

### Outline

- CIIS Background
- Meaningful Use Implementation (early response)
- Initial Statistics
- Development of CoPHR
  - Design & Testing Phases
  - Rollout Phase
- CoPHR Statistics
- Lessons Learned
- Next Steps



# CIIS Background

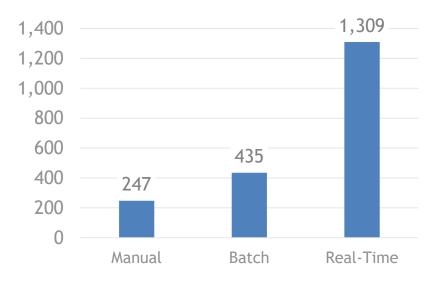
#### Colorado Immunization Information System (CIIS)

#### Confidential, secure, population-based, web-based system that:

- Consolidates immunization records for Coloradans of all ages
- Recommends the vaccines a patient needs based on history and age
- Supports the increase and sustainability of high immunization coverage rates

#### CIIS by the numbers (as of June 30,2019)

- Total Patients: 6.3 million
- Total Vaccinations: 70.9 million
- Sites Submitting Data to CIIS
  - Manually Reporting: 247
  - Electronically Reporting: 1,744
    - Batch: 435
    - Real-Time: 1,309
    - Bi-Directional: 475



88% of data is electronically reported



### Meaningful Use Implementation

Increased administrative burden on Public Health Authorities

- Develop Declaration of Readiness process
- Develop Registration of Intent process
- Evaluate current onboarding process
- Provide Acknowledgements for attestation



### Declaration of Readiness

- Developed Declaration of Readiness for all Public Health Reporting Objectives
- Posted Declaration of Readiness on Colorado
   Department of Public Health and Environment website

Name of MU	Immunization Registry Reporting
Public Health	
Objective	
Name of	Colorado Immunization Information System (CIIS)
CDPHE	
Program	
PHA	STAGE 2: CIIS is currently capable of receiving electronic data from Electronic
Readiness	Health Record (EHR) systems and is accepting registrations from Eligible Providers
	and Eligible Hospitals for the Stage 2 Meaningful Use immunization reporting public
	health objective.
	STAGE 3: By January 1, 2017, CIIS will be capable of responding to bidirectional
	queries (QBP/RSP) and receiving NDC Codes for the Stage 3 Meaningful Use
	immunization reporting public health objective.
PHA Contact	STAGE 2: Providers interested in the immunization reporting objective must
Information	register their intent here: <a href="http://www.costage2mu.dphe.state.co.us/">http://www.costage2mu.dphe.state.co.us/</a>
	STAGE 3: Providers interested in the immunization reporting objective that did not
	register their intent during Stage 2 must register their intent here:
	http://www.costage2mu.dphe.state.co.us/
Transport	Secure FTP for batch files, SOAP for real-time messaging
Messaging and	HL7 2.5.1 Implementation Guide for Immunization Messaging, CEHRT 2014 -
Vocabulary	Release
Standards	1.4: http://www.cdc.gov/vaccines/programs/iis/technicalguidance/hl7.html &
	CEHRT 2015 - Release 1.5 (including Release 1.5 Addendum):
	http://www.cdc.gov/vaccines/programs/iis/technical-guidance/hl7.html
	HL7 Standard Code Set CVX - Vaccines Administered (updates through July 30,
	2016))
Additional	Dose-Level VFC Eligibility (OBX-5)
Requirements	Vaccine Funding Source (OBX-5)
	Action Code (RXA-21)
	NDC Code (RXA-5)



# Registration of Intent (ROI)

- Developed online ROI form
  - Individual contact for each PH reporting program
  - Program emailed when ROI completed
  - Each program developed way to track ROIs
- Immunization Reporting ROI tracking
  - Information transferred to a Google Sheet
    - Tracked ROI date(s)
    - Tracked Acknowledgment date(s)

#### Meaningful Use Registration Form

To save your progress...

New/Returning Users <u>CLICK HERE</u> to setup or return to your account for this registration form. This enables you to partially complete this form and return later to finish the form.

Eligible Hospitals and Eligible Providers wishing to participate in electronic public health reporting for Meaningful Use in Colorado must register their intent to do so with the Colorado Department of Public Health and Environment. Please complete this online registration form to the best of your ability.

