Monitoring your Immunization Submissions

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Clinical Data Exchange Implementation

Session Goals

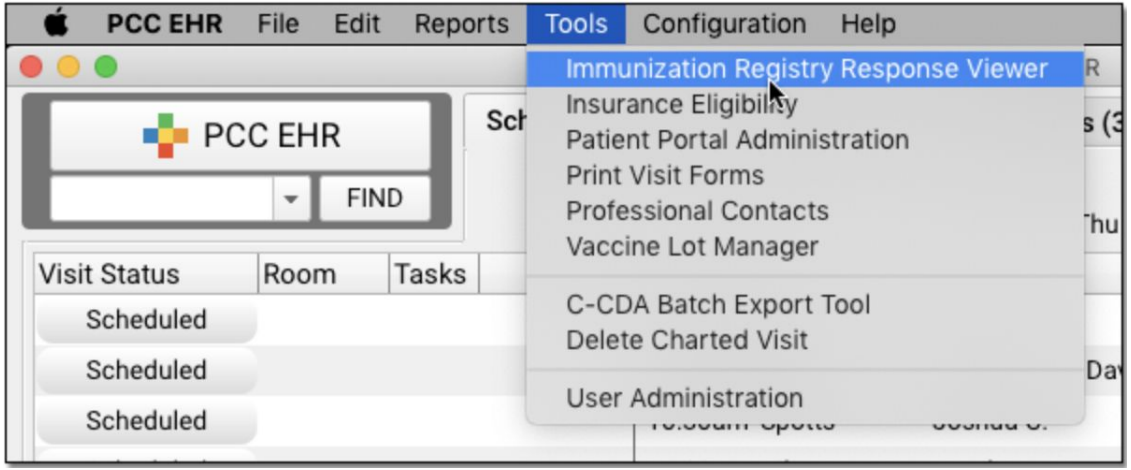
1. Tools for monitoring your immunizations
2. Understand errors and warnings and how to fix them.

Tools

Tools

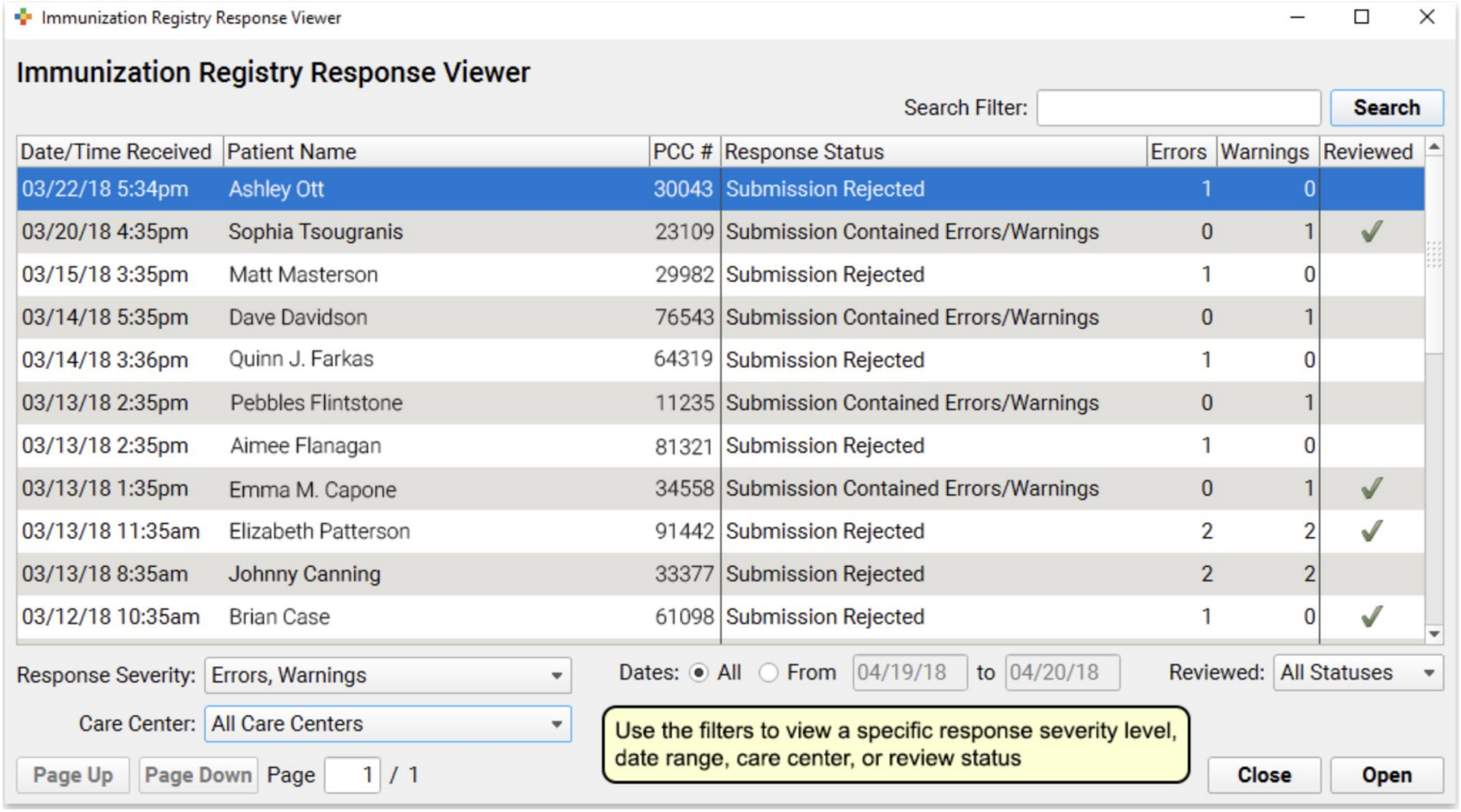
- Immunization Registry Response Viewer
- EHR Immunization Administration Details Report
- CDC code sets

