

Indian Health Service

RPMS Immunization Updates 2024

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OFFICE OF INFORMATION TECHNOLOGY

DIVISION OF INFORMATION TECHNOLOGY

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Learning Objectives

After attending this session, you should be able to:

1. List and explain key changes in the Immunization Interface Management package.
2. Demonstrate the new capabilities in the Immunization Tracking package.
3. Apply the latest changes to your patients using the Immunization Calculation Engine (ICE) Forecaster package.
4. Describe planned enhancements for the RPMS system, including their expected impacts and implementation timeline.



BI (Immunization Tracking) Updates



Contraindications Expansion

Expanded list

1. Allergy to proteins of rodent or neural origin - Rabies vaccine
2. Allergy to 2-phenoxyethanol - DTaP (Daptacel, Pentacel, Quadracel), Tdap (Adacel)
3. Allergy to baker's yeast - HPV, MenACWY, Hep B, Twinrix, Pediarix
4. Gelatin allergy – LAIV, MMR, MMRV, Rabies, Typhoid, Varicella, Yellow Fever
5. Streptomycin allergy – IPV
6. Allergy to thimerosal – Influenza
7. Allergy to aluminum – Pneumococcal, DTaP, Hib, Hep A, Hep B, Twinrix, Pediarix, Pentacel, HPV, Japanese Encephalitis, MenB, Td, Tdap
8. Latex Allergy – MenB
9. Polymixin B allergy – Influenza, IPV, Kinrix, Pentacel, Quadracel, Pediarix
10. Previous history of Intussusception – Rotavirus
11. Encephalopathy within 7 days of previous dose of DTaP
12. Patient currently pregnant

Previous list

Anaphylactic Egg Allergy
Anaphylaxis
Carrier
Convulsion
Egg Allergy
Fever>104F
GBS
Hx of Chicken Pox
Immune
Immune deficiency
Lethargy/Hypotonic episode
Neomycin allergy
Other Allergy



Revising Form letters

ERR	Edit Patient Errors
CMG	Add/Edit Case Manager
CMT	Transfer a Case Manager's Patients
SCN	Scan For Patients

ESP	Site Parameters Edit
PKG	Package Setup Information
LET	Form Letters Add/Edit
LOT	Lot Number Add/Edit
VAC	Vaccine Table Edit
ELI	Eligibility Table Edit
RES	Restandardize Vaccine Table
EXP	Export Immunizations

* ADD A NEW FORM LETTER *

You have chosen to add a new Form Letter.
In order to save you time, this program will load a Sample Form Letter, which you may then edit to suit the purpose of your new Form Letter.

There are three Sample Form Letters to choose from:

- 1) Standard Due Letter
- 2) Official Immunization Record
- 3) Standard Due Letter--Forecast First

Or you may choose to copy an existing customized Form Letter and then make changes to it under the new Form Letter you are creating.

Please enter "1" to select the Standard Due Letter, "2" to select the official Immunization Record, "3" to select the Standard Due Letter (with the Forecast listed first and the History following), or enter "C" to copy an existing Form Letter.

Enter 1, 2, 3, or C:



Revising Form letters

Standard DUE letter

Jimmy's Immies Clinic
7 Your Street
Your City, ST 77777

15-Aug-2023

Date of Birth: 07-Dec-2017 (5 yrs)
Chart#: 122345

Parent/Guardian of
PATIENT DEMO
100 MAIN STREET
ALBUQUERQUE, No State No Zip

Dear Parent or Guardian:

Your child, PATIENT, is due for immunizations.

PATIENT will be due for the immunizations listed below:

DTAP
POLIO
HEP B
MMR
VARICELLA
HEP A
FLU
COV

If you feel our records are not correct, please notify us so that we may make the corrections to update our records. Otherwise, please bring the your child to the clinic at the date and location given below:

Current Next Appt: None

Sincerely,

Jack's Vax, LPN
Drive-thru Immunization Program
"You always get great service ...
at the Sign of the Syringe!"

phone: 777-7777

printed: 15-Aug-2023 @13:34 Case Manager: Unknown

Official Immunization Record

19-Jul-2024

MISTER MAX Date of Birth: 10-Aug-1963 (60 yrs)
113 PALO VERDE DR. Chart#: 102551
Albuquerque, NM 87119

Our records show that MISTER has received the following immunizations:

10/27/93: FLU,NOS
02/25/21: FLU-HIGH4
08/11/23: RSV
09/01/23: VARICELLA
09/25/23: VARICELLA
11/13/23: FLU-IV4
12/21/23: COV,1vPfrA
03/20/24: COV,Pfr, DTaP (DTaPPVHHb), HEP B PED (DTaPPVHHb),
IPV (DTaPPVHHb), PEDVAXHIB (DTaPPVHHb)

MISTER will be due for the immunizations listed below:

Td
HEP B
FLU
ZOS-Shgrx

If you feel our records are not correct, please notify us so that we may make the corrections to update our records.

