RESOURCE AND PATIENT MANAGEMENT SYSTEM

Laboratory Reference

(BLR, LA, LR)

User Manual

Version 5.2 Patch 1041
February 2018
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<td>A.3</td>
<td>Qualitative Critical Alert Flag</td>
</tr>
<tr>
<td>A.4</td>
<td>Reminder document for patient</td>
</tr>
<tr>
<td>A.5</td>
<td>Interim Report Option to Display Date of Birth Only</td>
</tr>
<tr>
<td>A.6</td>
<td>Open Lab Orders with Non-Active Providers</td>
</tr>
<tr>
<td>A.7</td>
<td>LOINC terms incorrectly pulling</td>
</tr>
</tbody>
</table>
1.0 Introduction

This document lists various changes to the RPMS Lab module that were brought about by IHS Lab Patch LR*5.2*1041.

The majority of the additions/changes to the RPMS Lab Package were made to accommodate RPMS Laboratory Package Enhancement requests.

Laboratory end users can expect to observe the following modifications and corrections in this 2nd quarter release for Fiscal Year 2018.

The field MAX. ORDER FREQ. within the COLLECTION SAMPLE sub node in the Laboratory Test (#60) file was modified.

The field PRINT NAME in the Laboratory Test (#60) file will be modified with the field length is increased from 8 characters to 16 characters.

Users assigned to the new LAB RESULTS CHANGED Mail Group will receive a message each time any Chemistry lab result is changed. The message will consist of the same verbiage that has been stored into the comments section of the Lab test result display.

Two new reports will be available to show a patient's future/current orders as well as all orders the patient has in the LAB ORDER ENTRY file.

With the installation of LR*5.2*1041, there will be a new parameter that can be set, BLR DOB ONLY, that will modify how the Interim Report will print patient information in the header.

Two reports regarding open lab orders with ordering providers who are no longer active will be available in the RPMS Lab package.

A new file and a new report regarding when and who selected the Purge old orders & accessions option will be installed into the RPMS Lab module.

Two VA Patches were also included in LR*5.2*1041.
2.0 **MAX. ORDER FREQ. Modification**

The field MAX. ORDER FREQ. within the COLLECTION SAMPLE sub node in the Laboratory Test (#60) file will be modified with the installation of LR*54.2*1041.

The number will be increased from 365 days to 3650 days, which allows for ten years. The maximum order frequency applies to a laboratory test.

```plaintext
Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: LABORATORY TEST/
EDIT WHICH FIELD: ALL// COLLECTION SAMPLE   (multiple)
   EDIT WHICH SITE/SPECIMEN SUB-FIELD: ALL// MAX. ORDER FREQ.
   THEN EDIT SITE/SPECIMEN SUB-FIELD:
   THEN EDIT FIELD:

Select LABORATORY TEST NAME: GLUCOSE
Select COLLECTION SAMPLE: SST (SERUM)
MAX. ORDER FREQ.: ?
   Type an integer between 1 and 3650.
MAX. ORDER FREQ.: 
Select COLLECTION SAMPLE:
```

Figure 2-1: Adding the number of days to the Max. Order Freq.

Enter a number between 1 and 3650, to limit the ordering of this test once per # of days entered within a certain time period. This entry will then the system to remind the ordering person that this has already been ordered and/or performed when using all Lab Test Order options.
3.0 File 60 Print Name Character Limit Extended

The field PRINT NAME in the Laboratory Test (#60) file will be modified with the installation of LR*5.2*1041.

The field length will be increased from 8 characters to 16 characters.

For example, if there were a test named URINE GLUCOSE, the PRINT NAME could also be URINE GLUCOSE after the LR*5.2*1041 installation.

See Section A.1 for further instructions.

Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: LABORATORY TEST//
EDIT WHICH FIELD: ALL// NAME
THEN EDIT FIELD: PRINT NAME
THEN EDIT FIELD:

Select LABORATORY TEST NAME: URINE GLUCOSE
NAME: URINE GLUCOSE//
PRINT NAME: UR.GLUC// ?
ANSWER MUST BE 1-16 CHARACTERS IN LENGTH
PRINT NAME: UR.GLUC// URINE GLUCOSE

Select LABORATORY TEST NAME:

Figure 3-1: Modifying the print name

Note: The print name will display on the Interim Report when the Laboratory Test name exceeds 15 characters. The Electronic Health Record Labs tab for results display the Laboratory Test Name and not the print name.
4.0 BLR Parameters and Mail Groups Option

With the installation of LR*5.2*1041, a new catch-all parameters/mail groups edit menu will be added to the BLRMENU with the PAGM option.

This will allow a Lab user with the LRSUPER security key the ability to edit all Lab Parameters and/or Mail Groups from one menu.

