2019 Interoperability Overview:
HL7 Electronic Data Exchange with the Citywide Immunization Registry and Meaningful Use Stage 3

Bureau of Immunization Webinar

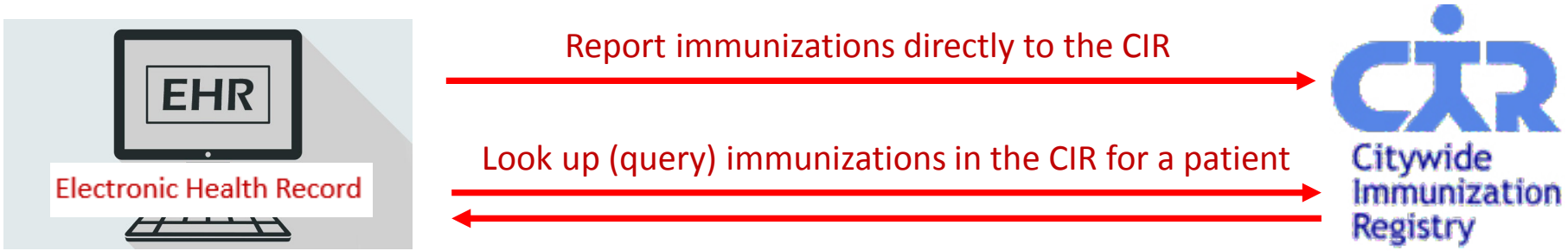
NYC Department of Health and Mental Hygiene

March 5-6, 2019

Monica Sull, Lita Jimenez, and David Park

Purpose

- Provide an overview of electronic data exchange with the Citywide Immunization Registry (CIR)



- Describe the process of "onboarding," i.e., connecting a facility's electronic health record (EHR) to the CIR for electronic data exchange
- Highlight Meaningful Use (MU) Stage 3 requirements in 2019
  - Federal incentive program that began in 2009 to support the adoption of EHR technology for exchanging, accessing, and utilizing health information
- Review MU registration process
- Provide helpful CIR and MU resources and support contacts

*All immunizing facilities must register for a CIR facility code (unique identifier) in order to exchange any information with the CIR: https://a816-healthpsi.nyc.gov/OnlineRegistration/dohmh/DOHMHService.action

Immunizing provider

Immunizing facility *

Participates in **MU**?

Yes

Go to the New York State Meaningful Use Registration for Public Health (**MURPH**) System

Register your practice locations in MURPH for MU

Onboarding process to connect your EHR to the CIR for electronic data exchange

Immunizing facility is **connected** to the CIR for electronic data exchange and is **MU compliant**

Attest to MU through Centers for Medicare and Medicaid Services (CMS)

No

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Citywide Immunization Registry

NYC Health

Promoting Interoperability (PI) = MU

- CMS EHR Incentive Program (commonly referred to as MU) was renamed the Promoting Interoperability (PI) Program in April 2018
  - https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentiveprograms/
- For the purposes of this webinar, we will continue referring to the program as MU, but please note that the official name is PI

Citywide Immunization Registry (CIR):

Methods of reporting immunizations and benefits of electronic data exchange

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Citywide Immunization Registry

NYC Health

CIR Background

- Started 1996; implemented citywide 1997
- Population-based
  - Birth certificate data loaded weekly
- NYC providers mandated to report immunizations for patients 0-18 years
  - Reporting for adults ≥19 years requires consent
- Over 7 million patient records
- Over 100 million immunizations

