



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Immunization Interface Management

(BYIM)

Addendum to User Manual

Version 2.0 Patch 8
November 2017

Office of Information Technology
Division of Information Technology

Table of Contents

- 1.0 Introduction..... 1**
 - 1.1 Summary of Changes 1
 - 1.1.1 Patch 8 (most recent) 1
- 2.0 Patch 8..... 3**
 - 2.1 Immunization Interface Management Menu Options 3
 - 2.2 Test Immunization Data Export File..... 4
 - 2.3 Immunizations Exported for a Patient Report 5
 - 2.4 File Statistics Report..... 6
 - 2.5 New SETUP Submenu 6
 - 2.6 Set Immunization Data Exchange Parameters 7
 - 2.7 New Define Additional Data Exchange Sites 8
- Contact Information 10**

1.0 Introduction

1.1 Summary of Changes

1.1.1 Patch 8 (most recent)

Note that some changes were done in a patch prior to patch 8, but were not documented in the User Manual or in an earlier Addendum. They are documented in this manual if noticed with an indication that they came from an earlier patch.

- The BYIM main menu and the SET sub-menu were changed to display the status of the GIS background processes.
- The text for the “NO” option was changed from “Children for whom there is no match in RPMS” to “Imported Patients NOT found in RPMS” on the BYIM menu (earlier patch).
- The text for the “SET” option was changed from “Immunization Data Exchange Parameters” to “SETUP Options ...” on the BYIM menu (earlier patch).
- The Create TEST Export File option now allows the user to select only NEW immunizations.
- The Create TEST Export File option includes a new prompt to “Include” or “Exclude” historical immunizations from TEST exports.
- The Create TEST Export File option changed the minimum number of records for a test export from 10 to 1.
- The Show Immunizations Exported for a Patient report option was updated to allow a BYIM user to specify the device that the patient report would be printed. The DEVICE: prompt defaults to the HOME (screen) device, but a printer could be specified for a hard copy report (earlier patch).
- The File Statistics Report option was enhanced to select files by “File Name” or “By Date Range” and the DEVICE: prompt was added so the user can select where to display the report. The default is to send it to the HOME (screen) device or a printer can be specified for a hard copy report (earlier patch).
- The SET UP Immunization Data Exchange Parameters and the Define Additional Data Exchange Sites options were modified to add a new question called "Flag TEST messages T MSH-11" that will allow either 'T' for testing or 'P' for production. This goes into the MSH-11 field as some states require that MSH-11 field be 'T' for Testing during the testing phase.

- The SET UP Immunization Data Exchange Parameters and the Define Additional Data Exchange Sites options were modified to add a new question called "Patient address type PID-11.7" to allow different values for PID-11.7. The field is defaulted to 'L' for legal but other values are allowed.
- The SET UP Immunization Data Exchange Parameters and the Define Additional Data Exchange Sites options were modified to add a new question called "File extension (dat or hl7)" to allow the file extension field to accept "hl7" as a valid extension.
- BYIM programming was modified to allow creation of additional export file(s) that contain state specific data. Various elements of the HL7 messages need to be state specific. Modified HL7 messages to determine all segments, components and sub-components that may require state specific information. Database elements were added to capture and store state specific HL7 information.

2.0 Patch 8

The following subsections illustrate the changes first described in BYIM v2.0, p8. Change numbers at the right margin of each RPMS roll and scroll example correspond to the changes described in the text that immediately follows the figure. Click the Change number to jump to the change description.

2.1 Immunization Interface Management Menu Options

Change to: BYIM User Manual v 2.0, Section 1.2, Figure 1-1

```

                                Immunization Data Exchange
                                2013 DEMO HOSPITAL

                                BYIM VERSION: 2.0 P 8
                                HL7 VERSION: 2.5.1
                                OUTPUT CONTROLLER: RUNNING
                                FORMAT CONTROLLER: RUNNING
                                NEXT EXP: NOT SCHED
                                NEXT IMP: NOT SCHED
                                <Change 1
                                <Change 1

                                IZDE  Start Immunization Data Export
                                IZS   Check Immunization Data Export Status
                                IZIM  Import Immunizations from State Registry
                                IZAD  Add Immunizations from State Registry
                                EXP   Show Immunizations Exported for a Patient
                                IZFS  File Statistics Report
                                NO    Imported Patients NOT found in RPMS
                                TEST  Create TEST Export File
                                SET   SETUP Options ...
                                <Change 2
                                <Change 3

                                Select Immunization Interchange Management Menu Option:
    
```

