Electronic Health Record Adoption

Progress and Impact on Public Health

Electronic Health Record Adoption and Meaningful Use

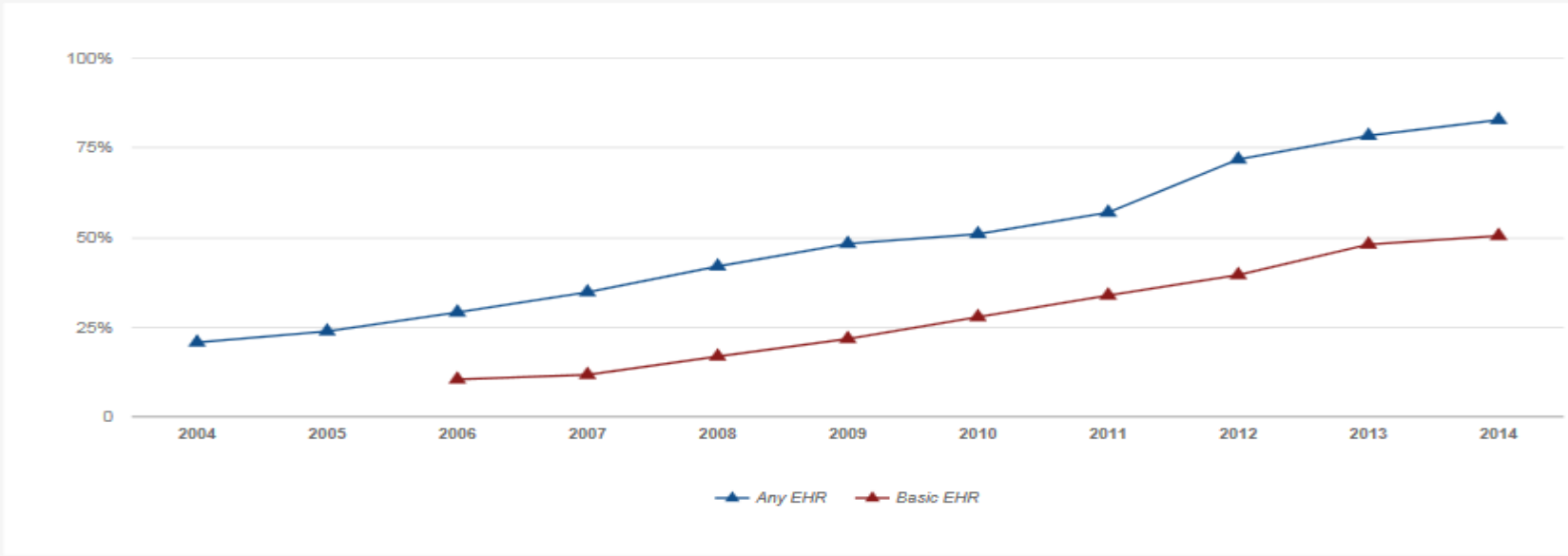
Stage 1 and 2 Trends

Physician Adoption of EHR Technology

Office-based Physician Electronic Health Record Adoption: 2004-2014

EHR adoption has nearly doubled since 2008

2014



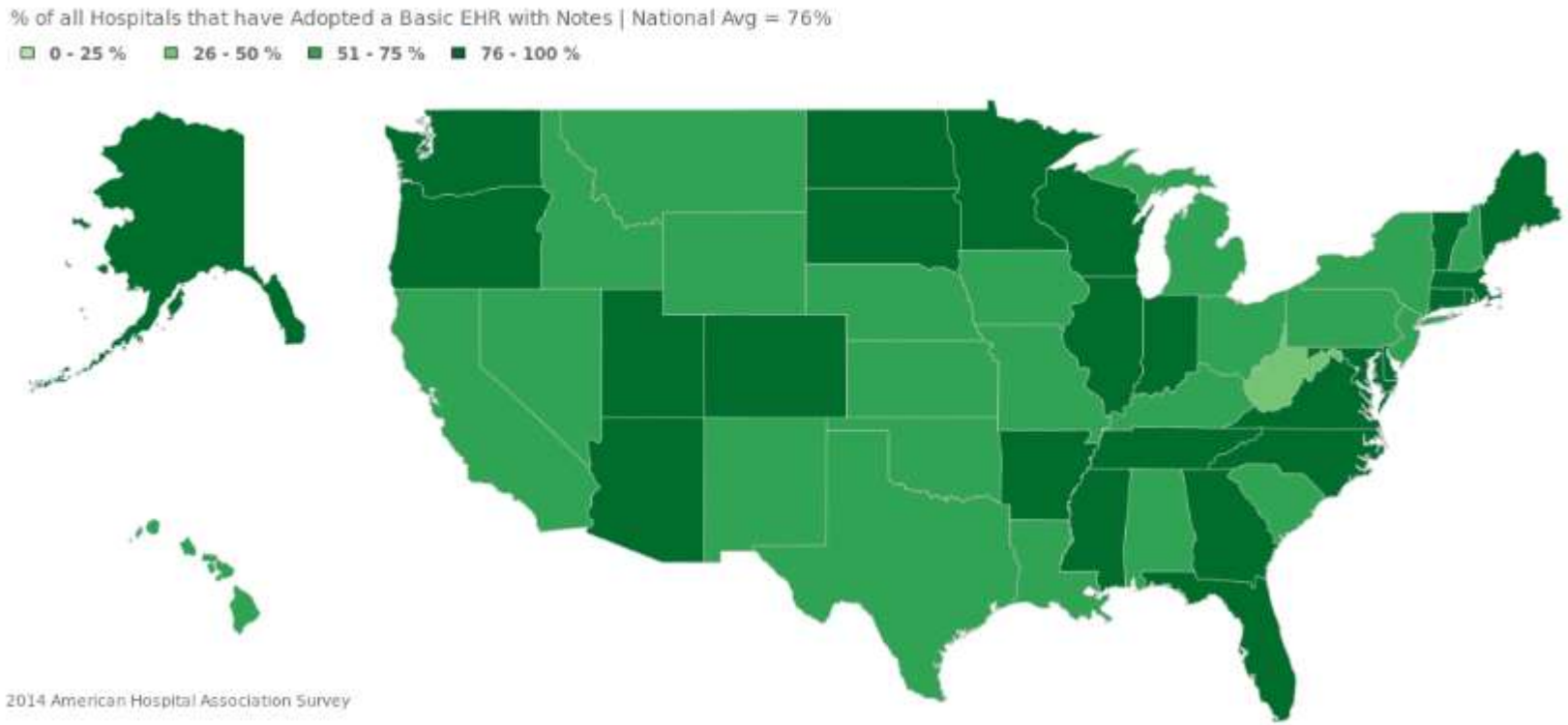
Percentage of Office-based Physicians with Electronic Health Record System

2004 - 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Any EHR	20.8%	23.9%	29.2%	34.8%	42%	48.3%	51%	57%	71.8%	78.4%	82.8%
Basic EHR	--	--	10.5%	11.8%	16.9%	21.8%	27.9%	33.9%	39.6%	48.1%	50.5%

Office of the National Coordinator for Health Information Technology. 'Office-based Physician Electronic Health Record Adoption: 2004-2014,' Health IT Quick-Stat #50. dashboard.healthit.gov/quickstats/pages/physician-ehr-adoption-trends.php. September 2015.

Hospital Adoption of EHR Technology

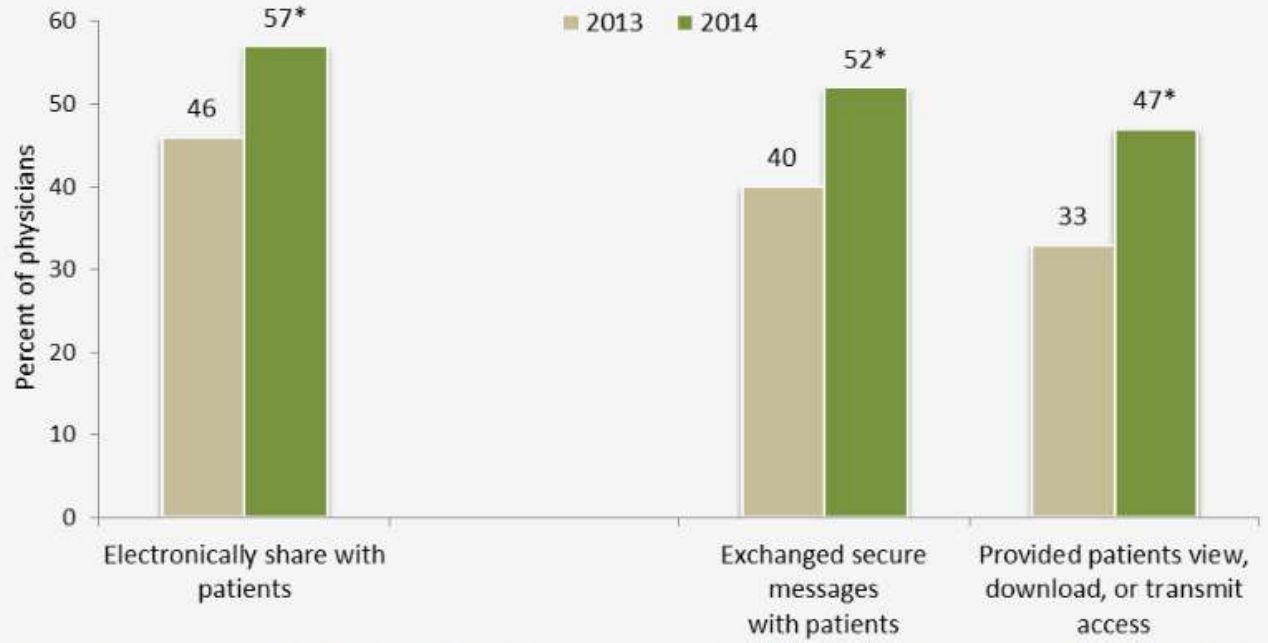


Office of the National Coordinator for Health Information Technology. 'Non-federal Acute Care Hospital Health IT Adoption,' Health IT Dashboard. http://dashboard.healthit.gov/dashboards/hospital-health-it-adoption.php. October 2015.