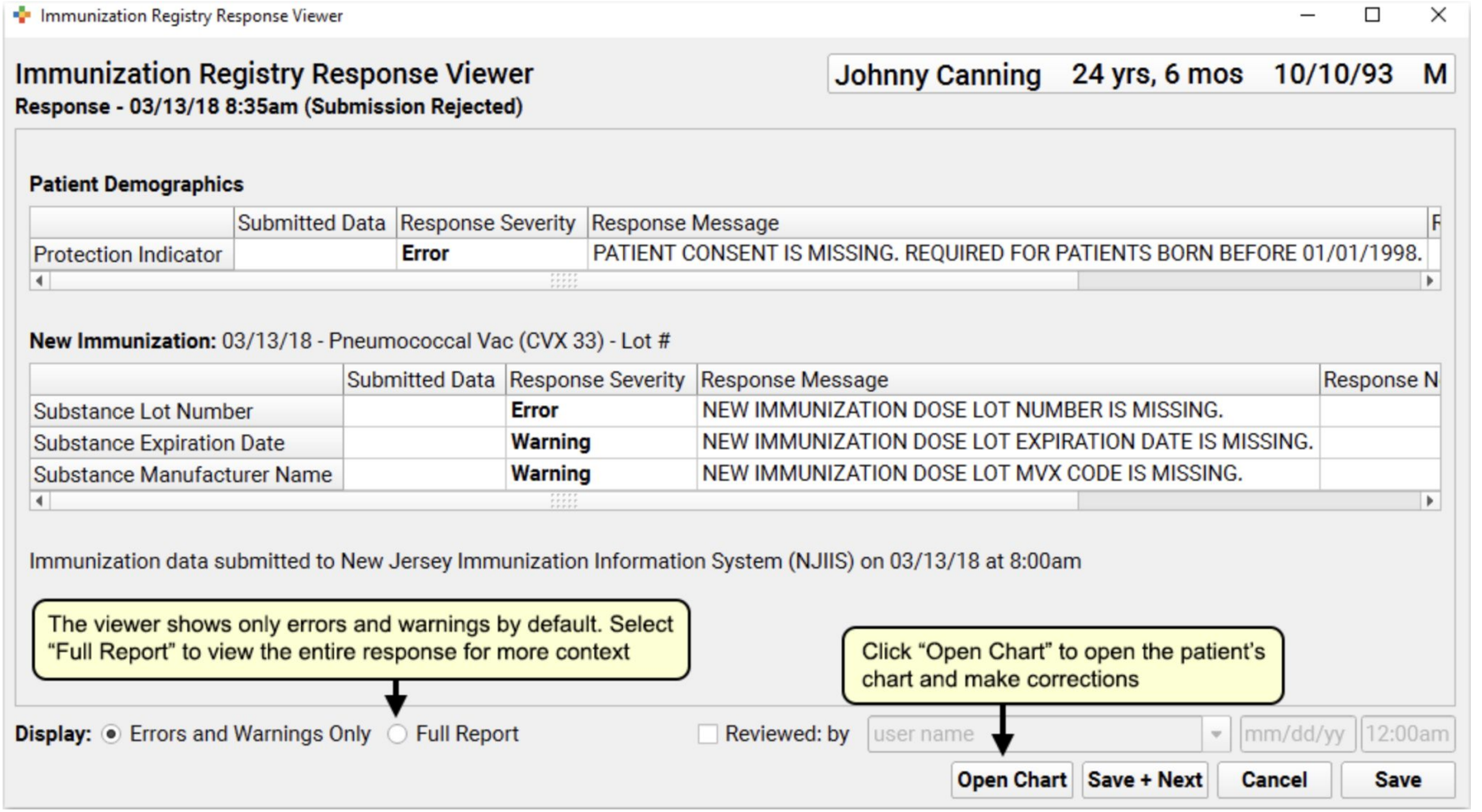
Immunization Registry Response Viewer



From the Tools menu in the EHR.

Not available for all states


Immunization Registry Response Viewer
Immunization Registry Response Viewer
Search Filter:
Search
Date/Time Received
Patient Name
PCC #
Response Status
Errors
Warnings
Reviewed
03/22/18 5:34pm
Ashley Ott
30043
Submission Rejected
1
0
03/20/18 4:35pm
Sophia Tsougranis
23109
Submission Contained Errors/Warnings
0
1
✓
03/15/18 3:35pm
Matt Masterson
29982
Submission Rejected
1
0
03/14/18 5:35pm
Dave Davidson
76543
Submission Contained Errors/Warnings
0
1
03/14/18 3:36pm
Quinn J. Farkas
64319
Submission Rejected
1
0
03/13/18 2:35pm
Pebbles Flintstone
11235
Submission Contained Errors/Warnings
0
1
03/13/18 2:35pm
Aimee Flanagan
81321
Submission Rejected
1
0
03/13/18 1:35pm
Emma M. Capone
34558
Submission Contained Errors/Warnings
0
1
✓
03/13/18 11:35am
Elizabeth Patterson
91442
Submission Rejected
2
2
✓
03/13/18 8:35am
Johnny Canning
33377
Submission Rejected
2
2
03/12/18 10:35am
Brian Case
61098
Submission Rejected
1
0
✓
Response Severity:
Errors, Warnings
Dates:
All
From
04/19/18
to
04/20/18
Reviewed:
All Statuses
Care Center:
All Care Centers
Use the filters to view a specific response severity level, date range, care center, or review status
Page Up
Page Down
Page
1
/ 1
Close
Open


Immunization Registry Response Viewer
Immunization Registry Response Viewer
Response - 03/13/18 8:35am (Submission Rejected)
Johnny Canning 24 yrs, 6 mos 10/10/93 M
Patient Demographics
Submitted Data
Response Severity
Response Message
Protection Indicator
Error
PATIENT CONSENT IS MISSING. REQUIRED FOR PATIENTS BORN BEFORE 01/01/1998.
New Immunization: 03/13/18 - Pneumococcal Vac (CVX 33) - Lot #
Submitted Data
Response Severity
Response Message
Response N
Substance Lot Number
Error
NEW IMMUNIZATION DOSE LOT NUMBER IS MISSING.
Substance Expiration Date
Warning
NEW IMMUNIZATION DOSE LOT EXPIRATION DATE IS MISSING.
Substance Manufacturer Name
Warning
NEW IMMUNIZATION DOSE LOT MVX CODE IS MISSING.
Immunization data submitted to New Jersey Immunization Information System (NJIIS) on 03/13/18 at 8:00am
The viewer shows only errors and warnings by default. Select "Full Report" to view the entire response for more context
Click "Open Chart" to open the patient's chart and make corrections
Display: Errors and Warnings Only Full Report
Reviewed: by
user name
mm/dd/yy
12:00am
Open Chart
Save + Next
Cancel
Save

