



MIIS

Massachusetts Immunization
Information System



Adult Immunization Conference 2014

Massachusetts Department of Public Health
Immunization Program

Date: May 20, 2014

Presenters: Shari Davis & Tseli Mohammed

Disclosure:

Tseli Mohammed and Shari Davis

Consultant	No relevant conflicts of interest to declare or relevant conflict
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Speaker's Bureau	No relevant conflicts of interest to declare or relevant conflict
Major Stockholder	No relevant conflicts of interest to declare or relevant conflict
Other Financial or Material Interest	No relevant conflicts of interest to declare or relevant conflict



Agenda

- Background
- Overview of the MIIS
- MIIS Functions
 - Immunization Registry Module
 - Vaccine Management Module
- Coming on Board with the MIIS
 - Clinical Integration & Legislation
 - Technical Integration
- Meaningful Use
- Resources



Why is this important?

“ Registries work because they provide a secure infrastructure that can include any health care provider, ER, local health department, and school... Having this infrastructure in place means registries could also be a powerful tool for tracking vaccines - and, if circumstances warranted it - in cases of pandemic disease or bioterrorist attacks ”

~ *American Immunization Registry Association*

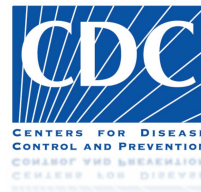


Where are we?

“

Immunization information systems (IISs) are commonly used to document administration of recommended childhood vaccinations; however, routine adult participation has historically been low... ”

~ Centers for Disease Control and Prevention



As of March 2014, 69.2% of Massachusetts adult providers that receive state supplied vaccine had not yet completed their annual provider enrollment in the MIIS



Overview of MIIS

- Secure, confidential web-based system capable of electronic data exchange and direct data entry
- Consolidates immunization records over lifespan
- Assists providers with clinical decisions
 - helps identify due or overdue immunizations
 - prevents over/under immunization
- Includes practice management tools
 - patient immunization and vaccine usage reports
 - tracks over 3.2 million doses of vaccine distributed by MDPH annually
- Provides infrastructure for tracking essential information during pandemics and other public health emergencies – *vital part of pandemic preparedness!*



MIIS Legislation

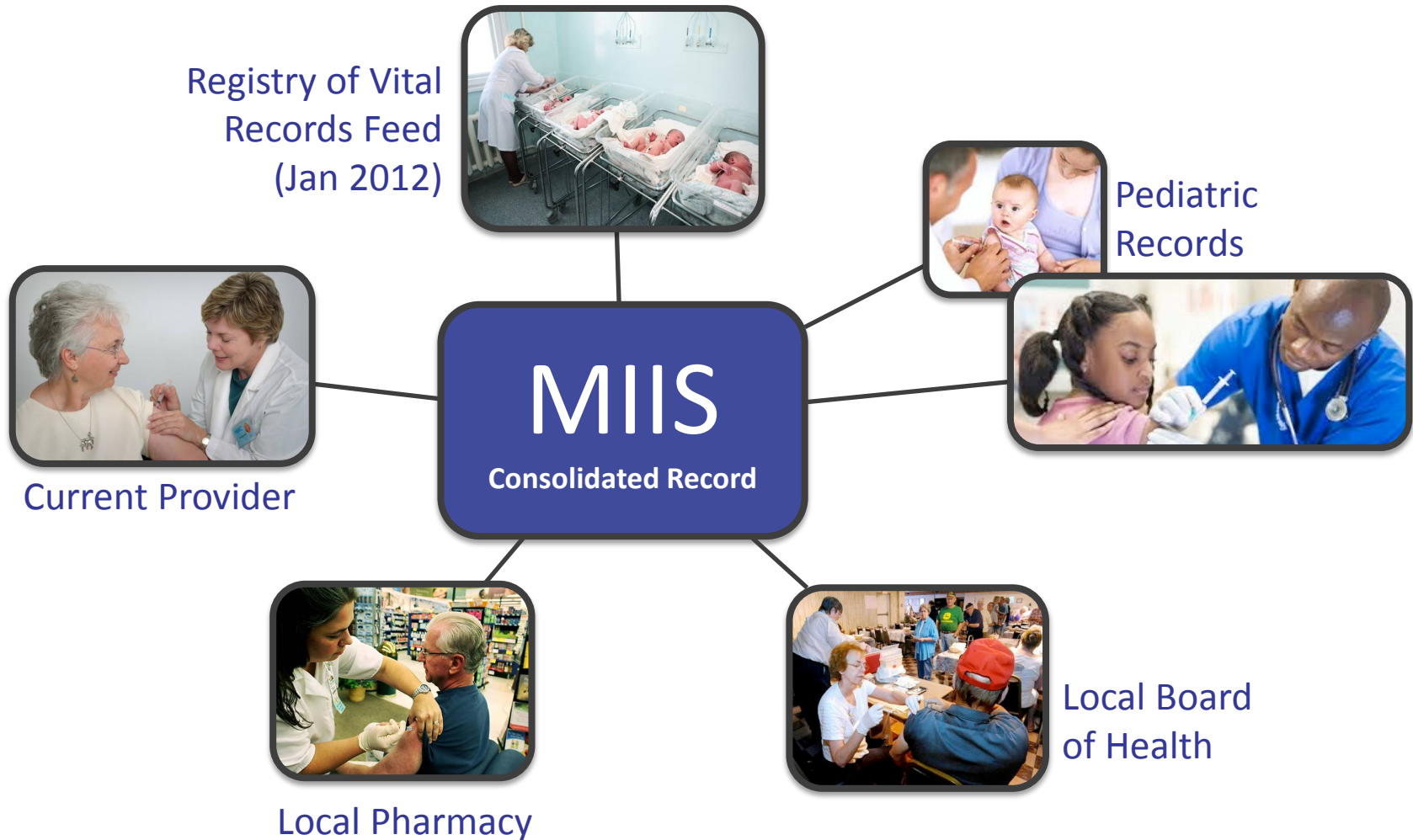
- Legislation passed in June 2010, charging MDPH to establish an immunization registry (M.G.L. c. 111, s.24M)
 - Mandatory reporting of all immunizations administered in MA
 - Access given to healthcare professionals that administer immunizations, as well as schools, LBOH, WIC, and other state agencies' programs involved in immunizations
- **Provider's Duty to Inform** *patients about the MIIS
- ***Patient's Right to Object to Data Sharing** across providers