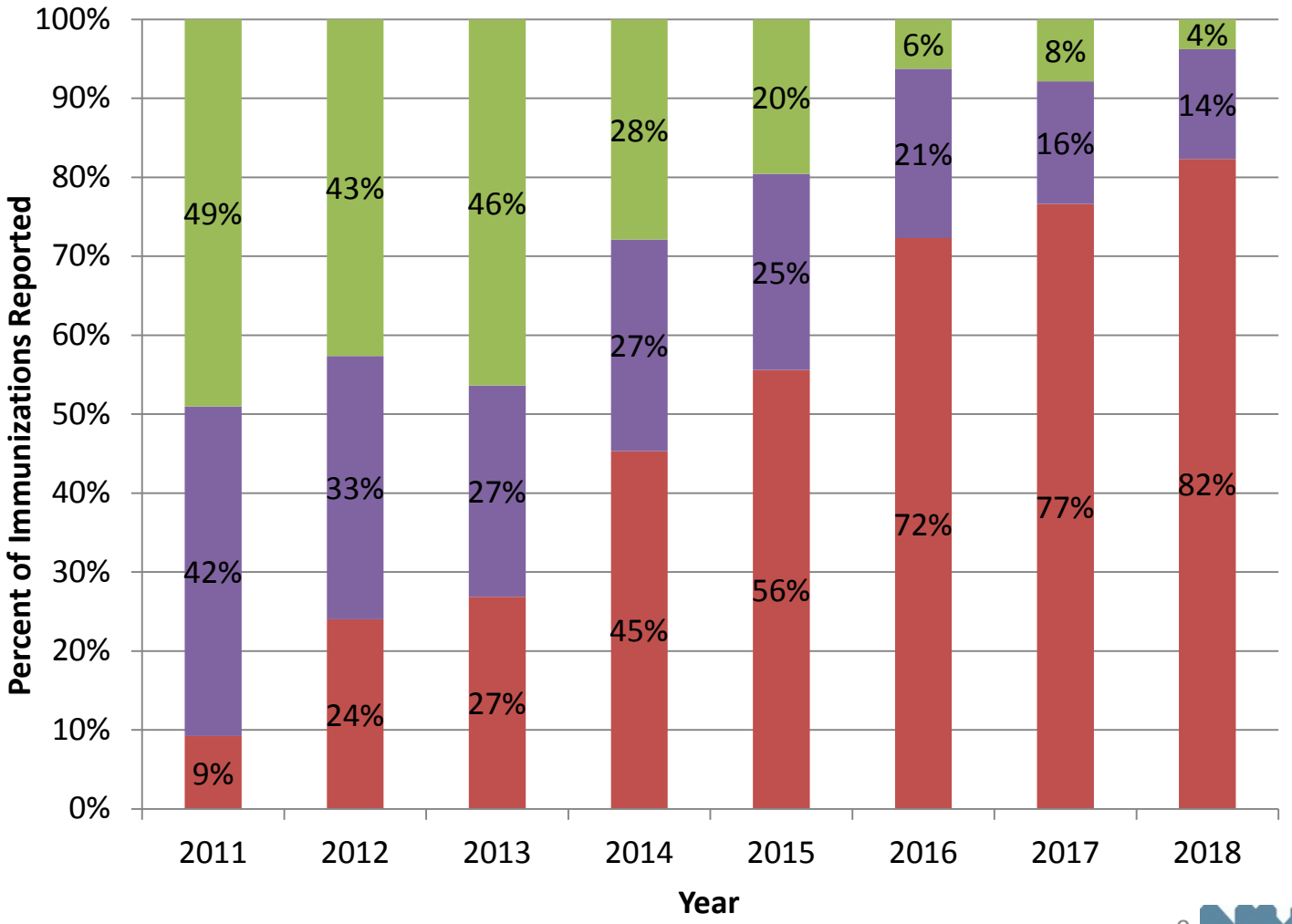
Programmatic Use of CIR Data

- Vaccines for Children (VFC)
  - Doses Administered Report
  - Vaccine Inventory Management
- Vaccine-preventable disease surveillance
- Monitor citywide immunization rates
- Targeted outreach to sites and neighborhoods with lower immunization rates
- Assess MU program compliance for the immunization registry reporting measure

Methods for Reporting Immunizations to the CIR

- **Electronic data exchange: 82%**
  - **Report directly from your EHR to the CIR (via HL7*)**
- Online Registry: 14%
  - Manual online data entry
- Batch file transfer: 4%
  - Submit batch files for upload to the CIR (via UPIF)

*HL7 is the way that immunization data is sent between connected EHRs and the CIR



Electronic Data Exchange with the CIR

- CIR's HL7 Web Service was established in 2009 to facilitate real-time, electronic data exchange between EHRs and the CIR
  - First facilities connected in 2011
- 3,041 facilities connected (as of 12/28/18)
- 70 EHR vendor products connected
- 46% of connected facilities are bidirectional, i.e., able to report and query (look up) immunizations in the CIR for a patient

Benefits of Bidirectional Data Exchange

- Avoid duplicate data entry
- Look up immunizations in the CIR for a patient in <5 seconds, without leaving your EHR workflow
- Receive clinical decision support
  - Evaluated immunization history (valid/invalid dose, series completion)
  - Immunization forecasting and recommendations based on patient's age and immunization history
- Reconcile data between EHR and CIR
- Avoid missed opportunities for immunization
- Avoid over-immunizing
- Increase up-to-date rates

How can you get connected to the CIR?

- CIR Interoperability Team uses a phased, onboarding process to establish connections between your EHR and the CIR

CIR Interoperability (“Interop”) Team:

Who are we and how can we help you?

*All immunizing facilities must register for a CIR facility code (unique identifier) in order to exchange any information with the CIR: https://a816-healthpsi.nyc.gov/OnlineRegistration/dohmh/DOHMHService.action

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CIR Interoperability ("Interop") Team

- Established in 2011 to onboard and manage providers' EHR connections to the CIR
- Managers of data quality and completeness of immunization data exchanged via the CIR's HL7 Web Service
- Assist participating providers with meeting compliance for the MU Public Health Immunization Registry Measure within NYC

Onboarding Process for Connection Requests

- Initial discussions and prerequisites
- Connection development and testing
- Production deployment

Onboarding: Initial discussions and prerequisites

- Initial discussions
  - A kick-off call with all stakeholders to discuss key phases of the onboarding process and plan milestones/timeline
- Information needed to start discussions:
  - CIR facility codes for each location
  - Expected date for onboarding completion
  - Health Care Provider Confidentiality Statement: https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cir-hcp-conf-statement.pdf
  - Vendor Confidentiality Statement: https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cir-vendor-confidentiality.pdf

To start this phase, reach out to CIR Interop Team requesting a kick-off call.

Onboarding: Connection development and testing

- Connection Development
  - EHR vendor + technical team develop connection to CIR in their development/test environment
  - CIR Interop Team member will confirm connectivity so testing can begin
- Testing
  - EHR vendor + technical team will report test data via HL7 until it meets all the CIR test criteria
  - There are two scopes for testing:
    - Reporting (sending immunization data to the CIR)
    - Querying (looking up patients' immunization data in the CIR)

To start this phase, open a ticket to your EHR vendor requesting connectivity testing with CIR.