Physician Health Information Exchange (HIE)

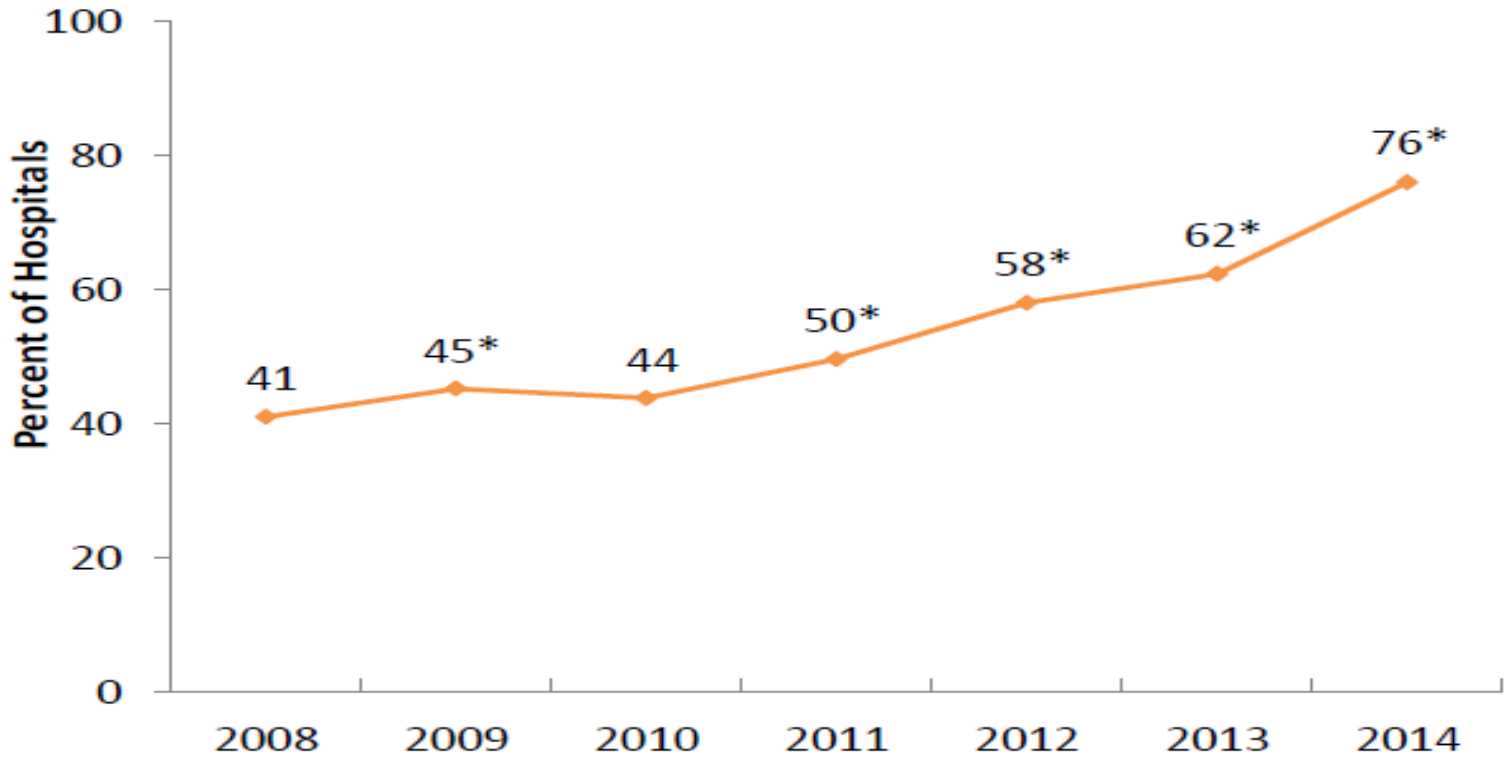
More than half of physicians electronically shared health information with their patients in 2014.

Figure 1: Proportion of physicians who electronically shared health information with patients in 2013 and 2014.



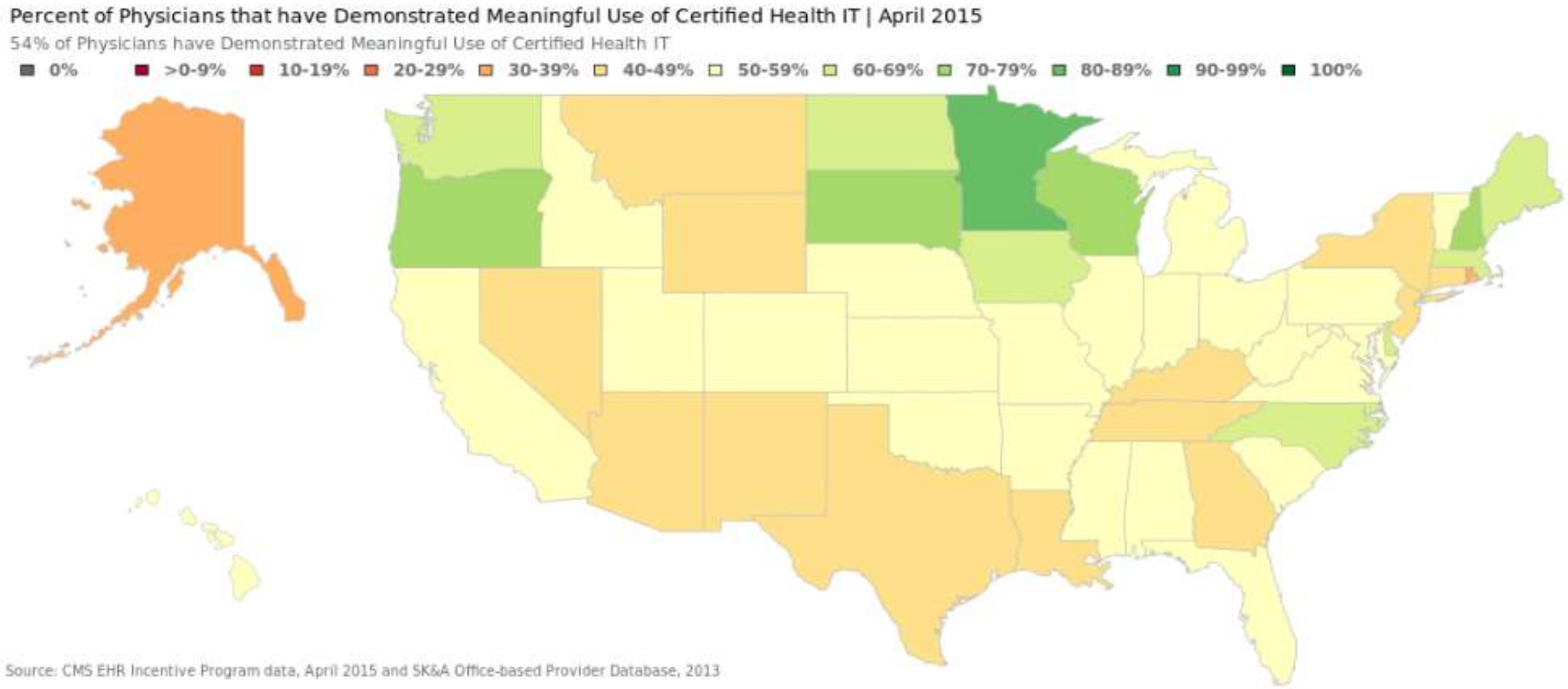
NOTES: * Statistically different from 2013 value at p<0.05. "Electronically share with patients" shows the proportion of unique providers who either exchange secure messages or provide patients access to their electronic health information.
SOURCE: 2013 and 2014 National Electronic Health Record Surveys.

Hospital HIE with Ambulatory and Non-affiliated Hospitals

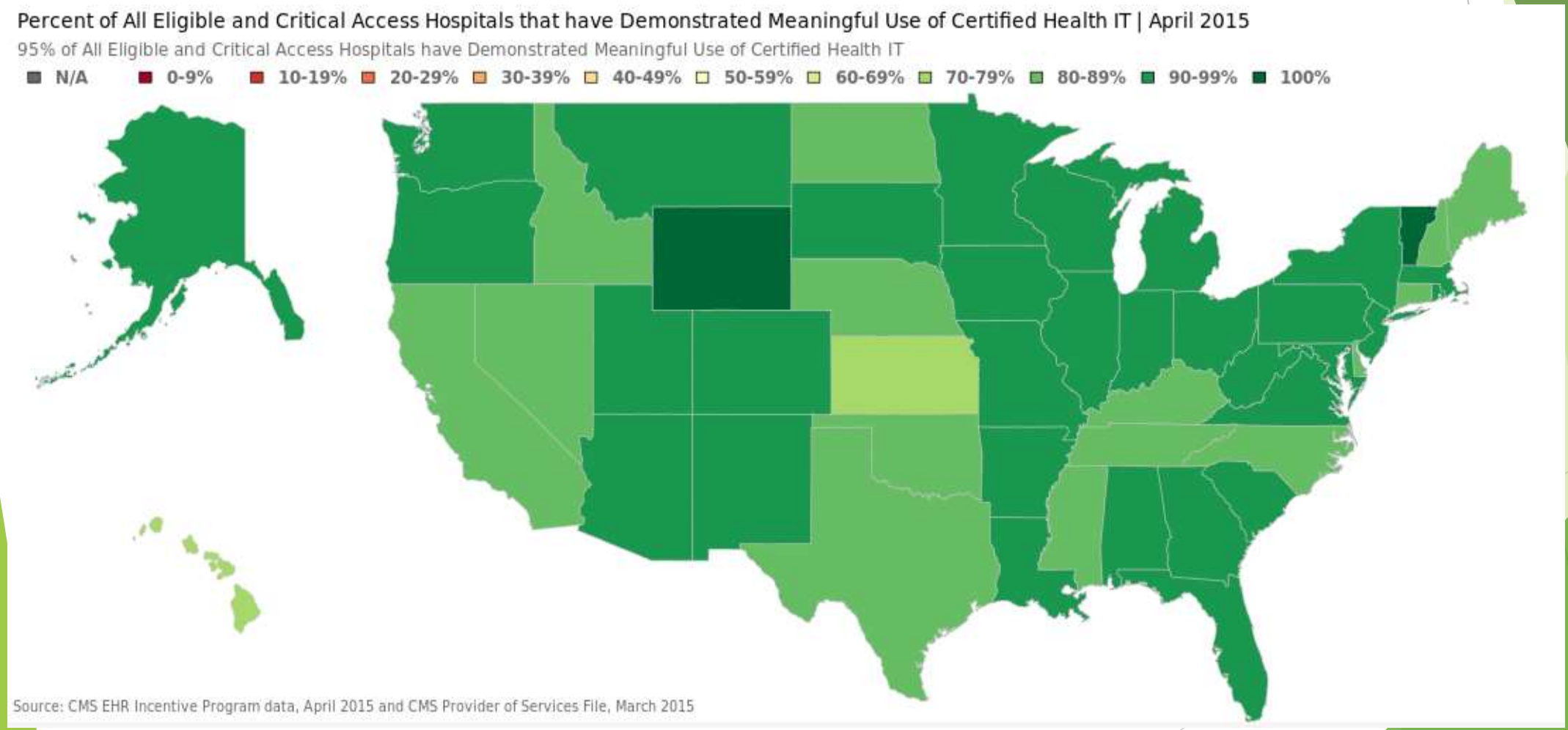


SOURCE: ONC/American Hospital Association (AHA), AHA Annual Survey Information Technology Supplement.
NOTES: Percent of non-federal acute care hospitals that electronically exchanged laboratory results, radiology reports, clinical care summaries, or medication lists with ambulatory care providers or hospitals outside their organization: 2008-2014
*Significantly different from previous year ($p < 0.05$).

