



# BYIM Immunization Data Exchange – BYIM Package & EHR Immunization Component



### Presented By...

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#### BYIM Interface Management

- BYIM v3.0
  - Two-way Generic Interface System (GIS) HL7
  - Exchange of immunization data with State immunization registries
- EHR v1.1 p29 Immunization Component



#### **Learning Objectives**

At the end of this session, participants should be able to ...

- Describe the menu options to send HL7 messages and evaluate responses
- Compare and contrast RPMS only, State only, and RPMS + State displays
- Describe differences in Immunization context displays available
- List possible error messages and how to approach resolution



#### **BYIM Menu**

#### Immunization Data Exchange 2021 DEMO HOSPITAL (INST)

```
BYIM VERSION: 3.0 P 2
HL7 VERSION: 2.5.1 R1.5 2016+

OUTPUT CONTROLLER: RUNNING

FORMAT CONTROLLER: RUNNING

NEXT AUTO EXPORT: JUL 21@14:03
NEXT AUTO IMPORT: JUL 21@09:24:15
NEXT AUTO QUERY.: JUL 21@09:27
NEXT AUTO PURGE.: JUL 22@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 ...
```



#### IZDE Start Immunization Data Export

```
The last Immunization export ran on: JUL 19,2021
This export will include: Patients of all ages who have had a visit since the last export.
You can select another date range for the export.
Export Immunizations given since JUL 19,2021: JUL 19,2021//
Exclude Immunizations given after JUL 20,2021: JUL 20,2021//
Which immunizations should be included:
     Select one of the following:
                     NEW or EDITED Immunizations in the date range
                     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//
Evaluation of immunizations for export to the State Immunization
registry may take several minutes.
Do you want to proceed? NO//
```



#### IZDE Start Immunization Data Export—Results

Immunizations for 8060 Patients 0-99 were evaluated.

The file 'izdata\_232101\_20210720\_133353.dat' will be created in the 'G:\Immunization Tracking\BYIM\export\' directory.

File creation may take several minutes. Check for the file in the directory listed above.

If SMM is running, the file should transfer automatically to the State registry.



### IZFS File Statistics Report

File Status Report			Report Date: 07/23/2021				
File	IMP/EXP Date	Туре	Pat- ients	Imuni- zations	NO Pat Match	New Imms	Imms Added
File Name Prefix: i: 20210716_101.dat	The state of the s		10				
File Name Prefix: No 20210716_114337.dat 20210716_12091.dat	07/16/2021	<b>EXPORT</b>	0	0			
File Name Prefix: i: 20210716_123501.dat			10				



#### IZSI Show Immunizations Exported for a Patient

Select the patient to review:

Enter Name, HRN or DOB:

```
Immunization Export summary for:
TEST,NEWBABY DOB: 09/03/2014 HRN: 86009
```

Export Date	Immunization	Admin Date
08/01/2016	ROTAVIRUS, PENTAVALE	08/01/2016
08/01/2016	DTAP-Hep B-IPV	08/01/2016
12/20/2015	ROTAVIRUS, MONOVALEN	12/20/2015
06/08/2021	DTAP	08/01/2017

Press <ENTER> to continue or '^' to exit...:



#### **BYIM Menu Immunization Query**

```
Immunization Query Options - Version: 2.5.1 R1.5 2016+
```

#### Select one of the following:

```
Request Patient Imm History and Forecast
Send Patient Immunizations
Review Query or VXU Response
Review Query or VXU Sent
Send Scheduled Appt Queries
```

Which action:



#### Request Patient Imm History & Forecast

```
Which action: 1 Request Patient Imm History and Forecast
Select patient(s) to send to the State Immunization Registry
Select patient:
    DEMO, PATIENT CHILD
                                      <W>
                                            F 11-17-2016 XXX-XX-9895 PIMC 999895
                    DEMO, PATIENT CHILD
    1
Select another patient:
A 'Request for Evaluated Imm History and Forecast' will be sent for:
                    DEMO, PATIENT CHILD
    1
Do you want to proceed? YES//
Please stand by. This may take a couple of seconds...
Query being sent for: DEMO, PATIENT CHILD
Query for : DEMO, PATIENT CHILD
     being sent to: ARIZONA
            and to: UNKNOWN
     QUERY Message ID: IHS-43527232 for DEMO, PATIENT CHILD
     and can be used to look up the responses from:
          ARIZONA
          UNKNOWN
```



