



Massachusetts Immunization Information System

2021 Massachusetts Adult Immunization Conference

Presented by Joseph Conte

Disclosure

I, Joseph Conte, have been asked to disclose any relevant financial relationships with ACCME-defined commercial entities that are either providing financial support for this program or whose products or services are mentioned during this presentation.

I have no relevant financial relationships to disclose.

I may discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration, but in accordance with ACIP recommendations.

Outline of Today's Presentation

- Overview of the MIIS
- Legislation & Regulations
- Core MIIS Functions
- Enhancements to support COVID-19 vaccination
- Data Quality
- Question and Answer



Overview of the MIIS

What is the MIIS?

Secure, confidential web-based immunization registry

Establishes complete, accurate immunization records for MA residents of all ages

Assists with clinical decisions, helps prevent under- and over-immunization

Can contribute to higher immunization rates and a healthier population

Public Health Systems can use MIIS data to help monitor and control vaccine preventable diseases

Data Sources

**BoH, VNAs,
Senior Care
Facilities**



**E-Vitals Feed
(Jan 2012)**



Pediatric



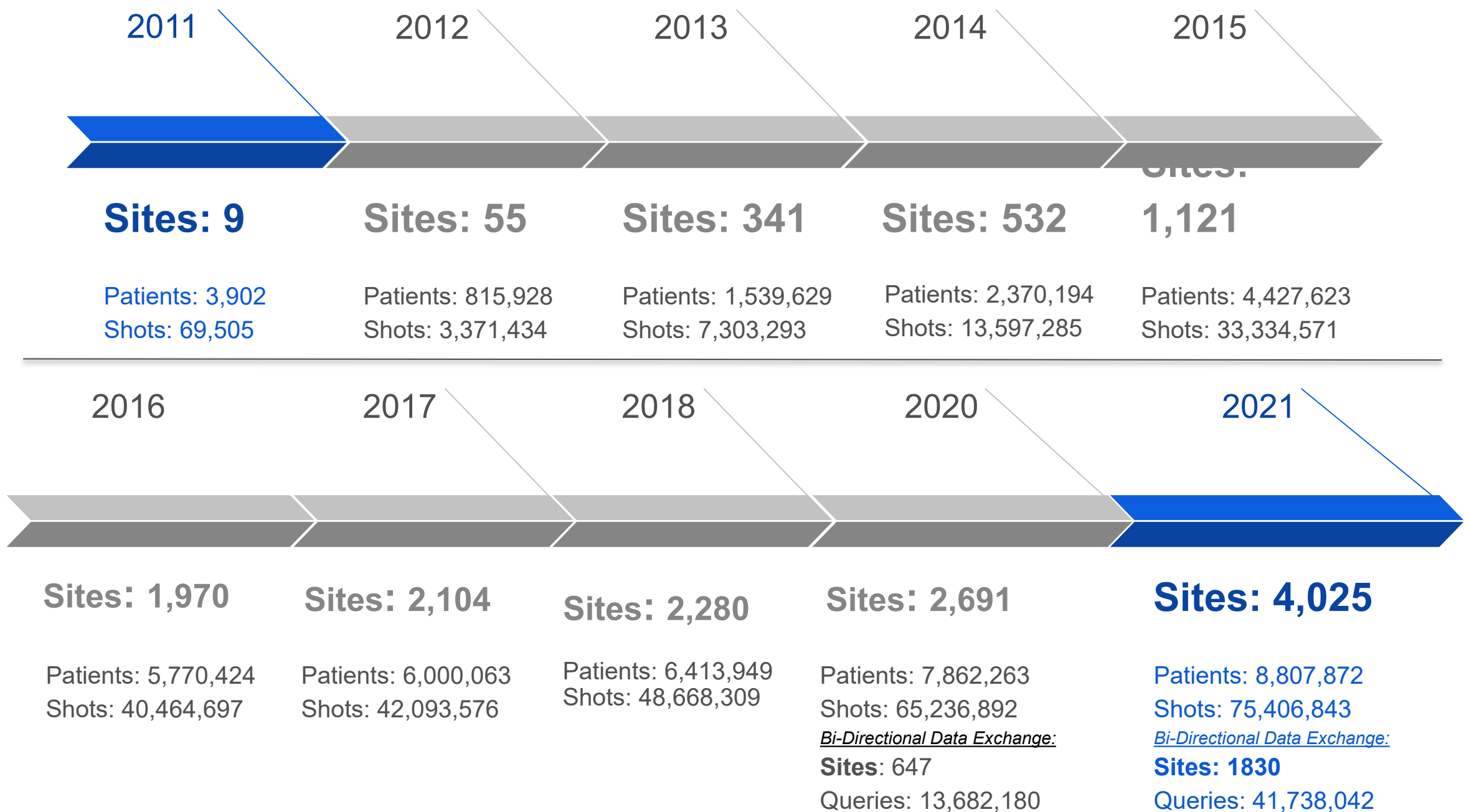
**Internal Med PCPs,
Hospitals,
Multispecialty' s,
CHCs, OB/GYNs, etc.**