Physician Demonstration of Meaningful Use (MU)

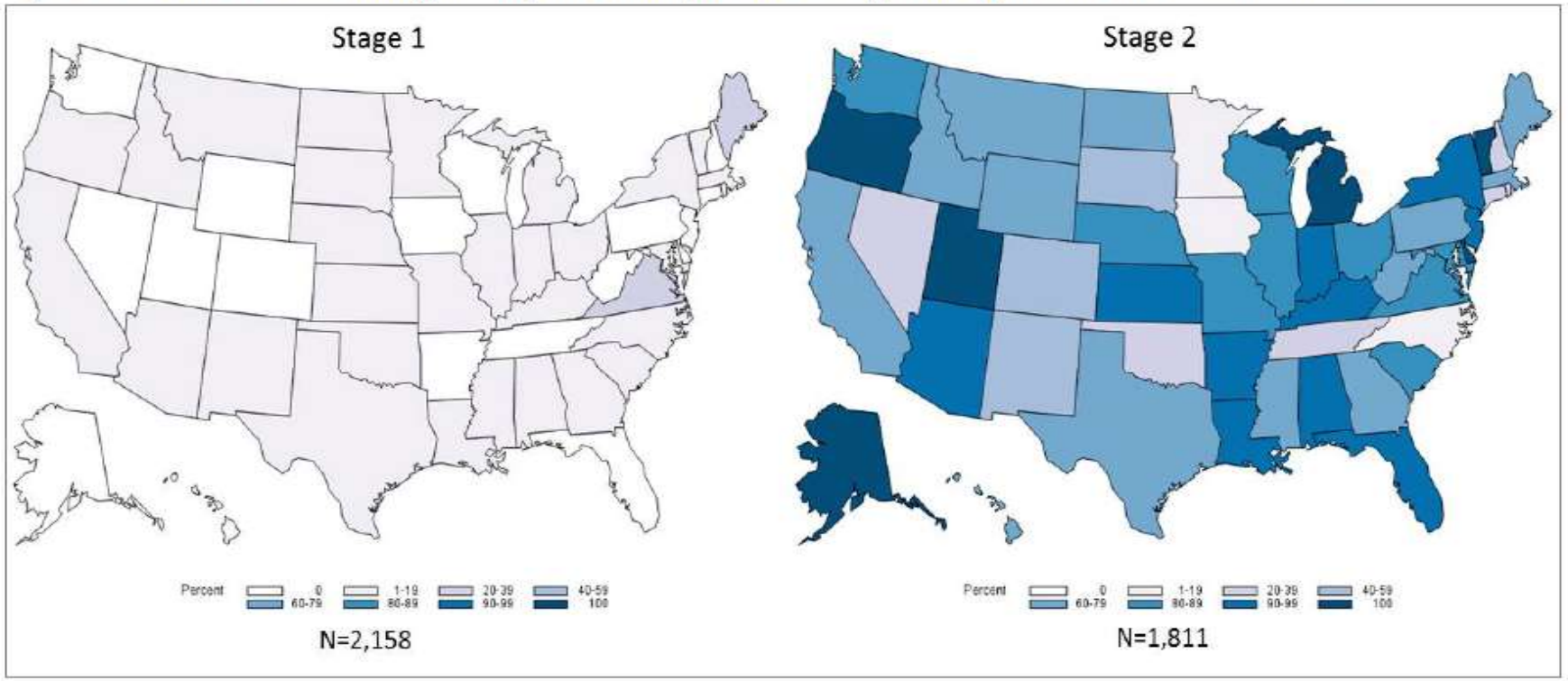


Hospital Demonstration of Meaningful Use (MU)



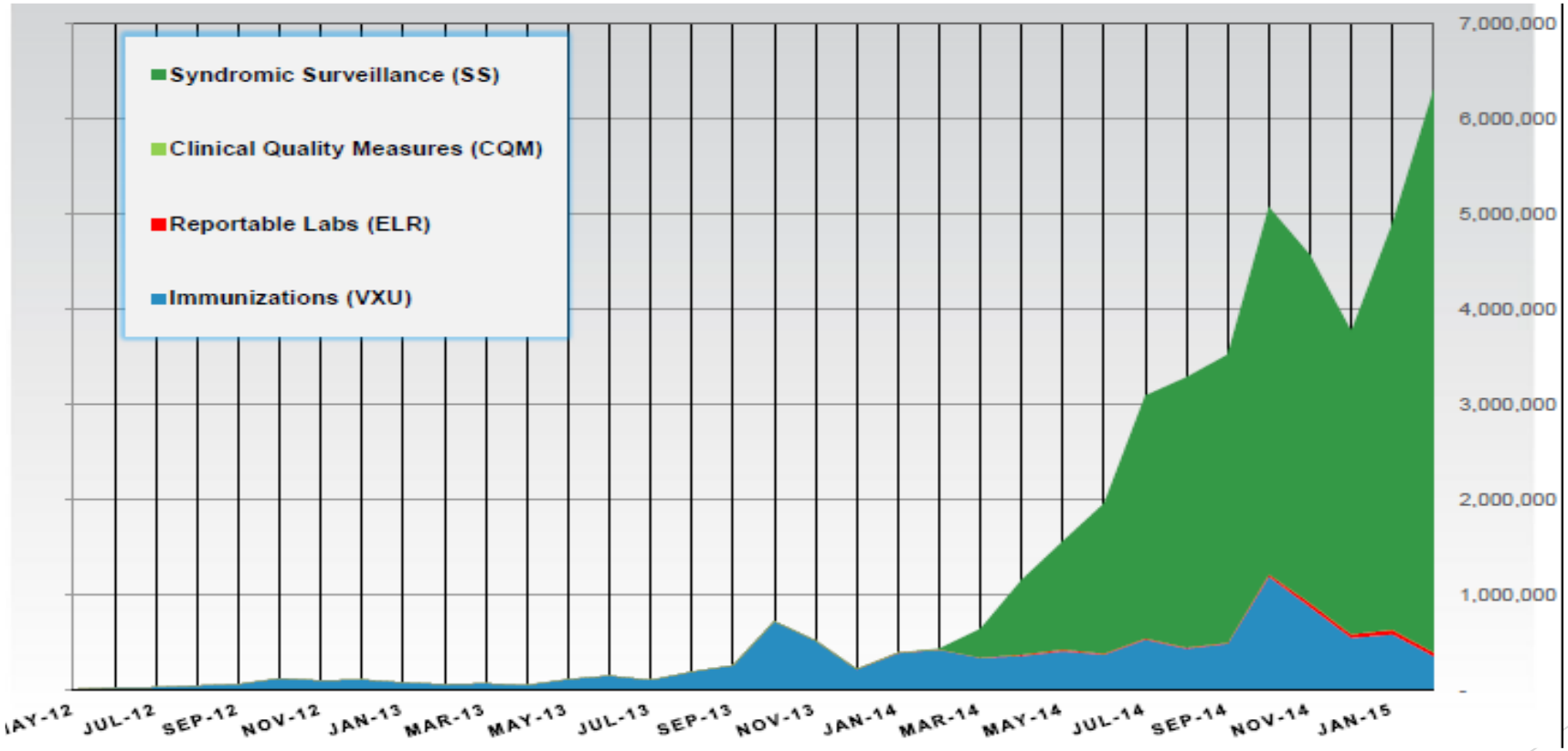
Electronic Reporting to Public Health Agencies (PHA)

Figure 1: Percent of Medicare eligible hospitals that reported on all applicable public health measures in 2014.



SOURCE: Medicare EHR Incentive Program Data through December, 2014.
NOTE: Includes eligible hospitals reporting to the Medicare EHR Incentive Program for Fiscal Year 2014. (N=3,969) Data available in Table A1.

Meaningful Use Public Health Submissions in Michigan



EHR Incentive Programs 2015 and Beyond

2015 – 2017 Modification Rule and Stage 3

Changes for 2015-2017 (Modified Stage 2)

Final Rule for Medicare and Medicaid EHR Incentive Programs:

- Changes EHR reporting period in 2015 to 90-day period to accommodate modifications
- Aligns EHR reporting period with full calendar year
- Streamlines program by removing redundant, duplicative and topped out measures
- Modifies patient action measures related to patient engagement
- Modifies public health reporting requirements

Alignment of Meaningful Use

The rule reconciles measures to align 2015-2017 (Modified Stage 2) with Stage 3 to:

- Prepare providers to report Stage 3 criteria in 2018
- Reduce provider burden and create a single set of sustainable objectives that promote best practices for patients
- Enable providers to focus on objectives, which support advanced use of health IT, such as:
  - Health information exchange
  - Consumer engagement
  - Public health reporting

Modified Stage 2 Objectives

1. Protect Patient Health Information
2. Clinical Decision Support
3. CPOE
4. Electronic Prescribing (eRx)
5. Health Information Exchange
6. Patient Specific Education
7. Medication Reconciliation
8. Patient Electronic Access (VDT)
9. Secure Messaging (EPs only)
10. Public Health and Clinical Data Registry Reporting

Stage 3 Objectives

1. Protect Electronic Health Information
2. Electronic Prescribing (eRx)
3. Clinical Decision Support
4. Computerized Provider Order Entry (CPOE)
5. Patient Electronic Access to Health Information
6. Coordination of Care through Patient Engagement
7. Health Information Exchange
8. Public Health Reporting

http://www.cms.gov/EHRIncentivePrograms/

Public Health Objective

2015-2017 and Stage 3

Public Health Objective: Eligible Professionals (EPs)

Stage 1 (2014)	Stage 2 (2014)	2015-2017	Stage 3 2017	Stage 3 2018+
2 Menu Objectives • Immunizations • Syndromic	**1 Core Objective** • Immunizations **3 Menu Objectives** • Syndromic • Cancer • Specialized Registry	**1 Objective** **3 Measures** • Immunizations • Syndromic • Specialized Registry	**1 Objective** **5 Measures** • Immunizations • Syndromic • Case Reporting • Public Health Registry • Clinical Data Registry	**1 Objective** **5 Measures** • Immunizations • Syndromic ***(Urgent Care Only)*** • Case Reporting • Public Health Registry • Clinical Data Registry
Requirement • Must Select 1 PH measure • Exclusions apply	**Requirement** • Immunizations • Select 3 of 6 Menu • No Public Health required • Exclusions apply	**Requirement*** • Must select 2 PH measures • Exclusions apply	**Requirement** • Must select 2 PH measures • Exclusions apply	**Requirement** • Must select 2 PH measures • Exclusions apply

*Alternate Specification: An EP scheduled to be in Stage 1 in 2015 may meet 1 measure.