*"Licensed health care providers administering vaccinations **shall discuss the reporting procedures of the immunization registry with the persons receiving the vaccinations and their parents or guardians**, when appropriate, and advise them of their **right to object to the disclosure of such information** as set forth in this section."*

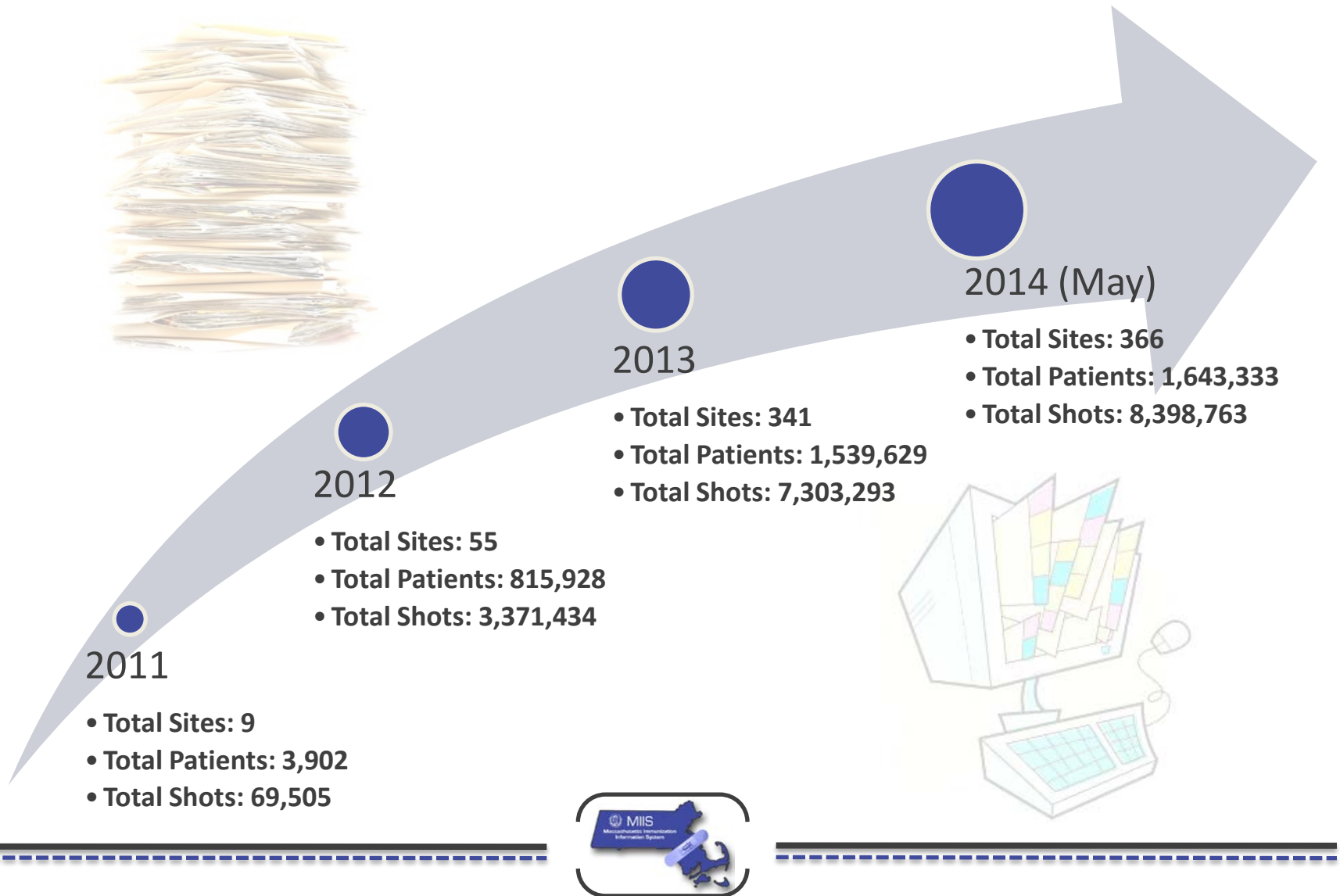
*Parents/Guardians if patient is under 18 years of age



How the MIIS Works

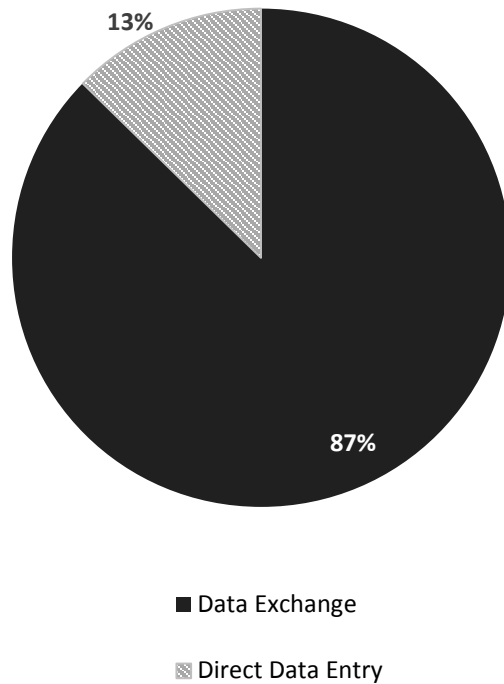


MIIS Data so far...