Onboarding: Production deployment

- After all testing requirements are met, the CIR Interop Team will notify all stakeholders
- A close-out call with all stakeholders will be conducted to discuss the date connection will be set up in Production by the EHR vendor + technical team
- CIR will verify proper contacts to communicate any future data quality or connectivity issues

The CIR Interop Team will start this phase once determined that testing objectives were met.

Communicating with CIR Interop Team

- CIR_interop@health.nyc.gov
  - This shared email will be used to communicate the following:
    - Onboarding communications
    - CIR maintenance or outage updates for external partners
    - Data exchange failures and/or errors
- Email CIR_interop for:
  - Onboarding requests
  - Data quality issues, errors, and connectivity issues

Reach out to CIR_Interop@health.nyc.gov to be added to mailing list.

Meaningful Use (MU):

What is new in 2019 and what do participating providers need to do?

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MU Stage 3: New requirements

- As of 2019, Stage 3 is required
- Providers must be utilizing an EHR product that is 2015 edition certified EHR technology (CEHRT), specifically, for transmission to immunization registries
- Providers must also be able to demonstrate bidirectional data exchange with the CIR
  - Report immunization data to the CIR in HL7 2.5.1 version
    - NDC codes, in addition to CVX code, are required for all newly administered doses
  - Query (look up) patient's immunization data in HL7 2.5.1 version
    - Must display evaluated history and forecasting in EHR
- For the full list of CIR MU Stage 3 requirements, we have included a resource link to the CIR's MU Stage 3 checklist later on

Requesting MU Stage 3 Testing

- Submit a ticket to EHR vendor requesting MU Stage 3 testing
  - Must have 2015 edition CEHRT
- Eligible providers (EPs) and eligible hospitals (EHs) already connected to the CIR still require additional updates to meet MU Stage 3 requirements
- Know your CIR facility code(s)
  - Facility cannot exchange data with the CIR without a facility code

MU Stage 3 Resources

- To look up CEHRT, refer to the following site:
  - https://chpl.healthit.gov/#/search
- For instructions on looking up CEHRT, refer to the following document:
  - https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:ca2d5b44-9d87-49e5-b7f8-69083844b280
- For more details about MU Stage 3 requirements, refer to the CIR's MU Stage 3 Checklist
  - https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cir-meaningful-use-checklist.pdf

MU Communications

- 2 types of routine MU communications:
  - Invitation to Test letter
    - Invitation to begin the onboarding process of connecting
  - Request for Action letter
    - Letter sent to request a specific action
- In order to be actively engaged in MU, contacts must reply to all MU communications

Communicating with CIR Interop Team for MU

- MUtracking@health.nyc.gov
  - CIR Interop Team's shared email account used for programmatic communications regarding MU
    - Invitation to Test letters
    - Request for Action letters
- Email MUtracking for:
  - Information regarding MU Stage 3 immunization requirements
  - MU status letters
    - Must include 90-day EHR reporting period

Contacting New York Medicaid MU Support Team

- (877) 646-5410
  - Option 1
    - ePACES, ETIN, MEIPASS Technical Issues, Enrollment
    - Email: meipasshelp@csra.com
  - Option 2
    - Calculations, Eligibility, Attestation Support and Review, Attestation Status Updates, General Program Questions
    - Email: hit@health.ny.gov
  - Option 3
    - Public Health Reporting Objective Guidance, MURPH Registration Support, Registry Reporting Status
    - Email: MUPublicHealthHelp@health.ny.gov

Additional MU Resources

- Receive CMS MU updates (will be referred to as PI)
  - https://public.govdelivery.com/accounts/USCMS/subscriber/new?topic_id=USCMS_627
- CMS website for 2019 MU requirements
  - https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/2019ProgramRequirementsMedicaid.html
- New York State Medicaid Public Health Reporting webpage
  - https://www.health.ny.gov/health_care/medicaid/redesign/ehr/publichealth/
- New York State Medicaid MU Program Eligibility
  - https://www.health.ny.gov/health_care/medicaid/redesign/ehr/2019_opt_stage3.htm
- CIR MU webpage
  - https://www1.nyc.gov/site/doh/providers/reporting-and-services/cir-ehr-meaningfuluse.page

Meaningful Use Registration for Public Health (MURPH):

