

# Immunization Submissions to IIS for RPMS Providers

**Preparing for Attestation and  
Ongoing Submission of  
Immunization Information to State  
Immunization Information Systems**

Updated 10/2/13

# Introduction

- The Indian Health Service certified EHR system is the Resource and Patient Management System (RPMS).
- Since 2002, IHS has been committed to RPMS provider participation in immunization interfaces with immunization information systems (IIS).
- Meaningful Use: increased interest, increased resource support for interface within IHS, IIS.

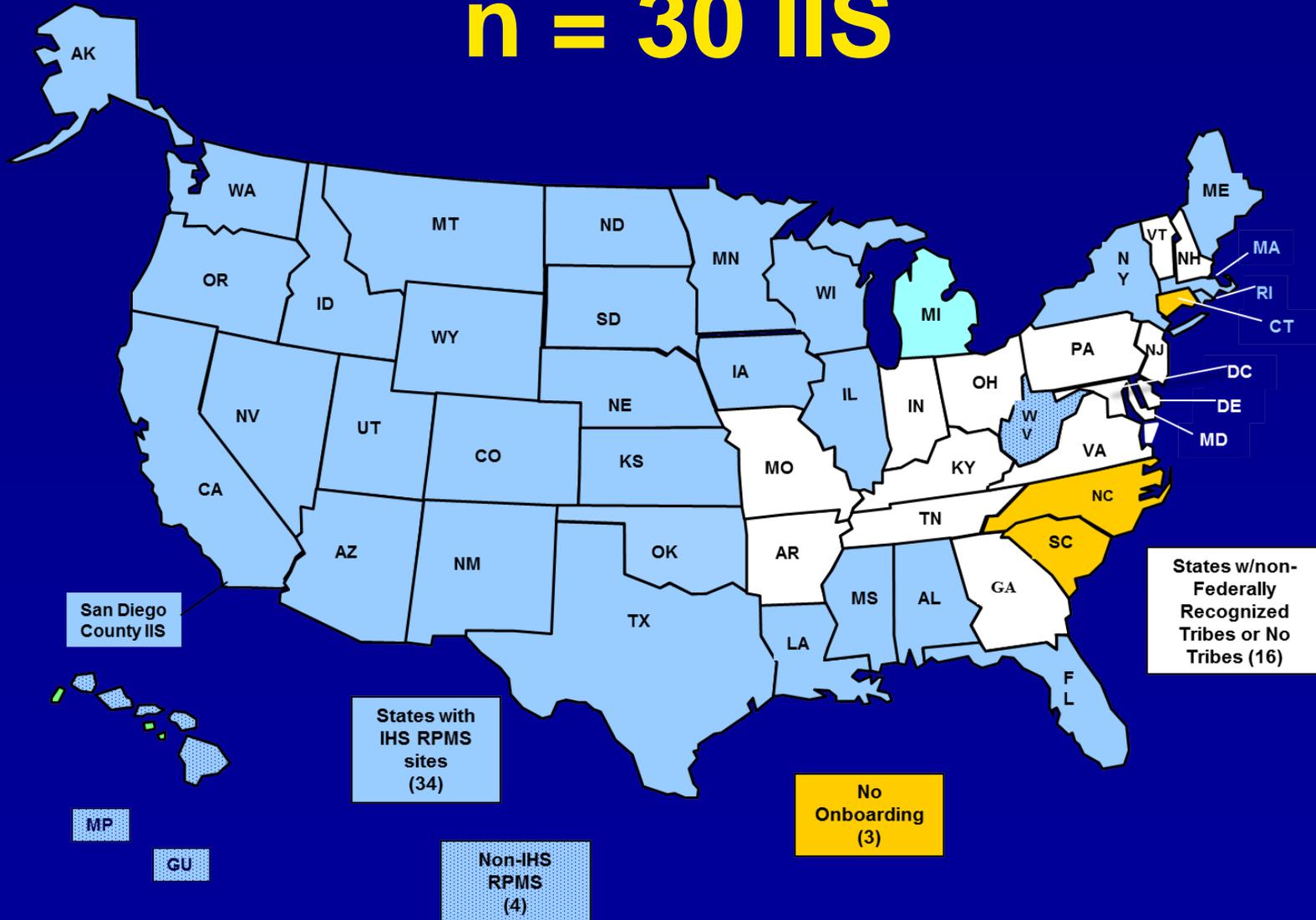


# Implementation

- Indian Health Service prefers the use of real time, automated transmission interfaces.
  - Interface software: HL7 2.31 or 2.5.1
  - Transport software: HTTPS or web services capability
- Interface is supported by the national development team, regional support teams, and implemented locally by IT and clinical providers.