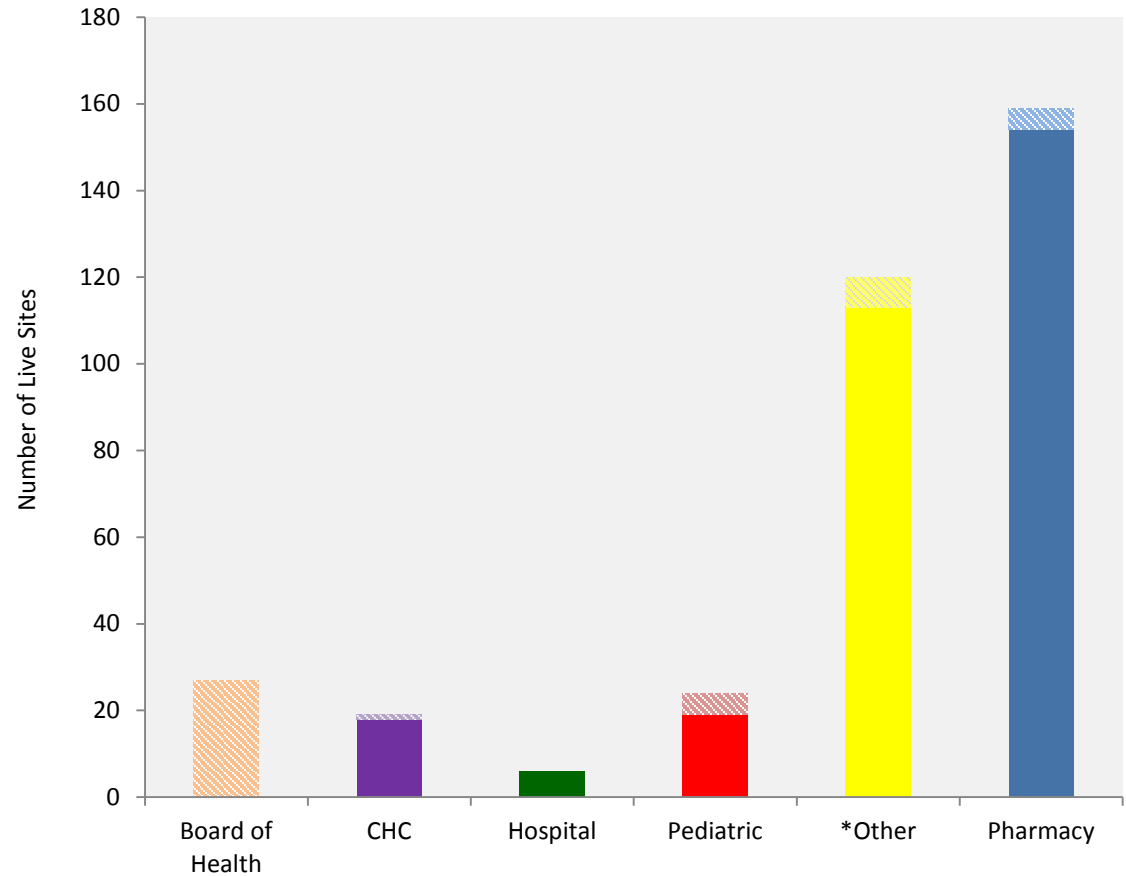


MIIS Data so far...