#### GENERAL INFORMATION

What Meaningful Use Public Health Reporting Objective(s) are you registering for? (check all that apply) \*

- ☐ Cancer Registry Reporting
- ☐ Immunization Data Reporting (IZ)
- ☐ Electronic Laboratory Reporting (ELR)
- Syndromic Surveillance Reporting (SS)

Click below to download or view the questions that may necessitate some research prior to completing your registration.

- Cancer Info
- Immunization Info
- ELR Info

Are you registering only for Syndromic Surveillance Reporting (SS) \* 3

- YES (this choice will submit the survey)
- NO (Please also select Cancer, IZ or ELR before proceeding)



# Registration of Intent (ROI)

CIIS Clinic	Umbrella Organization =	Interface Status	■ Date Submitted =	MU 2 Acknowledgement Provided	Stage	─ Provider Type	Incentive Program	HIE Affiliation  Designated
DMI	0	15	2/0/2044	2/6/2015		Elizible Describes	Madiana	Ness
	:			11/17/2015				None CORHIO
GFA	None	Live	3/4/2014	0/22/2044	stage 2	Eligible Provider	Medicare	CORNIO
003	HCA-HealthOne LLC	Live	3/4/2014	10/19/2015 11/29/2016 12/21/2017	Stage 2	Eligible Hospital	Dual	CORHIO
063	HCA-HealthOne LLC	Live	3/4/2014	9/22/2014 10/19/2015 11/29/2016 12/21/2017		Eligible Hospital	Dual	CORHIO
051	HCA-HealthOne LLC	Live	3/4/2014	9/22/2014 10/19/2015 11/29/2016 12/21/2017	Stage 2		Dual	CORHIO
080	HCA-HealthOne LLC	Live	3/4/2014	9/22/2014 10/19/2015 11/29/2016 12/21/2017	Stage 2	Eligible Hospital	Dual	CORHIO
915	HCA-HealthOne LLC	n/a	3/4/2014		Stage 2	Eligible Hospital	Dual	CORHIO
007	HCA-HealthOne LLC	Live	3/4/2014	9/22/2014 10/19/2015 11/29/2016 12/21/2017	Stage 2	Eligible Hospital	Dual	CORHIO
006	HCA-HealthOne I I C	Live	3/4/2014	10/19/2015 11/29/2016	Stage 2	Fligible Hospital	Dual	CORHIO
	003 063 051 080 915	RML ? GFA None  003 HCA-HealthOne LLC  063 HCA-HealthOne LLC  051 HCA-HealthOne LLC  080 HCA-HealthOne LLC  915 HCA-HealthOne LLC  007 HCA-HealthOne LLC	RML ? Live  GFA None Live  003 HCA-HealthOne LLC Live  063 HCA-HealthOne LLC Live  051 HCA-HealthOne LLC Live  080 HCA-HealthOne LLC Live  915 HCA-HealthOne LLC Live  007 HCA-HealthOne LLC Live	RML   ?   Live   2/6/2014	Clis Clinic   ID	CIIS Clinic   ID	Cilis Clinic   Umbrella   Umbrella   Organization   Estatus   Date Submitted   Estatus   Provided   Estatus   Est	CIIS Clinic   Organization   Fig.   Organization   Organization   Fig.   Organization   Fig.   Organization   Organization   Organization   Fig.   Organization   Organization   Organization   Fig.   Organization   Organiz



ROI Date and Acknowledgement Date



# Evaluate Onboarding Process

- 2011: Three full-time staff to onboard influx of providers
  - No resources to verify test message for Stage 1
- Developed Google Sheet waitlist to track providers
  - Waitlist grew to 637 sites