Figure 2-1: IIMM Main Menu

Changes to the Immunization Interface Management Menu (IIMM) main menu (Figure 2-1) are:

1. The statuses of the GIS OUTPUT CONTROLLER and GIS FORMAT CONTROLLER background process are displayed in the header of the main menu. If either of these two background processes are not running, it will display "NOT RUNNING-Contact IT support." Contact your IT support to restart the process so that the BYIM files are properly created.
2. Text for the "NO" option was changed from "Children for whom there is no match in RPMS" to "Imported Patients NOT found in RPMS" (earlier patch).
3. Text for the "SET" option was changed from "Immunization Data Exchange Parameters" to "SETUP Options ..." (earlier patch).

2.2 Test Immunization Data Export File

Change to: BYIM User Manual v 2.0, Section 3.1, Figure 3-1

```

Select Immunization Interchange Management Menu Option: TEST <Enter>
Create TEST Export File
    Select group of patients for TEST export

    Select one of the following:

        1          Random group of patients
        2          Select patients for test export

Which group of patients: Random group of patients//

    TEST export option
    An export file will be created for Patients of all ages.

Enter the number of patients
to include in the test export:(1-1000): 10// 1          <Change 1

    Default TEST export criteria

    TEST Export Criteria:

Start date:

Only administered and never exported immunizations will be included in the
test export.

    1. Specify start date for immunizations to include
    2. Exclude HISTORIC immunizations
    3. Exclude PREVIOUSLY EXPORTED immunizations

Select all criteria you want to set: (1-3): 1-3

Select start date for the TEST export: 7/30/2013          <Change 2

Exclude HISTORIC immunizations? YES// NO          <Change 3

Exclude PREVIOUSLY EXPORTED immunizations? YES// NO          <Change 4
    TEST Export Criteria:

Start date: JUL 30,2013

Administered and historic and new and previously exported
immunizations will be included in the test export.

Proceed with test export of 1 patients? NO// YES/
Requested Start Time: NOW// (JUL 19, 2017@13:06:33)

27 immunizations for 1 Patients 0-99 were evaluated in 0 minutes, 0
seconds.

The file 'izdata_232101_20170719_47189_test.dat' will now be created in the
'/local/hl7immunizationDataExport/' directory. This may take several
minutes.
It can be retrieved from this directory for transfer to the State registry.

```

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

Figure 2-2: Example of a Test Immunization Data Export File

The TEST export screen now includes the following enhancements:

1. Change minimum number of patients allowed in test exports to 1 patient instead of 10. The maximum allowed is still 1000.
2. Specify export immunizations from a specified date in TEST exports.
3. Specify Include or Exclude historical immunizations from TEST exports.
4. Allow Include/Exclude previously exported immunizations in TEST exports.

2.3 Immunizations Exported for a Patient Report

Change to: BYIM User Manual v 2.0, Section 5.1, Figure 5-1

```
Select Immunization Interchange Management Menu Option: EXP <Enter>
Enter Name, HRN, or DOB: PATIENT, A <Enter>

DEVICE: HOME//      Virtual                                <Change>

Immunization Export summary for:
PATIENT,A          DOB: 05/12/1930  HRN: 748526

      Export Date  Immunization          Admin Date
      -----
      08/25/2006  TD (ADULT)            03/01/1988
      08/27/2006  TD (ADULT)            03/01/1988
      08/28/2006  TD (ADULT)            03/01/1988
      08/29/2006  TD (ADULT)            03/01/1988

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

Figure 2-3: Report of Immunizations exported to the state registry for a patient

This screen allows a user to specify the device on which the patient report will be printed. The DEVICE: prompt defaults to the HOME (screen) device, but a printer can be specified for a hard copy report (earlier patch).

2.4 File Statistics Report

Change to: BYIM User Manual v 2.0, Section 5.2, figure 5-2

```

Select Immunization Interchange Management Menu Option:  IZFS <Enter>  File
Statistics Report

                Select the FILE report option

        Select one of the following:

                1          File Name          >Change 1
                2          By Date range      >Change 1

Enter response: 2

Beginning Date FILE STATISTICS Report:  JUL 19,2017// 7/12/2017

Ending Date FILE STATISTICS Report:  JUL 19,2017//

DEVICE: HOME//  Virtual          >Change 2

File Status Report                      Report Date: 07/19/2017

File          IMP/EXP          Pat-   Imuni-   NO Pat   New      Imms
              Date            Type   ients   zations NO Pat   Imms      Added
              -----          -----
File Name Prefix: izdata_232101_
20170712_34264.dat  07/12/2017  EXPORT   40     197
20170712_38453.dat  07/12/2017  EXPORT   40     197
20170712_63874.dat  07/12/2017  EXPORT    2      41

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

Figure 2-4: Example of the File Statistics report (IZFS)

1. This report interface has been enhanced to select files by “File Name” or “By Date Range.”
2. The DEVICE prompt was added so the user can select where to display the report. The default is to send it to the HOME (screen) device; a printer can be specified for a hard copy report.

2.5 New SETUP Submenu

Change to: BYIM User Manual v 2.0, Section 5.3, new figure to show the SETUP submenu with its four options.

```

                Immunization Data Exchange
                2013 DEMO HOSPITAL

                BYIM VERSION: 2.0 P 8          NEXT EXP: NOT SCHED
                HL7 VERSION: 2.5.1           NEXT IMP: NOT SCHED
                OUTPUT CONTROLLER: RUNNING    >Change
                FORMAT CONTROLLER: RUNNING    >Change
    
```

```

SET      SET UP Immunization Data Exchange Parameters
ADD      Define Additional Data Exchange Sites
IIS      Add/Edit IIS Assigned Vaccine Inventory Codes
REL      Review and Edit BYIM RELATIONSHIP Table Codes

Select SETUP Options <TEST ACCOUNT> Option:
    
```

Figure 2-5: Example of the File SETUP submenu

The status for the GIS OUTPUT CONTROLLER and GIS FORMAT CONTROLLER background process is displayed in the header of the Setup submenu. If either of these two background processes are not running, it will display “NOT RUNNING-Contact IT support.” Contact your IT support to restart the process so that the BYIM files are properly created.

2.6 Set Immunization Data Exchange Parameters

Change to: BYIM User Manual v 2.0, Section 5.3, Figure 5.3

```

Select Immunization Interchange Management Menu Option: SET UP Immunization
Data Exchange Parameters <ENTER>

ADD Data Exchange Parameter Site
Select SITE for Data Exchange Parameters: CHINLE HOSP// <ENTER>          NAVAJO
      CHINLE      01              AZ              010101
      ...OK? Yes// <ENTER> (Yes) Choosing the facility

UPDATE Data Exchange Parameters for CHINLE HOSP

PATH FOR OUTBOUND MESSAGES:
PATH FOR INBOUND MESSAGES:
AUTO IMPORT IMMUNIZATIONS: NO//
AUTO ADD IMMUNIZATIONS: NO//
AGES TO EXPORT.....: 18 AND UNDER// ?? <ENTER> displays all options

  Choose from:
    0      18 AND UNDER
    1      UNDER 19 AND OVER 64
    2      ALL AGES
AGES TO EXPORT.....: 18 AND UNDER//
SENDING APPLICATION  MSH-3.1.: MAINMSH3.1//
SENDING APPLICATION  MSH-3.2.: MAINMSH3.2//
SENDING APPLICATION  MSH-3.3.: MAINMSH3.3//
SENDING FACILITY     MSH-4.1.: MAINMSH4.1//
SENDING FACILITY     MSH-4.2.: MAINMSH4.2//
SENDING FACILITY     MSH-4.3.: MAINMSH4.3//
RECEIVING APPLICATION MSH-5.1.: MAINMSH5.1//
RECEIVING APPLICATION MSH-5.2.: MAINMSH5.2//
RECEIVING APPLICATION MSH-5.3.: MAINMSH5.3//
RECEIVING IIS ACRONYM MSH-6...: MAINMSH6//
State SECURITY CODE   MSH-8.1.: MAINMSH8.1//
Flag TEST messages T MSH-11...: Production//          >Change 1
Patient address type  PID-11.7: LEGAL//                >Change 2
PRIMARY FACILITY ID   PD1-3.1.: MAINPD13.1//
PRIMARY FACILITY NAME PD1-3.2.: MAINPD13.2//
PRIMARY FACILITY ID-2 PD1-3.3.: MAINPD13.3//
CVX or CPT or Both for RXA-5...:                      >Change 3
    
```

```
Value for blank volume RXA-6..: 555//
File extension (dat or hl7)...: dat//
Include Alaska Financial Class: NO//
Protection Indicator Enforced.: PI NOT NEEDED//
Mark IMMS as HISTORIC prior to: JAN 1,2004//
Exclude patient's SSN.....: INCLUDE SSN//
State site exchanges with....: ARIZONA//
Include Insurance Segments....: NO//
```