# Making Contact

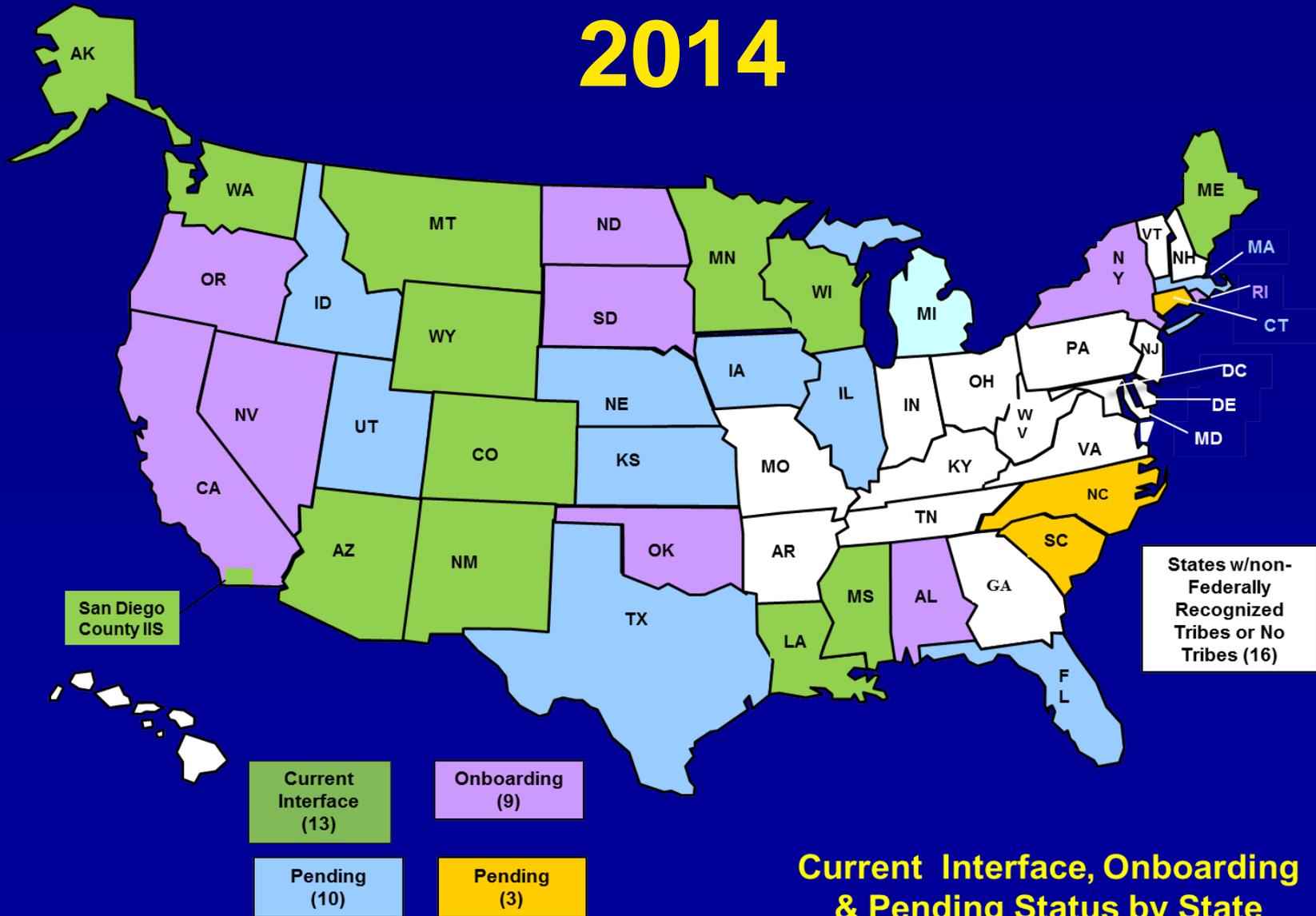
## n = 30 IIS



# Working with IIS

- From 2006 – 2009, Indian Health Facilities used RPMS interfaced with (IIS) in eight states, using automated and manual transmission standards.
- From 2010 to the present, five additional interfaces were added.
- RPMS providers in 22 states anticipate entering the onboarding process as part of MU Stage 2.