								COR	HIO
	── Provider Type		CIIS Clinic Code (if = applicable)	Date Added to _	oordinatc =	EHR Vendor =	EHR Product/Versio ≂ n	Agreement Implementatio = n	Connecte
Southern Colorado Nephrology	Internal Medicine	Pueblo	SCN	3/19/2012	Linda	Acumen			
Partners in Health Family Medicine (part of iPN)	Family Practice	Adams	PHF	1/26/2011	Heather	NextGen		Yes	Yes
Southeast Wellness Works	Family Practice	Otero	SWW	6/27/2013	Linda	Advanced MD - Changed to Avatar	ADP-Advanced MD		
Nicholas G. Nonas, MD & Arvin K. Rao, MD	Family Practice	Arapahoe	NNR	12/29/2011	Rosemary	AllMeds	V.9.0.35		
Kids First Pediatrics	Pediatrics	Jefferson	KFP	5/10/2011	Linda	GE Centricity		X - In backlog	X
Daniel Jinich, MD, PC	Family Practice	Larimer	DBJ	5/11/2011	Melanie	AllScripts	MyWay 2010.5.1		
Flatiron Pediatrics (part of iPN)	Pediatrics	Boulder	FLP	5/17/2011	Linda	NextGen		Yes	Yes
All About Women Care	OB/GYN	Arapahoe	AAW	7/18/2011	Rosemary	AllScripts	MyWay	Yes	Yes
Healthy Futures, PC	Family Practice	Arapahoe	HYF	6/7/2011	Karen	AllScripts	MyWay		
Broomfield Medical Associates	Internal Medicine	Broomfield	BPC	6/10/2011	Rosemary	athenaHealth			
Rocky Mountain Primary Care Lakewood (part of iPN)	Family Practice	Jefferson	RPL	6/13/2011	Karen	NextGen		Yes	Yes
South Suburban Family Practice	Family Practice	Arapahoe	SSU	10/17/2011	Rosemary	AllScripts			
Pediatrics at the Meadows (formerly Perry Street Pediatrics)	Pediatrics	Douglas	PSP	1/27/2012	Rosemary	Greenway	PrimeSuite	Yes	
Grand River Hospital District	Hospital	Garfield	GRM	4/23/2012	Cinda	AllScripts - move Meditech April 2019	Enterprise		
Family Practice Associates (part of iPN)	Family Practice	Boulder	FAP	7/18/2011	Rosemary	NextGen		Yes	Yes
Pueblo Women's Center (part of Parkview and convert to eCW?)	OB/GYN	Pueblo	PWC	6/28/2012	Linda	AllScripts	Professional		
Internal Medicine of North Springs	Internal Medicine	El Paso	IMN	7/18/2011	Kim	Amazing Charts	6.0.9		
New West Physicians	Family Practice	Multiple	Multiple	7/3/2012	Linda	AllScripts	Enterprise		
Spruce Street Internal Medicine - BCH purchased	Internal Medicine	Boulder	SSI	7/18/2011	Linda	Amazing Charts		X	Yes
Blue Skies Center for Women	OB/GYN	El Paso	BSC	7/11/2012	Kim	AllScripts	MyWay/Pro		



### Acknowledgement Letters

- Developed templates for Acknowledgement letters
  - Non-vaccinating site
  - Active Engagement: Waiting for Invite
  - Active Engagement: Testing and Validation
  - Active Engagement: Ongoing Submission
- Saved Acknowledgement letters



Dedicated to protecting and improving the health and environment of the people of Colorado

November 15, 2018

To Whom It May Concern:

Castle Rock Pediatrics registered with the Colorado Department of Public Health and Environment (CDPHE) for Meaningful Use reporting on November 15, 2018, yet achieved ongoing electronic submission to CDPHE for Immunization Reporting on August 1, 2015, according to the Stage 2 Meaningful Use requirements below:

Immunization Reporting Objective: Capability to submit electronic data to immunization registries or immunization information systems except where prohibited, and in accordance with applicable law and practice.

Immunization Reporting Measure: Successful ongoing submission of electronic immunization data from CEHRT to an immunization registry or immunization information system for the entire EHR reporting period.

Immunization Reporting Standards: Health Level 7 version 2.5.1, Standard CVX Code Set

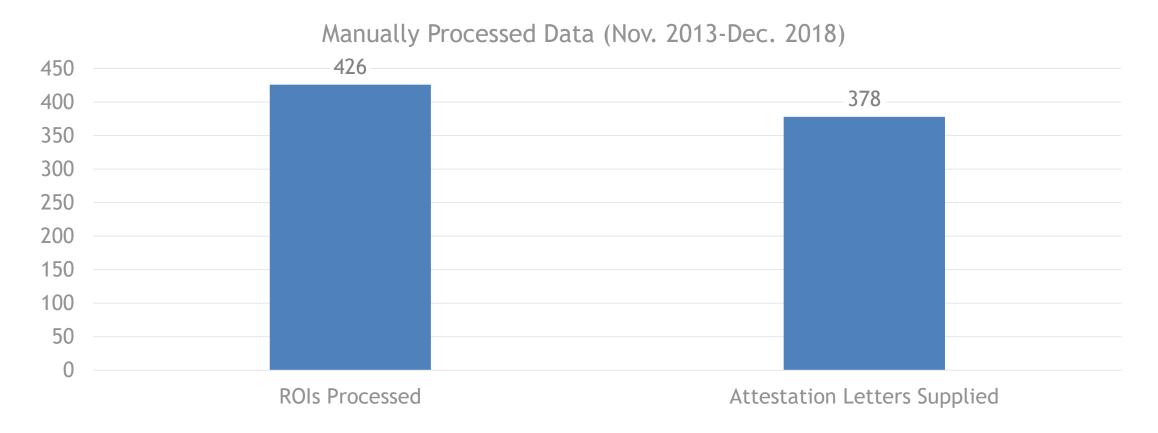
This document serves as your official Acknowledgement. Please contact me with any questions at many.kohrman@state.co.us or (303) 692-2753.