Key reminders when registering for MURPH

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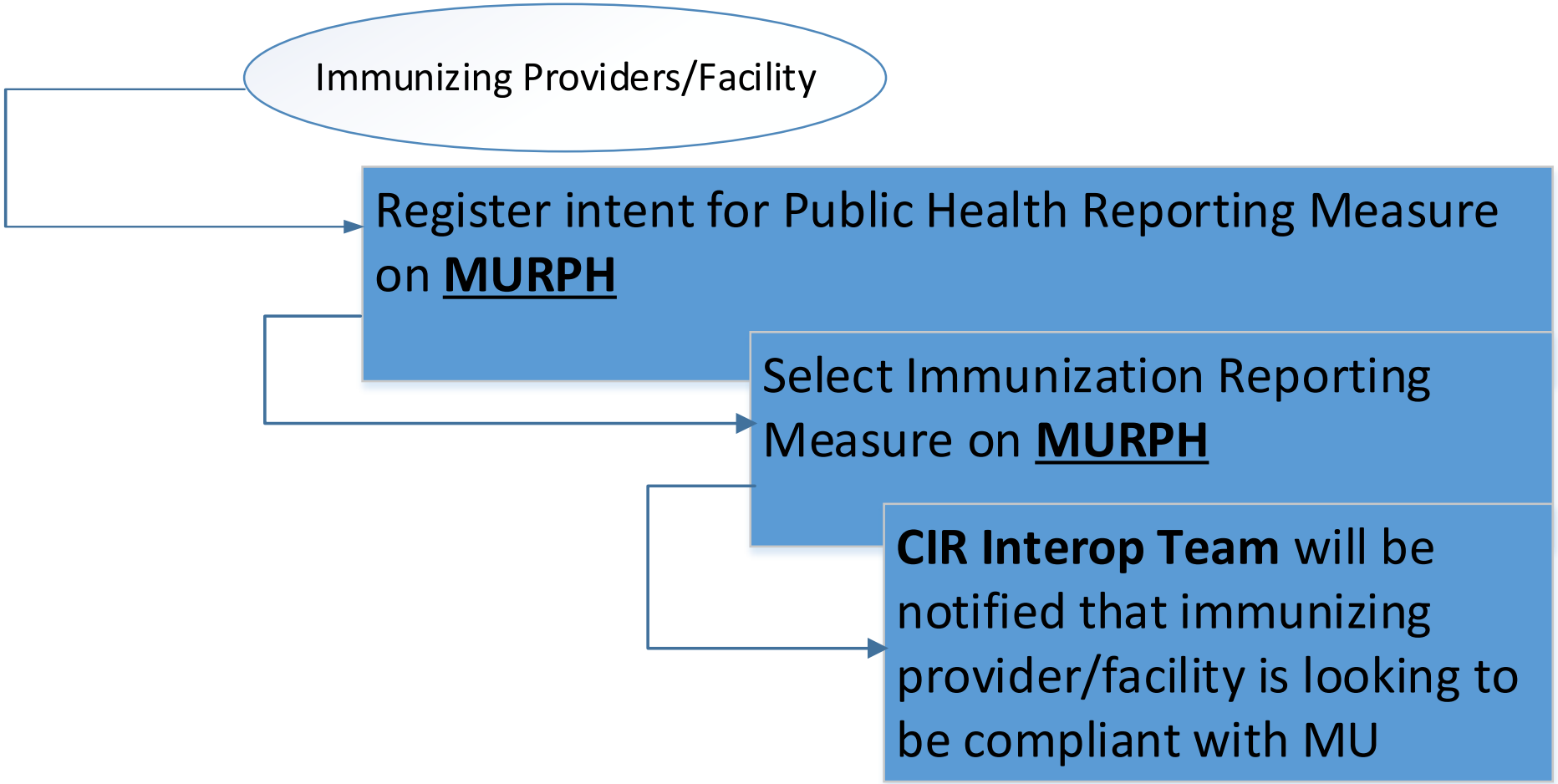
Citywide Immunization Registry

NYC Health

Purpose of MURPH for MU



MURPH System: MURPH Registration

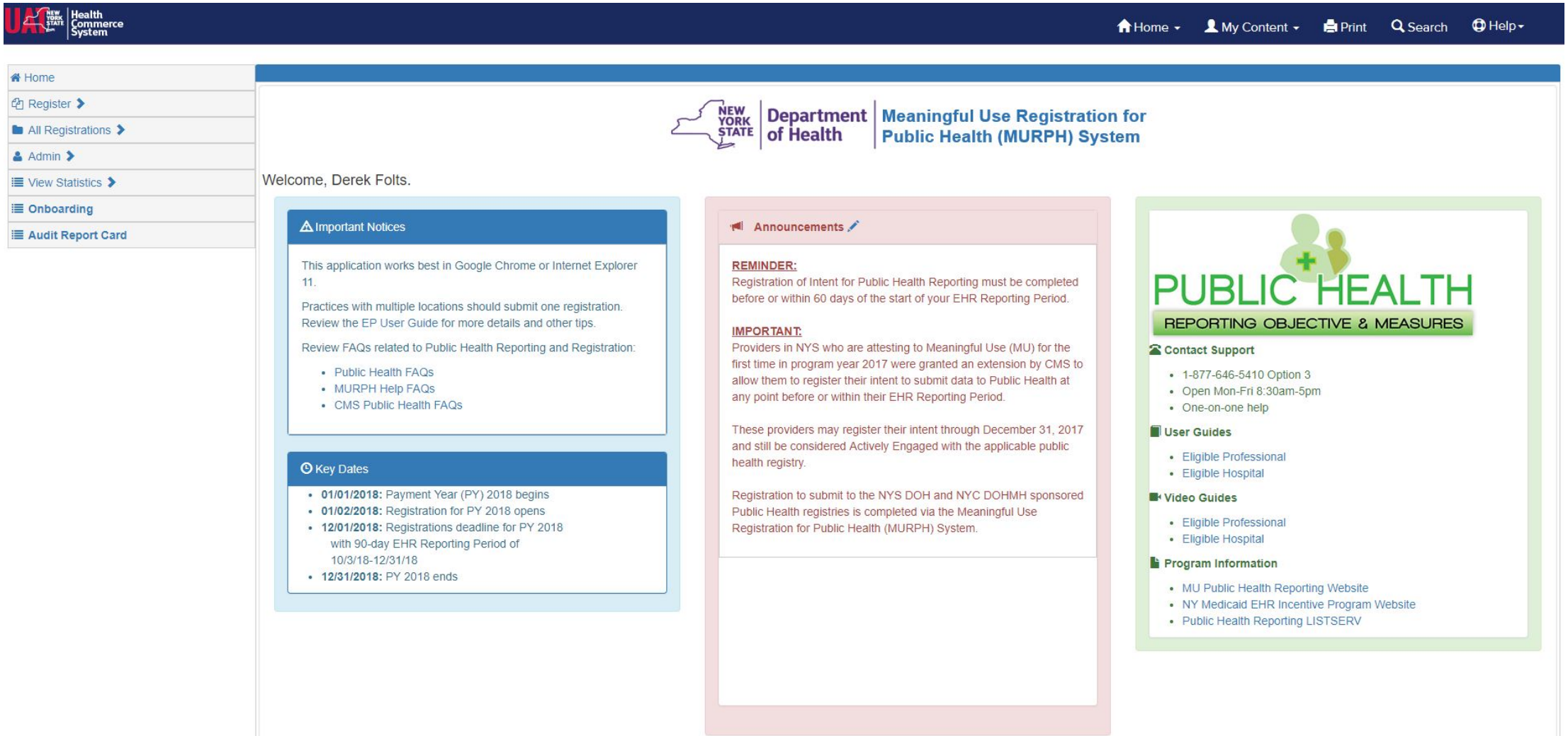
- Providers must register on MURPH for the Immunization Reporting Measure
  - How the CIR tracks MU registrants
- **Registration for MURPH is not the same as MU attestation**
- MURPH is for all MU public health reporting measures, including the immunization registry reporting measure
- Registration of intent should not be redone each year
- You may edit an existing registration
- If you have not previously registered intent to report to Public Health, please register in MURPH