Sincerely,

Name Title

phone: (000)777-7777

Standard DUE Letter – Forecast first

Jimmy's Immies Clinic
7 Your Street
Your City, ST 77777

19-Jul-2024

Date of Birth: 01-Aug-2022 (23 mths)
Chart#: No 789101

Parent/Guardian of
TALUM SAMMISE
100 MAIN STREET
HOBBITSVILLE, ME 00714

Dear Parent or Guardian:

Your child, TALUM, is due for the immunizations listed below:

POLIO
HIB
HEP B
VARICELLA
HEP A
FLU
PNEUMO

If you feel our records are not correct, please notify us so that we may make the corrections to update our records. Otherwise, please bring the your child to the clinic at the date and location given below:

Current Next Appt: None

Sincerely,

Jack's Vax, LPN
Drive-thru Immunization Program
"You always get great service ...
at the Sign of the Syringe!"

phone: 777-7777

Nirsevimab Documentation

Background

In some high risk situations, a higher dose of Nirsevimab (**Beyfortus**) for pediatric patients is recommended.

The higher dose (Nirsevimab 200mg/2mL) is required to be injected into two (2) different anatomical locations as 2 separate 100mg doses on the same day.

Previously, documentation of this “double” dose was not possible in the RPMS and EHR.



Nirsevimab documentation

Dose 1

Visit Date: APR 26, 2024 Category: Ambulatory
Admin Date:
Vaccine: Respiratory syncytial virus mo Lot#: LTG2398
 (RSV-mAbN1) Remaining: Not tracked
 Exp Date: 12/31/25

Inj Site: Left Thigh IM Vol: 1 ml
Location Type: IHS Location: 2021 DEMO HOSPITAL (INST)
Provider: PALANKI, SURYAM Ordering Provider: FLOOD, WILLIAM
VIS Date: SEP 25, 2023 Presented: APR 26, 2024 Reaction:
Vac Elig: V04 - Dose Override:

Patient: PATIENT, DEMO DOB: 03-Mar-2023 (16 mths)
Chart#: 334455 Active Female M HBsAg: UNK

#	Immunization History		Immunizations DUE on 04/26/2024
1	04/26/24 RSV-mAbN1	2021	
2	04/26/24 RSV-mAbN1	2021	

Dose 2

Visit Date: APR 26, 2024 Category: Ambulatory
Admin Date:
Vaccine: Respiratory syncytial virus mo Lot#: LTG2398
 (RSV-mAbN1) Remaining: Not tracked
 Exp Date: 12/31/25

Inj Site: Right Thigh IM Vol: 1 ml
Location Type: IHS Location: 2021 DEMO HOSPITAL (INST)
Provider: PALANKI, SURYAM Ordering Provider: FLOOD, WILLIAM
VIS Date: SEP 25, 2023 Presented: APR 26, 2024 Reaction:
Vac Elig: V04 - Dose Override:



Split Dose Vaccine Add/Remove

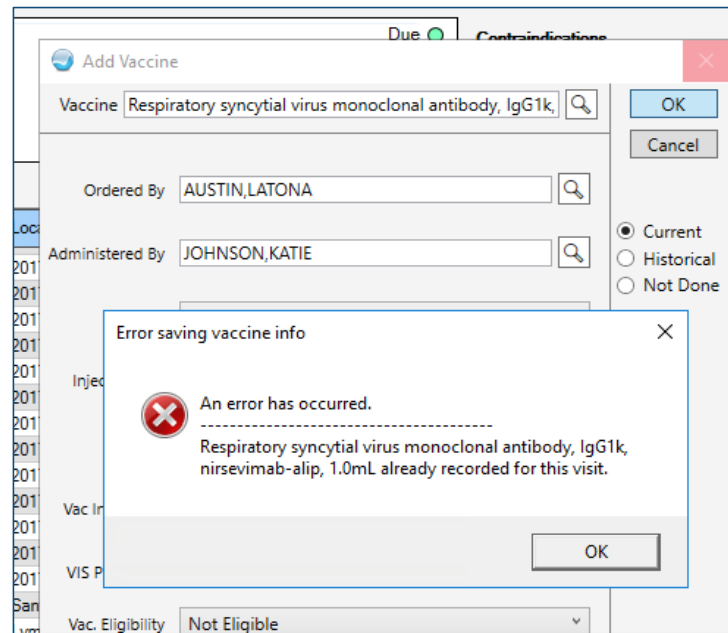
Immunization History ?

Vaccine	Visit Date	Age@Visit	Location	Inj. Site	Volume	Lot	VIS Date	Administered By	VIS Presented
RSV-mAbN1	04/26/2024	13 mths	2021 DEMO HOSP	Left Thigh IM	1	LTG2398	09/25/2023	PALANKI,SURYAM	04/26/2024
RSV-mAbN1	04/26/2024	13 mths	2021 DEMO HOSP	Right Thigh IM	1	LTG2398	09/25/2023	PALANKI,SURYAM	04/26/2024



Nirsevimab Documentation with B1p28 and EHRp35/36

Attempting to enter via EHR – user will get an error



Nirsevimab Documentation with BIp28 and EHRp35/36 continued (2)

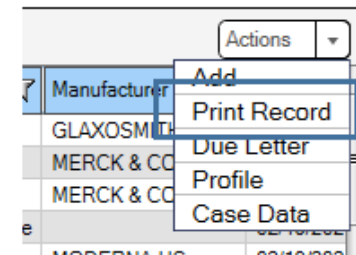
This happens when you are connected to one or more State Immunization Exchange(s) and the interface is on...