Public Health Objective: Hospitals and Critical Access Hospitals

Stage 1 (2014)	Stage 2 (2014)	2015-2017	Stage 3 2017	Stage 3 2018+
3 Menu Objectives • Immunizations • Reportable Labs • Syndromic	**3 Core Objective** • Immunizations • Reportable Labs • Syndromic	**1 Objective** **4 Measures** • Immunizations • Syndromic • Reportable Labs • ***Specialized Registry***	**1 Objective** **6 Measures** • Immunizations • Syndromic • Reportable Labs • Case Reporting • Public Health Registry • Clinical Data Registry	**1 Objective** **6 Measures** • Immunizations • Syndromic • Reportable Labs • Case Reporting • Public Health Registry • Clinical Data Registry
Requirement • Must Select 1 PH measure • Exclusions apply	**Requirement** • Must meet 3 PH Objectives • Exclusions apply	**Requirement*** • Must select 3 PH measures • Exclusions apply	**Requirement** • Must select 4 PH measures • Exclusions apply	**Requirement** • Must select 4 PH measures • Exclusions apply

* Alternate Specification: Stage 1 eligible hospitals and CAHs may meet two measures to meet the threshold.

Public Health Objective 2015 and Beyond

The EP, eligible hospital or CAH is in ***active engagement*** with a public health agency to submit electronic public health data from CEHRT except where prohibited and in accordance with applicable law and practice.

Active Engagement

Means: The provider is in the process of moving towards sending "production data" to a public health agency or clinical data registry, or is sending production data to a public health agency or clinical data registry.

Option 1	• Completed registration* to submit data within 60 days of the start of reporting period AND • Is awaiting an invitation to begin testing and validation
Option 2	• Testing and validation in process, responding to PHA requests within 30 days • Failure to respond twice within the reporting period is failure to meet the measure
Option 3	• Electronically submitting production data • If issues with production and provider fails to respond to an issue within 30 days on two occasions the provider would fail to meet the measure

Public Health Reporting Measures 2015 – 2017*

Measure	Measure Specification	Maximum Time Used
Measure 1 – Immunization Registry Reporting	The EP, eligible hospital, or CAH is in active engagement with a public health agency to submit immunization data.	1
Measure 2 – Syndromic Surveillance Reporting	The EP, eligible hospital or CAH is in active engagement with a public health agency to submit syndromic surveillance.	1
Measure 3 – Specialized Registry Reporting	***The EP, eligible hospital, or CAH is in active engagement with a public health agency to submit data to a specialized registry.***	***2 for EP, 3 for eligible hospital/CAH***
Measure 4- Electronic Reportable Laboratory Results Reporting	The eligible hospital or CAH is in active engagement with a public health agency to submit ELR results.	N/A

*Alternate Specification: An EP scheduled to be in Stage 1 in 2015 may meet 1 measure and an eligible hospital or CAH scheduled to be in Stage 1 in 2015 may meet two measures.

Specialized Registries (2015–2017)

- Eligible Professionals may select 2 different registries
- Hospitals may select 3 different registries
- Cancer reporting is an option for eligible professionals only
- Providers may use electronic submission methods beyond the functions of CEHRT to meet the requirements
  - However, if a standard is named in the ONC standards final rule, it must be used, i.e. cancer reporting, case reporting, antimicrobial use and resistance reporting, health care surveys.
- Clinical Data Registries included
  - Prescription Drug Monitoring Reporting Program
  - National Quality Registry Network inventory

Specialized Registry Split for Stage 3*

Specialized Registry Split		
Case Reporting	**Public Health Registry**	**Clinical Data Registry**
• "reportable conditions" as defined by the state, territorial, and local PHAs to monitor disease trends and support the ***management of outbreaks***	• A registry that is administered by, or on behalf of, a local, state, territorial or national public health agency and which collects data for public health purposes. • 4 different registries can be selected to meet this measure	• Administered by, or on behalf of, other non-public health agency entities • 4 different registries can be selected to meet the measure

*The final rule includes a 60 day comment period on the Stage 3 portion of the rule.

New Opportunities Identified in Michigan

MDHHS Public Health System/reportable condition	Meets Case Reporting Definition	Meets Public Health Registry Definition	Ready to Receive from EH or EP	Plan to Receive from EH or EP
MDSS/Communicable Disease	Yes	Yes	Not at this time, receiving ELRs from hospitals	Yes, in future
Michigan Birth Defect Registry/Birth Defects	No	Yes	Yes, EPs only	Yes for EH in future
Michigan Cancer Registry	No	Yes	Yes, Eps only	Yes for EH in future
Michigan Birth Registry/ Birth Information	No	Yes	Not at this time	Yes, in future for both EH and EP
Michigan Death Registry/Death Information	No	Yes	Not at this time	Yes, in future for both EH and EP
Newborn Screening Critical Congenital Heart Defect Information	No	Yes	Yes for EH	No plans for EP
Early Hearing Detection and Intervention Information	No	Yes	Not at this time	Yes, in future for both EH and EP

New Challenges (2015-2017)

EPs select 2 out of potentially 8 public health systems

- Immunizations
- Syndromic
- MDSS case reporting
- Cancer reporting
- Birth Defect Reporting
- Birth reporting
- Death reporting
- EHDI

Hospitals select 3 out of potentially 10 public health systems

- Immunizations
- Syndromic
- MDSS case reporting
- Cancer reporting
- Birth Defect Reporting
- Birth reporting
- Death reporting
- ELRs (MDSS and cancer)
- Newborn screening
- EHDI

National Standard Birth Defects Case Report

Status of Effort Develop an Official National Standard

Objective of the Effort

- Improve the timeliness, accuracy and efficiency of birth defects case reports from health care providers.
- Enable tracking information on the health encounters of children with a reportable condition

Methods

- Exploit National Efforts at Health Information Exchange
- Model after National Standards for Public Health Reporting
- Leverage NBDPN to Find Universal Requirements
- Apply with HL7 to Establish a National Standard

We don’t have real-time case reporting in Michigan

…..because it takes too long

Environmental Developments

- Meaningful Use
  - Birth Defects Case Reports now a Certification Item for Hospitals
  - Public Health Case Reporting now lumped into a Single MU Measure.
- Rapid Evolution of Standards
  - CCDA
  - FHIR
    - Fast Healthcare Interoperability Resources

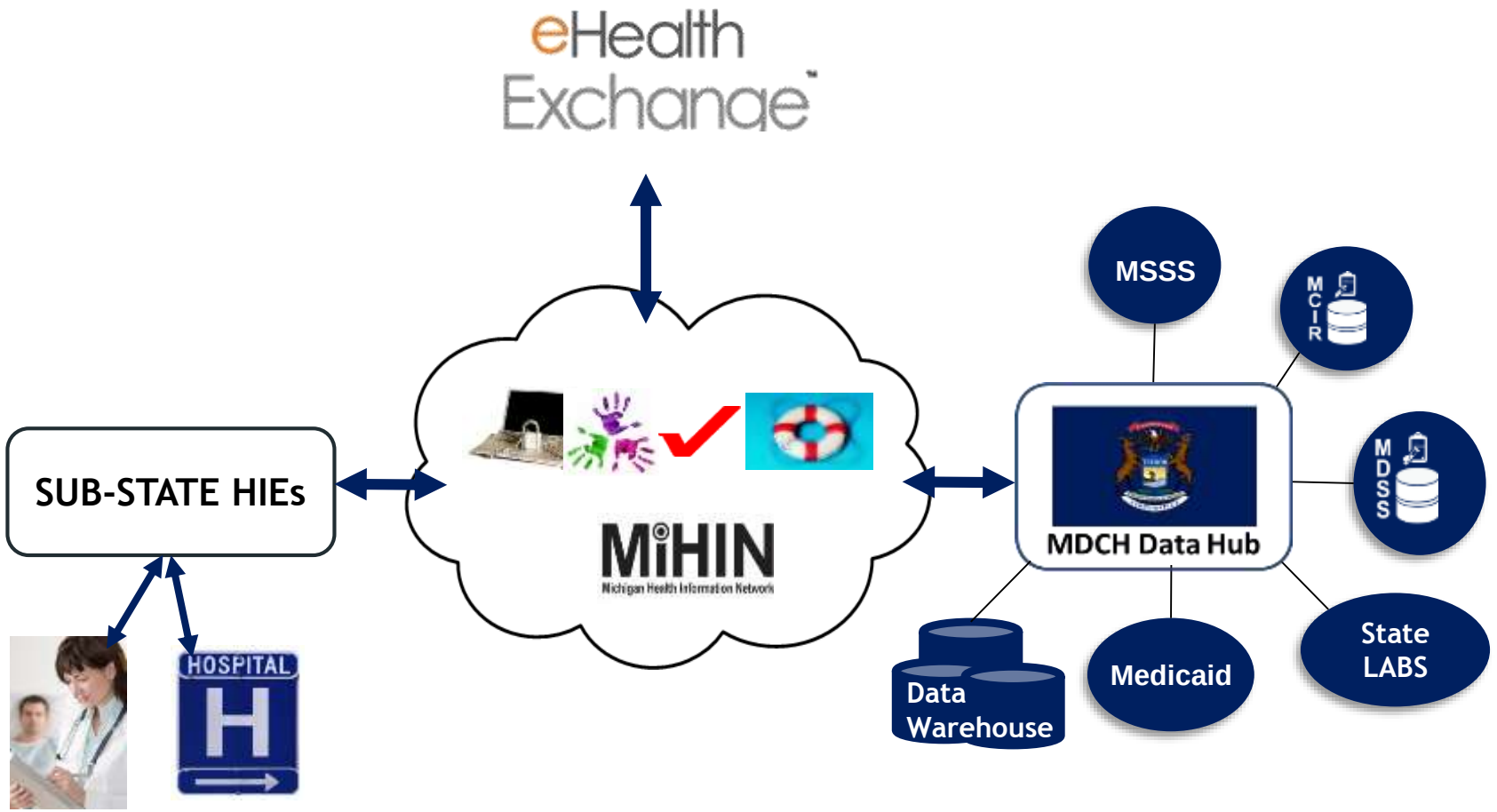
Quick Review of Happenings in Michigan

- Michigan Health Information Initiatives
- Transport
- Funding for the Effort
  - Chronic Disease Registry

MBDR
MICHIGAN
BIRTH DEFECTS REGISTRY


MiHIN Community
UPHIE
eHealth Exchange
State of Michigan
Health Plans
More to Come…
MICHIGAN HEALTH CONNECT
BEACON
GREAT LAKES
Jackson Community Medical Record
SEMHIE
INGENIUM
MiHIN
Shared Services
10

Michigan HIE



Infrastructure

- Registration
- Validation
- Message Management
- Process for Incorporating Data

Michigan Health IT

Home of the Michigan Medicaid EHR Incentive Program

Get E-mail Updates | Contact Us

Main | Dashboard | Tools & Resources | FAQ | Search

Announcements

- FAQs with Guidance on Switching EHR Vendors
- 2016 Payment Adjustment Fact Sheet for Hospitals Available
- How to Register for an OID
- Medicare Eligible Hospitals: Take Action by April 1!
- July 1, 2015 Deadline for 2016 Hardship Exemption

Overview for Professionals

Program introduction with links to guides & detailed information.