MURPH Overview

- How to…
  - Review existing MURPH registrations
  - Register for a new MURPH registration
- What is…
  - CIR facility code
  - MURPH Audit Report Card (ARC)

MURPH: Home Page

https://commerce.health.state.ny.us/public/hcs_login.html



MURPH: Importance of reviewing existing registrations

- Add and/or remove participating provider
- Add new participating locations
- Update EHR vendor and/or product version
- Update and/or add new registration contacts

MURPH: Review existing registrations

- Verify and update the following, as needed:
  - Primary and alternate contact information
  - Providers
  - EHR vendor and product version
  - Facility address

MURPH: When to start new registration

- The only time you should start a new registration is if you or your facility have not registered before

MURPH: New Registration

Practice Registrations

Filter Results...

Actions	Reg ID	Name	NPI	Status	Submit Dt	Update Dt	Updated By	Reg Contact Last Name	Alt. Contact Last Name
	109750	VanSlyke Family Care	4444444444	Submitted	12/27/2018			Vanslyke	Folts
	109746	PARK Family Care	999991111	Submitted	12/07/2018			Folts	VanSlyke
	109745	Test NYC Practice Pop Health	5555555555	In-Progress				Vanslyke	Folts
	109739	VANSLYKE MED CENTER	1234546243	Submitted	11/20/2018	11/27/2018	dfolts	Vanslyke	Folts
	109663	Derek Prop Test	1777777770	In-Progress	08/22/2018			Folts	Vanslyke
	109661	InQueue Testing Practice	1357912461	Submitted	08/15/2018			Vanslyke	Folts
	109639	Folts - EP No Loc Test Practice	1777777777	In-Progress				Folts	Vanslyke
	109594	LITAS MED CENTER	654874548	Submitted	08/09/2018	10/02/2018	dfolts	Vanslyke	Folts
	94570	Folts Family Practice	1444333342	Submitted	05/29/2018			Vanslyke	Folts
	36042	Test Care Test	888898881	In-Progress				Potka	Folts

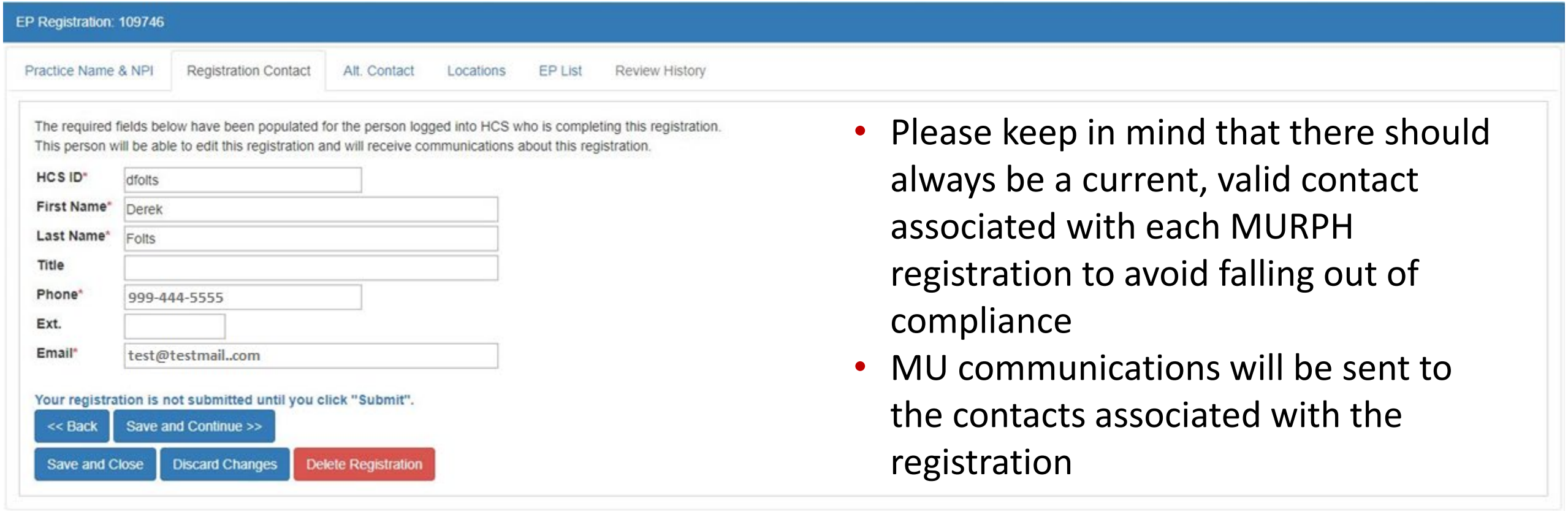
1 / 2 10 items per page 1 - 10 of 11 items