When the immunization record is present at both immunization exchange and in EHR, then one dose of Nirsevimab is **hidden in EHR Immunization component**

Staff can view the accurate immunization record within RPMS or via the EHR “Print Record”

Patient: PATIENT, DEMO DOB: 03-Mar-2023 (16 mths)
Chart#: 334455 Active Female M HbsAg: UNK

#	Immunization History	Immunizations DUE on 04/26/2024
1	04/26/24 RSV-mAbN1	2021
2	04/26/24 RSV-mAbN1	2021



Nirsevimab Documentation with BIp28 and EHRp35/36 continued (3)

This is a PROBLEM because...

This could result in additional doses given to a fully vaccinated patient due to the clinical staff not seeing the second dose.



Bottom Line on Nirsevimab Documentation

Do not install BI v8.5 p28 until you can also install EHR v1.1 p37 to ensure all scenarios of Nirsevimab documentation can be accurately displayed.

If BI v8.5p28 is already installed on an EHRp35 or p36 system:

- Educate staff on potential issue

- Delay documentation of 200mg/2m Nirsevimab doses until EHRp37 is installed



Split Dose Vaccine Add/Remove

Current SPLIT DOSE vaccines for which duplicate entry allowed:

IEN	CVX	Short name
343	307	RSV-mAbN1

Select one of the following:

- 1 ADD additional SDV
- 2 REMOVE existing SDV

Add or Remove SDV:



BYIM (Immunization Interface Management) Updates



Age Value Fix

Vaccine	Visit Date	Age@Visit
ACTHIB (PENTACEL)	05/20/2013	1
DTaP (KINRIX)	07/01/2016	1
DTaP (PEDIARIX)	07/05/2012	1
DTaP (PEDIARIX)	08/23/2012	1
DTaP (PEDIARIX)	11/16/2012	1
DTaP (PENTACEL)	05/20/2013	1
HEP B PED (PEDIARIX)	07/05/2012	1
HEP B PED (PEDIARIX)	08/23/2012	1
HEP B PED (PEDIARIX)	11/16/2012	1
IPV (KINRIX)	07/01/2016	1
IPV (PEDIARIX)	07/05/2012	1

Vaccine	Visit Date	Age@Visit
DTaP (DTaPPVHHb)	05/21/2022	2 mths
DTaP (DTaPPVHHb)	07/21/2022	4 mths
DTaP (DTaPPVHHb)	09/21/2022	6 mths
DTaP (DTaPPVHHb)	03/21/2023	12 mths
IPV (DTaPPVHHb)	05/21/2022	2 mths
IPV (DTaPPVHHb)	07/21/2022	4 mths
IPV (DTaPPVHHb)	09/21/2022	6 mths
IPV (DTaPPVHHb)	03/21/2023	12 mths
PEDVAXHIB (DTaPPVHHb)	05/21/2022	2 mths
PEDVAXHIB (DTaPPVHHb)	07/21/2022	4 mths



Eligibility Codes Expanded

EDIT ELIGIBILITY CODE TABLE

#	Code	Label of Code	Status	Local Text	Report Tx
1	999	Unknown	Active		Unknown
2	AKA01	ALASKA-01	Active	ZZZZZ	
3	MIA06	MICHIGAN-06	Active	COVID	MI
4	V01	Not Eligible	Active		NotElig
5	V02	Medicaid	Active		Medicaid
6	V03	Uninsured	Active		Uninsured
7	V04	Am Indian/AK Native	Active		AmIn/AKNa
8	V05	Underinsured Fed Qual	Active		Under/Fed
9	V06	State-specific Elig	Active		State
10	V07	Local-specific Elig	Active		Local
11	VIA01	VIRGIN ISLANDS-01	Active		
12	AKA02	ALASKA-02	Inactive		
13	AKA03	ALASKA-03	Inactive		

Scroll down to view more. Type ?? for more actions >>>

⌘ Edit Elig Code H Help
select Action:quit//

```

RXA|0|1|20230418120000|20230418120000|162^Trumenba^CVX|.5|mL^MilliLiters^UCUM||00^NEW
IMMUNIZATION RECORD^NIP001||^SIISCLIENT80883|||CP|A|20230418072359
RXR||
OBX|11|CE|30963-3^Vaccine Funding Source^LN|1|PHC70^Private funds^CDCPHINVS|||||F||
20230418
OBX|12|CE|64994-7^Vaccine Funding Program Eligibility^LN|1|ZZZZZ^AKA01^HL70064|||||F||
20230418||VXC40^per immunization^CDCPHINVS
  