Live Sites by Reporting Type

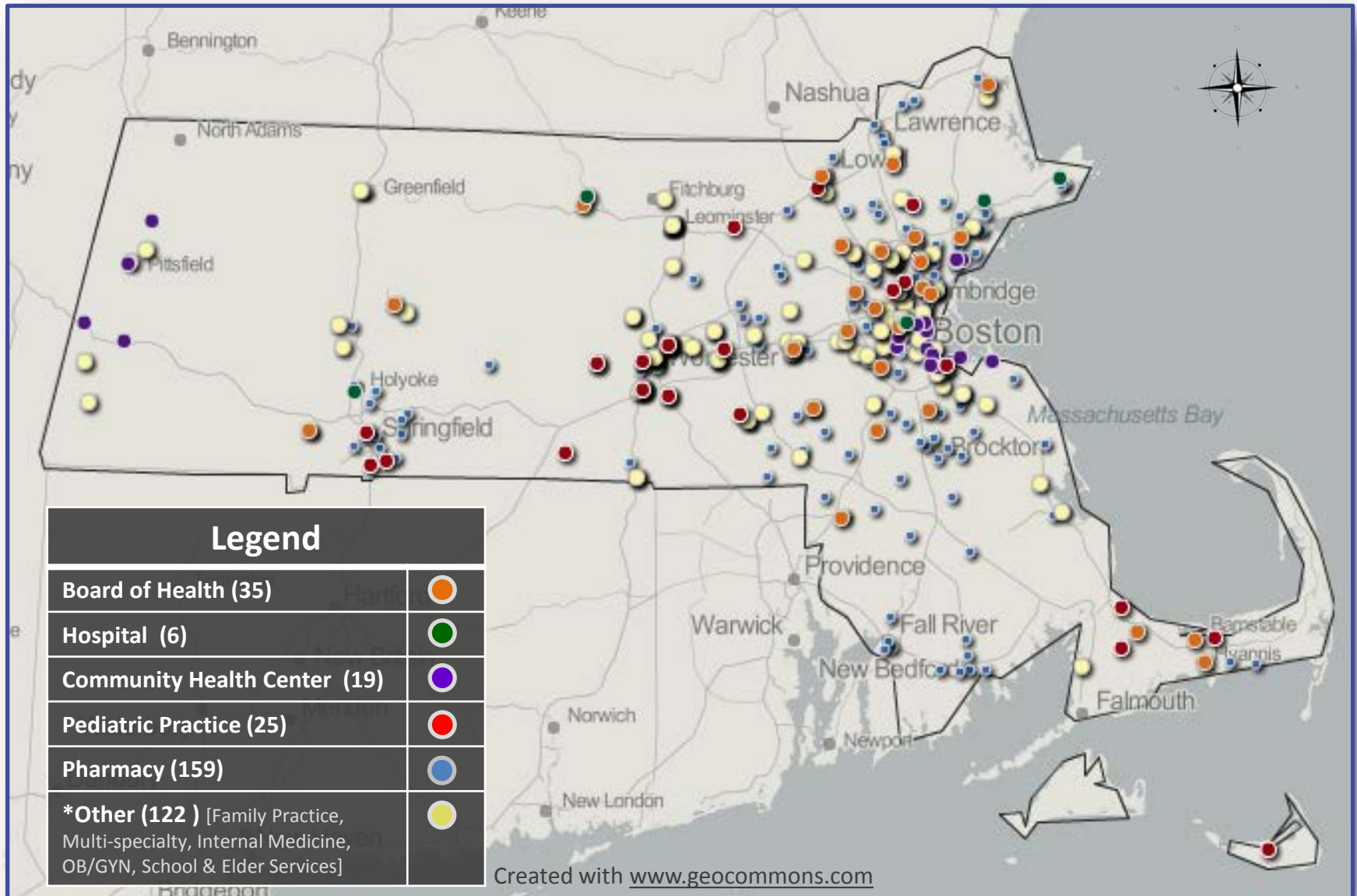


Live Sites in the MIIS (as of Mar 2014)



*Other – Family Practice, Multi-specialty, Internal Medicine, OB/GYN, School, & Elder Services

Sites Reporting to MIIS (Mar 2014)