Start New Registration

Important Information

- A practice registration should include every Eligible Professional associated with the practice and planning to attest yes to at least one Meaningful Use Public Health Reporting Measure.
- A single user with an active HCS account may complete a practice registration on behalf of all affiliated Eligible Professionals.
- Do NOT complete separate registrations for each Eligible Professional.
- Multiple locations (with unique NPIs and names) may be added to a single registration.
- If you are unsure how to register your practice or Eligible Professionals, please contact the Meaningful Use Public Health Objective Support Team at 1-877-646-5410 Option 3 or MUPublicHealthHELP@health.ny.gov

MURPH Registration: Registration Contact



- Please keep in mind that there should always be a current, valid contact associated with each MURPH registration to avoid falling out of compliance
- MU communications will be sent to the contacts associated with the registration

MURPH Registration: Locations

EP Registration: 109746

Practice Name & NPI | Registration Contact | Alt. Contact | Locations | EP List | Review History

Please enter all locations where EPs you are registering deliver services.
All locations in this registration must be in the same jurisdiction (Inside or Outside the 5 boroughs of NYC).

Practice Jurisdiction

Is this practice located inside or outside of the five boroughs of NYC?
Inside the 5 boroughs of NYC ▾

The Practice's location inside or outside the five boroughs of NYC determines to which registries the EPs will report data. Please make sure the value for Practice Jurisdiction is correct before continuing.

Add Another Practice Location | Save Location

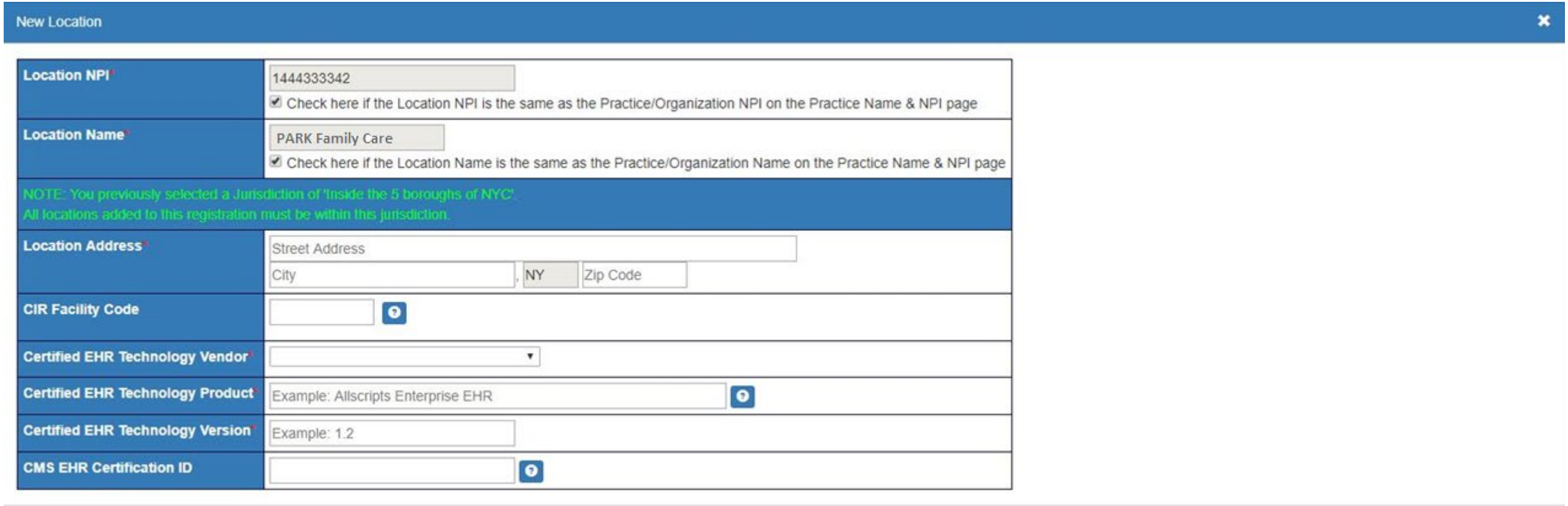
Location	Actions	NPI	Name	Address	Vendor	Product	Version	Certification ID
1		1222222222	Location 1	1 Main Brooklyn, NY 12222	Agastha, Inc	Agastha EMR	1.1.2.3	
2		1444333342	Location 2	2 Main Queens, NY 13333	Allscripts	Allscripts EMR	4.4.3	

Your registration is not submitted until you click "Submit".