```



Contraindications

```
1 MSH|^~\&|RPMS^RPMS^|63027|ASIS|ASIS|20230816120639-0700||VXU^V04^VXU_V04|IHS-8079333|P|2.5.1||ER|AL|USA|||222^CDC|
2 PID|1||232101334455^^2021 DEMO HOSPITAL (MR)|SILOPANNA^KATE^ONE^^L^^^|20230303|F||2106-3^WHITE^CDCREC|123 Test|
3 PDI|||||102^REMINDER/RECALL - ANY METHOD^HL70215|||||A|20221212|20221212
4 ORC|RE|283477-232101^IHS|2321010420283477^IHS||IP||||^HATHAWAY^KATHIJO^^PHYSICIAN^^L^^|^HATHAWAY^KATHIJO^^PHYS|
5 RXA|0|1|20230815|20230815|20230815|130300148^ActHIB^CVX|0.5|mL^MilliLiters^UCUM|100^NEW IMMUNIZATION RECORD^NIP001|^HATHAW
6 RXR|C28161^Intramuscular^NCIT|RT^Right Thigh^HL70163
7 OBX|1|CE|30963-3^Vaccine Funding Source^LN|1|VXC51^Public VFC^CDCPHINVS|||||F|||20230815
8 OBX|2|CE|64994-7^Vaccine Funding Program Eligibility^LN|1|V04^VFC ELIGIBLE AI/AN^HL70064|||||F|||20230815||VXC40^pe
9 ORC|RE||2321010000013486^IHS
10 RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
11 OBX|3|CE|30945-0^Vaccination contraindication/precaution^LN|1|VXC26^Convulsion^SCT|||||F
12 ORC|RE||2321010000013487^IHS
13 RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
14 OBX|4|CE|30945-0^Vacc: Find
15 ORC|RE||23210100000134
16 RXA|0|1|20230815|20230
17 OBX|5|CE|30945-0^Vacci
18 ORC|RE||23210100000134
19 RXA|0|1|20230815|20230
20 OBX|6|CE|30945-0^Vacci
21 OBX|7|CE|69764-9^Docur
22 OBX|8|IS|29768-9^Date
23 OBX|9|DT|29769-7^Date
24
```

```
RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
OBX|3|CE|30945-0^Vaccination contraindication/precaution^LN|1|VXC26^Convulsion^SCT|||||F
ORC|RE||2321010000013487^IHS
RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
OBX|4|CE|30945-0^Vaccination contraindication/precaution^LN|1|30916003^Latex allergy (disorder)^SCT|||||F
ORC|RE||2321010000013488^IHS
RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
OBX|5|CE|30945-0^Vaccination contraindication/precaution^LN|1|VXC26^Com
ORC|RE||2321010000013490^IHS
RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|||||NA
OBX|6|CE|30945-0^Vaccination contraindication/precaution^LN|1|161423008
OBX|7|CE|69764-9^Document Type^LN|2|998^NO VACCINE^CVX|||||F
OBX|8|IS|29768-9^Date VIS Published^LN|2|||||F|||
OBX|9|DT|29769-7^Date VIS Presented^LN|2|||||F|||
```



Funding Source codes

```

RXA|0|1|20230815130300|20230815130300|48^ActHIB^CVX|0.5|mL^MilliLiters^UCUM||00^NEW IMMUNIZATION RECORD^NIP001|^HATHAW
RXR|C28161^Intramuscular^NCIT|RT^Right Thigh^HL70163
OBX|1|CE|30963-3^Vaccine Funding Source^LN|1|VXC51^Public VFC^CDCPHINVS|||||F|||20230815
OBX|2|CE|64994-7^Vaccine Funding Program Eligibility^LN|1|V04^VFC ELIGIBLE AI/AN^HL70064|||||F|||20230815|||VXC40^per
OBX|3|CE|69764-9^Document Type^LN|2|253088698300006611210806^Haemophilus Influenzae type b (Hib) Vaccine VIS^cdcgs1vis
OBX|4|TS|29768-9^Date VIS Published^LN|2|20210806|||||F|||20230815
OBX|5|DT|29769-7^Date VIS Presented^LN|2|20230815|||||F|||20230815
ORC|RE|283480-232101^IHS|2321011790283480^IHS||IP|||||^HATHAWAY^KATHIJO^^^PHYSICIAN^^^L^^|^HATHAWAY^KATHIJO^^^PHYSI
RXA|0|1|20230818110900|20230818110900|48^ActHIB^CVX|0.5|mL^MilliLiters^UCUM||00^NEW IMMUNIZATION RECORD^NIP001|^HATHAW
RXR|C28161^Intramuscular^NCIT|RD^Right Deltoid^HL70163
OBX|6|CE|30963-3^Vaccine Funding Source^LN|1|VXC51^Public VFC^CDCPHINVS|||||F|||20230818
OBX|7|CE|64994-7^Vaccine Funding Program Eligibility^LN|1|Unable to obtain^Unknown^HL70064|||||F|||20230818|||VXC40^p
ORC|RE||2321010000013486^IHS
RXA|0|1|20230815|20230815|998^No vaccine administered^CVX|999|AAAAAAAAAAAAAAAAA
  