**Local
Pharmacies**



**School, SBHCs,
Colleges, etc.**



MIIS Legislation and Regulations



Legislation (2010)

Established the Massachusetts Immunization Information System (MIIS)

Mandatory reporting of **all immunizations** administered in MA

State registry of vital statistics transmits immunization information regarding immunizations administered to a newborn

Information accessible by healthcare professionals that administer immunizations, schools, LBOH, WIC, and other state programs involved in immunizations



Regulations (2015)

Set out required information to be transmitted with historical and administered vaccinations

System access and confidentiality, provider registration, research requests

Patient access to records, requests to amend records

Provider's duty to inform patients about the MIIS and patient's right to object to data sharing

Compliance schedule ended in June 2016
– all providers in MA should be reporting

Core MIIS Functions

Core MIIS Functions

Search/Create patient records

Look up an immunization forecast

Manage a patient's data sharing status

Run Reports (patient coverage, vaccine order history, etc.)

Monitor data quality

Vaccine management (ordering, inventory, storage and handling)

School immunization surveys

Core MIIS Functions

- Different roles (Vaccine Coordinator, Access Administrator, etc) in the MIIS may use certain core functions more frequently than others
- If you are concerned that you cannot perform certain core MIIS functions necessary for your role, please contact the MIIS Help Desk to ensure you have the correct access
- Mini Guides which provide step by step instructions for performing many of the core MIIS functions are available on the MIIS Resource Center

MIIS Resource Center

www.miisresourcecenter.com



Enhancements to Support COVID-19 Vaccination

Enhancements Supporting COVID-19 Vaccination

Coverage Report

Reminder/Recall Report

Invalid Dose Report

Practice Profile Report

COVID-19 Clinic Roster Template

Coverage Report

- The MIIS Coverage Reports allow each provider site to evaluate the immunization coverage for its practice
- Enhancements to Custom Coverage Report allows users to determine how many of their patients have received 1 or 2 doses of a COVID-19 vaccine

Executive Office of Health and H... x Massachusetts Immunization Info x +

miis.dph.mass.gov/miis/pagesHome/welcome.jsf

Apps Virtual Gateway Search Provider Co... CERT

Hello, Joseph! My Site Training Cen

Logged in at 99992 – DPH-Bureau of Infectious Disease

MIIS
Massachusetts Immunization Information System

PATIENTS **SCHOOL** **VACCINES** **REPORTS** **MA**

Welcome Back, Joseph!

ALERTS

Attention Roster Entry Users
Roster Entry supports patient upload through an excel template.
To access the Roster Entry Excel Template for COVID-19 vaccine [click here](#)

To access the Roster Entry Excel Template for all other vaccines [click here](#) or go to Clinic Rosters to create a new roster.

REPORTS

- Coverage
- Immunization Reporting Timeliness
- Invalid Dose
- Patients Vaccinated
- Practice Population

PROVIDER SCORE

The Overall Score is a Completeness, Accuracy scores. Your score is N reported for February detailed score card.