# IHS Interface Efforts 2014



**Current Interface, Onboarding & Pending Status by State**

# Interface Challenges

## IHS:

- IHS system de-centralized, locally administered
- Support needed by local staff for complex, real-time exchange
- Local systems installed on various platforms, environments
- One software, 34 states
- Implementations dependent on forthcoming enhancements

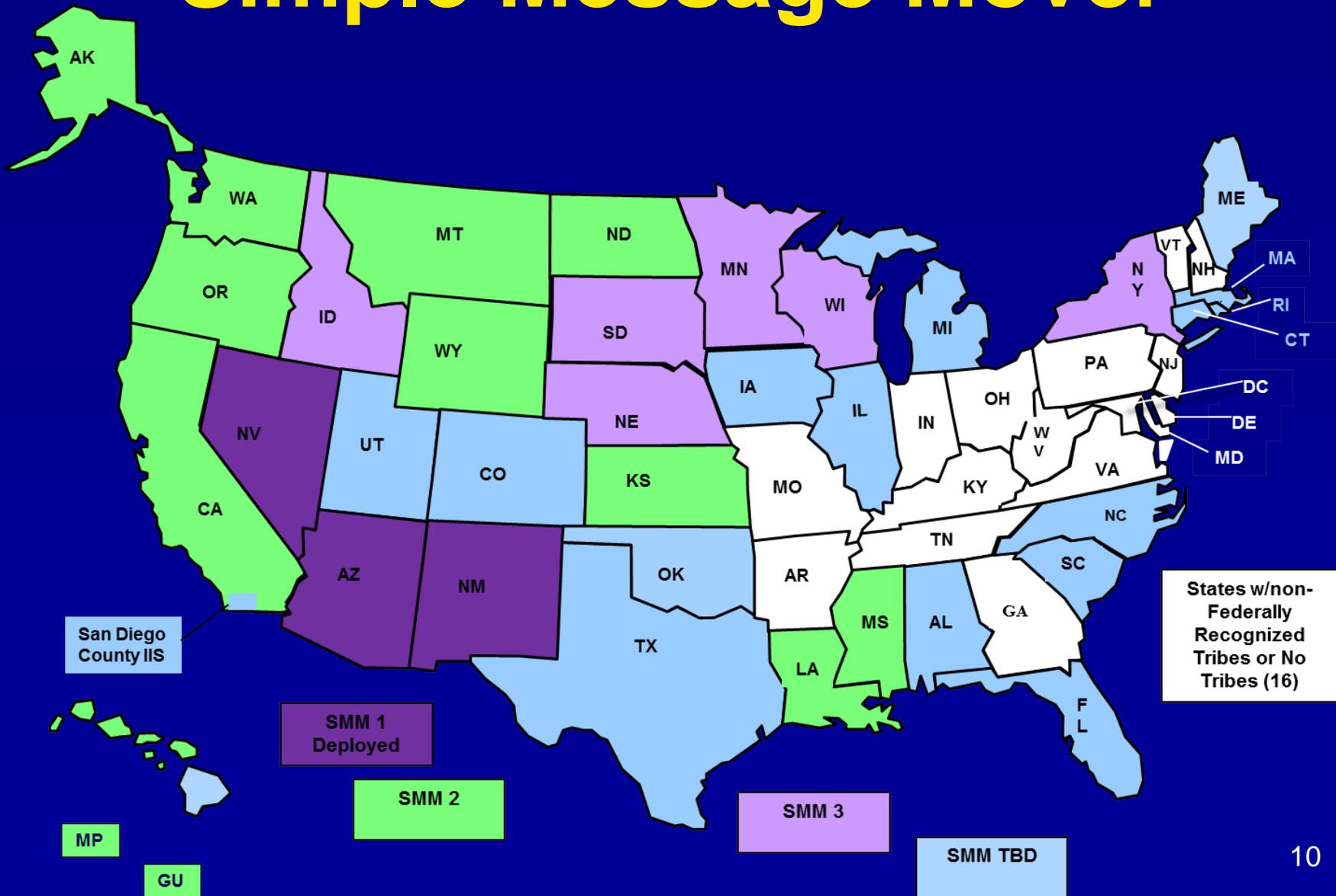
## IIS:

- Varied interpretation of the HL7 standard
- Varied transport standards used
- Complex security requirements
- Variability in acknowledgments (ACK) and their interpretation

# Software Used

- RPMS Immunization Module - BI
- IHS Immunization Data Exchange Software – BYIM
  - Usually IIMM on RPMS Menu
- Web Services software – non IHS software called Simple Message Mover

# Simple Message Mover





# **IMMUNIZATION INTERFACES AND MEANINGFUL USE STAGE 2**

# Key Elements of Meaningful Use - IIS

Stage 1	Stage 2
IIS submission is menu option	IIS submission is core
Test message to IIS; ongoing submission if successful/possible	“Successful ongoing submission”
Dummy data permitted for test	“Actual patient data is required” for ongoing submission
HL7 2.3.1 or 2.5.1	HL7 2.5.1 only* <i>(including Stage 1 in 2014)</i>
Transport not specified	Transport as specified by Local Health Agency (LHA)
Provider attests to having made a test; may be audited but no documentation prescribed	Provider attests to ongoing submission; proof of submission provided by LHA

\* HL7 2.5.1 – ONC specifically references Implementation Guide v. 1.4, see ONC Final Rule Federal Register Vol. 77, No. 171, p. 54240.

# SMM Transport Standards

- HTTPS Post
  - Old IIS transport standard, still used by many IIS
- SOAP Web Services
  - New standard is called TLEP
  - Many IIS have created variations similar to TLEP standard
  - Simple Message Mover adapted for variations
- PHIN-MS
  - Could support in the future
- sFTP, FTPS, etc. – not supported

# “Ongoing Submission”

- **If IIS is able to accept submission**
  - CMS repository where Public Health Authorities (PHAs) can report if they’re accepting submissions.
  - PHAs will be asked to report in first 60 days of reporting period.
- **If previously submitting (Stage 1), then continue.**
- **EPs/EHs who register with PHA in first 60 days qualify even if in an on-boarding queue.**
  - EPs/EHs must be responsive to PHA while in-queue:  
**The measure will not be met if the provider:**
    - Fails to register his/her intent by the deadline; or
    - Fails to participate in the on-boarding process as demonstrated by failure to respond to the PHA written requests for action within 30 days on two separate occasions.

