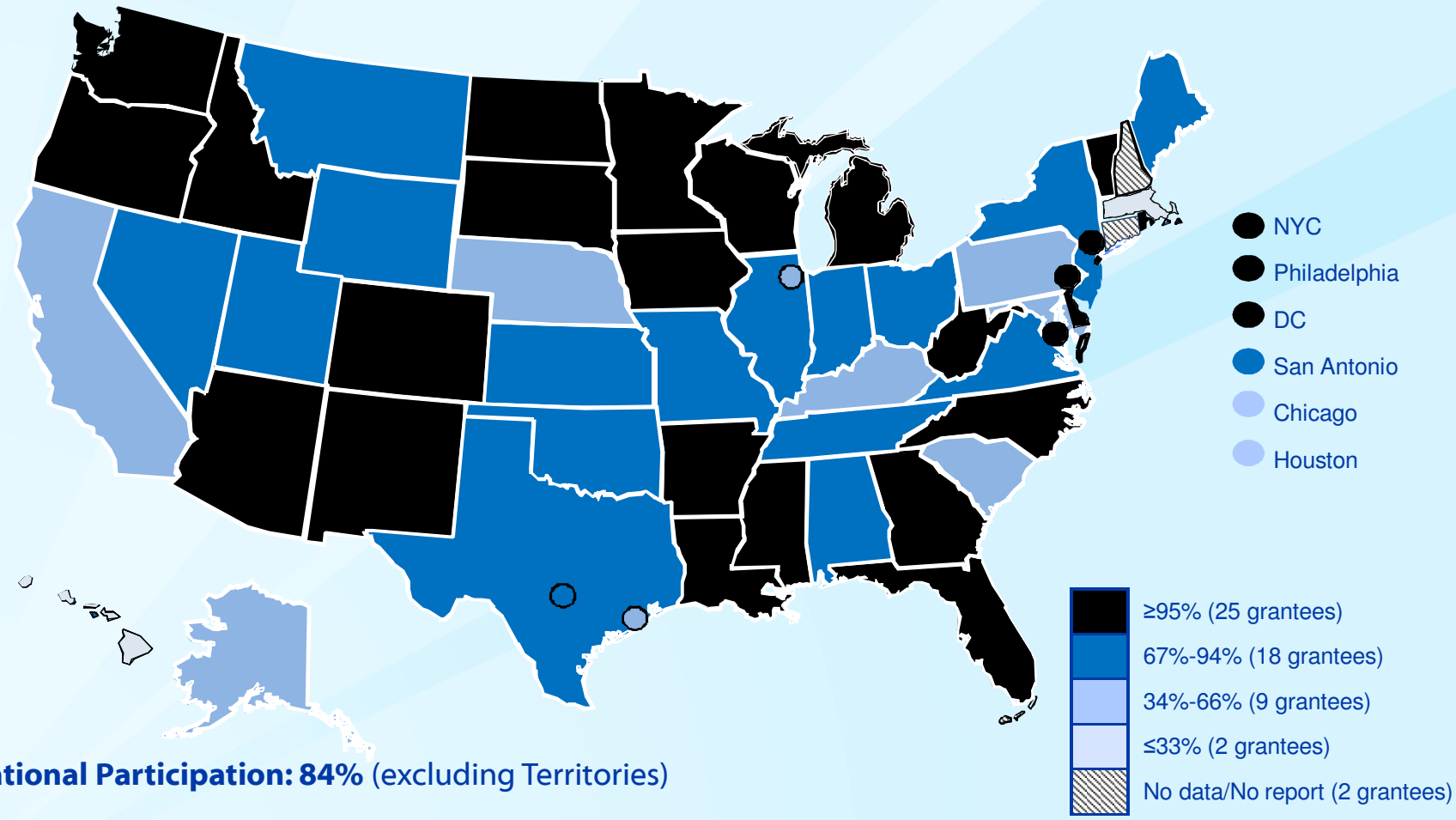
Source: State and Local Health Departments via the 2010 Immunization Information System Annual Report

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)