Real world responses from the registry

Immunization Registry Response Viewer

Response - 06/13/23 6:30am (Submission Contained Errors/Warnings)

Historical Immunization: 06/12/23 - MEN-Trumenba (B) (CVX 162) - Lot #

	Submitted Data	Response Severity	Response Message	Response Notes
Substance/Treatment Refusal Reason		**Warning**	Required observation missing	RXA-18 (SubstanceTreatmentRefusalReason): Has a conditionally required element [SubstanceTreatmentRefusalReason]. ...

General

	Submitted Data	Response Severity	Response Message	Response Notes
Additional Information		**Error**	Required observation missing	The Segment will not load due to missing or invalid required data. Expectation: value for fields segment when defining a refusal must have a valid refusal reason in RXA-18 (SubstanceTreatmentRefusalReason) and have RXA-20 (CompletionStatus) set to "RE". Also, the reserved CVX codes ...
Additional Information		**Error**	Invalid value	Not processing order group, the following error occurred: 1 or more segments in the ordered group contains errors preventing ...

Immunization data submitted to on 06/13/23 at 6:15am

Real world responses from the registry

- **NK1**: Responsible person required in the NCIR. No NK1 segment provided.
- **RXA**-17 (SubstanceManufacturerName): Has a conditionally required element [SubstanceManufacturerName]. Expectation: value is not empty (or set to UNK) when the first occurrence of RXA-9.1 is valued "00" and RXA-20 (CompletionStatus) is valued "CP" or "PA".
- If RXA-20 is valued "CP" or "PA" and the first occurrence of RXA-9.1 (Administration Note code) is valued "00" then the message SHALL include an OBX segment associated with the RXA with **OBX**-3.1 shall equal "64994-7" indicating Funding Eligibility.

Etcetera Etcetera Etcetera.....

What the H*^~! are all these 3 letter words?

HL7 (Health Level 7) is a messaging format used to communicate clinical data electronically. Sometimes registries will return responses that refer to various segments of the message they receive.

Basic HL7 reference

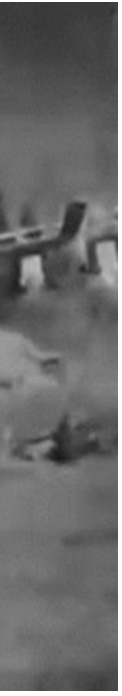
PID and NK1: Demographics

RXA and RXR: The immunization

OBX: Additional details

The foot bone's connected to the leg bone.

EHR to Registry message map



What elements in the EHR relate to what is sent to the registry

Demographics

PID - Patient Identification:

- Patient's Name, DOB, Sex, Race, Ethnicity
- Patient's custodial account's Address, Phone, Email

PD1 - Patient Additional Demographics:

- Share with registry, Preferred Contact Method for the Immunization Registry, Patient's Immunization Registry Status

NK1 - Next of Kin / Associated Parties:

- Comes from Personal Contacts listed on the patient

Demographics

Pebbles Flintstone 10 yrs, 3 mos 03/28/13 F

Patient Demographics

Pebbles Flintstone
Date of Birth: 03/28/13
Sex: Female

Birth History
GA at Birth: Undetermined
Multiple Birth: Yes 1st

Race, Ethnicity, and Preferred Language
Race: White
Ethnicity: Not Hispanic or Latino
Pref. Language:

Patient Information
Patient Flags: Adoption, Burlington
PCP: Mark Williams, M.D.
Other ID: 828-74-6104
School: Bedrock Central
Note: Rubble
Old PM ID #: 2755
Relation to Bill Payer: Child