MAIC 2021



Massachusetts Immunization Information System

Custom Coverage Report

As Of Date: 03/22/2021

Birth Date Range: 03/23/1920 - 03/22/2005

Selected PIN(s): 60013

Assessment Date: 03/22/2021

Age Range: 16 Year(s) to 100 Year(s) (inclusive)

Today's Date: 03/22/2021

Provider Name: AIRA Testing

Selected Parameters:

Current WIC Participant Status: All

Patient Status: Active

Go LIVE Date: 08/07/2020

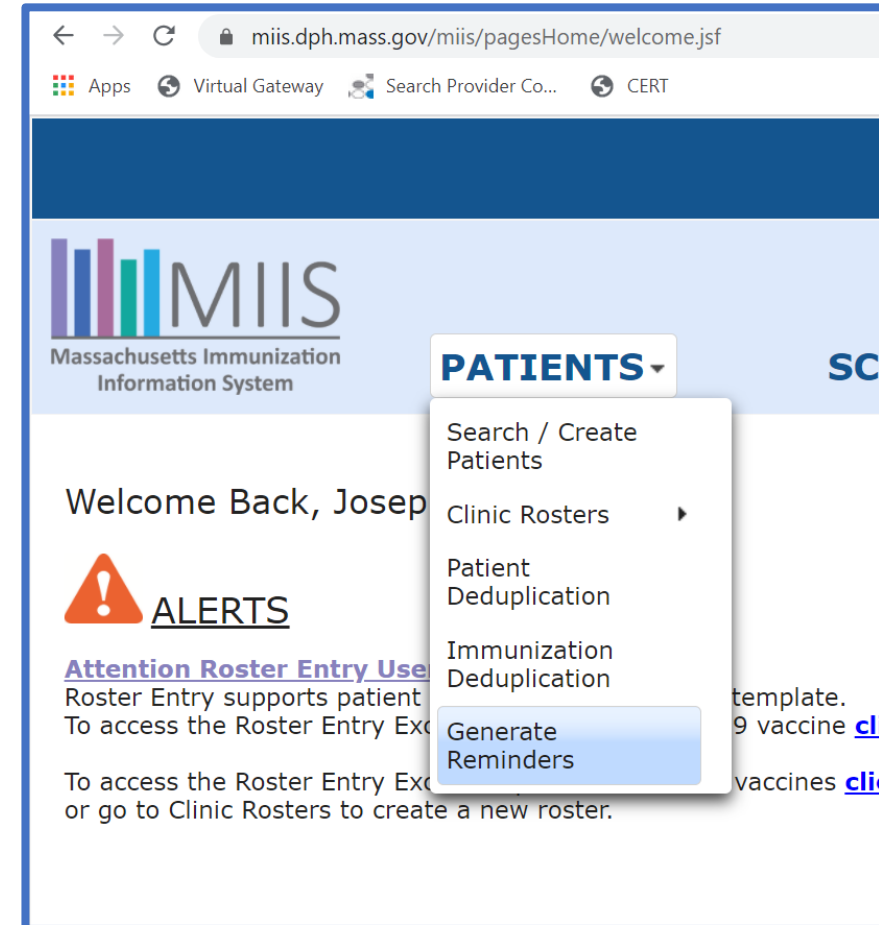
Number of Patients Assessed: 0

Evaluation of Immunization Rates as of: 03/22/2021

Vaccine Group	Count	Percentage	Number of Doses Evaluated
COVID-19	0	0%	≥ 2 COVID-19 Vaccine
All Antigens	0	0%	Receipt of all the doses listed above

Reminder/Recall Report

- Reminder/Recall Report provides a list of patients that are due or overdue for a recommended vaccine, based on criteria specified by the user.
 - Reminders are created for patients that will soon be due for a particular immunization.
 - Recalls are created for patients that are currently overdue for a particular immunization.
- With some COVID-19 vaccines requiring two doses for full protection, it is very important for providers to know when their patients are due for 2nd doses



[Patient Listing PDF](#)[Patient Listing Excel](#)[Letters](#)[Postcards](#)[Labels](#)

Reminder Recall Report

Report Name: test**Selected Site PIN:** 88812**Provider Name:** Vaccine Ordering**Age Range:** 1 Months - 100 Years (inclusive)**Age as of:** 03/26/2020**Immunization Due Date Time Frame:** Due Now

Selected Parameters:

Selected Vaccine Groups: All Vaccines**Patient Status:** Active**Additional Text:**
(Optional, to be added to each letter)☐ Select/Deselect All

Patient Listing

Total Patients: 4

Note: Patient records where an address is not complete are not available to be selected for printing.