Best

Mary Kohrman, MPH
Data Exchange Coordinator
Colorado Immunization Information System
Colorado Department of Public Health and Environment



### Initial Statistics



ROIs included 1,727 individual sites



## Development of CoPHR



#### Purpose of CoPHR

- Develop all-inclusive resource center for all MU needs
- CoPHR allows external partners to:
  - Complete Registration of Intent
  - Obtain Attestation documentation
- Immunization Reporting better onboarding tools
- Expanded functionality to include all Public Health reporting programs
  - Immunization
  - Cancer Registry
  - Electronic Lab
  - Syndromic Surveillance



### Design & Testing Phases

#### **Design Phase**

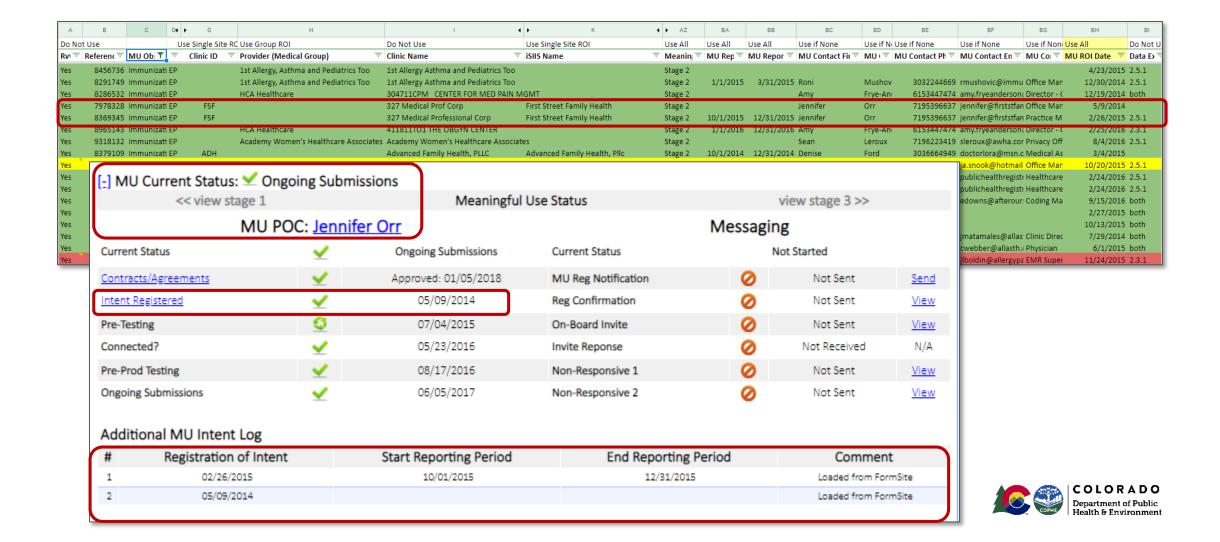
- Ensured enrollment process gathered necessary data elements
- Ensured user-friendly environment for external partners