Meaningful Use (MU) Overview

Introduction to MU, AIU, EHR certification and more

Overview for Hospitals

Hospital specific program guides, attestation dates and links.

Public Health Reporting

Public Health Testing for Meaningful Use and Other Reporting

reasons for exclusion in Michigan. For example, providers in Stage 1 of MU who qualify for the exclusion for submitting data to the immunization registry should submit syndromic data in order to meet the public health requirement for MU.

Click the system name in the table below to obtain more detailed system-specific information and instructions on how to complete the MU requirements.

System Name	Meaningful Use	Available Since	Stage 1		Stage 2	
			EP	EH	EP	EH
Michigan Disease Surveillance System (MDSS)	Electronic Lab Reporting (ELR)	Fall 2010	N/A	≥ 1 test submission	N/A	Ongoing submission
Michigan Care Improvement Registry (MCIR)	Immunization Registry	Fall 2010	≥ 1 test submission	≥ 1 test submission	Ongoing submission	Ongoing submission
Michigan Cancer Surveillance Program (MCSP)	Cancer Registry	March 1, 2014	N/A	N/A	Ongoing submission	N/A
Michigan Birth Defects Registry (MBDR)	Specialized Registry	March 1, 2014	N/A	N/A	Ongoing submission	N/A
Michigan Syndromic Surveillance System (MSSS)	Syndromic Surveillance	August 1, 2013	≥ 1 test submission*	≥ 1 test submission*	Ongoing submission*	Ongoing submission

*MSSS is not accepting data from the following provider types, and therefore an exclusion is permitted for MU: Dentists, Dental Surgeons, Podiatrists, Optometrists/Ophthalmologists, Chiropractors, and Certified Nurse-midwives. For more information, see the MSSS Testing and Submission guide at https://www.michiganhealthit.org/public-health/msss/.

Public Health System Availability for Other Entities

Providers who wish to test and submit information electronically to a public health database but are ineligible for or do not wish to participate in the Medicaid or Medicare EHR Incentive Programs are still required to register in the HSTR using the button above.

The table below lists the Public Health systems that are available for reporting that is not meaningful-use related.


Michigan Health IT
Home of the Michigan Medicaid EHR Incentive Program
Get E-mail Updates
Contact Us
Main
Dashboard
Tools & Resources
FAQ
Search
PUBLIC HEALTH REPORTING
Submit Birth Defects Data to Michigan Birth Defects Registry
MBDR MICHIGAN
Submit Birth Defects Data to Michigan Birth Defects Registry
Birth defects are reportable in Michigan when diagnosed in stillborns, infants and children under the age of two years. Birth defects case reports are included in the statewide birth defects registry maintained by the Michigan Department of Health and Human Services (MDHHS). Reportable conditions include congenital, structural, endocrine and metabolic disorders; malignant or genetic conditions; and certain exposures in utero affecting the fetus. Birth defects surveillance is required by Michigan Act 236 of 1988 and associated administrative rules. Hospitals, clinical laboratories, health clinics, physicians, genetics counselors and other health professionals and health facilities involved in the diagnosis or treatment of children with birth defects are required to report. MDHHS has developed specifications and procedures for reporting birth defects through an electronic health records system (EHR). An EHR that can report birth defects diagnoses to DCH through this mechanism will be certified as reporting to a Specialized Registry, which is a Stage 2 Meaningful Use menu item. Procedures and specifications leverage the Clinical Document Architecture.
Meaningful Use and MBDR
Meeting MBDR's Ongoing Submission criteria will:
• Allow Eligible Professionals (EPs) to meet Menu Measure 6 of Stage 2 Meaningful Use (MU) (Specialized Registry)
Announcements
As of May 13, 2014, MBDR is available to receive birth
Instructions:
Stage 2 (Recall that this MU measure is only introduced for EPs in Stage 2.)
1. You have 60 days from the start of your EHR Reporting Period (Any calendar quarter in 2014; a full calendar year in 2015 and beyond) to register your intent in the Health System Testing Repository. Failure to do so by the 60-day deadline will mean that you will not be able to successfully attest to the Specialized Registry MU

Clinical Document Architecture (CDA)

- Health Level Seven (HL7) standard used for clinical document exchange
- Standard required for meaningful use:
  - Provide clinical summaries to patients
  - Provide summary of care for transition of care (TOC) or referrals (CCD)
  - Report cancer cases to a public health cancer registry
  - Report specific cases to a specialized registry (birth defect cases)
  - Submit electronically Clinical Quality Measures
- HL7 Message vs. HL7 CDA
  - HL7 Message– not a CDA, transient, snippets of data (syndromic, lab reporting)
  - HL7 CDA– longitudinal, patient events from multiple providers

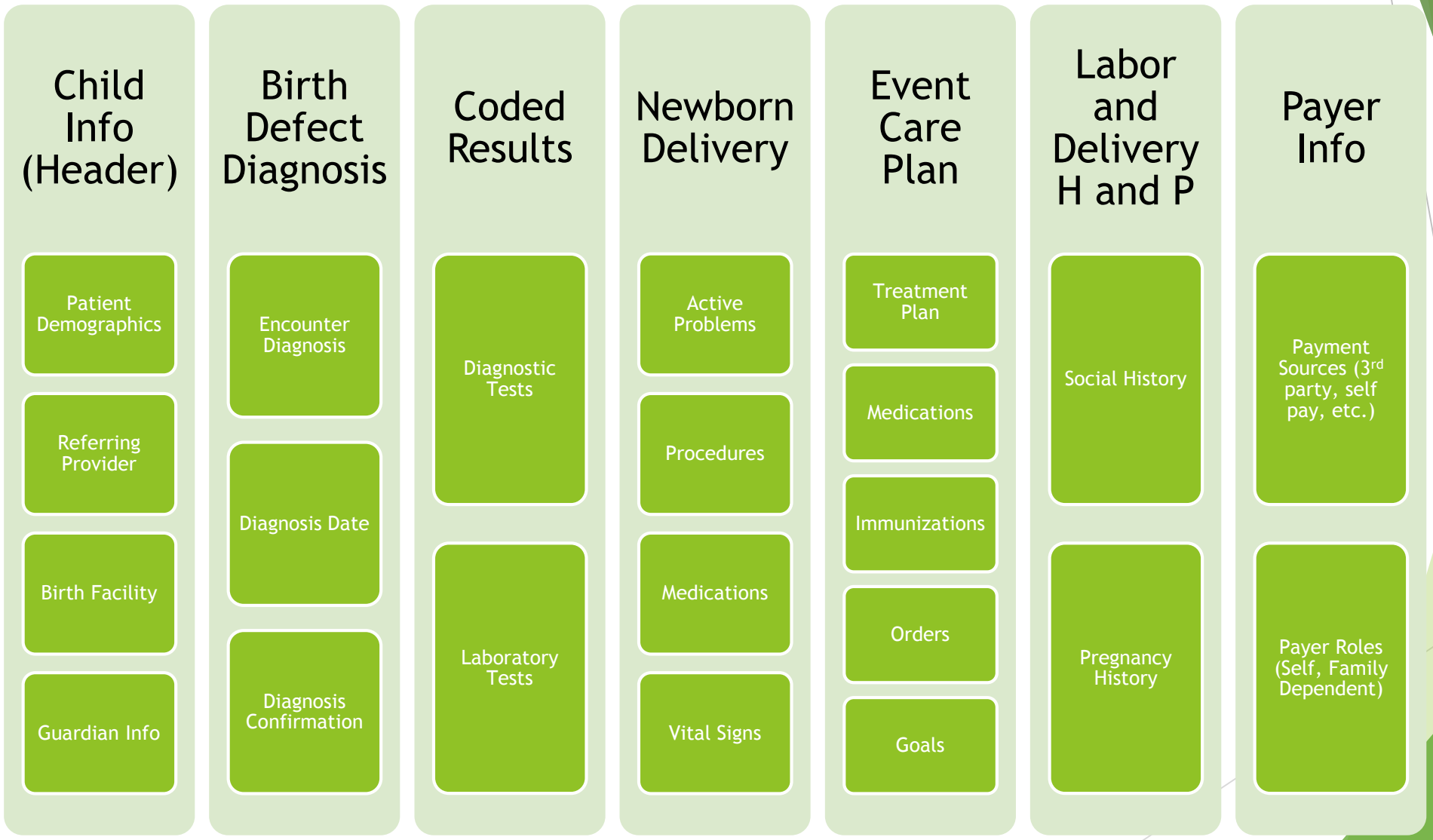
Ambulatory Healthcare Provider BxDefects Event Report

Patient	Baby Newborn	**Sex**	Female
Date of birth	October 5, 2013	**Place of Birth**	Beaverton, OR 97867, US Telecom information not available
Contact info	**Primary Home :** 1000 Home Drive Blue Bell, MA 02368, US Tel: (555)555-1212	**Account #**	998991 2.16.840.1.113883.19.5.99999.2 111-00-2330 2.16.840.1.113883.4.1
Document Id	2223 2.16.840.1.113883.3.564.1492		
Document Created:	October 7, 2013		
Performer	ETHAN NEWQUIST		
Author	EMORY WADDINGTON		
Contact info	**Work Place :** 8762 STONERIDGE CT STE 190 PASKENTA, CA 96074		
Encounter Id	3733dae9-2013-b04b-05d4-001A64958C30		
Encounter Date			
Personal Relationship	**Mother :** Mrs. Abigail Ruth from January 1, 1959 to October 25, 2011		
Contact info	17 Daws Rd. Blue Bell, MA 02368, USA Tel: (999)555-1212		
Personal Relationship	**Father :** Mr. Frank II Jones		
Contact info	**Primary Home :** 1357 Amber Drive Beaverton, OR 97006, US Tel: (555)555-2006		
Next of kin	**Grandfather :** Mr. Frank I Jones from January 1, 1959 to October 25, 2011		
Contact info	17 Daws Rd. Blue Bell, MA 02368, USA Tel: (999)555-1212		