4.1 New PAMG Option on the BLRMENU

The new Edit RPMS Lab Parameters and/or Mail Groups option will be added to the BLRMENU during the installation of LR*5.2*1041.

Figure 4-1 illustrates the BLRMENU with the new PAMG option.

<table>
<thead>
<tr>
<th>IHS Lab Main Support Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS</td>
</tr>
<tr>
<td>7421</td>
</tr>
<tr>
<td>INQ</td>
</tr>
<tr>
<td>FLD</td>
</tr>
<tr>
<td>RSN</td>
</tr>
<tr>
<td>RST</td>
</tr>
<tr>
<td>CPT</td>
</tr>
<tr>
<td>FAL</td>
</tr>
<tr>
<td>STF</td>
</tr>
<tr>
<td>MSTR</td>
</tr>
<tr>
<td>PV</td>
</tr>
<tr>
<td>6249</td>
</tr>
<tr>
<td>BZV</td>
</tr>
<tr>
<td>CCCD</td>
</tr>
<tr>
<td>CGFR</td>
</tr>
<tr>
<td>CLR</td>
</tr>
<tr>
<td>CUM</td>
</tr>
<tr>
<td>DADD</td>
</tr>
<tr>
<td>ETP</td>
</tr>
<tr>
<td>IHSM</td>
</tr>
<tr>
<td>ILUM</td>
</tr>
<tr>
<td>LABT</td>
</tr>
<tr>
<td>LOI</td>
</tr>
<tr>
<td>LRAS</td>
</tr>
<tr>
<td>LROS</td>
</tr>
<tr>
<td>LTRR</td>
</tr>
<tr>
<td>LVP</td>
</tr>
<tr>
<td>MACC</td>
</tr>
<tr>
<td>MILO</td>
</tr>
<tr>
<td>MRA</td>
</tr>
<tr>
<td>NLO</td>
</tr>
<tr>
<td>ORDO</td>
</tr>
<tr>
<td>ORPH</td>
</tr>
<tr>
<td>ORPR</td>
</tr>
<tr>
<td>PAMG</td>
</tr>
<tr>
<td>PODOC</td>
</tr>
<tr>
<td>PURG</td>
</tr>
<tr>
<td>PURG</td>
</tr>
</tbody>
</table>
RBE   Clear ALL BLR Errors from Error Log
REFL  Reference Lab Main Menu ...
REPL  Replace Lab Order/Test Status ...
RSNL  Reprint/Reship a Non LEDI Order
SF60  IHS Search File 60
SHDR  State Health Dept Report
TCCR  Test Creatinine Clearance Logic
TGFR  Test CKD-EPI Equation Logic
       Count Accessioned Tests Using Lab Data File ...
       RPMS Lab Ask-At-Order ...

Select IHS Lab Main Support Menu Option:

Figure 4-1: BLRMENU with PAMG option

If a user selects the PAMG option, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Parameters-Mail Groups</th>
<th>BLRPAMGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit RPMS Lab Parameters ...</td>
<td></td>
</tr>
<tr>
<td>2 RPMS Lab Parameter's Description ...</td>
<td></td>
</tr>
<tr>
<td>3 Edit RPMS Lab Mail Groups ...</td>
<td></td>
</tr>
<tr>
<td>4 Mail Group's Description ...</td>
<td></td>
</tr>
</tbody>
</table>

Select:  (1-4):

Figure 4-2: PAGM Option Menu

4.1.1 Edit RPMS Lab Parameters Options

If a user selects Edit RPMS Lab Parameters, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Parameters-Mail Groups</th>
<th>BLRPAMGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit BLR CC DATA parameter</td>
<td></td>
</tr>
<tr>
<td>2 Edit BLR AGE DETAIL parameter</td>
<td></td>
</tr>
<tr>
<td>3 Edit BLR EMERGENCY ALERT parameter</td>
<td></td>
</tr>
<tr>
<td>4 Edit BLR COLL DT PCC VISIT CREATION parameter</td>
<td></td>
</tr>
<tr>
<td>5 Edit BLR DOB ONLY parameter</td>
<td></td>
</tr>
</tbody>
</table>

Select:  (1-4):

Figure 4-3: PAGM Option Menu
6 Edit BLR LAB RESULTS CHANGED NOTIFY parameter
7 Edit BLR QUALITATIVE ALERT parameter
8 Edit BLR DAYS TO ACCESSION parameter
9 Edit BLR FT CONFIRM parameter

Select: (1-9):

Figure 4-4: Parameters Edit sub-Menu

Selection of a parameter to edit will take the user to the standard parameter edit menu.