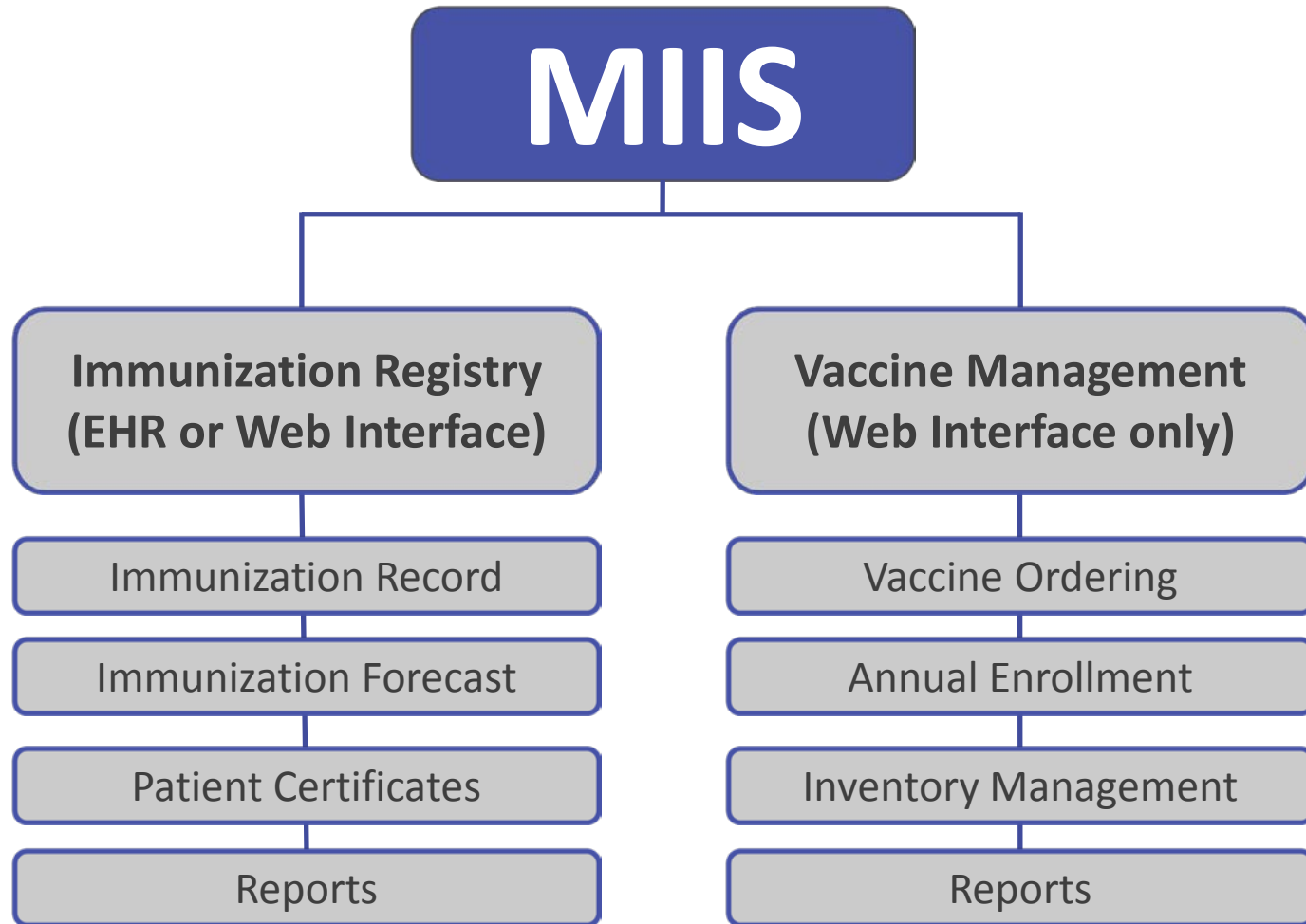


Statewide Roll Out of the MIIS

- MDPH Adult Provider prioritization:
 - Community Health Centers
 - Local Boards of Health
 - Multi-specialty Practices & Provider Networks
 - Pharmacies
 - Community Vaccinators
- Key Partnerships:
 - Massachusetts League of Community Health Centers (MLCHC)
 - Massachusetts Association of Public Health Nurses (MAPHN)
 - Massachusetts Pharmacists Association



MIIS Modules and Functionality



Immunization Registry Module

- Access consolidated patient immunization records
- Access patient immunization forecast
- Print patient immunization certificates/VARs
- Run reminder/recall reports
- Coming this summer:
 - Roster Entry
 - Coverage Reports



MIIS Main Menu

Massachusetts Immunization Information System



Logged in as: Trainer1 at Teacher Pediatrics

[Signout](#)

[Home](#)



Immunization Registry



Vaccine Management



Resources

Welcome to the Massachusetts Immunization Information System.

Immunization registries are part of a national and statewide effort to increase childhood immunization rates. Immunization registries, which collect and consolidate records of vaccinations from multiple health care providers, are required by the Centers for Disease Control and Prevention(CDC) to:

- assist providers with ensuring that patients are up to date with their immunizations
- identify unimmunized and under immunized children
- provide the infrastructure needed for tracking essential information during natural disasters, influenza pandemics, bioterrorist events and other infectious disease emergencies

[Known Issues](#)



Alerts

Vaccine Management - New Order:

Daptacel shortage Infanrix is available to order. Call the Vaccine unit for any questions regarding how to order.

Vaccine Management - New Order:

We identified a problem with auto-decrementing immunizations that are reported in the Immunization Registry Module from vaccine inventory in the Vaccine Management module. Auto-decrementing has been disabled until it is fixed. As a result, the "doses administered" column in your vaccine order will not be pre-populated with counts of vaccine administration reported to the Immunization Registry Module.

Vaccine Management - New Order:

When completing a new vaccine order, please do not click the "**back**" button on the "Enter Aggregate Unreported Doses" located at the bottom of the page. This button is currently not working correctly and will result in a loss of any data you have already entered. We are actively working on correcting this issue and will remove this alert when it has been resolved.

Vaccine Management - New Order:

Pentacel now available in limited supply. See Pentacel Advisory on the MDPH website: www.mass.gov/eohhs/docs/dph/cdc/immunization/pentacel-advisory.pdf



Immunization Registry Module

Massachusetts Immunization Information System



Mass.gov

Logged in as: Trainer1 at Teacher Pediatrics

[Signout](#)

[Home](#)

Manage Patients

- Search
- New Patient
- Duplicate Patient Queue
- Duplicate Shot Queue

Patient Reports

- Reminder Recall

Search

Search Criteria

Please enter at least one of the following four required fields:

Last Name Date of Birth: MIIS ID: Medical Record Number:

The following fields may also be utilized for a more detailed search:

First Name Mother's Last Name: Street Address: City:

Search Options

Sort: Sort Order:

Last Name Ascending

Search Results

0 record(s) found for the entered search criteria.

Patient	Date of Birth	MIIS ID	Medical Record Number	Mother's Last Name	Street Address	Address Line 2	City	State	Zip Code	Data Sharing Status
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- New Roster

[illegible]

Vaccine Management Module

- Order state-supplied vaccine
- Manage state and private inventory
- Run vaccine accountability reports
- Report aggregate usage of allocated vaccine (Flu)
Note: In the event of a pandemic, vaccine will be allocated through this module so it is important for all providers who currently administer vaccines or those who may administer vaccines to register with the MIIS
- Submit annual provider enrollment
- Coming Functionality: Temperature log upload



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Vaccine Management Module

Massachusetts Immunization Information System

Logged in as: Trainer1 at Teacher Pediatrics[Signout](#)[Home](#)

Vaccine Management

- Provider Enrollment
- New Order**
- Orders Worklist
- Inventory
- Transfer Vaccines
- Report Aggregate Usage

Reports

- Daily Orders
- Inventory By Provider
- Vaccine Accountability

Vaccine Management

Vaccine Management navigation menu

© Commonwealth of Massachusetts

The MIIS requires a PDF reader which can be downloaded [here](#).

[Help Desk](#)



New Vaccine Order – Fridge Counts

New Order - Enter Refrigerator Counts

Order #: 19196130001 Provider: Miis Pediatrics PIN: 19196

Vaccine	Packaging	NDC	Lot #	Doses Administered	Calculated Current Inventory	Refrigerator Count	Vaccine Lost/Expired	Reason Code	Count Off By
DTaP-HepB-IPV	10 pack - 1 dose vials, No Needle	58160-0811-52	12345	0	50	50	0	--Select Reason Code--	0
HepA-Peds 2 Dose	10 pack - 1 dose vials	00006-4831-41	4532356	0	25	10	0	--Select Reason Code--	15
HepB-Peds	10 pack - 1 dose vials	58160-0820-11	64564	0	50	40	10	--Select Reason Code--	0

Note to Vaccine Unit:

☐ Check if Temperature Logs have been faxed to the Vaccine Unit.