XML Code Transformation to Human Readable

Birth Defect CDA and the CCD CDA

Birth Defect and CCD Common Elements

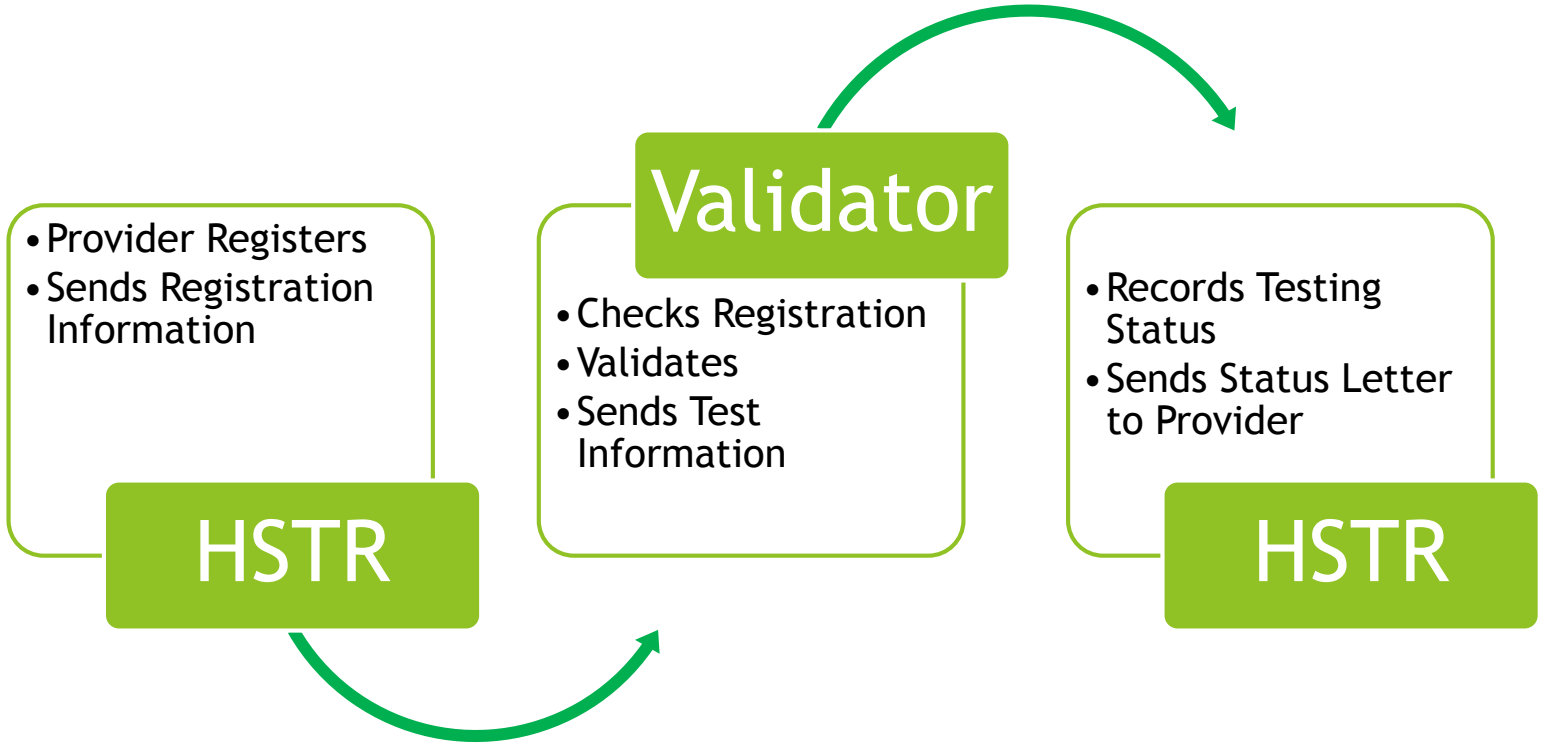


DQA Testing and Validation Purpose

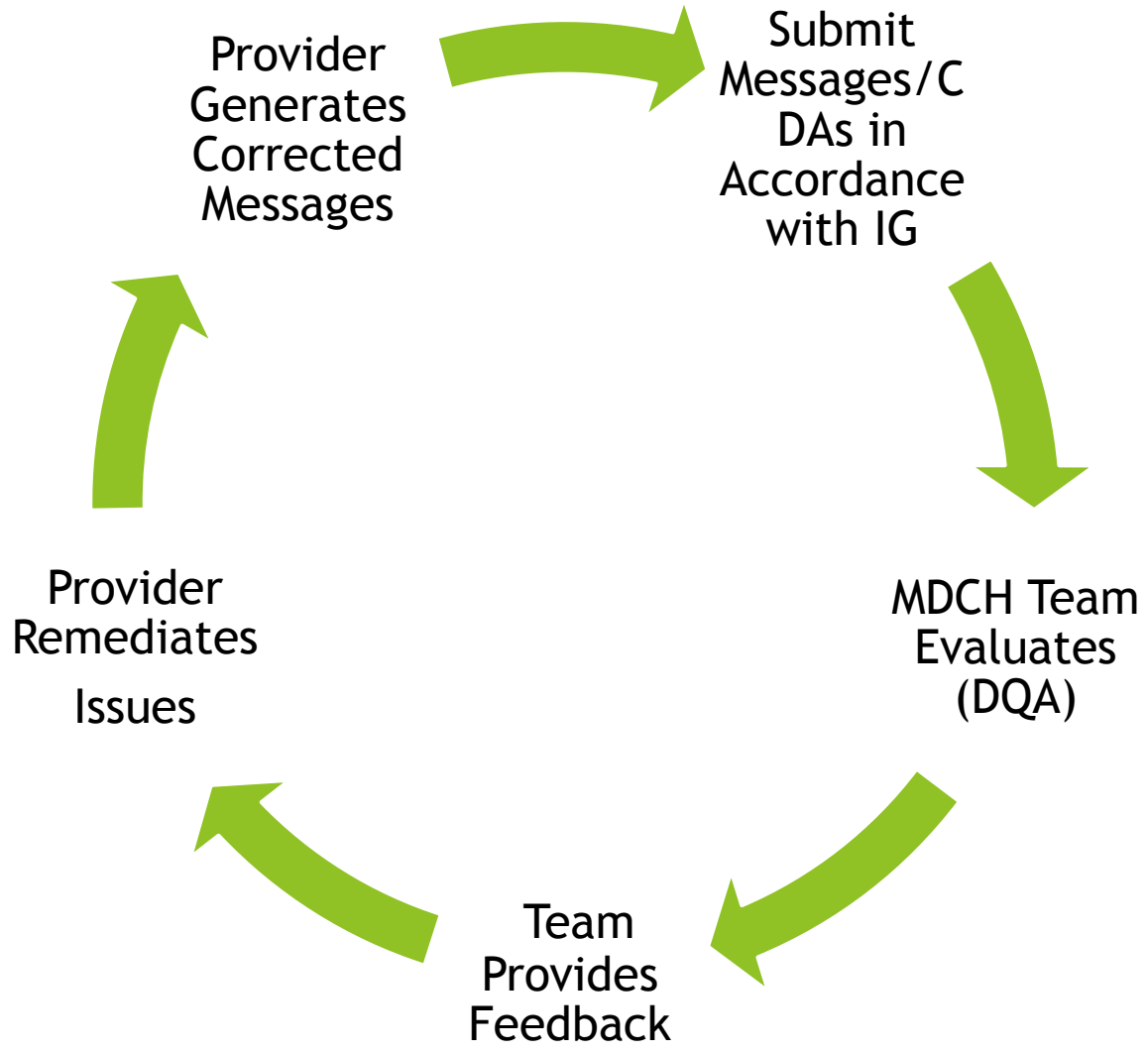
- Ensure providers have entered the required health information into the EHR
- Ensure the EHR technology is set up to electronically extract the information according to MDCH's HL7 Implementation Guides
- Ensure the data sent is what MDCH is expecting before adding the data into the registry/system
- Provide a tool to monitor and evaluate electronic submissions


MDHHS
Register
Log in
Michigan Health System Testing Repository
The Michigan Department of Health and Human Services has been charged with collecting and recording information on Eligible Professionals and Eligible Hospitals that test with one of the Public Health Meaningful Use measures for auditing purposes. This system will allow you to enter the required information and inform the public health system of your request to test for Meaningful Use.
Create a new account.
Register »
Log in with existing account.
Log in »
© 2015 v2.0.6 - Michigan Department of Health and Human Services | Questions and Support | Download HSTR User Guide

HSTR and Validator Interface



Pre-Production DQA Validation Cycle



Levels of Validation

Pre-production (MiHIN URL)	Production (MiHIN)	Data Quality Assurance (DQT)
Get it right while the Vendor is AVAILABLE • Structure and Content must conform to the IG • All required data elements • All required code sets and values (i.e. Birth Defects has 174 data elements and 90 different value sets	**Keep the Stream Going** • Validate for Structure • Is it what it says it is? • Return unreadable garbage	**Hold and Fix what you can** • Allows business to set the data quality threshold • Enables common coding errors to be mapped to the correct code set • Provides insight for data quality improvement

Message Archive Management

- Maintain original documents in a searchable format
- Store and search any document type
  - XML, Word, PDF, HL7, CSV, Excel, etc.
- User selected search fields
- Derived search fields
  - Functions of other data, joins to related data,
  - DB, File, Network services
- Documents viewed or pulled from repository as original data or as human-readable versions
- Cross link document results
  - Validation records, other records

Accomplishments Specific to Birth Defects

Implementation Guide

- Initiative began in 2012
- Developed draft message in 2013 and 2014
- Proposed to HL7 PHER in March 2014
  - *Public Health and Emergency Response*
- Published/Balloted by HL7 in January 2015
- Comments addressed through August
- PHER approval of DSTU in August
- Finalizing Revisions to IG
  - Target publication in December

Wide Range of Comments

- Clarifications
- Value Sets
- Protocols
- Consistency/Comparability
- Harmonization with Birth and Death Messages
- Upgrade from CDA 2.0 to CCDA