```

v	VFC
n	NON-VFC
o	Other State
i	IHS/Tribal
VXC1	Federal funds



IZDE is made State Specific

```
BYIM VERSION: 3.0 P 6          NEXT AUTO EXPORT: AUG 15@13:00
HL7 VERSION: 2.5.1 R1.5 2016+  NEXT AUTO IMPORT: AUG 15@12:43:45
OUTPUT CONTROLLER: RUNNING     NEXT AUTO QUERY.: AUG 15@12:47
FORMAT CONTROLLER: RUNNING     NEXT AUTO PURGE.: AUG 16@01:00
```

```
IZDE  Start Immunization Data Export
IZCE  Check Immunization Data Export Status
IZFS  File Statistics Report
IZSI  Show Immunizations Exported for a Patient
IZTE  Create TEST Export File
IZQR  Immunization Queries
SET   SETUP Options ...
```

```
You have PENDING ALERTS
      Enter "VA to jump to VIEW ALERTS option
```



IZDE is made State Specific

You can select another date range for the export.

Export Immunizations given since JUN 27,2024: JUN 27,2024// (JUN 27, 2024)

Exclude Immunizations given after JUL 2,2024: JUL 2,2024// ■

Which immunizations should be included:

Select one of the following:

- 1 NEW or EDITED Immunizations in the date range
- 2 ALL Immunizations for patients with VISIT in the date range

Send NEW or ALL Immunizations: NEW or EDITED Immunizations// in the date range

Include HISTORIC Immunizations added to RPMS in the date range? NO//



IZDE is made State Specific

Export file can be sent to selected states instead of to all states
Select which state(s) or press <ENTER> to send to all states

- 1 NEW MEXICO
- 2 OKLAHOMA
- 3 WISCONSIN
- 4 UTAH
- 5 ARIZONA (Primary State)

Which State(s) should export file be sent to:

Select State(s) to send export file: (1-5): █



IZDE is made State Specific

Exports will be created in the following folders:

NEW MEXICO	g:\export\byim\smm\nmsiis\sent\
OKLAHOMA	g:\export\byim\smm\osiis\sent\
WISCONSIN	g:\export\byim\smm\wir\sent\
UTAH	g:\export\byim\smm\usiis\request\
ARIZONA	g:\export\byim\smm\asiis\request\

Evaluation of immunizations for export to the State Immunization registry may take several minutes.

Do you want to proceed? NO// ■



IZDE is made State Specific

SET	SET UP Immunization Data Exchange Parameters
IZIS	Add/Edit IIS Assigned Vaccine Inventory Codes
FLCV	Flag COVID Immunizations for Export
IZER	Display ERRORS from State Response
IZRW	Add/Review RWT Reports



Make HL7 messages user friendly

```
IZDE  Start Immunization Data Export
IZCE  Check Immunization Data Export Status
IZFS  File Statistics Report
IZSI  Show Immunizations Exported for a Patient
IZTE  Create TEST Export File
IZQR  Immunization Queries
SET   SETUP Options ...
```

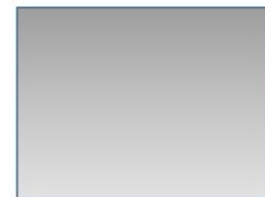


Make HL7 messages user friendly

SET	SET UP Immunization Data Exchange Parameters
IZAD	Define Additional Data Exchange States
IZIS	Add/Edit IIS Assigned Vaccine Inventory Codes
IZER	Display ERRORS from State Response
IZRW	Add/Review RWT Reports

Select Message ID or Pat Name: ??

Choose from:
izdata_232101_20230907_142936.h17
20 IHS-2031446 ARIZONA
izdata_232101_20230907_142936.h17
:15:20 IHS-2031448 ARIZONA
izdata_232101_20230907_142936.h17
20 IHS-2031450 ARIZONA
izdata_232101_20230907_142936.h17
0 IHS-2031452 ARIZONA



Sep 7,2023@14:15:
Sep 7,2023@14:
Sep 7,2023@14:15:
Sep 7,2023@14:15:2



Make HL7 messages user friendly

```
IZDE  Start Immunization Data Export
IZCE  Check Immunization Data Export Status
IZFS  File Statistics Report
IZSI  Show Immunizations Exported for a Patient
IZTE  Create TEST Export File
IZEP  Export Selected Patients
IZQR  Immunization Queries
SET   SETUP Options ...
```



Make HL7 messages user friendly

Select one of the following:

- 1 Request Patient Imm History and Forecast
- 2 ~~Send Patient Immunizations~~
- 3 Review Query or VXU Response
- 4 Review Query or VXU Sent
- 5 Send Scheduled Appt Queries

Which action: ■



Make HL7 messages user friendly

NAME: JALAPENO, JOLLY
DOB : 03/04/1950
HRN : 125369 (2021 DEMO HOSPITAL (INST))