LAST NAME	FIRST NAME	MIDDLE NAME	BIRTH DATE	AGE	DUE/OVERDUE GROUPS	FORECAST	TEXT LANGUAGE	PHONE NUMBER	REMINDER RECALL ADDRESS	SELECT TO PRINT
DKDFVU	URWAS		07/01/1977	42 yr 8 mo	MMR, Tdap, Varicella	View	English	Home: (999) 999-9999 Mobile: (586) 379-8002		<input type="checkbox"/>
DYDXXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988	31 yr 10 mo	Flu, HepB, Tdap, Varicella	View	English	Home: (000) 000-0000 Work: (000) 100-0000 Mobile: (000) 200-0000		<input type="checkbox"/>
LNZYGOMDOL	CHXFIMTUV		08/20/1986	33 yr 7 mo	Tdap Flu, MMR, Varicella	View	English			<input type="checkbox"/>
MGSMNKPXGK	ESYCKHWKN		06/01/2013	6 yr 9 mo	Flu, HepA, HepB, MMR, Varicella	View	English			<input type="checkbox"/>

Invalid Dose Report

- Report which identifies the total doses that are invalid in the MIIS for the site's patients
 - Great tool for identifying administration errors and ensuring that patients are properly protected
 - Can be used to search for invalid COVID-19 doses


Hello, Joseph! [My Site](#) [Training Center](#)

Logged in at 99992 - DPH-Bureau of Infectious Disease

MIIS
Massachusetts Immunization Information System

PATIENTS **SCHOOL** **VACCINES** **REPORTS** **MA**

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or go to Clinic Rosters to create a new roster.

Invalid Dose

Delivered Reports
Patient
Vaccines

PROVIDER SCORE
The Overall Score is a Completeness, Accuracy scores. Your score is N reported for February detailed score card.

MAIC 2021



Massachusetts Immunization Information System

Invalid Dose Report

Selected PIN(s): 88812
Immunizations Reported By: Any Facility
Vaccine Group: Any Vaccine

Provider Name: Vaccine Ordering
Vaccine Administration Date Range: 01/01/2000 - 03/26/2020

Selected Parameters:

Patient Status: Active

Vaccine Group	Vaccine	Doses Given	IFM Invalid	Incomplete Dosage	Expired Lot Administered	Storage/Handling Issue (if forced invalid)	Affected by Recall (if forced invalid)	Forced Invalid Unspecified	Total Invalid Doses Given
HepB	HepB-Peds	2	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)
MCV	MCV4-D (Menactra)	2	1 (50.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50.0%)
Rotavirus	Rotavirus, pentavalent	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Tdap	Tdap	1	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Total		6	5 (83.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (83.3%)

Total Invalid Immunization Count: 5

Last Name	First Name	Middle Name	Birth Date	Vaccine	Date Given	Administered By	Reason Code
DYDXXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988	HepB-Peds	05/05/2019		IFM Invalid
DYDXXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988	HepB-Peds	04/05/2019		IFM Invalid
DYDXXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988	MCV4-D (Menactra)	05/05/2019		IFM Invalid
DYDXXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988	Rotavirus, pentavalent	03/26/2020	test	IFM Invalid
MGSMNKXPG K	ESYTCKHWKN		06/01/2013	Tdap	09/11/2019	Automation User	IFM Invalid

Practice Population Report

- Allows providers to see a complete list of their patients
- Patient status can be managed here (past patients can be marked as inactive), helping with all reports and deduplication queues
- Allows you to generate a patient list by age, helping to identify patients at your practice who are eligible for COVID-19 vaccines based on age criteria

The screenshot displays the MIIS (Massachusetts Immunization Information System) web interface. At the top, a dark blue header bar contains the user greeting "Hello, Joseph!" and links for "My Site" and "Training Center". Below this, a light blue navigation bar features the MIIS logo and several menu items: "PATIENTS", "SCHOOL", "VACCINES", "REPORTS", and "MA". The "REPORTS" menu is currently open, showing a list of options: "Coverage", "Immunization Reporting Timeliness", "Invalid Dose", "Patients Vaccinated", and "Practice Population". The "Practice Population" option is highlighted in blue. To the left of the "REPORTS" menu, there is a "Welcome Back, Joseph!" message and an "ALERTS" section with a warning icon. Below the alerts, there is a notice about "Attention Roster Entry Users" and links to download Excel templates for COVID-19 and other vaccines. On the right side of the interface, there is a "PROVIDER SCORE" section displaying the overall score and a link to a detailed score card. The bottom of the page includes the text "MAIC 2021".