#### **Testing Phase**

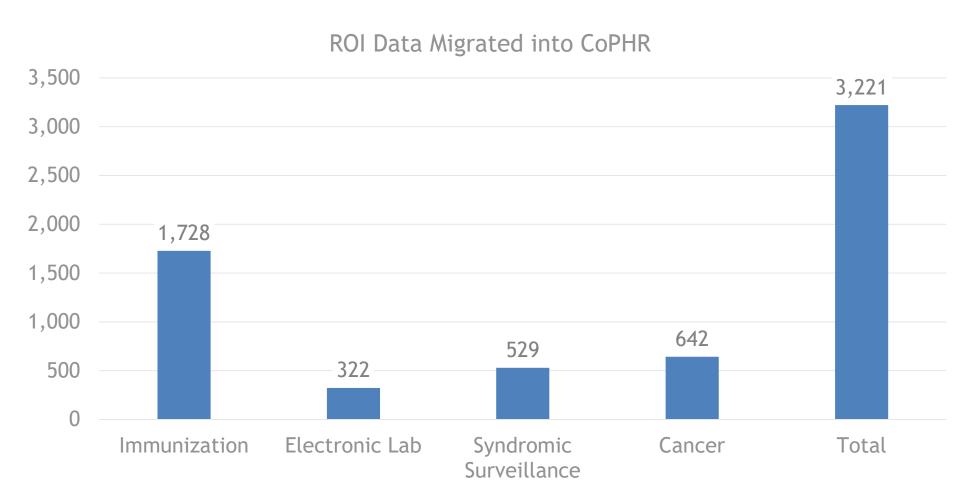
- Ensured functionality worked as expected
- Ensured new functionality didn't corrupt existing immunization data
- Verified migrated data was accurate
  - Migrated 3,221 existing ROIs for all Public Health programs



## Data Migration Review



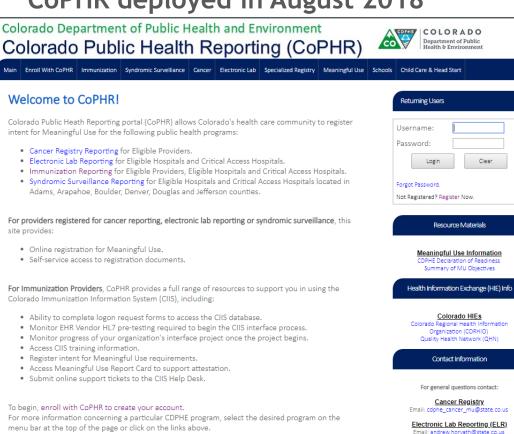
# Migrated ROI Data





### Rollout Phase

#### CoPHR deployed in August 2018



Immunization Reporting

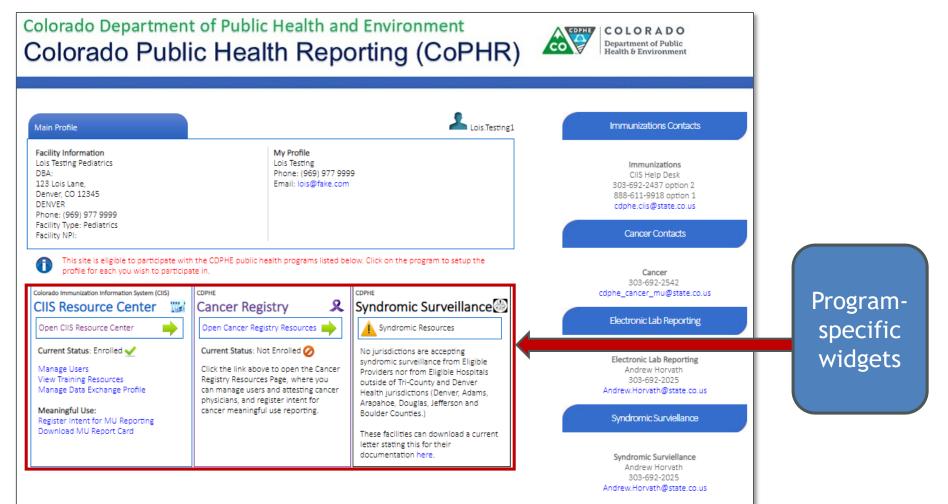
Email: cdphe.CIIS@state.co.us Syndromic Surveillance