4.1.2 Edit RPMS Lab Mail Groups Options

If a user selects the PAMG option, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Parameters/Mail Groups</th>
<th>BLRPAMGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit RPMS Lab Parameters ...</td>
<td></td>
</tr>
<tr>
<td>2 RPMS Lab Parameter's Description ...</td>
<td></td>
</tr>
<tr>
<td>3 Edit RPMS Lab Mail Groups ...</td>
<td></td>
</tr>
<tr>
<td>4 Mail Group's Description ...</td>
<td></td>
</tr>
</tbody>
</table>

Select: (1-4):

Figure 4-5: PAGM Option Menu

When a user selects Edit RPMS Lab Mail Groups, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Mail Groups</th>
<th>BLRPAMGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit LAB HIGH URGENCY NOTIFICATION Mail Group</td>
<td></td>
</tr>
<tr>
<td>2 Edit LAB RESULTS CHANGED Mail Group</td>
<td></td>
</tr>
<tr>
<td>3 Edit LAB QUALITATIVE ALERT Mail Group</td>
<td></td>
</tr>
<tr>
<td>4 Edit LAB EMERGENCY ROOM NOTIFICATION Mail Group</td>
<td></td>
</tr>
<tr>
<td>5 Edit LMI Mail Group</td>
<td></td>
</tr>
<tr>
<td>6 Edit BLR ERROR OVERFLOW WARNING Mail Group</td>
<td></td>
</tr>
<tr>
<td>7 Edit BLR LAB PATIENT MERGE Mail Group</td>
<td></td>
</tr>
<tr>
<td>8 Edit BLRLINK Mail Group</td>
<td></td>
</tr>
<tr>
<td>9 Edit LAB MESSAGING Mail Group</td>
<td></td>
</tr>
<tr>
<td>10 Edit BLR APPLICATION PLUGIN WARNING Mail Group</td>
<td></td>
</tr>
<tr>
<td>11 Edit LAB Mail Group</td>
<td></td>
</tr>
<tr>
<td>12 Edit LAB TECHS Mail Group</td>
<td></td>
</tr>
</tbody>
</table>

Select: (1-12):

Figure 4-6: Mail Groups Edit sub-Menu

Selection of a Mail Group to edit will take the user to the standard Mail Group edit menu.
4.1.3 RPMS Lab Parameter's Description

If a user selects the PAMG option, the sub-menu looks similar to the following:

```
IHS Database LR1041
Date:09/28/17                      RPMS Lab                        Time:2:31 PM
Parameters-Mail Groups                     BLRPAMGE
-----------------------------------------------------------------------------------------------
1    Edit RPMS Lab Parameters ...
2    RPMS Lab Parameter's Description ...
3    Edit RPMS Lab Mail Groups ...
4    Mail Group's Description ...

Select:  (1-4):
```

Figure 4-7: PAGM Option Menu

When a user selects the RPMS Lab Parameter's Description option, the sub-menu looks similar to the following:

```
IHS Database LR1041
Date:09/28/17                      RPMS Lab                        Time:2:35 PM
Parameter's Description                     BLRPAMGE
-----------------------------------------------------------------------------------------------
1    BLR CC DATA parameter
2    BLR AGE DETAIL parameter
3    BLR EMERGENCY ALERT parameter
4    BLR COLL DT PCC VISIT CREATION parameter
5    BLR DOB ONLY parameter
6    BLR LAB RESULTS CHANGED NOTIFY parameter
7    BLR QUALITATIVE ALERT parameter
8    BLR DAYS TO ACCESSION parameter
9    BLR PT CONFIRM parameter

Select:  (1-9):
```

Figure 4-8: Parameters' Description sub-Menu

Selecting any of the options will display the DESCRIPTION field from the PARAMETER DEFINITION file for that parameter.

For example, if the user selects 2, BLR AGE DETAIL, the display screen will look similar to the following:

```
IHS Database LR1041
Date:09/28/17                      RPMS Lab                        Time:2:35 PM
SHOWDESC                         BLR AGE DETAIL                         BLRPAMGE
-----------------------------------------------------------------------------------------------
DESCRIPTION:
If YES it means that the AGE variable needs to have MOS if toddler or DYS if newborn or YRS if AGE > 2 years.

Press RETURN Key:
```
4.1.4 RPMS Mail Group's Description

If a user selects the PAMG option, the sub-menu looks similar to the following:

```
Figure 4-10: PAGM Option Menu

When a user selects the Mail Group's Description option, the sub-menu looks similar to the following:

```

Selecting any of the options will display the DESCRIPTION field from the MAIL GROUP file for that group.