>Change 4

Figure 2-6: Immunization Data Exchange Parameters (SET)

The “SET UP Immunization Data Exchange Parameters” was modified to:

1. Allow the flagging of messages as Test or Production messages.
2. Specify the patient's address type.
3. Allow choice of which code to use for the immunization in RXA-5: CVX only, CPT only or Both.
4. Specify the “File extension” so that you can enter “hl7” as a possible extension. The old check would not allow numbers in the extension.

2.7 New Define Additional Data Exchange Sites

Change to: BYIM User Manual v 2.0, Section 5.3, new screen to show the Defined Additional Data Exchange Sites screen and the changes introduced by patch 8.

```
Additional EXPORT/IMPORT Site Directories

NUM  SITE/STATE
----  -
1    COLORADO
      OUTBOUND: d:\temp\hl7bridge\colorado\requests
      INBOUND:  d:\temp\hl7bridge\colorado\responses
2    NEW MEXICO
      OUTBOUND: d:\temp\hl7bridge\new_mexico\requests
      INBOUND:  d:\temp\hl7bridge\new_mexico\responses

Select one of the following:

      1      Edit site
      2      Add site
      3      Delete site

Enter response: 1  Edit site

Select site number: (1-2): 1

Additional SITE name.....: COLORADO//
Path for OUTBOUND Messages...: d:\temp\hl7bridge\colorado\requests
      Replace
Path for INBOUND Messages....: d:\temp\hl7bridge\colorado\responses
      Replace
SENDING APPLICATION  MSH-3.1: COMSH3.1//
SENDING APPLICATION  MSH-3.2: COMSH3.2//
SENDING APPLICATION  MSH-3.3: COMSH3.3//
```

```

SENDING FACILITY      MSH-4.1: COMSH4.1//
SENDING FACILITY      MSH-4.2: COMSH4.2//
SENDING FACILITY      MSH-4.3: COMSH4.3//
RECEIVING APPLICATION MSH-5.1: COMSH5.1//
RECEIVING APPLICATION MSH-5.2: COMSH5.2//
RECEIVING APPLICATION MSH-5.3: COMSH5.3//
RECEIVING IIS ACRONYM MSH-6.: COMSH6//
State SECURITY CODE   MSH-8.1: COMSH8.1//
Flag TEST messages T MSH-11.: Test//
PATIENT ADDRESS TYPE PID-11.7: PERMANENT//

PRIMARY FACILITY ID   PD1-3.1: COPD13.1//
PRIMARY FACILITY NAME PD1-3.2: COPD13.2//
PRIMARY FACILITY ID-2 PD1-3.3: COPD13.3//
CVX or CPT or Both for RXA-5.:

Value for blank volume RXA-6.: 888//
File extension (dat or hl7)..: hl7//

Protection Indicator Enforced: PI NOT NEEDED//
Exclude patient's SSN.....: EXCLUDE SSN//
State site exchanges with....: COLORADO//
    
```

Figure 2-7: New Screen for the Define Additional Data Exchange Sites option

The “Define Additional Data Exchange Sites” was modified to:

1. Allow the flagging of messages as Test or Production messages.
2. Specify the patient's address type.
3. Allow choice of which code to use for the immunization in RXA-5: CVX only, CPT only or Both.
4. Specify the “File extension” so that you can enter “hl7” as a possible extension. The old check would not allow numbers in the extension.

Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (888) 830-7280 (toll free)

Web: <http://www.ihs.gov/helpdesk/>

Email: support@ihs.gov