ARIZONA reports a WARNING in Message IHS-8131014
in the 'PID' Segment, PID-13.1 'Phone Number-Home'
WARNING: Patient phone of usecode WPN is invalid

```
HL7 Sent: PID|1||232101125369^2021 DEMO HOSPITAL (^MR||JALAPENO^JOLLY^19500304|F||1002-5^AMERICAN INDIAN OR ALASKA NATIVE^CDCREC|159 SPICY BLVD^ALBUQUERQUE^NM^87125^USA^P^||^PRN^PH^505^1239874|^WPN^PH^505^1233698|||||2186-5^NOT HISPANIC OR LATINO^CDCREC||N|||||N
```

```
RSP R'cd: ERR||PID^1^13^1|102^Data type error^HL70357|w||||Patient phone of usecode WPN is invalid|
```



Make HL7 messages user friendly

NAME: JALAPENO, JOLLY
DOB : 03/04/1950
HRN : 125369 (2021 DEMO HOSPITAL (INST))

ARIZONA reports a WARNING in Message IHS-8131014
in the 1st 'RXA' Segment, RXA-15.1 'Substance Lot Number'
WARNING: vaccination lot is missing

HL7 Sent: RXA|0|1|20230920151900|20230920151900|33^PNEUMOVAX 23^CVX|0.5|mL^Milli
Liters^UCUM||00^NEW IMMUNIZATION RECORD^NIP001|^PINTO-YAZZIE^ANGELA^^^PHYSICIAN^
^^^L^^^|^^^SIISCLIENT74594||||CP|U|20230920152006

RSP R'cd: ERR|^RXA^1^15^1|101^Required field missing^HL70357|W|||vaccination lo
t is missing|



Add Parameter to make QPD-11 conditional on QPD-10

```
IZDE  Start Immunization Data Export
IZCE  Check Immunization Data Export Status
IZFS  File Statistics Report
IZSI  Show Immunizations Exported for a Patient
IZTE  Create TEST Export File
IZEP  Export Selected Patients
IZQR  Immunization Queries
SET   SETUP Options ...
```

```
SET   SET UP Immunization Data Exchange Parameters
IZAD  Define Additional Data Exchange States
IZIS  Add/Edit IIS Assigned Vaccine Inventory Codes
IZER  Display ERRORS from State Response
IZRW  Add/Review RWT Reports
```



Add Parameter to make QPD-11 conditional on QPD-10

select one of the following:

- 1 Edit parameters for ARIZONA
- 2 Add specific FACILITY(IES) for ARIZONA export
- 3 Add ARIZONA specific IIS code(s)

Path for OUTBOUND Messages.....: g:\pub\byim\smm\precert\request\
Replace ^BIRTH█



Add Parameter to make QPD-11 conditional on QPD-10

Birth order control PID-25..: SEND BIRTH ORDER// ??

Choose from:

- 0 SEND BIRTH ORDER
- 1 DO NOT SEND BIRTH ORDER

Birth order control PID-25..: SEND BIRTH ORDER//



ICE (Immunization Calculation Engine) Forecaster Updates



Pneumococcal updates

- Use PCV-20 in place of PCV-13 at 2mths, 4mths, 6mths and 12mths

Patient:
 DOB: 21-Mar-2022 (0 days)

HLN ICE Forecaster v1.41.1 for:

-- IMM HISTORY EVALUATION -----

Date	CVX	vaccine (combo)	Status - Rea:
05/21/2022	216	PCV-20	VALID
07/21/2022	216	PCV-20	VALID
09/21/2022	216	PCV-20	VALID
03/21/2023	216	PCV-20	VALID

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
PNEUMO,NOS	Due now	06/18/2022	07/21/2022	09/17/2022

FUTURE:

Vaccine	Status	Earliest	Recommended	Overdue
---------	--------	----------	-------------	---------



Live Vaccine Interval

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status
11/04/2023	111	FLU-LAIV3	VALID
11/28/2023	151	FLU-NasNOS	VALID

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status
11/04/2023	03	MMR	VALID
11/28/2023	03	MMR	VALID

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status
11/04/2023	21	VARICELLA	VALID
11/28/2023	21	VARICELLA	VALID



COVID – Booster dose

- Vaccinated patient of previous COVID doses

Adult patient

```

-- IMM HISTORY EVALUATION -----
  Date      CVX  Vaccine (combo)      Status - Reason
-----
12/01/2020  208  COV,Pfr              VALID
01/17/2021  208  COV,Pfr              VALID
12/01/2022  300  COV,PfrBbA          VALID
DUE:
| Vaccine   Status      Earliest   Recommended Overdue
|-----
| COV,NOS   Due now     09/12/2023 09/12/2023 NO DATE
COMPLETE:
| Vaccine   Status
|-----
| None
  
```

Child patient

```

-- IMM HISTORY EVALUATION -----
  Date      CVX  Vaccine (combo)      Status - Reason
-----
05/01/2023  229  COV,ModBbv          VALID
05/29/2023  229  COV,ModBbv          VALID
DUE:
| Vaccine   Status      Earliest   Recommended Overdue
|-----
| COV,NOS   Due now     09/12/2023 09/12/2023 NO DATE
COMPLETE:
| Vaccine   Status
|-----
| None
  