Note: Temperature logs must be submitted (Fax # 617-983-6924) before orders may be processed.

Save Cancel Next

- Select Reason Code--
- Expired
- Natural Disaster/Power Outage
- Refrigerator/Freezer Too Warm
- Refrigerator Too Cold
- Failure to Store Properly Upon Receipt
- Vaccine Spoiled in Transit
- Mechanical Failure
- Spoiled
- Broken Vial/Syringe
- Discarding Remaining Doses in Opened Multi-dose Vial

Reason Code



New Vaccine Order – Usage

New Order - Enter Aggregate Unreported Doses

Order #: 19196130001 Provider: Miis Pediatrics PIN: 19196

Vaccine	Packaging	NDC	Lot #	Doses Administered	Calculated Current Inventory	Refrigerator Count	Vaccine Lost/Expired	Age Less than 1	Age 1	Age 2 to 5	Age 6 to 12	Age 13 to 18	Age 19 to 29	Age 30 to 49	Age 50 to 64	Age 65 and more	Total	Count Off By
DTaP-HepB-IPV	10 pack - 1 dose vials, No Needle	58160-0811-52	12345	0	50	50	0	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	0	0
HepA-Peds 2 Dose	10 pack - 1 dose vials	00006-4831-41	4532356	0	25	10	0	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="10"/>	<input type="text" value="5"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	15	0
HepB-Peds	10 pack - 1 dose vials	58160-0820-11	64564	0	50	40	10	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	0	0

Note to Vaccine Unit:

☐ Check if Temperature Logs have been faxed to the Vaccine Unit.

Note: Temperature logs must be submitted (Fax # 617-983-6924) before orders may be processed.

Back Save as Pending Next



New Vaccine Order – Doses Requested

New Order - Enter Doses Requested

Order #: 19196130001 Provider: Miis Pediatrics PIN: 19196

Vaccine	Packaging	NDC	Refrigerator Count	Doses Administered	Doses Requested	Order Intention
DTaP-HepB-IPV	10 pack - 1 dose vials, No Needle	58160-0811-52	50	0	0	PED ▼
HepA-Peds 2 Dose	10 pack - 1 dose vials	00006-4831-41	10	0	20	PED ▼
HepB-Peds	10 pack - 1 dose vials	58160-0820-11	40	0	0	PED ▼

Add Vaccine from Formulary

Note to Vaccine Unit:

☐ Check if Temperature Logs have been faxed to the Vaccine Unit.


Note: Temperature logs must be submitted (Fax # 617-983-6924) before orders may be processed.

Back Save as Pending Next



Vaccine Management Module

Massachusetts Immunization Information System

 **Mass.gov**

Logged in as: Trainer1 at Teacher Pediatrics

[Signout](#) [Home](#)

Vaccine Management

- Provider Enrollment
- **New Order**
- Orders Worklist
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Reports

- Daily Orders
- Inventory By Provider
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[Help Desk](#)



Submit Provider Enrollment

Enrollment

Save Cancel Submit Enrollment

Provider Site Enrollment Data Addresses Shipping Information Practice Provider List Agreement to Comply Notes

Provider Site Enrollment Data

*Provider Site Vaccine PIN: 15400

*Name of Facility or Practice: Board Of Health 123

Adult Only Practice ☒

*Practice Type: Board of Health/Health Dept

*Enrollment Status: Pending Enrollment ← Check Enrollment Status

Site Type: --Select Site Type--

*Telephone:

*Fax:

*Primary Contact Last Name:

Primary Contact First Name:

Primary Contact Middle Name:

*Primary Contact's Email:

Secondary Email:

*Medical Director's Last Name:

*Medical Director's First Name:

Medical Director's Middle Name:

*Medical Director's License No:

Medical Director's Email:

*Original VFC Enrollment Date:



Submit Provider Enrollment

Enrollment

Save Cancel Submit Enrollment

Provider Site Enrollment Data Addresses Shipping Information Practice Provider List Agreement to Comply Notes

Provider Site Enrollment Data

*Provider Site Vaccine PIN: 15400

*Name of Facility or Practice: Board Of Health 123

Adult Only Practice ☒

*Practice Type: Board of Health/Health Dept

*Enrollment Status: Pending Enrollment

Site Type: --Select Site Type--

*Telephone:

*Fax:

*Primary Contact Last Name:

Primary Contact First Name:

Primary Contact Middle Name:

*Primary Contact's Email:

Secondary Email:

*Medical Director's Last Name

*Medical Director's First Name

Medical Director's Middle Name

*Medical Director's License No:

Medical Director's Email:

*Original VFC Enrollment Date:

Verify and add/edit info across all tabs

- Provider Site Enrollment Data
- Addresses
- Shipping Information
- Practice Provider List



Submit Provider Enrollment

Enrollment

Save Cancel **Submit Enrollment** (3)

Provider Site Enrollment Data Addresses Shipping Information Practice Provider List **Agreement to Comply** Notes

Agreement to Comply

Agreement to Comply with Federal and State Requirements for Vaccine Administration

The Vaccines for Children (VFC) Program is a component of the Massachusetts Department of Public Health (MDPH) Immunization Program. To receive vaccine provided by the MDPH Immunization Program and VFC program. I, on behalf of myself and any and all practitioners associated with this medical office, group practice, HMO, health department, hospital, clinic, or other entity of which I am the medical director or equivalent, agree to all of the requirements put forth in the document at the following link:

[Click this link to open the Agreement to Comply with Federal and State Requirements for Vaccine Administration](#) (1)

☐ I certify that the Medical Director has read and agrees to the requirements listed at the link above pertaining to participation in the MDPH Immunization Program. (2)

Click the final tab Agreement to Comply:

- (1) Have your Medical Director review the agreement
- (2) Check the “I certify ...” checkbox
- (3) Click the “Submit Enrollment” button



Coming on Board with the MIIS

- Clinical Integration
- Technical Integration (EHR sites)
- Training
- Data Quality (EHR sites)
- Go Live!