Mother's Maiden Name
First Name: Wilma
Middle Name:
Last Name: Slaghoople

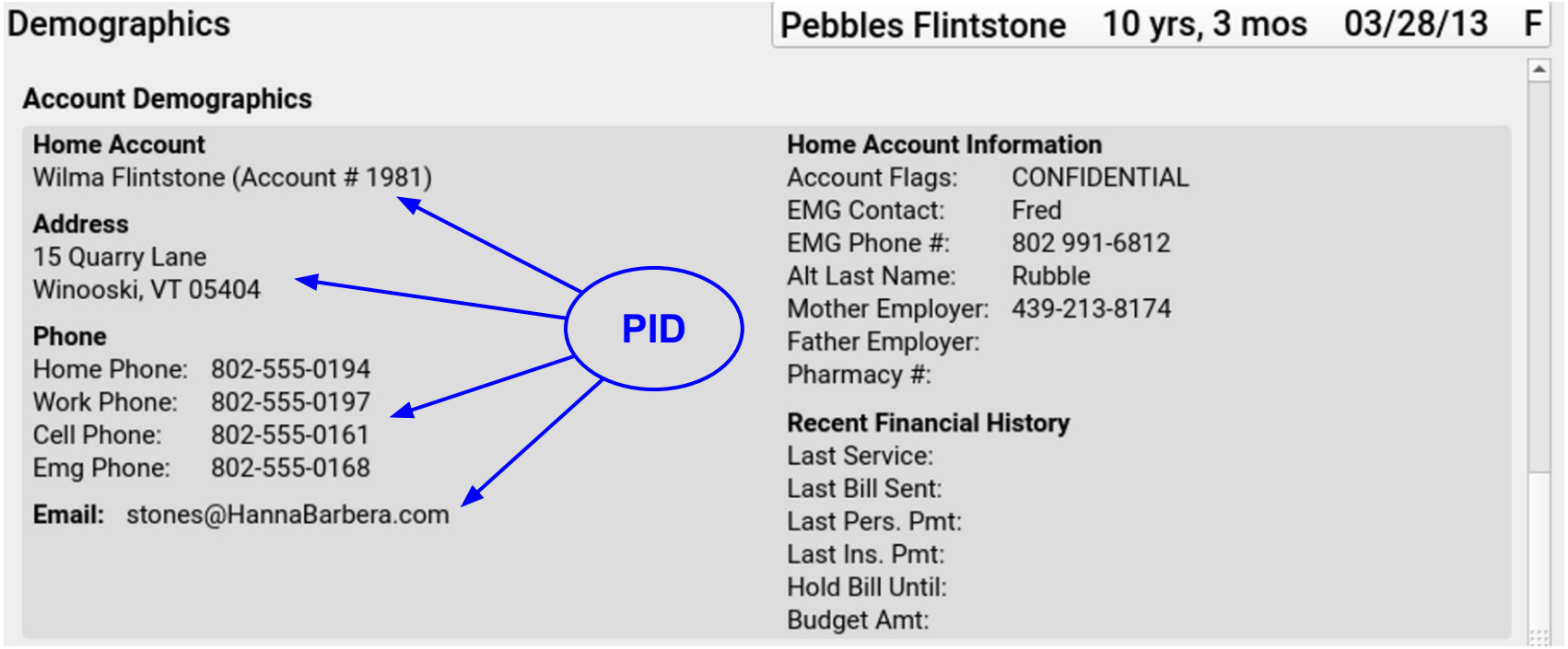
PID

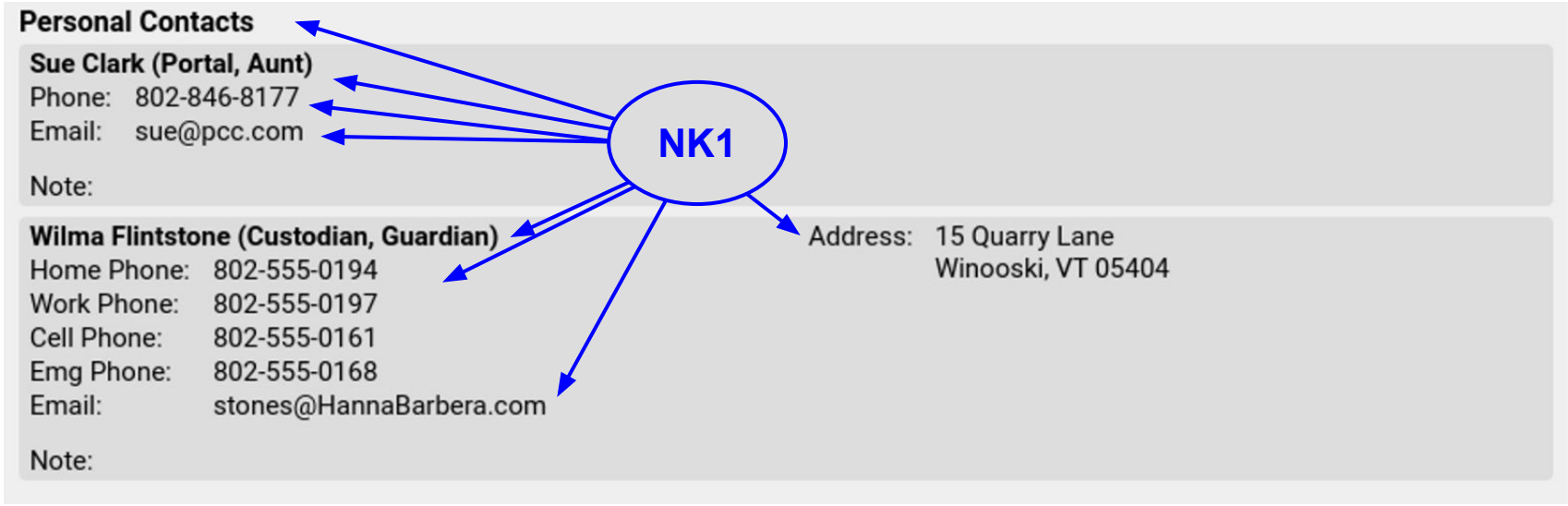
Communication Preferences

Patient's Confidential Communication Preference
No Preference

Immunization Registry Communication Preferences
Share with Registry: Yes
Preferred Contact Method for the Immunization Registry: Undetermined
Patient's Immunization Registry Status: Unknown

PD1


Demographics
Pebbles Flintstone 10 yrs, 3 mos 03/28/13 F
Account Demographics
Home Account
Wilma Flintstone (Account # 1981)
Address
15 Quarry Lane
Winooski, VT 05404
Phone
Home Phone: 802-555-0194
Work Phone: 802-555-0197
Cell Phone: 802-555-0161
Emg Phone: 802-555-0168
Email: stones@HannaBarbera.com
PID
Home Account Information
Account Flags: CONFIDENTIAL
EMG Contact: Fred
EMG Phone #: 802 991-6812
Alt Last Name: Rubble
Mother Employer: 439-213-8174
Father Employer:
Pharmacy #:
Recent Financial History
Last Service:
Last Bill Sent:
Last Pers. Pmt:
Last Ins. Pmt:
Hold Bill Until:
Budget Amt:


Personal Contacts
Sue Clark (Portal, Aunt)
Phone: 802-846-8177
Email: sue@pcc.com
Note:
NK1
Wilma Flintstone (Custodian, Guardian)
Home Phone: 802-555-0194
Work Phone: 802-555-0197
Cell Phone: 802-555-0161
Emg Phone: 802-555-0168
Email: stones@HannaBarbera.com
Note:
Address: 15 Quarry Lane
Winooski, VT 05404

Immunization

ORC - Order:

Provider of visit and provider placing the order

RXA - Administration:

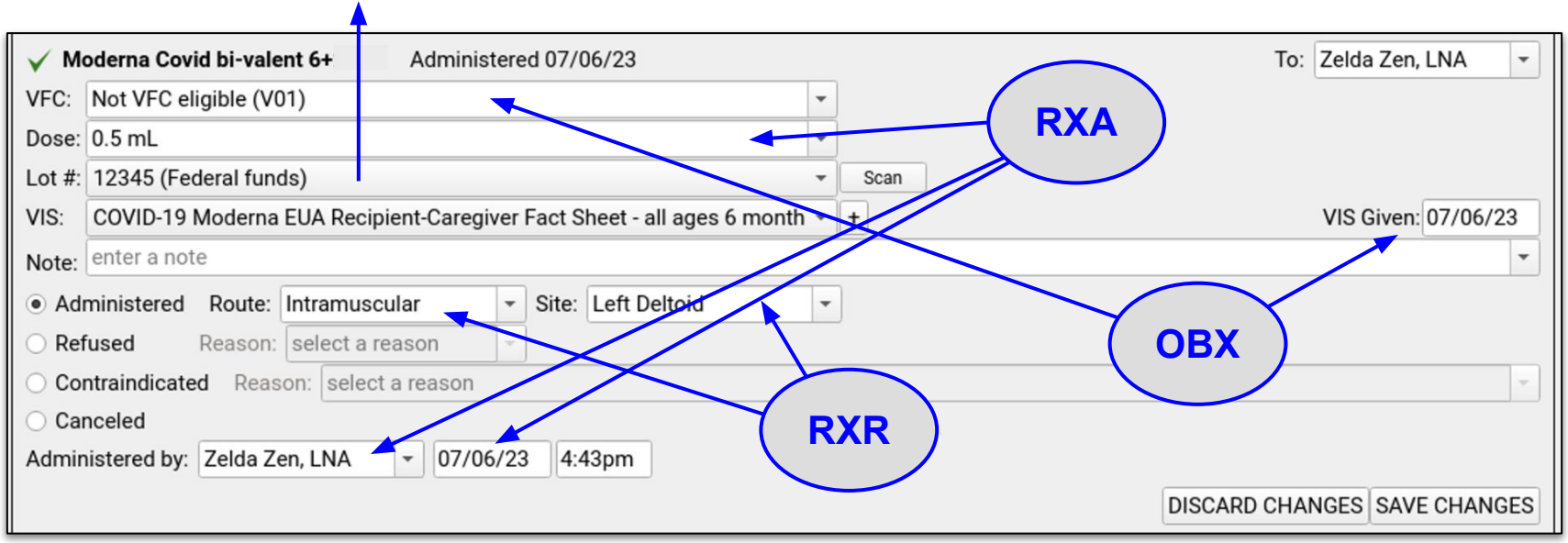
What, when and who administered the vaccine or why it wasn’t

RXR - Route: Where it was administered on the patient

OBX - Additional details: VIS, Funding, VFC, Contraindication Reasons

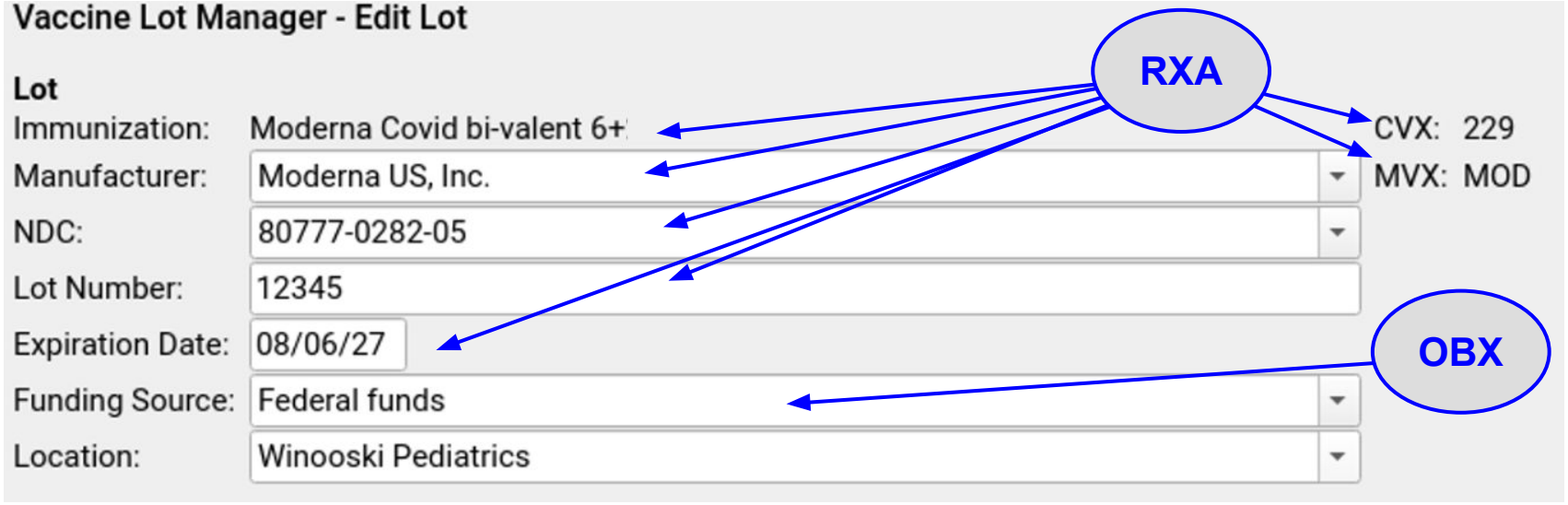
Immunization Order

Lot number links Manufacturer, NDC, Funding Source and Expiration Date in the vaccine lot manager



Lot Number Links the Immunization:

Manufacturer, NDC, Expiration Date and Funding Source



But how can you prevent errors?