```



COVID – Pfizer update

- CVX code 308 Dose Validation and Forecasting for 6 months to 4 years

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
09/12/2023	308	COV,1vPfrT	VALID

-- FORECAST -----

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
COV,NOS	Due now	10/03/2023	10/03/2023	11/06/2023

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
09/12/2023	308	COV,1vPfrT	VALID
10/03/2023	308	COV,1vPfrT	VALID

-- FORECAST -----

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
COV,NOS	Due now	11/28/2023	11/28/2023	NO DATE

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
09/12/2023	308	COV,1vPfrT	VALID
10/03/2023	308	COV,1vPfrT	VALID
11/28/2023	308	COV,1vPfrT	VALID

-- FORECAST -----

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
COV,NOS	Complete			

COMPLETE:

Vaccine	Status
COV,NOS	Complete



COVID – Pfizer update

- CVX code 309 – dose 1 as primary series for 12 years and older

```
-- IMM HISTORY EVALUATION -----  
Date      CVX   Vaccine (combo)      Status - Reason  
-----  
09/12/2023 309   COV,1vPfrA          VALID  
-- FORECAST -----  
  
DUE:  
| Vaccine      Status          Earliest      Recommended    Overdue  
|-----  
COMPLETE:  
| Vaccine      Status  
|-----  
| COV,NOS      Complete
```



COVID – Pfizer update

- CVX code 310 – dose 1 as primary series for 5 to 11 years

```
-- IMM HISTORY EVALUATION -----  
Date      CVX  Vaccine (combo)      Status - Reason  
-----  
09/12/2023 310  COV,1vPfrP          VALID  
-- FORECAST -----
```

```
DUE:  
| Vaccine      Status          Earliest      Recommended    Overdue  
| -----  
COMPLETE:  
| Vaccine      Status  
| -----  
| COV,NOS      Complete
```



COVID – Moderna update

- CVX code 311 – 2-dose, primary series for 6 months to 4 years

```
-- IMM HISTORY EVALUATION -----
Date      CVX  Vaccine (combo)      Status - Reason
-----
09/12/2023 311  COV,1vModP          VALID
-- FORECAST -----
```

```
DUE:
| Vaccine      Status      Earliest      Recommended      Overdue
|-----
| COV,NOS      Due now      10/10/2023    10/10/2023      11/06/2023
```

```
-- IMM HISTORY EVALUATION -----
Date      CVX  Vaccine (combo)      Status - Reason
-----
09/12/2023 311  COV,1vModP          VALID
10/10/2023 311  COV,1vModP          VALID
-- FORECAST -----
```

```
DUE:
| Vaccine      Status      Earliest      Recommended      Overdue
|-----
COMPLETE:
| Vaccine      Status
|-----
| COV,NOS      Complete
```



COVID – Moderna update

- CVX code 311 – dose 1, primary series for 5 to 11 years

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
01/05/2024	311	COV,1vModP	VALID

-- FORECAST -----

DUE:				
Vaccine	Status	Earliest	Recommended	Overdue

COMPLETE:	
Vaccine	Status
COV,NOS	Complete



COVID – Moderna update

- CVX code 312 – dose 1, primary series for 12 years and older

```
-- IMM HISTORY EVALUATION -----  
Date      CVX  Vaccine (combo)      Status - Reason  
-----  
01/05/2024  312  COV,1vModA          VALID  
-- FORECAST -----  
  
DUE:  
| Vaccine      Status          Earliest      Recommended  overdue  
| -----  
COMPLETE:  
| Vaccine      Status  
| -----  
| COV,NOS      Complete
```



COVID – Novavax update

- CVX code 313 – 2-dose, primary series for 12 years and older

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason		
01/05/2024	313	COV,Nv-aPS	VALID		
DUE:					
Vaccine	Status	Earliest	Recommended	Overdue	
COV,NOS	Due now	01/26/2024	01/26/2024	02/29/2024	

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason		
01/05/2024	313	COV,Nv-aPS	VALID		
01/26/2024	313	COV,Nv-aPS	VALID		
-- FORECAST -----					
DUE:					
Vaccine	Status	Earliest	Recommended	Overdue	
COMPLETE:					
Vaccine	Status				
COV,NOS	Complete				



COVID – Novavax update

- CVX code 313 – 2-dose primary series for 5 to 12 years

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
01/05/2024	313	COV,Nv-aPS	VALID

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
COV,NOS	Due now	03/01/2024	03/01/2024	03/01/2024

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
01/05/2024	313	COV,Nv-aPS	VALID
03/01/2024	313	COV,Nv-aPS	VALID

-- FORECAST -----

DUE:

Vaccine	Status	Earliest	Recommended	Overdue
COV,NOS	Complete			

COMPLETE:

Vaccine	Status
COV,NOS	Complete



Td/Tdap issue

- Before ICE Forecaster implementation, workgroup assigned to review what was in it.
- Found that adult patients who didn't have a child record on file were required to complete a 3-dose Tdap series
- The workgroup recommended to suppress the 3-dose requirement