Development of the Guide

- NBDPN EHR/HL7 Work Group
- Universal list of registry items
- Universal list of case definitions
- Cross walk for ICD-9, ICD-10, BPA to SNOMED

XML – Database Integration in Registry

CCD/CDA Input

Shred/Parse XML

Document Repository

XML
HL7
pdf
Word
xlsx

EDRS

EBC

MBDR

Warehouse

XML
Output

Working Toward a Pilot

- Hoping for a Combined Pilot
  - Modifications for Michigan
  - Genesis Systems/Epic

Public Health Messaging
What is Coming On-board

- Cancer Reporting
  - On-Boarding Now
- Draft Standards for Live Birth/Fetal Death
  - Connectathon - Feasibility
- Draft Standards for Death
  - Being Used in Utah

Live Birth and Fetal Death Message

- Received Funding to Explore
- Extract Data from Hospital EHR
- Populate Birth Registry System
- Enable Completion and Certification
- String of Messages as Data Arrives in the EHR

Vital Records Published eVital Standards

For Birth/Fetal Death and Death Reporting

- Messaging Standards (HL7 V2.5.1) DSTU
- Document Standards (HL7 CDA) DSTU
- Content Profiles (IHE)
- Data Models (HL7)
- Functional Profiles (HL7)

http://www.cdc.gov/nchs/nvss/about_nvss.htm#evital_update

Michigan Activities
Live Birth and Mortality

- Gap Analysis
- Locating Data Within the CDA/CCDA
- Identifying Appropriate Value Sets
- Message Management
- Incorporation into Official Data
  - Certification

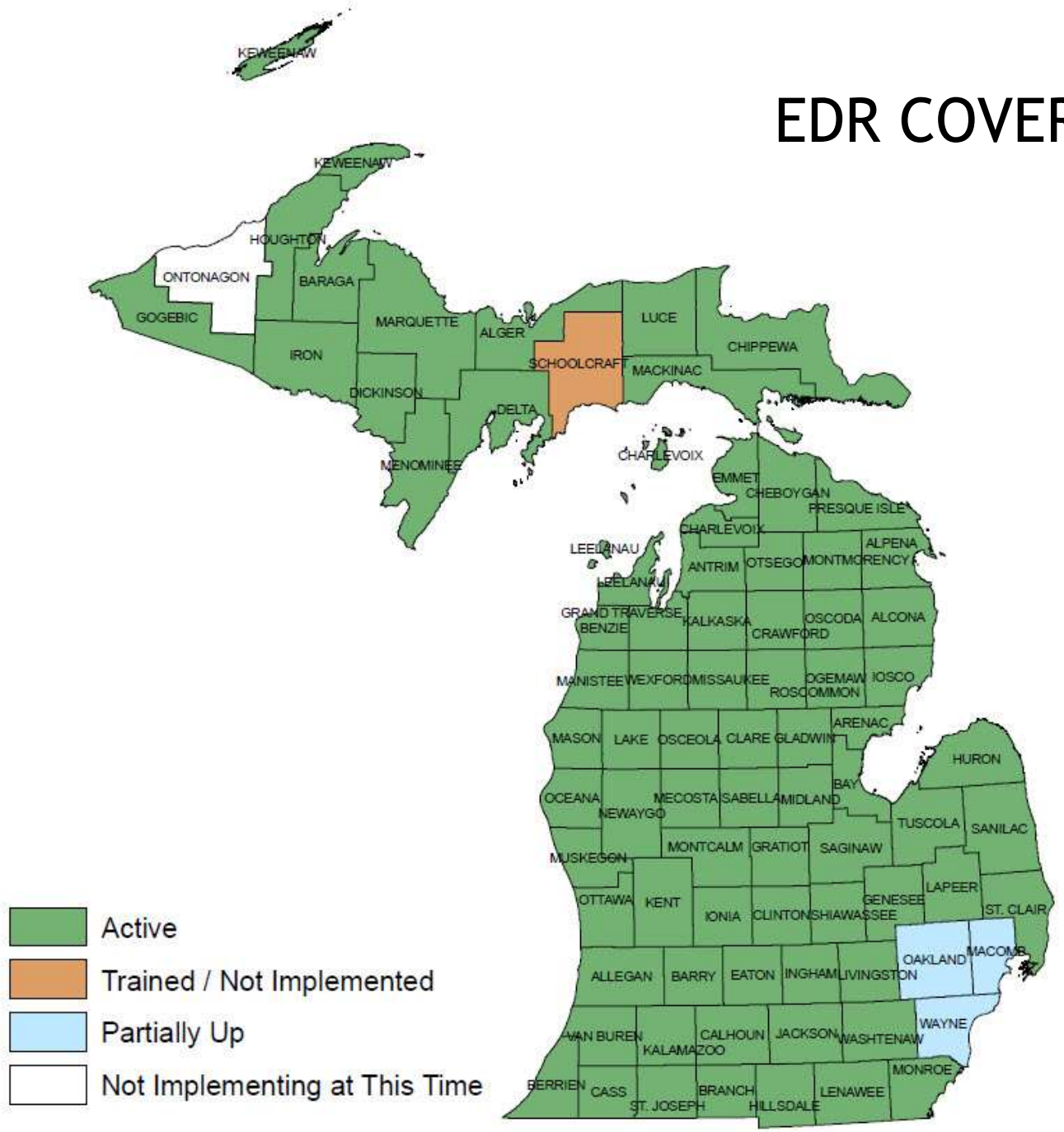
Death Message

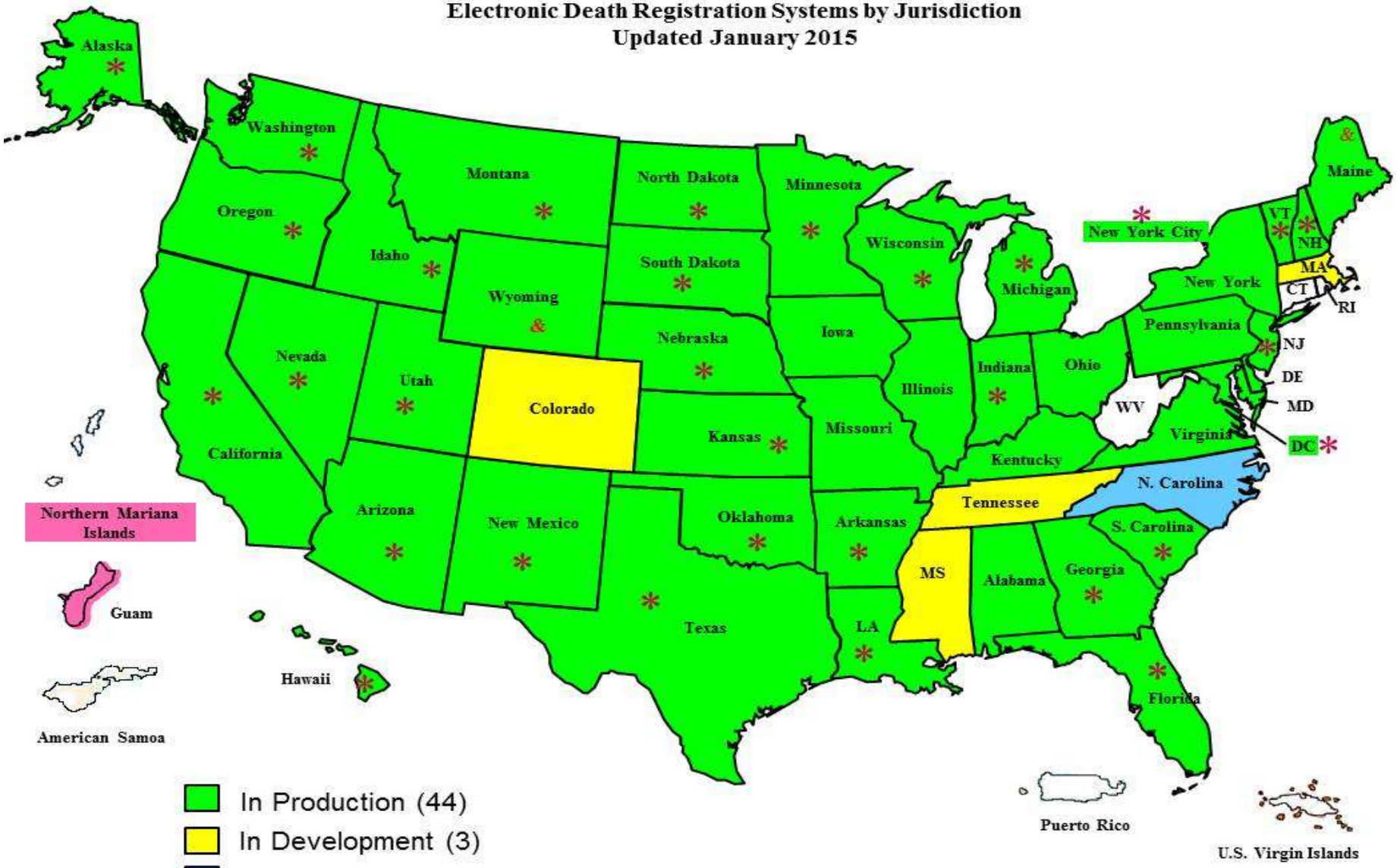
- HL7 Standard
- Vendor Builds a Screen to Organize Key Data
- Physician Completes
- Message Pushed to State
- Integrates EHR with State Reporting System
- Concept working for Hospital Deaths in Utah

Opportunities with Vital Statistics

- Pilot Medical Death Message
- Leverage FHIR to Inform Physician
- Push Death Data to Hospitals/Providers
  - Incentivize EDR use