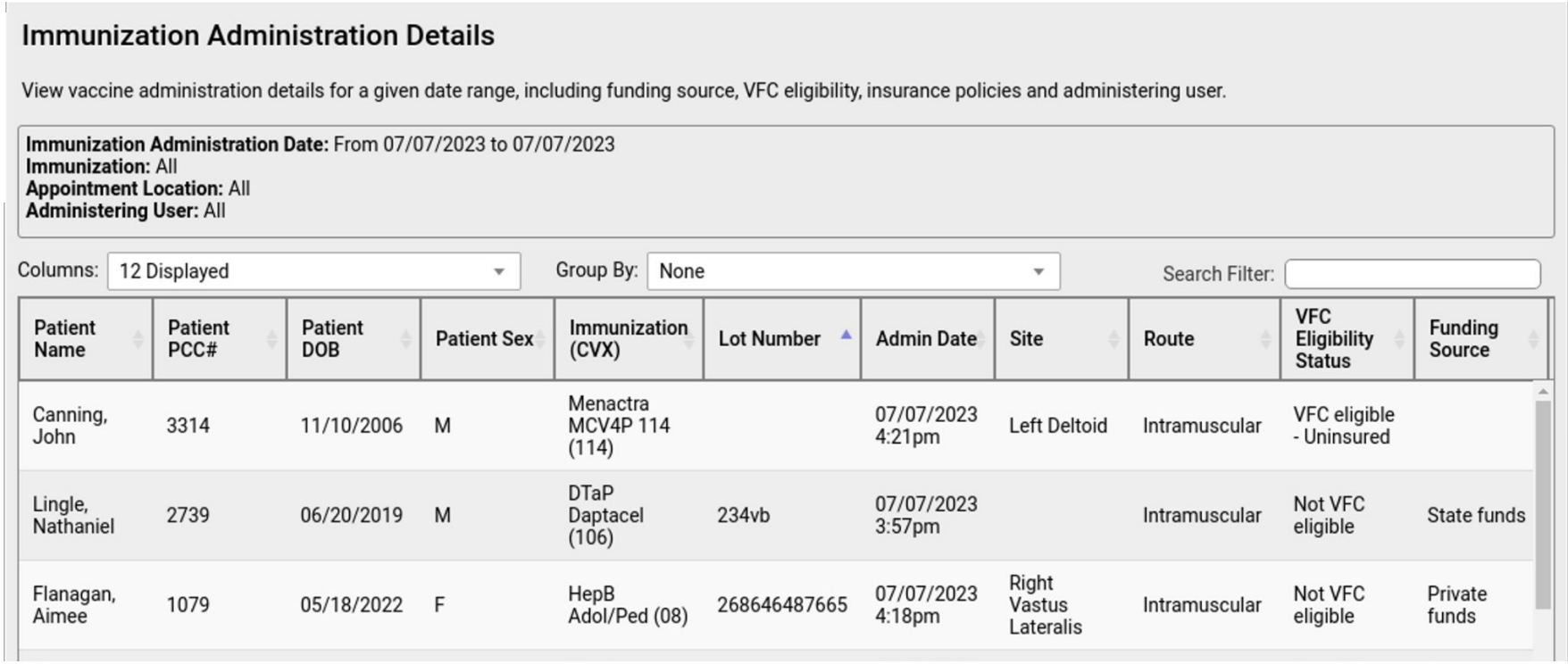
Immunization Administration Details Report

Vaccine Lot Manager

NDC codes

CDC CVX code/Tradename maps

Immunization Administration Details Report



Immunization Administration Details

View vaccine administration details for a given date range, including funding source, VFC eligibility, insurance policies and administering user.

Immunization Administration Date: From 07/07/2023 to 07/07/2023
Immunization: All
Appointment Location: All
Administering User: All

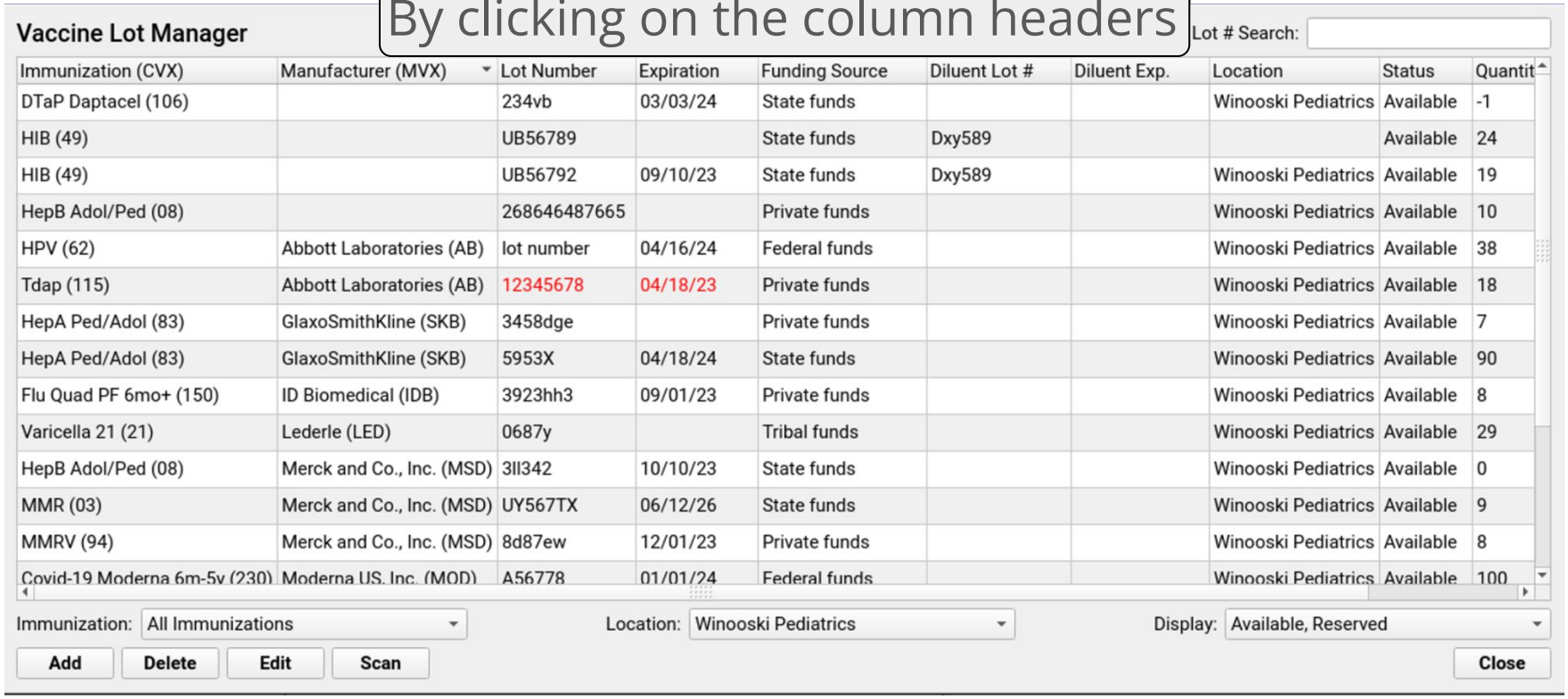
Columns: 12 Displayed Group By: None Search Filter:

Patient Name	Patient PCC#	Patient DOB	Patient Sex	Immunization (CVX)	Lot Number	Admin Date	Site	Route	VFC Eligibility Status	Funding Source
Canning, John	3314	11/10/2006	M	Menactra MCV4P 114 (114)		07/07/2023 4:21pm	Left Deltoid	Intramuscular	VFC eligible - Uninsured	
Lingle, Nathaniel	2739	06/20/2019	M	DTaP Daptacel (106)	234vb	07/07/2023 3:57pm		Intramuscular	Not VFC eligible	State funds
Flanagan, Aimee	1079	05/18/2022	F	HepB Adol/Ped (08)	268646487665	07/07/2023 4:18pm	Right Vastus Lateralis	Intramuscular	Not VFC eligible	Private funds

By clicking on the column headers

Vaccine Lot Manager

By clicking on the column headers



Vaccine Lot Manager

Lot # Search:

Immunization (CVX)	Manufacturer (MVX)	Lot Number	Expiration	Funding Source	Diluent Lot #	Diluent Exp.	Location	Status	Quantit
DTaP Daptacel (106)		234vb	03/03/24	State funds			Winooski Pediatrics	Available	-1
HIB (49)		UB56789		State funds	Dxy589			Available	24
HIB (49)		UB56792	09/10/23	State funds	Dxy589		Winooski Pediatrics	Available	19
HepB Adol/Ped (08)		268646487665		Private funds			Winooski Pediatrics	Available	10
HPV (62)	Abbott Laboratories (AB)	lot number	04/16/24	Federal funds			Winooski Pediatrics	Available	38
Tdap (115)	Abbott Laboratories (AB)	12345678	04/18/23	Private funds			Winooski Pediatrics	Available	18
HepA Ped/Adol (83)	GlaxoSmithKline (SKB)	3458dge		Private funds			Winooski Pediatrics	Available	7
HepA Ped/Adol (83)	GlaxoSmithKline (SKB)	5953X	04/18/24	State funds			Winooski Pediatrics	Available	90
Flu Quad PF 6mo+ (150)	ID Biomedical (IDB)	3923hh3	09/01/23	Private funds			Winooski Pediatrics	Available	8
Varicella 21 (21)	Lederle (LED)	0687y		Tribal funds			Winooski Pediatrics	Available	29
HepB Adol/Ped (08)	Merck and Co., Inc. (MSD)	3II342	10/10/23	State funds			Winooski Pediatrics	Available	0
MMR (03)	Merck and Co., Inc. (MSD)	UY567TX	06/12/26	State funds			Winooski Pediatrics	Available	9
MMRV (94)	Merck and Co., Inc. (MSD)	8d87ew	12/01/23	Private funds			Winooski Pediatrics	Available	8
Covid-19 Moderna 6m-5y (230)	Moderna US, Inc. (MOD)	A56778	01/01/24	Federal funds			Winooski Pediatrics	Available	100