#### **Send Patient Immunizations**

```
Which action: 2 Send Patient Immunizations
Which immunizations should be included:
     Select one of the following:
                    NEW or EDITED Immunizations in the date range
                    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//
Select patient(s) to send to the State Immunization Registry
Select patient:
  TEST, NEWBABY
                                        F 09-03-2014
                                                                   TST 86009
   1
                    TEST, NEWBABY
Select another patient:
An 'Unsolicited Vaccine Record Update (VXU)' will be sent for:
    1
                    TEST, NEWBABY
Do you want to proceed? YES//
Please stand by. This may take a couple of seconds...
Immunization record for: TEST, NEWBABY
          being sent to: ARIZONA
```



#### Review Query or VXU Response Information Only

```
3 Review Query or VXU Response
          Review Responses from the State IIS
Select by Pat Name, Query/VXU Date or Message ID: demo, patient c
HILD
                                         F 11-17-2016 XXX-XX-9895 PIMC 999895
  izrt qbp 298997 3 20210612 000027.dat DEMO,PATIENT CHILD
                                                                Jun 12,2021@0
           IHS-43527232
0:00:27
                          ARIZONA
    Select one of the following:
         1
                   Immunization Information Only
                   HL7 Message Content
Which display option: Immunization Information Only//
Response received Date/State File Name/Message ID
DEMO, PATIENT CHILD (F) 06/12/2021 izrt qbp 298997 3 20210612 000027.d
DOB: 11/17/2016 HRN: 999895 ARIZONA IHS-43527232
Response ID: (11744123) Query or VXU ID: (11743909)
DEMO, PATIENT CHILD 11/17/2016 F HRN: 1
  CVX VACCINE ADM DATE AGE LOCATION REACTION VOL SITE LOT MAN VALID STATUS
S 20 DTaP 20201121 4 dys PHOENIX .5
                                                      KG4M7 Gla
                                                                     COMPLE
 158 FLU-IIV 20170926 10 mts PHOENIX .5 LT 4MM5P Gla
158 FLU-IIV 20171024 11 mts PHOENIX .5 LT 4MM5P Gla
                                                                     COMPLE
                                                                     COMPLE
```



# Review Query or VXU Response HL7 Message Content

3 Review Ouery or VXU Response

Review Responses from the State IIS

Select by Pat Name, Query/VXU Date or Message ID: izrt\_qbp\_298997\_3\_20210612\_ 000027.dat DEMO,PATIENT CHILD Jun 12,2021@00:00:27 IHS-43527232 ARIZONA

Select one of the following:

- 1 Immunization Information Only
- 2 HL7 Message Content

Which display option: Immunization Information Only// 2 HL7 Message Content

Response received Date/State File Name/Message ID

DEMO,PATIENT CHILD (F) 06/12/2021 izrt\_qbp\_298997\_3\_20210612\_000027.d

DOB: 11/17/2016 HRN: 999895 ARIZONA IHS-43527232

Response ID: (11744123) Query or VXU ID: (11743909)

..., ...,

MSH|^~\&|ASIIS^^|ASIIS^^|RPMS^^|61588^^|20210612000207-0700||RSP^K11^RSP\_K1 1|4985022043.101576952|P|2.5.1|||NE|NE|||||Z42^CDCPHINVS^^| MSA|AA|IHS-43527232|

QAK|IHS-43527232|OK|Z44^Request Evaluated History and Forecast^CDCPHINVS|

QPD|Z44^Request Evaluated History and Forecast^CDCPHINVS|IHS-43527232|60660 1999895^^PHOENIX INDIAN MEDIC^MR|DEMO^PATIENT^CHILD^^^L|JOE^JANE^^^M|20 161117|F|4212 N 16TH ST^^PHOENIX^AZ^85016^USA^L|^PRN^PH^^302^3731344|



#### Review Query or VXU Sent

```
4 Review Query or VXU Sent
         Select Original Ouery or VXU sent
Select Patient, VXU or Query Date or Message ID: izrt_qbp_298997_3_20210612_0
             DEMO, PATIENT CHILD Jun 12,2021@00:00:27
00027.dat
                                                           IHS-43527232
RIZONA
    Select one of the following:
         1
                   Immunization Information Only
         2
                   HL7 Message Content
Which display option: Immunization Information Only// 2 HL7 Message Content
HL7 Message sent
                             Date/State File Name/Message ID
DEMO, PATIENT CHILD (F) 06/12/2021 izrt_qbp_298997_3_20210612_000027.d
DOB: 11/17/2016 HRN: 999895 ARIZONA
                                         IHS-43527232
Query or VXU ID: (11743909)
MSH|^~\&|RPMS|61588|ASIIS|ASIIS|20210612000027-0700||OBP^011^OBP 011|IHS-43
    527232|P|2.5.1|||ER|AL|||||Z44^CDCPHINVS|61588^^^^^^
QPD Z44^Request Evaluated History and Forecast^CDCPHINVS IHS-43527232 60660
    1999895^^^PHOENIX INDIAN MEDIC^MR|DEMO^PATIENT^CHILD^^^^L|JOE^JANE^^^^M|20
   161117|F|4212 N 16TH ST^^PHOENIX^AZ^85016^USA^L^^|^PRN^PH^^^302^373134
```