CoPHR Landing & **Enrollment Pages** 



# CoPHR-Single Site





# CoPHR-Single Site (Immunization)





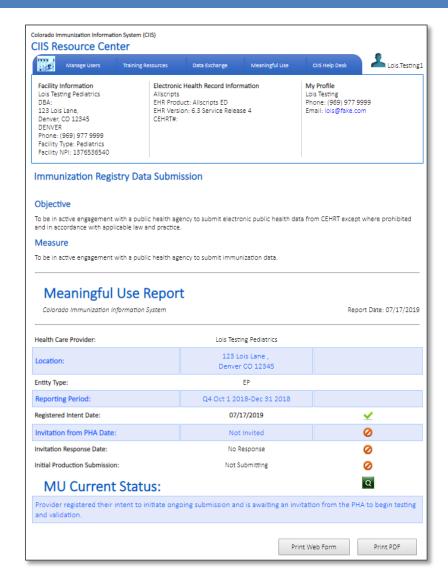
# CoPHR-Single Site

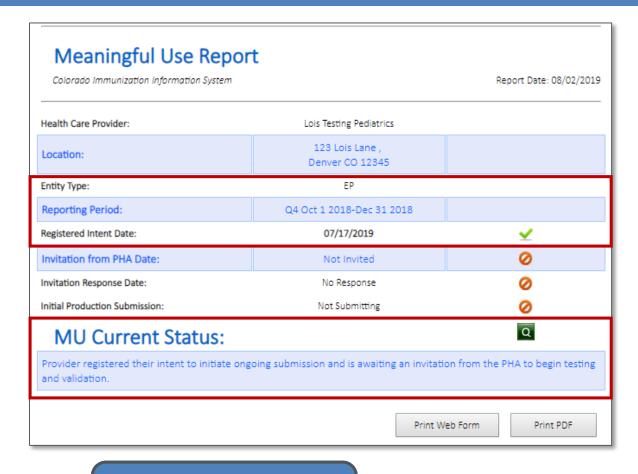
National Provider Identification (NP Please provide the NPI for the organization		1376536540 Click to search for NPI
Meaningful Use Designation Please select the designation of your or	ganization:	Eligible Provider (EP)    Eligible Hospital (EH)     Critical Access Hospital (CAH)
CMS Attestation Program Please Select CMS Program:		✓ Medicaid  Medicare
Attesting CMS Program Identifiers Please Enter Program IDs for Programs	selected above.	Medicare:
Select your Meaningful Use Report	ing Period *	Q4 Oct 1 2018-Dec 31 2018
OR The start date of your MU reporting pe	riod*	
Point of Contact (POC) for Me	aningful Use Communi	cations
	ultiple POCs for your organizat	on responsible for handling and facilitating communications w ion, click "Add Additional POC" to add additional POCs. All field
Point of Contact		<b>€</b> Self
First Name*:		Lois
Last Name*:		Testing
Phone Number*:		969 977 9999 x
Email Address*:		lois@fake.com
Employee Type*:		Medical Assistant ▼
		Add Additional POC
Use Immunization Reporting Objective. will be emailed to the address(es) provi	Upon submission of your regis ded for the designated POC(s):	ditions as set forth by the Public Health Agency for Meaningful tration a confirmation along with instructions for the next step as provided above. The confirmation and all other messages se and Acknowledgments section located at the right of this page.
MU Registration Agreement		
I acknowledge that the Colorado Depa Health Agency (PHA) for the state of Co forth by the Centers for Medicare & M	olorado. The PHA is not respon	
By agreeing to the terms and condition Immunization Reporting Objective you		
✓ I agree to the terms and condition:	as set forth by the Public Heal	th Agency for Meaningful Use Immunization Reporting
Objective.		