HLN ICE Forecaster v1.36.1 for: 11/10/2022 (run: 11/10/2022 @ 09:3

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
04/14/2022	115	Tdap	VALID
11/09/2022	205	FLU-V4ajv	VALID
01/05/2021	33	PNEUMO-PS	VALID

-- FORECAST -----

DUE:				
Vaccine	Status	Earliest	Recommended	Overdue
FUTURE:				
Vaccine	Status	Earliest	Recommended	Overdue
Td-ADULT	*Tdap assumed	completed	12/08/2032	



Td/Tdap issue

After ICE v1.41.1

19 yr old patient

```
-- IMM HISTORY EVALUATION -----
  Date      CVX  Vaccine (combo)      Status - Reason
-----
09/24/2005  20  DTaP                  VALID
11/24/2005  20  DTaP                  VALID
01/24/2006  20  DTaP                  VALID
10/24/2006  20  DTaP                  VALID
10/24/2009  20  DTaP                  VALID
07/24/2016  115  Tdap                  VALID
-- FORECAST -----
DUE:
| Vaccine      Status      Earliest      Recommended    Overdue
|-----
FUTURE:
| Vaccine      Status      Earliest      Recommended    Overdue
|-----
| Td,NOS      Due in future  07/24/2021   07/24/2026   08/20/2026
```

Recreating the routine

60 yr old

```
-- IMM HISTORY EVALUATION -----
  Date      CVX  Vaccine (combo)      Status - Reason
-----
12/08/2008  115  Tdap                  VALID
12/08/2018  115  Tdap                  VALID
-- FORECAST -----
DUE:
| Vaccine      Status      Earliest      Recommended    Overdue
|-----
| Td,NOS      *Tdap assumed completed  12/08/2028
```



Future Enhancements



Future Enhancements

- HPV vaccine – forecasting early at age 9

* SELECT MINIMUM VS RECOMMENDED AGE *

The Minimum vs Recommended Age parameter allows you to direct the Forecasting program to forecast Immunizations due at either the Minimum Acceptable Patient Age or at the Recommended Age.

Please select either MINIMUM or RECOMMENDED: Minimum// ??

Enter a code from the list.

Select one of the following:

M	Minimum
R	Recommended

Please select either MINIMUM or RECOMMENDED: Minimum// ■



Future Enhancements

- HPV vaccine – forecasting early at age 9

Patient: TESTPATIENT,TRACY DOB: 15-Jul-2015 (9 yrs)

HLN ICE Forecaster v1.42.1.4 for: 07/15/2024 (run: 07/15/2024)

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
07/15/2024	165	HPV-9v	VALID



Future Enhancements

- Displaying High Risk flags



Immunization History				Immunizations due on 09/22/2023	
1	07/27/05	DTaP (PEDIARIX)	2017	FLU,NOS	due
2	10/04/05	DTaP	2017	Men4,NOS	past due
3	01/05/06	DTaP (PEDIARIX)	2017	HPV,NOS	past due
4	07/26/06	DTaP (DTAP-HIB)	2017	COV,NOS	due *HR*
5	05/27/09	DTaP (CPT-coded visit)	2017	Men-B,NOS	due
6	06/06/16	Tdap	2017	Last Letter: 08-Aug-2016	
7	07/27/05	IPV (PEDIARIX)	2017	* CONTRAINDICATIONS/REFUSALS *	
8	10/04/05	IPV	2017		



Future Enhancements

- Force validation of Shingrix 2nd dose for ages 19 to 49

Patient: DOB: 12-Jul-1984 (40 yrs)

HLN ICE Forecaster v1.42.1.4 for: 07/15/2024 (run: 07/15,

-- IMM HISTORY EVALUATION -----

Date	CVX	Vaccine (combo)	Status - Reason
05/15/2024	187	ZOS-Shgrx	VALID
07/10/2024	187	ZOS-Shgrx	INVALID: This patient was below the minimum age for this dose.



Future Enhancements

Visit Date: JUL 10,2024
Admin Date:
Vaccine: ZOSTER RECOMBINANT
(ZOS-Shgrx)

Category: Ambulatory
Lot#: DV2335
Remaining: Not tracked
Exp Date: 12/31/25

Inj Site: Right Deltoid SQ vol: 0.5 ml
Location Type: IHS Location: 2020 DEMO CLINIC-1 (INST)
Provider: PALANKI,SURYAM PHARMD Ordering Provider: FLOOD,WILLIAM
VIS Date: FEB 4,2022 Presented: JUL 10,2024 Reaction:
Vac Elig: V01 - Dose override:



Future Enhancements

If this dose should be considered invalid, select one of the "INVALID" reasons below. If this dose is INVALID by the forecaster, but you wish to FORCE it to be considered valid, select "VALID-FORCE." If you do not wish to override this dose, leave it blank or select 0 (zero).

Choose from:

- 0
- 1 INVALID-BAD STORAGE
- 2 INVALID-DEFECTIVE
- 3 INVALID-EXPIRED
- 4 INVALID-ADMIN ERROR
- 9 FORCE VALID