# The Grandfather Clause

- However, if EPs prior to CY 2014 and eligible hospitals and CAHs prior to FY2014 have achieved successful ongoing submission using EHR technology certified to the 2011 Edition EHR certification criteria (HL7 2.3.1 only), it is acceptable to continue this ongoing submission and meet the Stage 2 measure for as long as HL7 2.3.1 continues to be accepted by the immunizations information system or immunization registry.
- Already doing ongoing submission using 2.3.1
- IIS continues to support/accept 2.3.1



# Exclusions from Immunization MU Measure

- **Provider doesn't administer immunizations.**
- **No IIS, or IIS can't receive submissions in a format that certified EHR can send.**
- **IIS has not reported its capability (to CMS) in time.**
- **IIS cannot enroll additional providers in time.**
  - Note: For (2), exclusion is not available if PHA has designated an intermediary such as an HIE to translate data to a format IIS can accept.

# Immunization Interchange Management - BYIM

IHS software used by RPMS sites  
to submit (and receive)  
immunization information  
to/from IIS

# Software Enhancements: When We Make Changes

- Interfaces require that RPMS message submissions are compatible with IIS requirements. When a change is requested in BYIM, it must:
  - Conform to CDC standards and NIST certification requirements.
  - NOT clash or conflict with current practice, not otherwise specified by CDC standard.
  - Be feasible in terms of BI data collection.

# Development Priorities

- Align message to National Institute of Standards and Technology (NIST) EHR Certification specifications.
- Achieve widespread interoperability in:
  - Messaging (what the message says).
  - Transport (how the message is conveyed).
- Create a process that enhances RPMS user uptake.

# Software Updates

## BYIM 2.0, patch 4 – Certification Patch

- Released: January 2014

## BYIM version 2.0 patch 5– MU2 Attestation

- Release: Expected November 2014

## BYIM version 3.0 – Query Interfaces

- Maintains batch interfaces, allows additional real-time interactions
- Allows a provider to access immunization history on specific patients
- Release: TBD 2015

# Road Map

Interfacing usually requires the cooperation of four independent entities:

- State or Local IIS Project
- Immunization Provider
- IIS Vendor
- EHR Vendor

Good communication and adherence to national standards help this process work well.

# Working Together on Data Exchange

1. State and IHS Initial Q&A
2. Determine contacts
3. Determine software specifications
4. Test Messaging
5. Testing Phase
6. Production at pilot site
7. Rollout to other sites in same state

# Important to Remember for MU Stage 2

- IHS IT presence critical
- Process must be assigned and ongoing
- It's a partnership – clinical and IT
- Initial phase will involve national and area teams
- Attestation and ongoing submission will rely on RPMS site and IIS relationship
- Use of SMM dependent on configuration

# Supporting the Immunization Providers

- IT Site Managers
- Clinical Applications Coordinators
- Area Site Analysts
- OIT Helpdesk
- Subject Matter Experts
- State IIS personnel
- State IIS vendors

# What Data Does RPMS Send?

- Demographic data, such as:
  - **Patient ID Patient Name (last, middle, first)**
  - **Date of birth**
  - **Sex (M or F or Unknown)**
  - **Race = AI/AN or Unknown**
  - **Ethnicity**
- Vaccine Administration data, including:
  - **Date of vaccine**
  - **Date of data transfer**
  - **Vaccine CVX code**
  - **01 = Historical 00 = Administered**
  - **Facility**
  - **Lot #, Manufacturer**

# Interface Success - Arizona

- As of 3/07, total number of records received by Arizona IIS (ASIIS) from IHS/Tribal sites = 2.5 million
- Initial exports from 6 IHS facilities to ASIIS
  - 1,128,380 shots for 87,737 people
  - New to ASIIS: 920,602 shots for 37,932 people
- Export from ASIIS to IHS facilities
  - New to IHS: 490,449 shots

# BYIM First Steps

- Set up a user account for your site with the state IIS.
- If you are not already exchanging data, arrange with state registry contacts and the IHS Immunization Program to conduct test messaging.
- Per the System Requirements (BYIM Installation Manual), install and set up the HL7 Communications Bridge. This will require contact with the IIS.

# The Dilemma

With HL7 message and transport capability,  
why aren't we more interoperable?