Single Site Registration of Intent



# CoPHR-Single Site

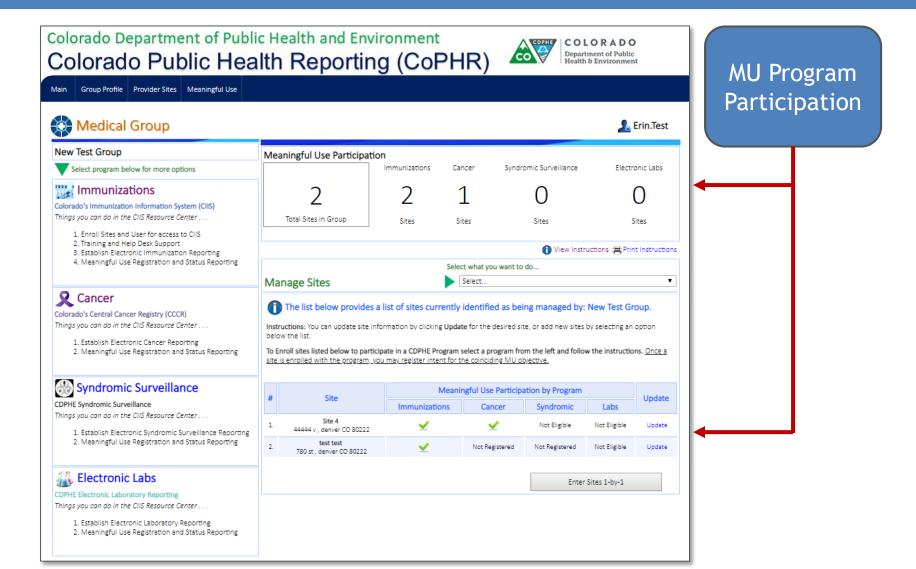




Single Site Meaningful Use Report Card



# CoPHR-Group



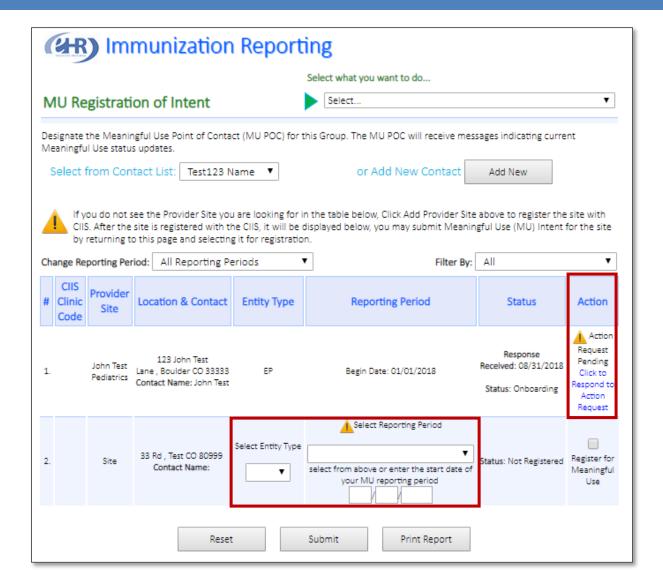


# CoPHR-Group (Immunization)





## CoPHR-Group



Registration of Intent



# CoPHR-Group

#### Meaningful Use Report

Colorado Public Health Reporting (CoPHR)

Report Date: 07/17/2019

#### Objective

To be 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.

#### Measure

To be in active engagement with a public health agency to submit immunization data.

#### New Test Group

#	CIIS Clinic Code	Provider Site	Location & Contact	Reporting Period	Status	Status Description
1.		Site 4	44444 v , denver CO 80222 Contact Name: Erin Test	Q4 Oct 1 2018-Dec 31 2018	Registered: 07/17/2019 Status: Waiting for Invite	Provider registered their intent to initiate ongoing submission and is awaiting an invitation from the PHA to begin testing and validation.
2.		test test	780 st , denver CO 80222 Contact Name: Erin Test	Q4 Oct 1 2018-Dec 31 2018	Registered: 07/17/2019 Status: Waiting for Invite	Provider registered their intent to initiate ongoing submission and is awaiting an invitation from the PHA to begin testing and validation.
					PRINT	CLOSE

Group MU Report Card



#### CoPHR: Automated Letters

- Automated letters sent for:
  - CoPHR enrollment confirmation
  - Non-vaccinating site
  - ROI confirmation
  - HL7 Pre-testing complete
  - Active Engagement: Testing & Validation
  - Active Engagement: Ongoing submissions



Objectiv

To be 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.

#### Measur

To be in active engagement with a public health agency to submit immunization data

St. Anthony North Health Campus 14300 Orchard Parkway

NPI: Medicaid #: Medicare UPIN:

Westminster, CO, 80023

Reporting Period:

Purpose: Meaningful Use Ongoing Submission

05/16/2019

07/01/2014

Dear Dana Fox.

On 12/02/2013, St. Anthony North Health Campus registered its intent with the Colorado Department of Public Health and Environment (CDPHE) for Meaningful Use reporting and successfully submitted the relevant public health data to CDPHE for Immunization Reporting according to the Meaningful Use requirements.

This document serves as your official acknowledgement.