Patient Listing PDF

Practice Population Report

Selected Site PIN: 88812 Provider Name: Vaccine Ordering

Age Range: 1 Months to 100 Years (inclusive) Age as of: 03/26/2020

Selected Parameters:

Patient Status: Active

Total Patient Count: 4

Total Number of Immunizations Administered by this Site: 4

Percent of Patients with Data Sharing 'No': 0%

Update Patient Status

LAST NAME ◯	FIRST NAME ◯	MIDDLE NAME ◯	BIRTH DATE ◯	MRN ◯	MIIS ID ◯	PATIENT STATUS ◯	DATA SHARING STATUS ◯	NUMBER OF IMMS ADMIN AT THIS SITE ◯	DATE OF MOST RECENTLY ADMIN IMM AT THIS SITE ◯	TOTAL IMMS IN THE MIIS ◯
DKDFVU	URWAS		07/01/1977		3651674	Active	Yes	1	03/26/2020	1
DYDXDBQ	OBGBPLBW	UFXVPVPA	05/05/1988		8522233	Active	Yes	1	03/26/2020(NV)	11
LNZYGOMDOL	CHXFIMTUV		08/20/1986		8579556	Active	Yes	1	03/26/2020	2
MGSMNKXPGK	ESYTCKHWKN		06/01/2013		8560749	Active	Yes	1	03/26/2020	2

[Close](#)

COVID-19 Clinic Roster Template

- Clinic Rosters allow sites who report via direct data entry to report multiple patients' immunizations in a streamlined process
 - Patients who received the same immunization (manufacturer, lot type, etc.) on the same day from the same clinician can all be reported under one roster
 - Excel roster templates allow sites to easily upload a list of patients (up to 100 per roster) into the MHS and adds the immunization to all records at once
 - This has also been useful for sites who report electronically but are administering COVID-19 vaccines to individuals who they do not enter into their EHR system (staff members, members of the general public who are not regular patients at that site, etc.)
- For COVID-19 vaccines, the CDC requires certain fields that are not typically required for other immunizations (race, ethnicity, etc.)
 - As a result, the MHS developed a COVID-19 specific roster template to ensure this information is captured and reported



PATIENTS ▾

SCHOOL ▾

VACCINES ▾

REPORTS ▾

MA

Upload Roster

A template for creating an Excel file to upload a roster may be downloaded at:

[Roster Template](#)

[Roster Template - COVID-19 only](#)

Instructions for using the Template may be downloaded at:

[Instructions for Roster Upload Template](#)

Select file:

Data Quality

Data Quality

- It is very important that sites pay close attention to their Data Quality. Focusing on Data Quality helps ensure the MIIIS has accurate and up to date immunization records for MA residents.
- The MIIIS has a team specifically dedicated to monitoring data quality
- Provider Scorecard – every PIN is given a Data Quality score that is visible to the site's MIIIS users upon log in
 - The scorecard provides sites with an overall data quality score based on several factors:
 - Completeness
 - Accuracy
 - Validity
 - Timeliness

Provider Scorecard



PATIENTS ▾

VACCINES ▾

REPORTS ▾

Welcome Back, Tricia!



ALERTS

Attention - State-Supplied Vaccine Ordering Providers!

The MDPH Immunization Division's Vaccine Management Unit is still fully operational. All state-supplied vaccine orders are being processed and there should be no anticipated delays in vaccine shipments. If you have any changes to your hours of operations, contact the Vaccine Management Unit at 617-983-6828.



TAKE ACTION

As of 09/15/2020 02:01 AM, **17557** patients required review for manual deduplication - [REVIEW DUPLICATE PATIENTS](#)

As of 09/15/2020 02:01 AM, **31117** immunizations required review for manual deduplication - [REVIEW DUPLICATE IMMUNIZATIONS](#)

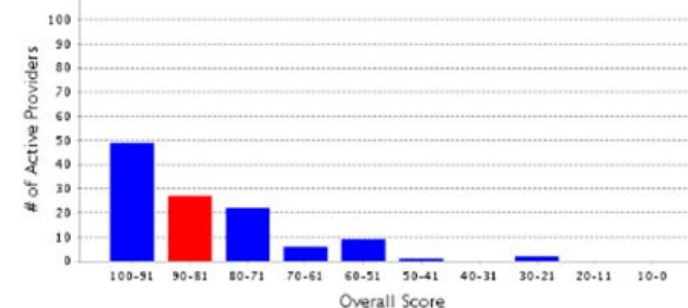
1 transfers are waiting for confirmation - [CONFIRM TRANSFER](#)



PROVIDER SCORE CARD

The Overall Score is a weighted average of the Completeness, Accuracy, Validity and Timeliness scores. Your score is 82. Click [here](#) to see your detailed score card.