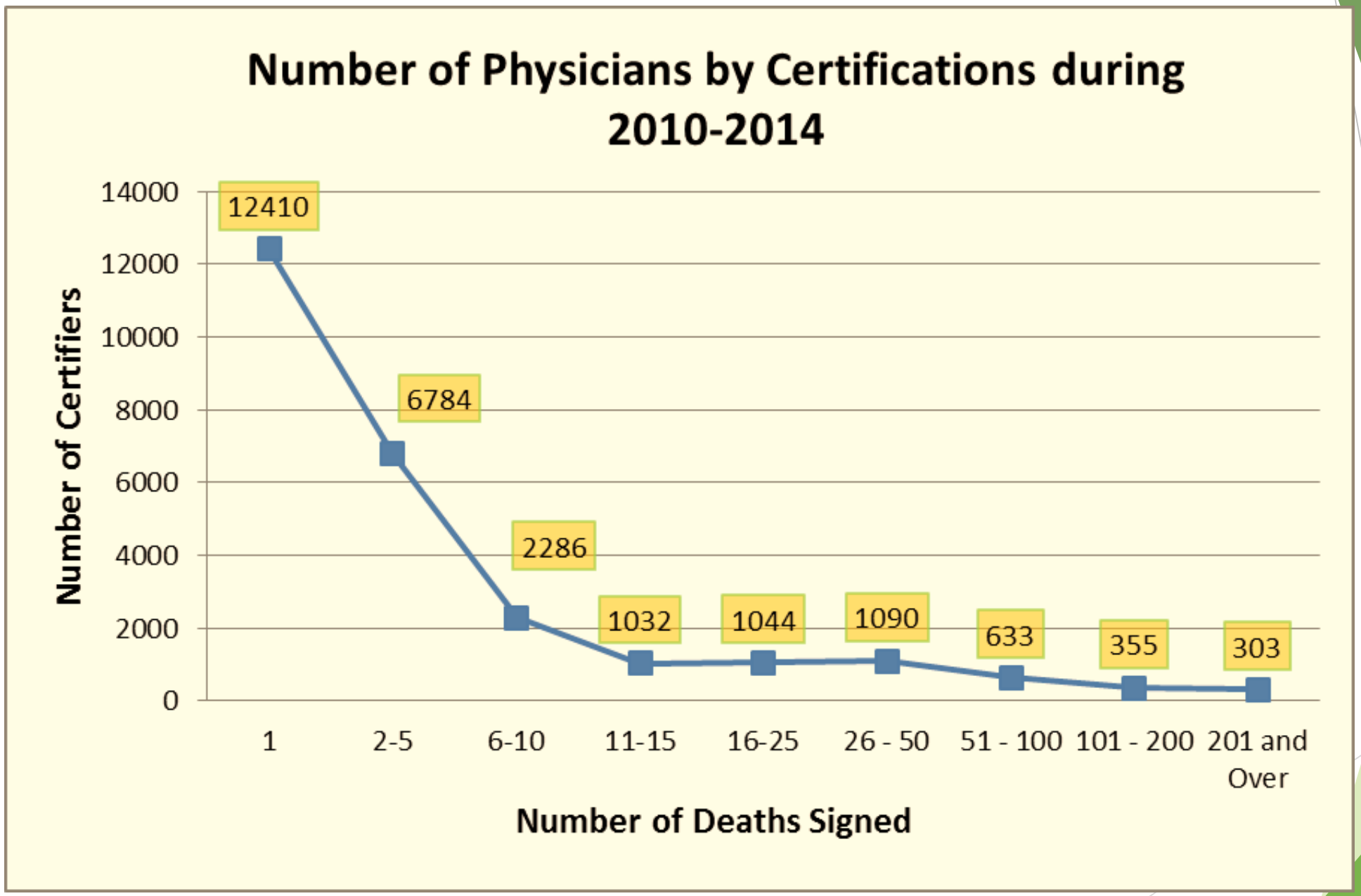
EDR COVERAGE

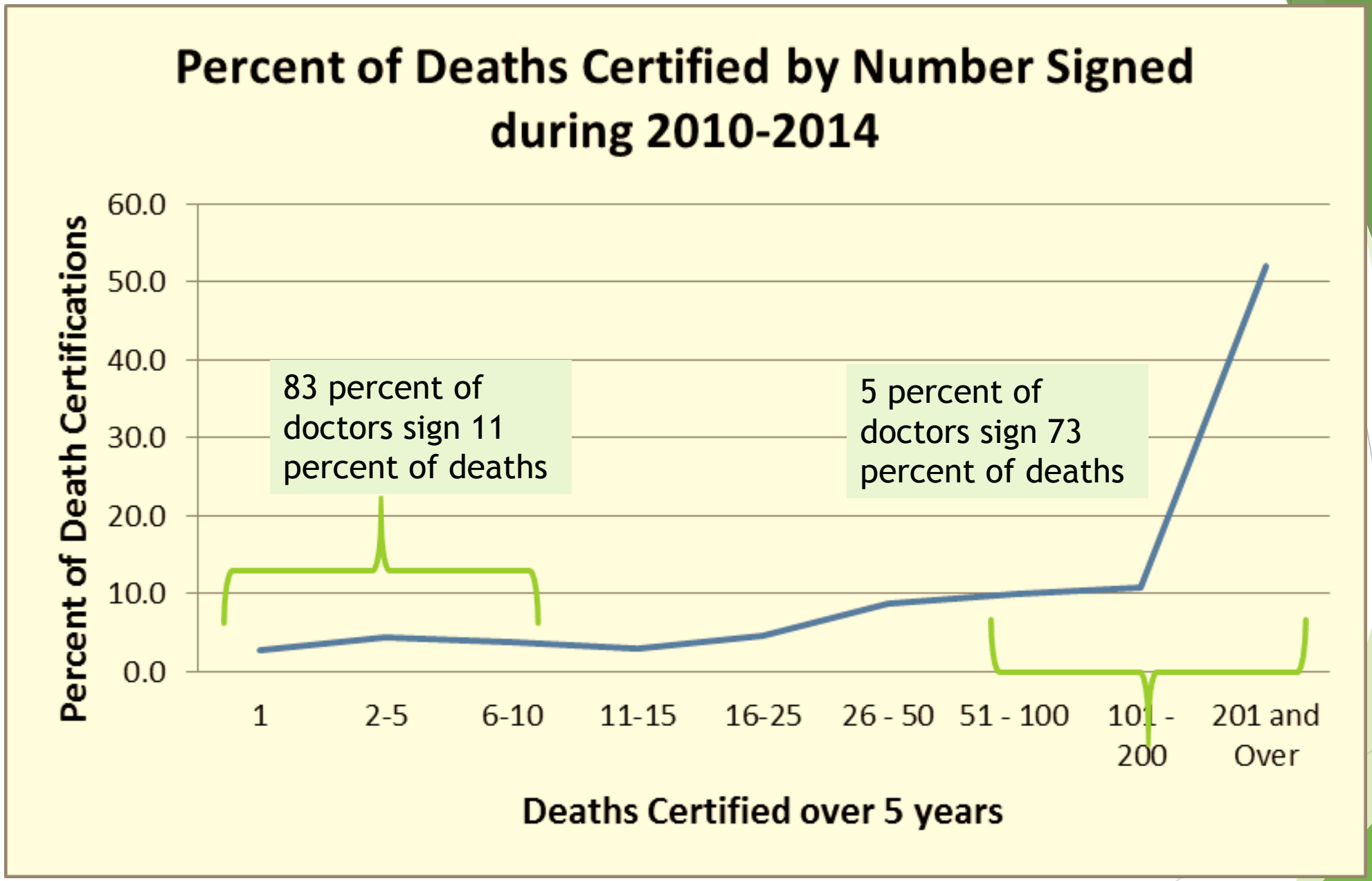



Electronic Death Registration Systems by Jurisdiction
Updated January 2015
Alaska
Washington
Oregon
California
Idaho
Nevada
Montana
Wyoming
Utah
Arizona
Colorado
New Mexico
North Dakota
South Dakota
Nebraska
Kansas
Oklahoma
Texas
Minnesota
Iowa
Missouri
Arkansas
LA
Wisconsin
Illinois
Michigan
Indiana
Ohio
WV
Kentucky
Tennessee
MS
Alabama
Georgia
Florida
South Carolina
North Carolina
Virginia
Pennsylvania
New York City
New York
VT
NH
Maine
MA
CT
RI
NJ
DE
MD
DC
Northern Mariana Islands
Guam
American Samoa
Hawaii
Puerto Rico
U.S. Virgin Islands
In Production (44)
In Development (3)
Planning/Requirements Stage (4)
Using STEVE-ER for death data entry(2)
* Received SSA Funding
& In Production/No SSN Verification

Increasing Use by Medical Certifiers

- Current direct medical use is low
- Involving doctors/hospitals is important
  - Need to improve quality of cause
  - VIEWS system can facilitate
- Need to spread information
- Need to make EDR a useful tool for doctors
- Hope to reach at least 50% direct medical


Number of Physicians by Certifications during 2010-2014
Number of Certifiers
14000
12000
10000
8000
6000
4000
2000
0
12410
6784
2286
1032
1044
1090
633
355
303
1
2-5
6-10
11-15
16-25
26 - 50
51 - 100
101 - 200
201 and Over
Number of Deaths Signed


Percent of Deaths Certified by Number Signed during 2010-2014
Percent of Death Certifications
60.0
50.0
40.0
30.0
20.0
10.0
0.0
83 percent of doctors sign 11 percent of deaths
5 percent of doctors sign 73 percent of deaths
1
2-5
6-10
11-15
16-25
26 - 50
51 - 100
101 - 200
201 and Over
Deaths Certified over 5 years

Exploring Possibilities

- Develop FHIR Death App
- Promote Use by Physicians with FHIR Ready Software
- Coordinate with NCHS on VIEWS Integration with FHIR App
- Assess potential use of FHIR for Birth Defects

So, now what?


LOST
CONFUSED
UNSURE
UNCLEAR
PERPLEXED
DISORIENTED
BEWILDERED

Next Steps

- Finalize and Publish the Standard
- Develop Messaging that Targets Providers
- Explore Revisions to Address Hospital Reporting
- Pilot with Vendor and Interested Physicians
  - Leverage Birth Certification Message
- Explore Connectathon with NCHS and Vendor(s)
  - Promote and Test
- Revise Based on testing and Establish a Normative Standard
  - Target date – 2018
- Explore use of FHIR App for Birth Defects Case Reporting

The Path is Clear

Project Team

Glenn Copeland, MBDR	Altarum Staff
Lorrie Simmons, MBDR	Laura Rappleye, Altarum Lead
Jetty Alverson, MBDR	Lisa Streffey, Project Manager
David Westover, MBDR	Ramya Kommareddi, Developer
Tina Scott, MDCH Data Hub	Ray Humphrys Developer
James Noland , MDCH Data Hub	Michael Yaskanin, Business Analyst
Jeff Shaw, MDCH Data Hub	Rachelle May-Gentile, Business Analyst
Suchi Inturi, MDCH Data Hub	

NBDPN HL7/EHR Work Group

- Ann Phelps
- Barbara Warmerdam
- Cara Mai
- Carol Stanton
- Craig Mason
- Csaba Siffel
- Deborah Badawi
- Debra Musa
- Eric Myer
- Fernando Arena
- Jane Correia
- Marlene Anderka
- Phoebe Thorpe
- Quansheng Song
- Renee Powell
- Russ Rickard
- Sergey Krikov
- Sharon Vaz
- Tiffany Colarusso