#### Send Scheduled Appointment Queries

```
Select a date for which to send queries for:
Scheduled appointments only
```

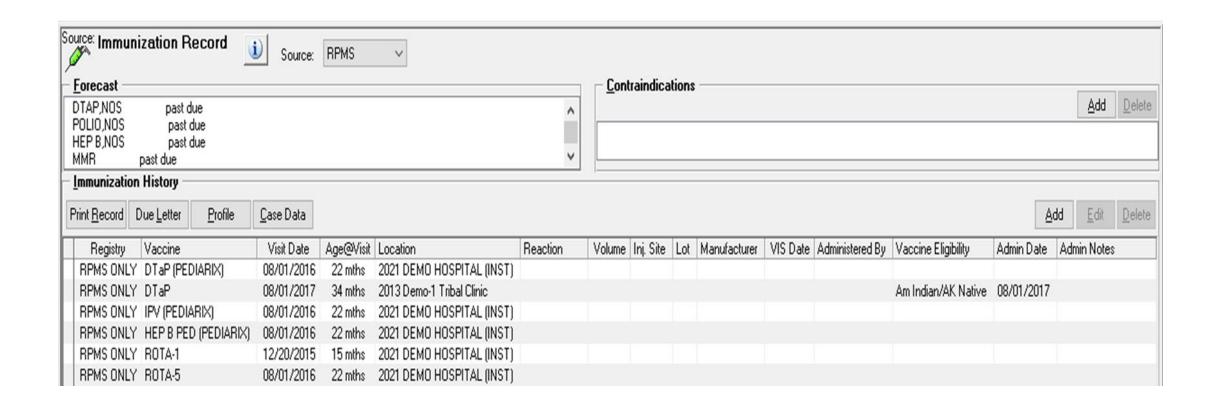
Date for Appointment Queries: 6/12

Queries will be sent for all patients who have Scheduled appointments only on JUN 12,2021

Press <ENTER> to continue or '^' to exit...:

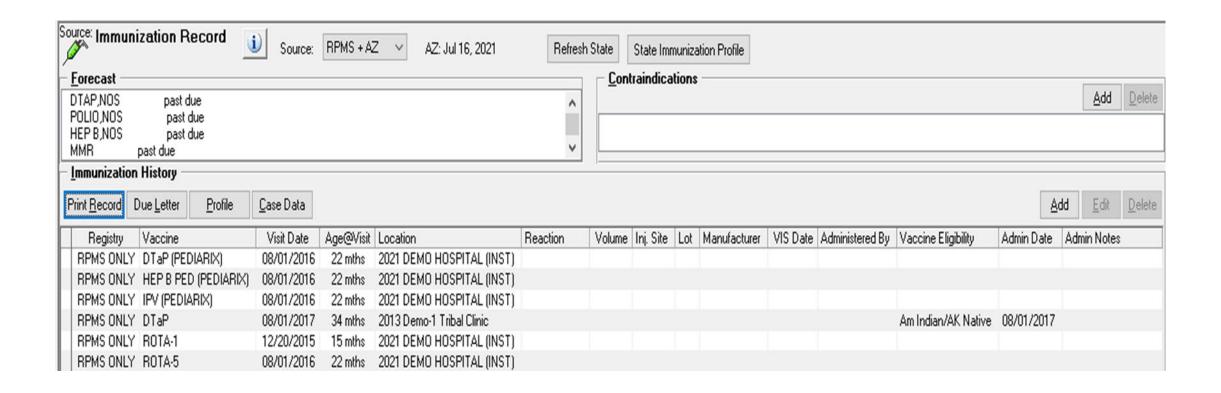


#### **EHR Immunization Component**



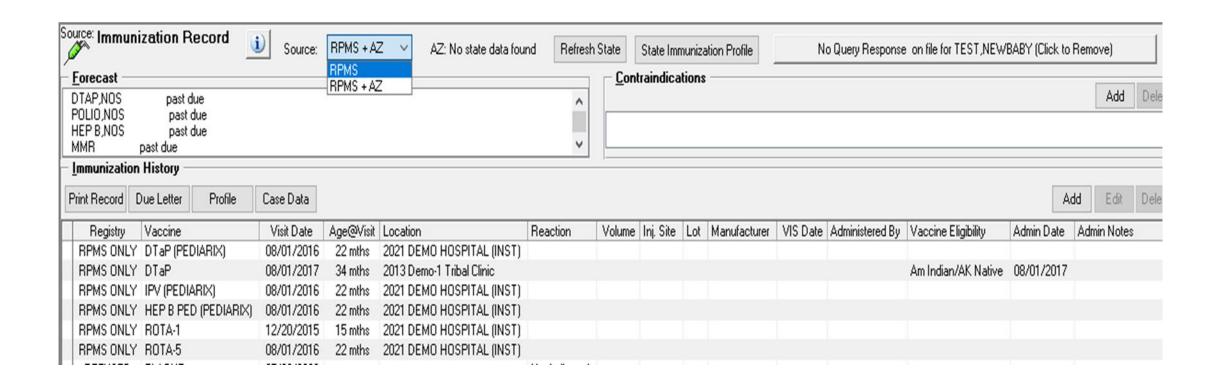


## EHR Immunization Component RPMS & State





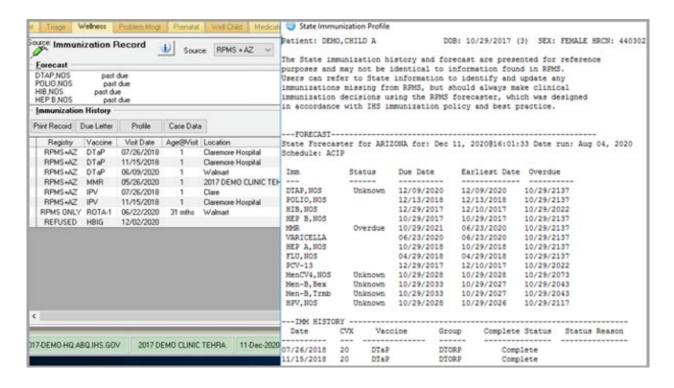
# EHR Immunization Component Last Export Failure



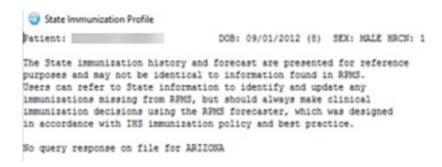


#### EHR Immunization Component (Examples)

#### **Example 1**



#### **Example 2**



#### **Example 3**

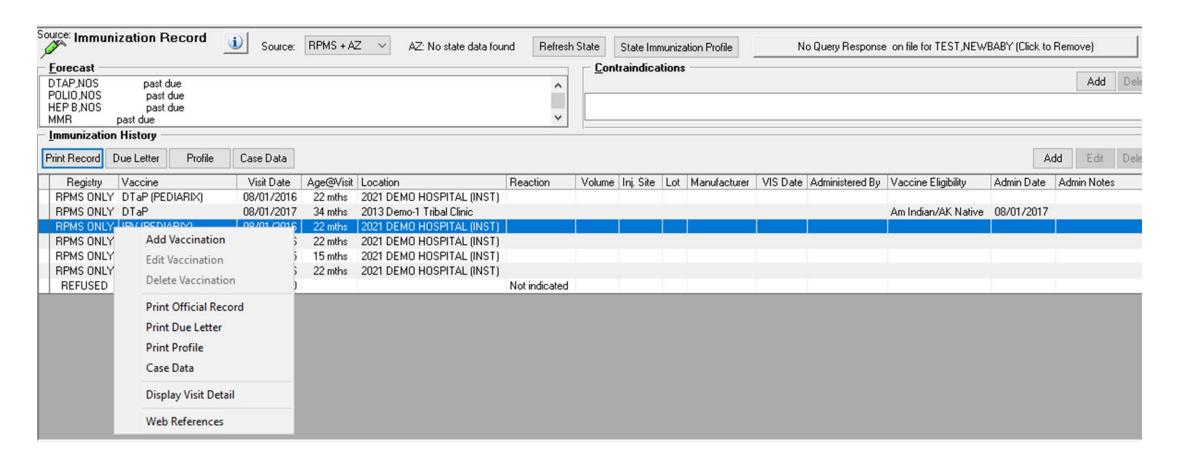
Patient: TEST, NEWBABY DOB: 09/03/2014 (6) SEX: FEMALE HRCN: 86009

The State immunization history and forecast are presented for reference purposes and may not be identical to information found in RPMS. Users can refer to State information to identify and update any immunizations missing from RPMS, but should always make clinical immunization decisions using the RPMS forecaster, which was designed in accordance with IHS immunization policy and best practice.

NO MATCH was found for 'TEST, NEWBABY'. for ARIZONA.



# EHR Immunization Component RPMS Only Options





### **Questions & Discussions**