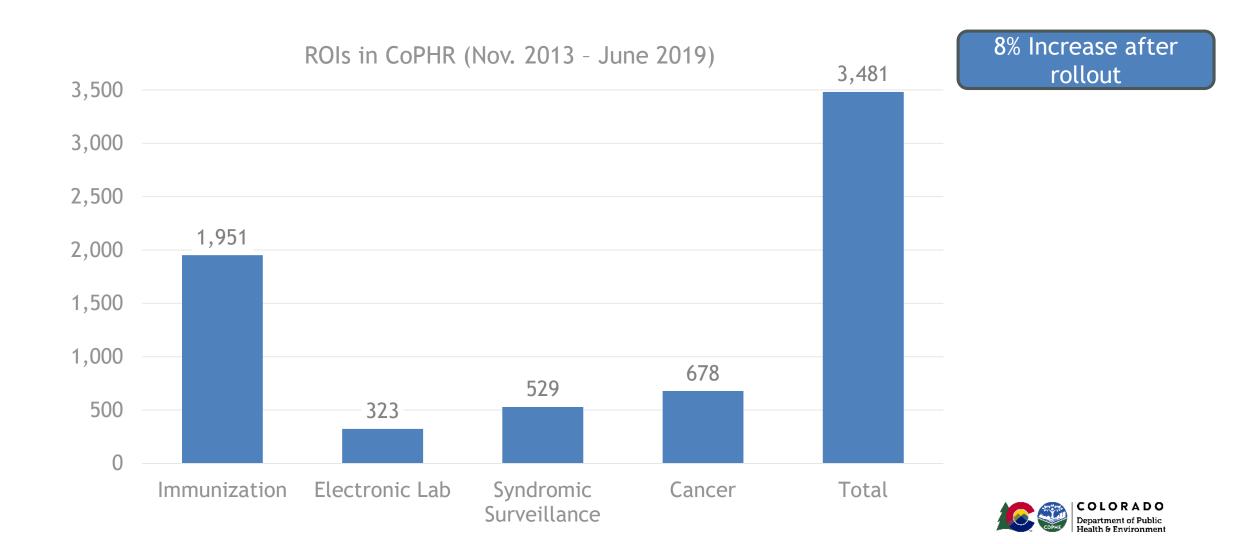
Please contact me with any questions at kim.gulliver@state.co.us or 303-692-2644

Best.

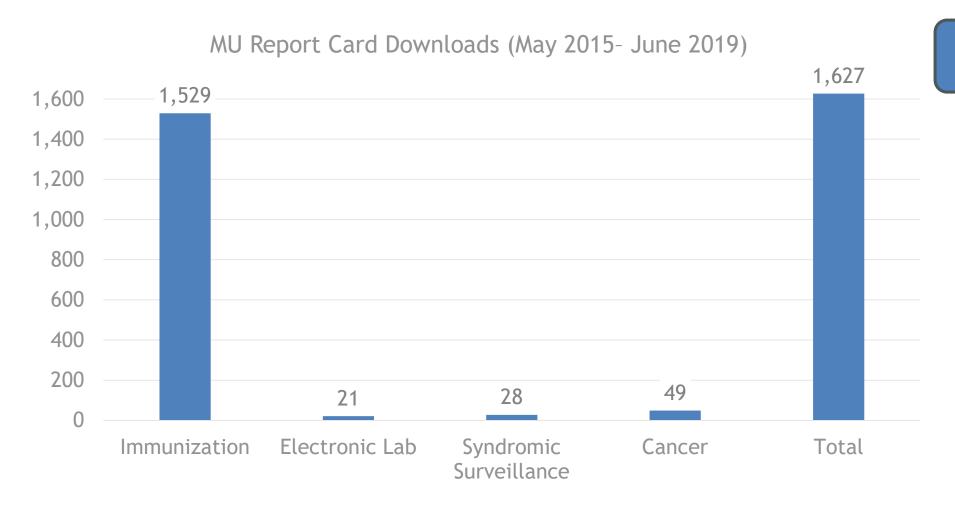
Kim Gulliver, MS Interoperability Unit Supervisor Colorado Immunization Information System Colorado Department of Public Health and Environment



### **CoPHR Statistics**



### **CoPHR Statistics**



1,559 Downloads since August 2018



#### Lessons Learned

- Communication, Communication, Communication
  - Buy-in from other PH program areas, which took 2-3 years
- Importance of Data Quality review before data migration
- Project helped produce additional functionality
  - Group functionality throughout system
  - Additional Project Management functionality
  - Additional ACK monitoring and translation



### Next Steps

- Continue promoting CoPHR to other Public Health programs
- Promoting Interoperability name change within CoPHR
- Evaluate how to add documentation for MU audits
- Enhancements to track Stage 3 requirements
  - Implementing real-time HL7 feed monitoring
  - Automatic MU Report Card updates

Status	Measure	Measure Description	Initial Production Submission	Latest Submission	
~	VXU	Ongoing Data Submission	dd//mm/yyyyy	dd//mm/yyyyy	
~	NDC	Submitting NDC Vaccine Codes	dd//mm/yyyyy	dd//mm/yyyyy	
~	QBP	Querying & Receiving Patient Hx	dd//mm/yyyyy	dd//mm/yyyyy	



#### Contact Information

Kim Gulliver

CIIS Interoperability Unit Supervisor

Colorado Department of Public Health and Environment

E: kim.gulliver@state.co.us

P: (303) 692-2644