Provider Score Card - August 2020



Data Quality and Inventory Management

- Maintaining a high data quality score is especially important for sites who receive vaccines from the State
- Reporting immunizations with all required fields and in a timely manner ensures that your site's state supplied inventory will be accurate
 - Immunizations reported missing Lot Type/Funding Source will NOT deduct from your inventory
 - Inaccurate inventory in the MIIIS can cause problems with future state supplied vaccine orders

Monitoring Data Quality

1.

Check your
Provider
Scorecard and
identify any areas
for improvement

2.

Review Inventory
Decrementing
Tool to ensure
your inventory is
up to date

3.

Review weekly HL7
Summary email

4.

Understand your
EHR and its
limitations (if
any)

5.

If problems have been
identified, reach out to
your EHR vendor and/or
the MIIS Help Desk to
explain the issues

6.

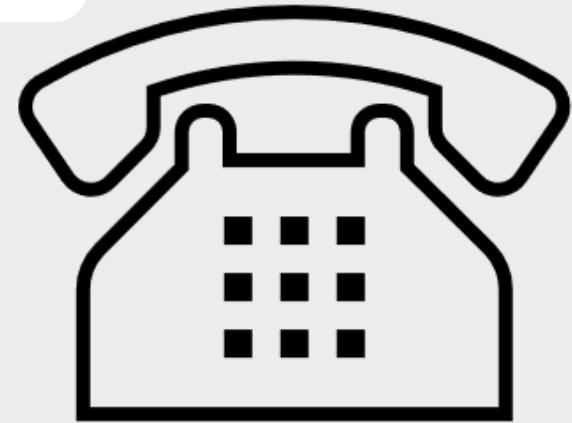
Continuously review
Patient Dedup and
Immunization Dedup
queues in the MIIS

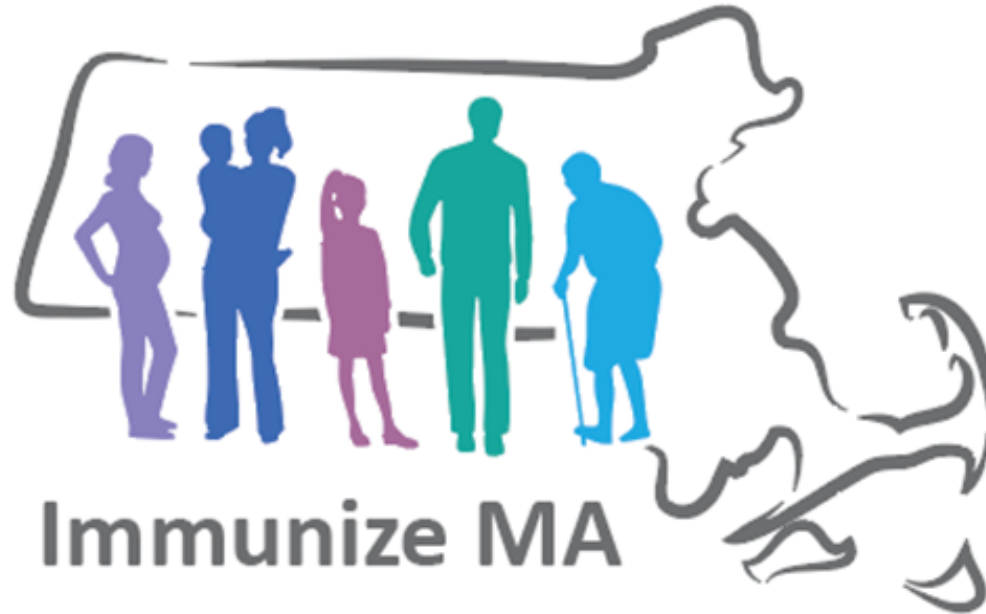
Question and Answer

Contact Us

For questions, please contact the MIIS Help Desk:

- Phone: (617) 983-4335
- Fax: (617) 983-4301
- Email: miishelpdesk@state.ma.us
- Website: www.miisresourcecenter.com





Thank You!