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

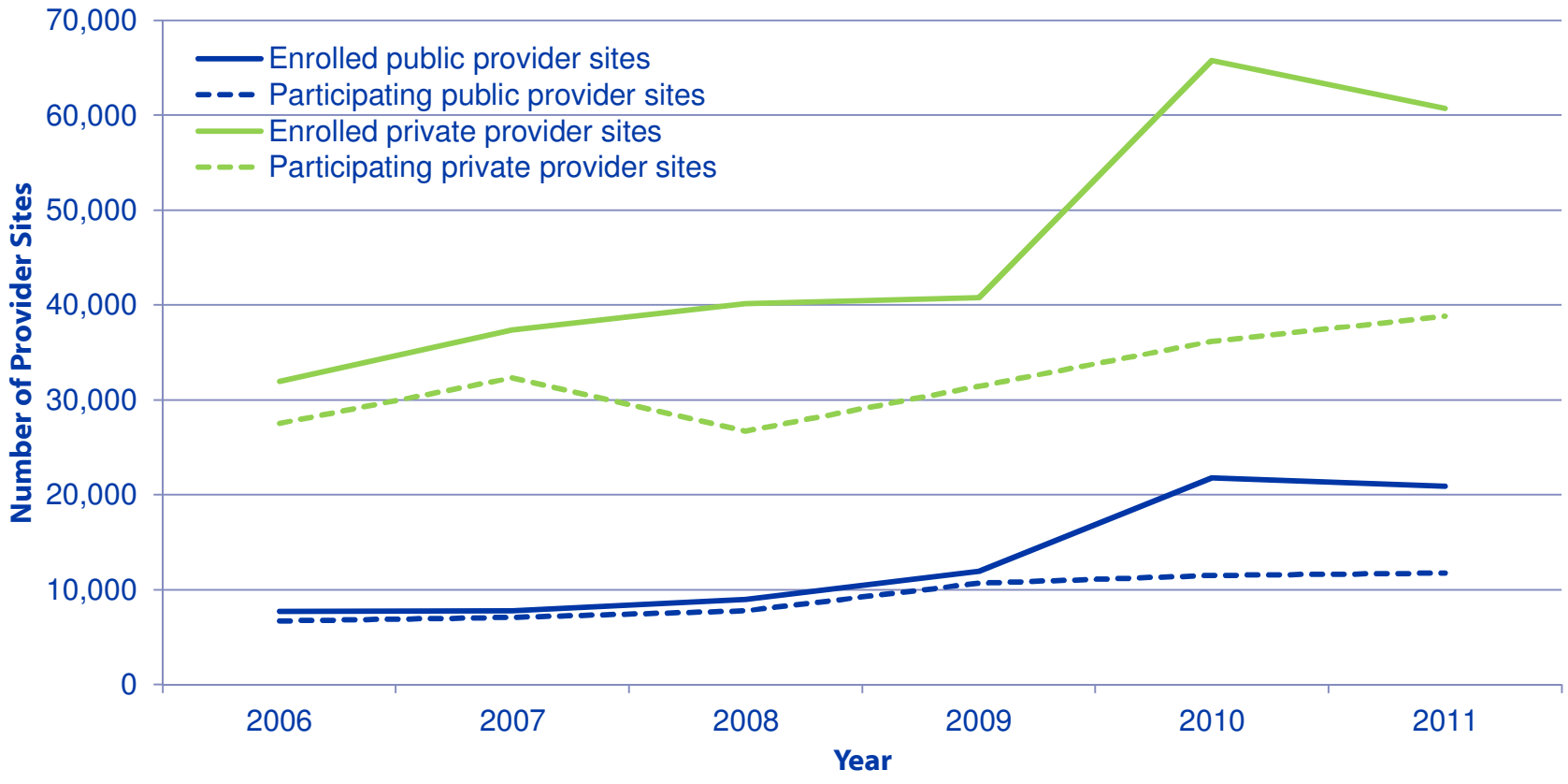
Children < 6 Years Participation in IIS, 2011
Healthy People 2020 IIS Objective Status



National Participation: 84% (excluding Territories)

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

Expectations

National HIT Initiatives including:

- Meaningful Use, HIEs, Parental access, BMI

IIS Support for Immunization Programs:

- Interoperability with EHRs
- Barcodes
- VTrckS (EXIS)
- Coverage assessment
- Vaccine effectiveness studies
- VFC
- CDS
- Pharmacies
- Adult Immunization

Overview of Proposed Changes

- **Clarify focus of standards on:**
  - Quality of care
  - Support of public health programs
- **Re-structured Standards document into three parts:**
  - General Considerations
  - Programmatic Goals
  - Functional Standards
- **Added additional Core Data Elements**

General Considerations

A. These functional standards are intended to identify operational, programmatic, and technical capacities that all IIS should achieve by the end of 2017.