Clinical Integration Steps

- Identify 'Clinical Champion' for coordination
- Complete site and user registration
- Based on legislation:
 - Develop plan to inform *patients about the MIIS
 - Develop objection (or withdrawal) workflow
- Decide on best approach for training



*Parents/Guardians if patient is under 18 years of age



Duty to Inform *Patients

- Each *patient must be informed that their data is being reported to the MIIS
- Recommended materials:
 - MIIS Factsheet (several languages)
 - MIIS Posters (English and Spanish)
 - Sample language for blast emails, newsletters, websites, registration forms, etc.



*Parents/Guardians if patient is under 18 years of age



*Patients' Right to Object to Sharing Data

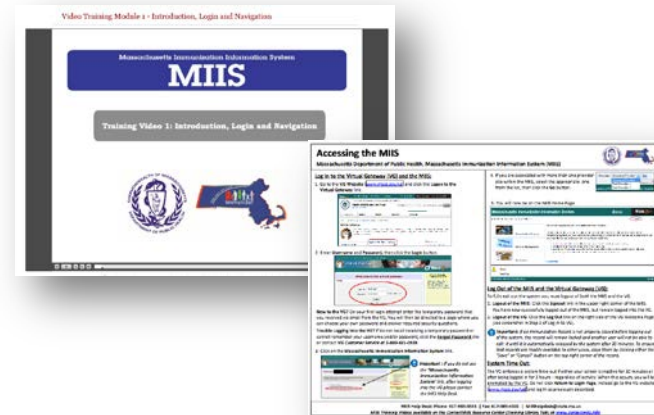
- Each *patient has the right to limit who can see their immunization data in the MIIS
- *Patient can choose to object or withdraw a previous objection any number of times
- Recommended process:
 - Complete an Objection (or Withdrawal of Objection) Form
 - Update data sharing status in the MIIS
 - Fax completed form to MIIS Help Desk
 - File completed form with patient record

 A form titled "MIIS" with the subtitle "Objection to Immunization Information System". It contains sections for "Name of Patient", "Patient's Address", "Patient's Date of Birth", "Patient's Sex", "Patient's Race", "Patient's Ethnicity", "Patient's Religion", "Patient's Education", "Patient's Occupation", "Patient's Marital Status", "Patient's Current Address", "Patient's Current Phone Number", "Patient's Current Email Address", "Patient's Current Fax Number", "Patient's Current Mailing Address", "Patient's Current Mailing Phone Number", "Patient's Current Mailing Email Address", "Patient's Current Mailing Fax Number", "Patient's Current Mailing Address", "Patient's Current Mailing Phone Number", "Patient's Current Mailing Email Address", "Patient's Current Mailing Fax Number".


*Parents/Guardians if patient is under 18 years of age

Training Approaches

- Self-paced training
- Train the trainer
- Resources
 - Training Videos
 - Recorded or Live Webinars
 - Training Website
 - Quick Reference Guides
 - User Manual



MA Health Information Highway (HIway)

- “A secure network for efficiently sharing electronic health records and other similar technologies that allow records populated with standardized data to be shared and integrated, effectively freeing vital data from information silos.”
- The data exchange transport channel for public health applications, including the MIIS
- For more information visit www.mass.gov/hhs/masshiway



Technical Requirements

- Confirm EHR is capable of HL7 2.5.1
- Review HL7 specifications
- Review Flat file specifications if performing optional one-time historical upload
- Complete and submit HL7 checklist
- Establish connection with MA Hlway
- Systems mapping and testing