<< Back | Continue >>

Close | Discard Changes | Delete Registration

MURPH Registration: New Location



MURPH Registration: Importance of CIR facility codes

- CIR facility codes are required to exchange data with the CIR
- CIR facility codes are also used to verify compliance with programs like VFC and MU
- When attesting to Immunization Registry Reporting measure in NYC, each location must have unique facility code
- Register for a new CIR facility code
  - https://a816-healthpsi.nyc.gov/OnlineRegistration/dohmh/DOHMHService.action

MURPH Registration Reminders

- Avoid duplicate registrations
- Avoid registering non-immunizing locations
- Update contact information
- CIR facility code should be associated with one location
- MURPH Registration Support Team:
  - Email: MUPublicHealthHelp@health.ny.gov
  - Phone: (877) 646-5410 Option 3

MU Statuses: Audit Report Card (ARC)

- As of 1/1/19, MURPH introduced a self-service option to check statuses: ARC*
- ARC serves as a status letter for EPs/EHs and will be used by auditors to verify MU engagement
- Review your MURPH ARC to understand current engagement

MU Statuses: ARC Resources

- For assistance interpreting the ARC, please contact MUPublicHealthHELP@health.ny.gov
- For questions about statuses shown for the NYC CIR, please contact MUTracking@health.nyc.gov
- User Guide: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/repository/docs/audit_rpt_card_user_guide.pdf

MU Statuses: Request for Letter

- If there are concerns about statuses that appear in the ARC, EPs/EHs may still request status (or confirmation) letters
- Send all status letter requests to MUtracking@health.nyc.gov
  - Include your practice name, registration ID, location ID(s), and CIR facility code(s)
- All requests must include the 90-day EHR reporting period from your MU attestation (CIR policy, moving forward)

Summary

Main Takeaways (1)

- Majority of immunizations are reported to the CIR through electronic data exchange (via HL7)
- Several benefits to providers of connecting to CIR and bidirectional data exchange
  - Avoid duplicate data entry
  - Look up immunizations in the CIR for a patient in <5 seconds, without leaving your EHR workflow
  - Clinical decision support
- CIR Interop Team can help you connect to the CIR and assist with MU compliance

Main Takeaways (2)

- Beginning 2019, MU Stage 3 is required
  - 2015 edition CEHRT
  - NDC codes
  - Bidirectional data exchange with the CIR
- To request testing for MU Stage 3 with the CIR:
  - Submit a ticket to your EHR vendor
  - EHR vendor/technical contact must reach out to CIR Interop Team to engage in testing
- Registration for MURPH is not the same as attestation
- Review existing MURPH registrations
- Each MURPH registration location must be associated with one unique CIR facility code

Key Contacts

- CIR Interop Team
  - CIR_interop@health.nyc.gov
  - MUtracking@health.nyc.gov
- New York Medicaid MU Support Team
  - (877) 646-5410
  - meipasshelp@csra.com
  - hit@health.ny.gov
  - MUPublicHealthHelp@health.ny.gov

Key Resources (1)

- CEHRT lookup: https://chpl.healthit.gov/#/search
  - CEHRT lookup instructions: https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:ca2d5b44-9d87-49e5-b7f8-69083844b280
- CIR
  - CIR MU webpage: https://www1.nyc.gov/site/doh/providers/reporting-and-services/cir-ehr-meaningfuluse.page
  - CIR MU Stage 3 checklist: https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cirimplementation-checklist.pdf
  - Health Care Provider Confidentiality Statement: https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cir-hcp-conf-statement.pdf
  - Vendor Confidentiality Statement: https://www1.nyc.gov/assets/doh/downloads/pdf/cir/cir-vendor-confidentiality.pdf
- CMS
  - CMS website for 2019 MU requirements (will be referred to as PI): https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/2019ProgramRequirementsMedicaid.html
  - CMS MU updates (will be referred to as PI): https://public.govdelivery.com/accounts/USCMS/subscriber/new?topic_id=USCMS_627