Immunization: All Immunizations

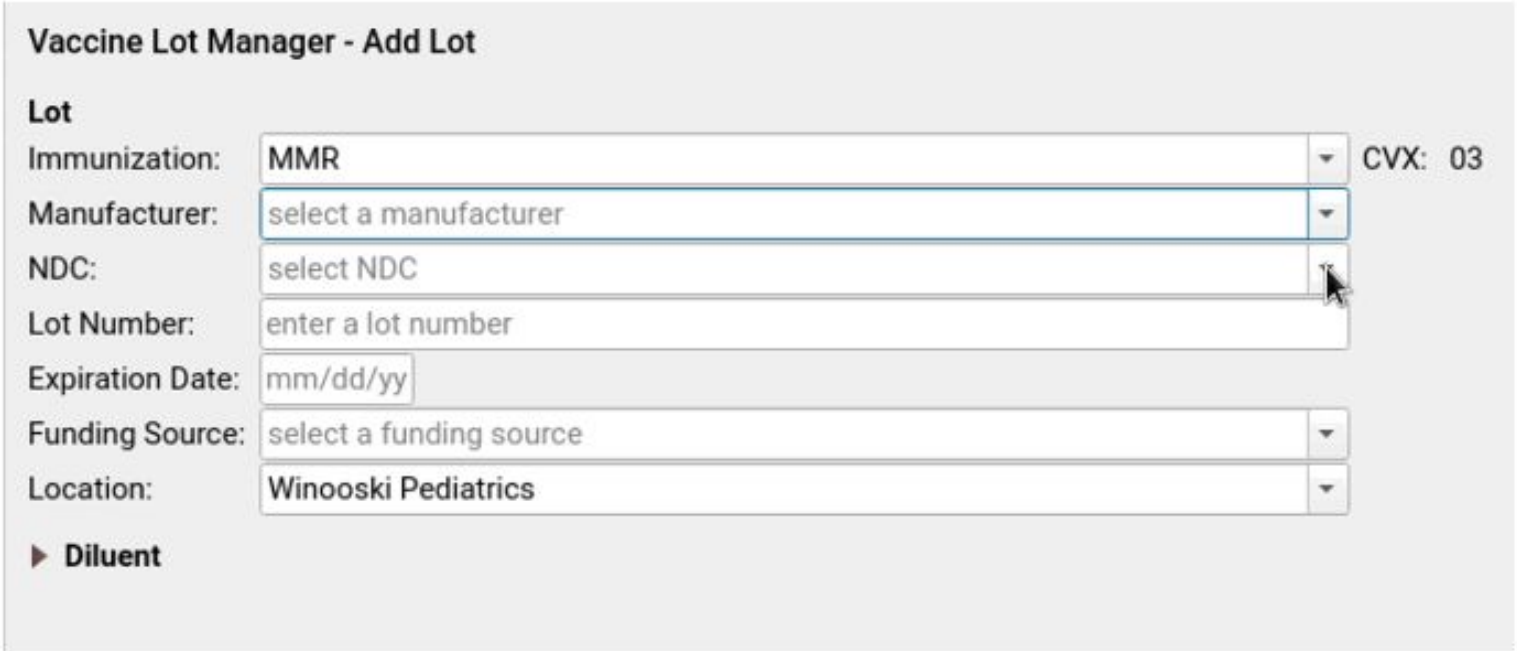
Location: Winooski Pediatrics

Display: Available, Reserved

Add | Delete | Edit | Scan | Close

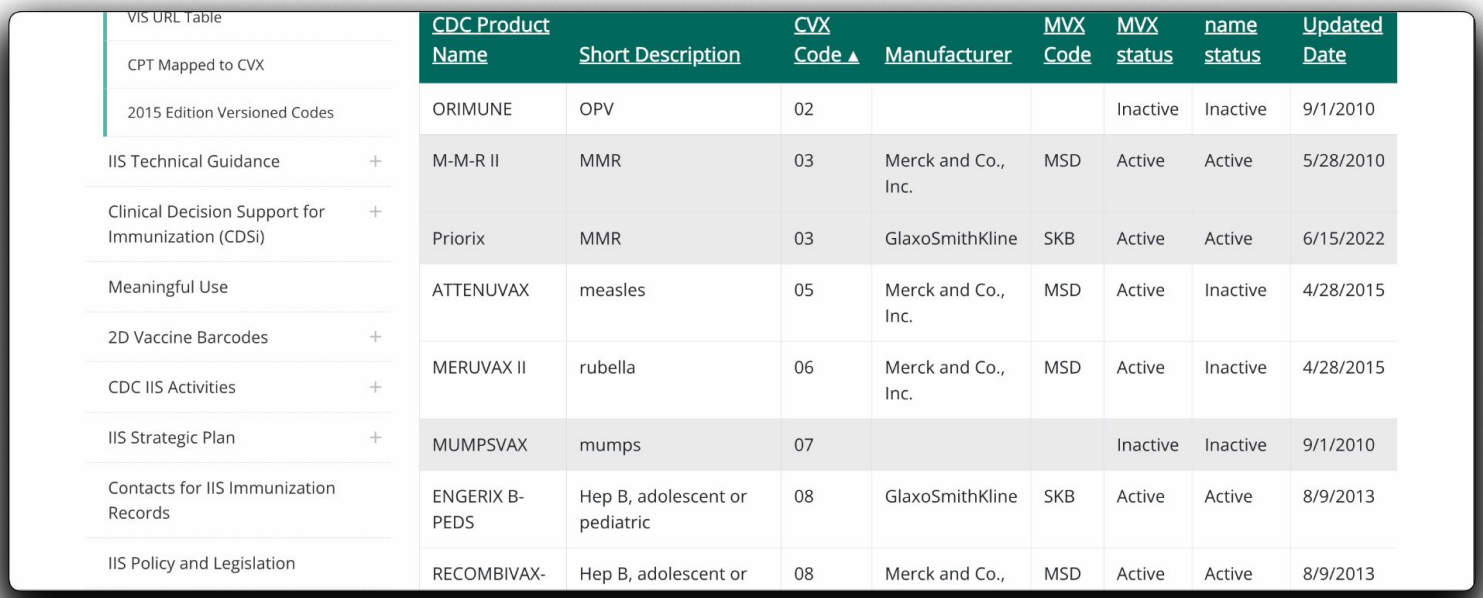
NDC codes

Can be helpful for ensuring correct manufacturer



CDC Code Sets

Mapping for Product Name, CVX, CPT, MVX, NDC, etc…



CDC Product Name	Short Description	CVX Code ▲	Manufacturer	MVX Code	MVX status	name status	Updated Date
ORIMUNE	OPV	02			Inactive	Inactive	9/1/2010
M-M-R II	MMR	03	Merck and Co., Inc.	MSD	Active	Active	5/28/2010
Priorix	MMR	03	GlaxoSmithKline	SKB	Active	Active	6/15/2022
ATTENUVAX	measles	05	Merck and Co., Inc.	MSD	Active	Inactive	4/28/2015
MERUVAX II	rubella	06	Merck and Co., Inc.	MSD	Active	Inactive	4/28/2015
MUMPSVAX	mumps	07			Inactive	Inactive	9/1/2010
ENGERIX B-PEDS	Hep B, adolescent or pediatric	08	GlaxoSmithKline	SKB	Active	Active	8/9/2013
RECOMBIVAX-	Hep B, adolescent or	08	Merck and Co.,	MSD	Active	Active	8/9/2013

Common Errors

- Invalid character in name
- Refusal reason missing
- Missing VFC eligibility status

slido

What types of errors and warnings have you seen?

ⓘ Click **Present with Slido** or install our Chrome extension to activate this poll while presenting.

Session Takeaways

1. Reports for finding incomplete immunization orders
2. Elements in the EHR in relation to what is sent to the registry
3. CVX/MVX/NDC relationship
4. What isn’t sent when a lot isn’t selected

References

IIS Data Code Sets | CDC:
https://www.cdc.gov/vaccines/programs/iis/code-sets.html

Tradename to CVX and MVX codes:
https://www2.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=tradename

Immunization Registry Response Viewer:
https://learn.pcc.com/help/immunization-registry-response-viewer/

Vaccine Lot Manager:
https://learn.pcc.com/help/immunization-lots-vaccine-inventory-management/

What Questions Do You Have?

Later Viewing

This and all other UC2023 course recordings will be available for later viewing through the app.