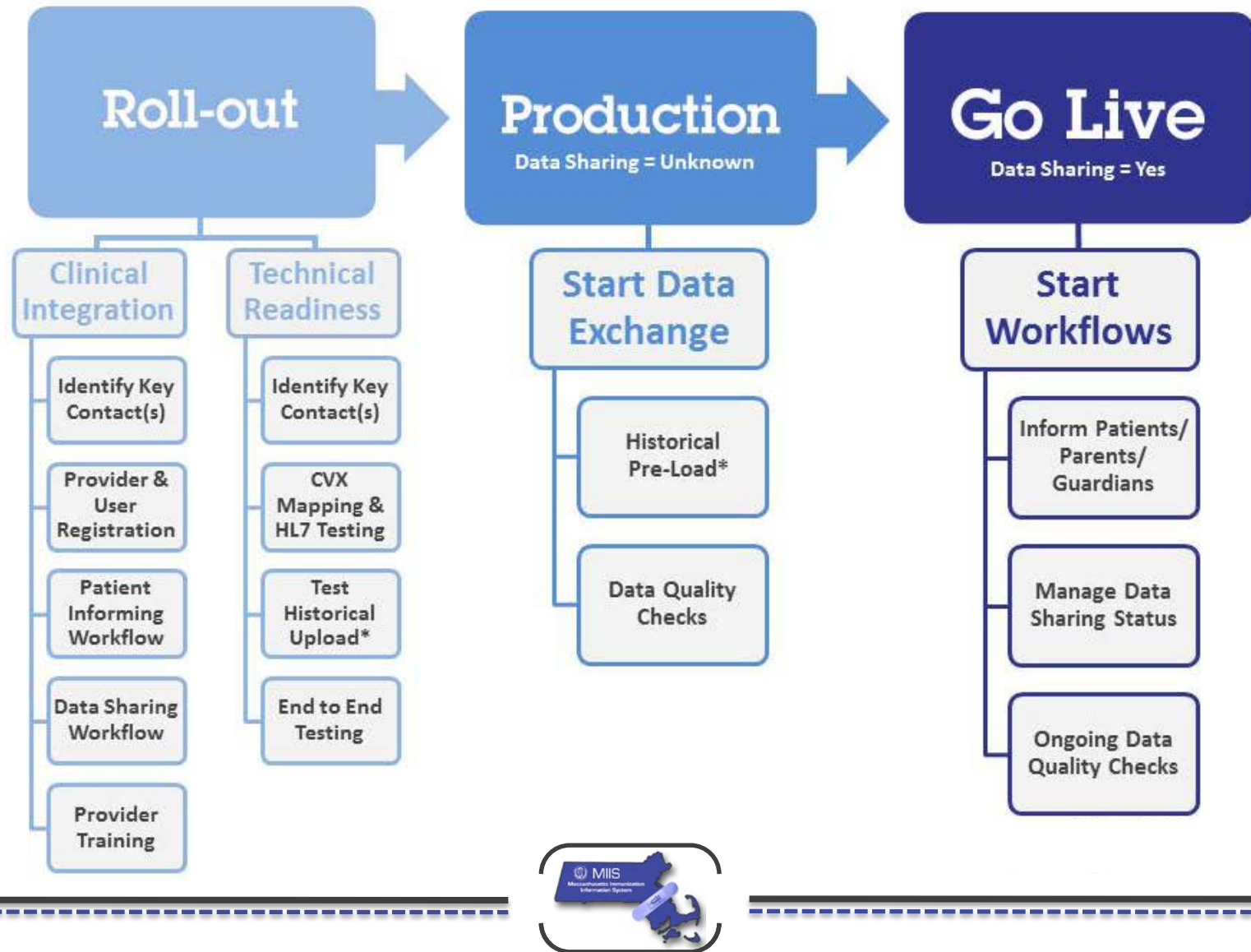


EHR Data Exchange Progress

- Currently reporting data to the MIIS:
 - athenaClinicals
 - Cerner Ambulatory EHR
 - EPIC (Customization necessary)
 - GE Centricity
 - Meditech (Iatric)
- In progress:
 - Allscripts
 - CPSI
 - e-ClinicalWorks
 - LMR (Partners Healthcare)



Coming on Board the MIIS – Data Exchange



Meaningful Use (MU)

- Electronic data exchange with the MIIIS meets the public health objective for *meaningfully using your EHR*
- Providers and hospitals are eligible for thousands to millions of dollars through federal reimbursements by CMS under the 2009 HITECH Act
- MU Stage 1: send a HL7 2.5.1 test message to the MIIIS
- MU Stage 2 core requirements:
 - Register your intent within 60 days of your EHR reporting period
 - Accept invitation to on-board within 30 days of receipt
 - Achieve on-going submissions of immunization data to MIIIS
 - 2014 only: 90 days of on-going submissions to the MIIIS



ContactMIIS Resource Center

- Available at www.contactmiis.info
- Complete registration for the MIIS
- Complete registration of intent for MU2
- Access technical and clinical resources
- Access training videos, quick reference guides and sign-up for in-person/webinar trainings
- Submit support tickets online



ContactMIIS Resource Center

www.contactmiis.info

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The image is a collage of several screenshots from the ContactMIIS website, illustrating its various features and user interface elements.

- MIIS Registration Page:** Features a navigation bar with "Home" and "Register" links. A "Welcome" message is displayed. The main content area includes a "MIIS Registration" section with a description of the program and a list of links: "MIIS Immunization", "Vaccine Management", "Reporting", "Search and Reporting", "Update patient information", and "Access patient information". A "Registration Guide" link is also present.
- Meaningful Use Intent Registration Page:** Contains sections for "National Provider Identifier", "Meaningful Use Designation", "Electronic Health Record", and "CMS Attestation Program".
- Training Videos:** A list of five training videos is shown, each with a brief description of its content.
- Create New Support Ticket Page:** A form titled "Create New Support Ticket" with sections for "Enter/Verify Your Information" (First Name, Last Name, Phone, Email, Vaccine PIN) and "Enter Your Issue Information" (Issue Title, Issue Category, Issue Description). The form includes "Save" and "Cancel" buttons.

At the bottom center of the collage, there is a logo for "MIIS Massachusetts Immunization Information System" featuring a stylized blue and white graphic.

What can you do now?

- Visit the MIIS Table for more information
- Register for the MIIS
- Submit your Provider Enrollment
- Review training resources and transition to online vaccine management through the MIIS
- Contact the MIIS Help Desk for more information on coming on board with the MIIS



What do people think?

““ I get the most positive reaction from parents. Most of the patients are happy with the shared info. ””

~ Kellie Mullen, South Boston Community Health Center

““ It is quite easy to use once you get used to it. The potential functionalities and decreasing duplication of services is phenomenal. ””

~ Kristina Paddock, Westfield Board of Health



MIIS Contact Information

- MIIS Help Desk

- Phone: (617) 983-4335
- Fax: (617) 983-4301
- Email: miishelpdesk@state.ma.us
- www.contactMIIS.info | www.mass.gov/dph/miis



- MDPH Vaccine Unit

- Phone: (617) 983-6828
- Fax: (617) 983-6924
- Email: dph-vaccine-management@state.ma.us
- www.mass.gov/dph/imm