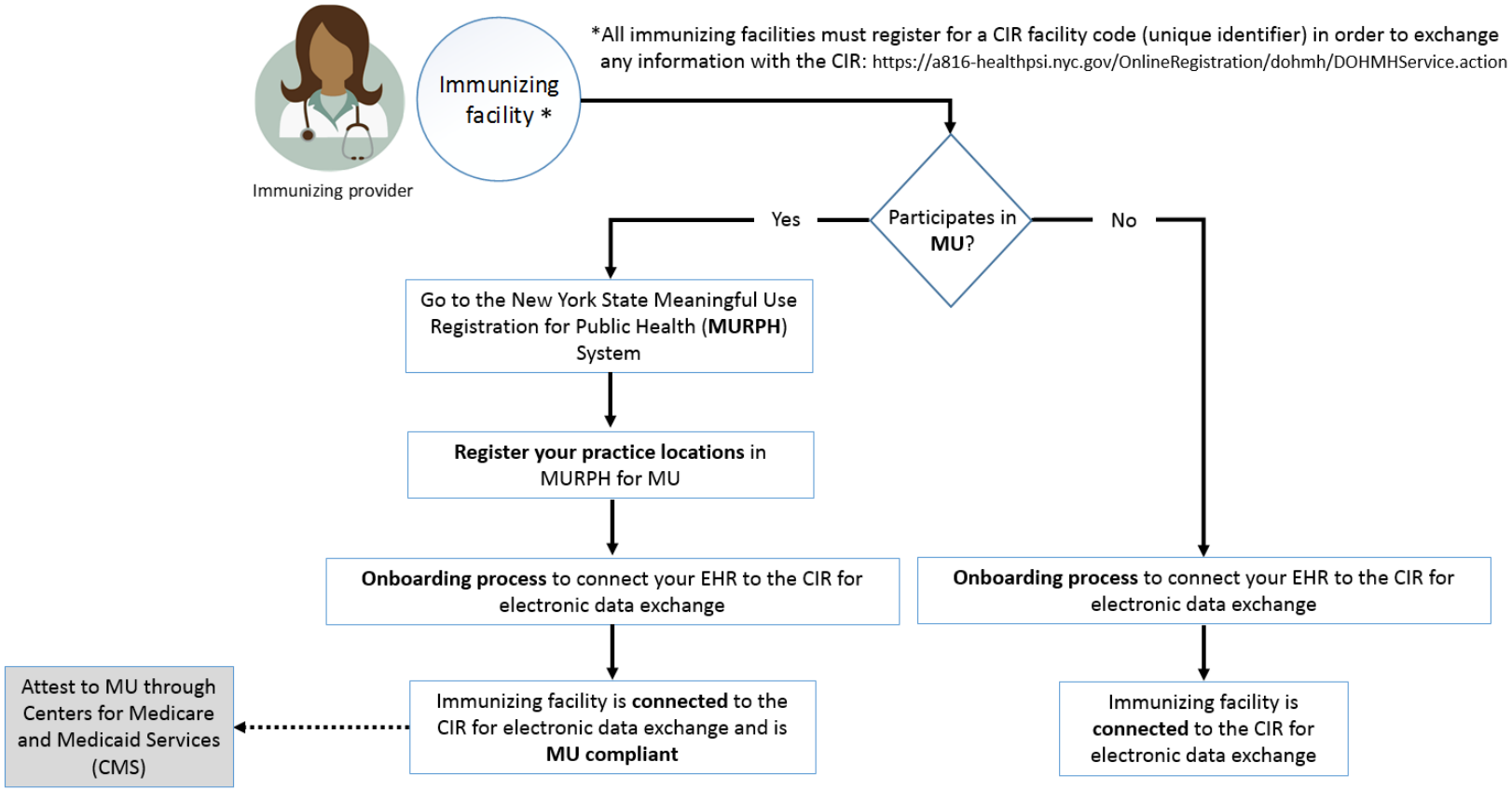
Key Resources (2)

- New York State Medicaid Public Health Reporting
  - New York State Medicaid Public Health Reporting webpage: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/publichealth/
  - New York State Medicaid MU Program Eligibility: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/2019_opt_stage3.htm
- MURPH
  - ARC User Guide: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/repository/docs/audit_rpt_card_user_guide.pdf
  - EP Registration User Guide: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/repository/docs/eligible_prof_murph_guide.pdf
  - EH Registration User Guide: https://www.health.ny.gov/health_care/medicaid/redesign/ehr/repository/docs/eligible_hosp_murph_guide.pdf

Commonly Used Terms and Acronyms

Term/Acronym	Definition
CEHRT	Certified EHR Technology
CIR facility code	Unique identifier (7 character alphanumeric code) used to identify sites (location-level) registered with the CIR
CMS	Centers for Medicare and Medicaid Services
EHR	Electronic Health Record
EH	Eligible Hospital
EP	Eligible Professional
HL7	Set of international standards for transfer of clinical and administrative data between software applications used by various healthcare providers
Interface	Point of data exchange with the CIR
MEIPASS	Medicaid EHR Incentive Program Administrative Support Service
MU	Meaningful Use
MURPH	Meaningful Use Registration for Public Health
NDC	National Drug Code
NPI	National Provider Identifier
Promoting Interoperability	EHR Incentive Programs committed to promoting and prioritizing interoperability of healthcare data
Query	Look up or searching for a patient's immunization record via EHR Product

Questions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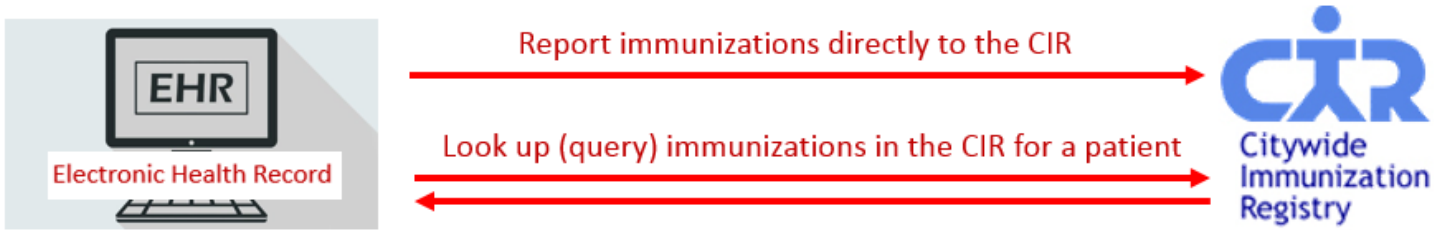
EHR
Electronic Health Record
Report immunizations directly to the CIR
Look up (query) immunizations in the CIR for a patient
Citywide Immunization Registry