B. Some standards are environmental, and can only be implemented in conjunction with the broader Department of Health or State/Local infrastructure. The Functional Standards are intended to reflect necessary functions, whether those functions are implemented by the IIS program or others.

General Considerations

C. In some cases, current law or policy may preempt full implementation unless changed. In these instances, an unmet standard may serve as a suggestion for possible revisions to such law or policy.

D. Metrics must capture IIS progress toward achieving the programmatic goals and functional standards in accurate and meaningful ways. CDC will define the metrics with input from immunization programs.

Programmatic Goals

1. **Support the delivery of clinical immunization services at the point of immunization administration, regardless of setting.**

2. **Support the activities and requirements for publicly-purchased vaccine, including the Vaccines For Children (VFC) and state purchase programs.**

Programmatic Goals - Continued

3. **Maintain data quality (accurate, complete, timely data) on all immunization and demographic information in the IIS.**

4. **Preserve the integrity, security, availability and privacy of all personally-identifiable health and demographic data in the IIS.**

Programmatic Goals - Continued

5. **Provide immunization information to all authorized stakeholders.**

6. **Promote vaccine safety in public and private provider settings.**

Next Steps

- June 15 – July 6, 2012: Review comments and edit draft document
- Late August 2012: Send to NVAC for review
- September 11, 2012: Meet with NVAC to discuss draft document and receive comments/edits for a final document
- Mid-2013: Develop metrics for inclusion in the IISAR
- March 31, 2014: IISAR for 2013 due to CDC

Thank You!!
Questions?

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

Extra Slides

Core Data Elements – Meaningful Use (MU) Crosswalk with IIS

- Patient ID (previously listed as "Medicaid Number")
- * Patient ID: Assigning Authority ID (i.e., owning source)
- * Patient ID: Type (e.g., medical record number, IIS ID)
- Patient Name: First
- Patient Name: Middle
- Patient Name: Last
- Patient Alias Name: First
- Patient Alias Name: Middle
- Patient Alias Name: Last
- Patient Date of Birth
- Patient Gender
- * Patient Multiple Birth Indicator
- Patient Birth Order
- * Responsible Person Name: First
- * Responsible Person Name: Middle
- * Responsible Person Name: Last
- * Responsible Person Name: Relationship to Patient

* denotes newly proposed since last NVAC approval
red denotes elements not required in MU Stage 1

Core Data Elements
MU Crosswalk with IIS

- Mother's Name: First
- Mother's Name: Middle
- Mother's Name: Last
- Mother's Name: Maiden Last
- Patient Address: Street
- Patient Address: City
- Patient Address: State
- Patient Address: Country
- Patient Address: Zip code
- * Patient Address: County of Residence
- Race
- Ethnicity
- Birthing Facility Name
- Patient Birth State
- Patient Primary Language
- Patient Telephone Number
- * Patient Telephone Number Type (e.g., home, cell)
- * Patient E-mail Address
- Patient status indicator—Provider facility level
- Patient status indicator—IIS level

* denotes newly proposed since last NVAC approval
red denotes elements not required in MU Stage 1

Core Data Elements
MU Crosswalk with IIS

- Vaccine Product Type Administered
- Vaccination Administration Date
- Vaccine Manufacture Name
- Vaccine Lot Number
- Vaccine Expiration Date
- * Vaccine dose volume and unit
- Vaccine Site of Administration
- * Vaccine Route of Administration
- * Vaccine Ordering Provider Name
- Vaccine Administering Provider Name
- Vaccine Administering Provider Suffix (e.g., MD, RN, LPN)
- Vaccination Event Information Source (i.e., administered or historical)
- VFC/grantee program vaccine eligibility at dose level
- * VIS Type & Publication Date
- * VIS Date given to patient

* denotes newly proposed since last NVAC approval
red denotes elements not required in MU Stage 1

Core Data Elements
MU Crosswalk with IIS

- * Contraindication(s)/Precaution(s)
- * Contraindication(s)/Precaution(s) Observation Date(s)
- * Exemption(s)/Parent Refusal(s) of Vaccine
- * Date of Exemption/Parent Refusal of Vaccine
- * Vaccine Reaction(s)
- History of vaccine preventable disease (e.g., varicella)
- * Date of History of Vaccine Preventable Disease

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red denotes elements not required in MU Stage 1