For example, if the user selects 2, LAB RESULTS CHANGED, the display screen will look similar to the following:

```

DESCRIPTION: Mail Group to receive notifications when Lab Results have been
changed.

Press RETURN Key:

Figure 4-12: Parameter Description
5.0 Changed Lab Results MailMan Messages

With the installation of LR*5.2*1041, users assigned to the new LAB RESULTS CHANGED Mail Group will receive a message each time any Chemistry lab result is changed. The message will consist of the same verbiage that has been stored into the comments section of the Lab Data file.

The messages will only be sent, however, if the new parameter BLR LAB RESULTS CHANGED NOTIFY is set to YES.

See Section A.2 for further instructions.

5.1 New BLR LAB RESULTS CHANGED NOTIFY Parameter Definition

The new BLR LAB RESULTS CHANGED NOTIFY Parameter will be added to the PARAMETER DEFINITION file during the installation of LR*5.2*1041.

5.1.1 BLR LAB RESULTS CHANGED NOTIFY Parameter Modification Option

The BLR LAB RESULTS CHANGED NOTIFY parameter can be modified by the new BLR PARMETERS AND MAIL GROUPS option that will be added to the BLRMENU with the PAMG menu option.

See Section 4.1 for an example BLRMENU listing showing the new PAMG option.

If a user selects the PAGM option, the sub-menu looks similar to the following:

```
IHS Database LR1041
Date:09/28/17                       RPMS Lab                        Time:2:35 PM
Parameters/Mail Groups                     BLRPAMGE
--------------------------------------------------------------------------------
1    Edit RPMS Lab Parameters ...
2    RPMS Lab Parameter's Description ...
3    Edit RPMS Lab Mail Groups ...
4    Mail Group's Description ...

Select:  (1-2):
```

Figure 5-1: PAGM Option Menu

Selecting the EDIT RPMS Lab Parameters option will display the Parameters menu.

```
IHS Database LR1041
Date:09/28/17                       Time:2:35 PM
Parameters                     BLRPAMGE
--------------------------------------------------------------------------------
1    Edit BLR CC DATA parameter
```

User Manual            Changed Lab Results MailMan Messages
February 2018
2    Edit BLR AGE DETAIL parameter
3    Edit BLR EMERGENCY ALERT parameter
4    Edit BLR COLL DT PCC VISIT CREATION parameter
5    Edit BLR DOB ONLY parameter
6    Edit BLR LAB RESULTS CHANGED NOTIFY parameter
7    Edit BLR QUALITATIVE ALERT parameter
8    Edit BLR DAYS TO ACCESSION parameter
9    Edit BLR PT CONFIRM parameter

Select:  (1-9):

Figure 5-2: Parameters Edit sub-Menu

Selecting the Edit BLR LAB RESULTS CHANGED NOTIFY parameter option will allow a user with the LRSUPER Security key to modify the parameter. It will display a screen similar to the following:

<table>
<thead>
<tr>
<th>Date:09/28/17</th>
<th>Time:8:38 AM</th>
<th>2013 DEMO HOSPITAL (CMBA)</th>
<th>IHS Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLR LAB RESULTS CHANGED NOTIFY Parameter</td>
<td>BLREMERA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modify Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLR LAB RESULTS CHANGED NOTIFY (YES/NO)? NO//</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5-3: LRCP Results Change notify menu

The only valid responses are either YES or NO. The default response is the current value of the parameter.

If a FileMan exit (by typing a caret (^), or up-hat) is entered, the routine is exited via a screen similar to the following:

<table>
<thead>
<tr>
<th>Date:09/28/17</th>
<th>Time:8:39 AM</th>
<th>2013 DEMO HOSPITAL (CMBA)</th>
<th>IHS Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLR LAB RESULTS CHANGED NOTIFY Parameter</td>
<td>BLREMERA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modify Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLR LAB RESULTS CHANGED NOTIFY (YES/NO)? NO// ^</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Invalid/No Entry/Quit. Routine Ends.

Press RETURN Key:

Figure 5-4: Exiting the LRCP option

5.2 New Mail Group LAB RESULTS CHANGED

LR*5.2*1041 will add a new Mail Group, LAB RESULTS CHANGED, to the Mail Group dictionary. It is the only Mail Group that will receive the Lab Results Changed MailMan messages.
5.2.1 Mail Group Modifications option

A new option, Edit RPMS Lab Mail Groups is part of the new BLR PARAMETERS AND MAIL GROUPS option that will be added to the BLRMENU with the PAMG menu option.

See Section 4.1 for an example BLRMENU listing showing the new PAMG option.

If a user selects the PAGM option, the sub-menu looks similar to the following:

```
IHS Database LR1041
Date:09/28/17                        RPMS Lab                        Time:2:31 PM
Parameters/Mail Groups              BLRPAMGE
--------------------------------------------------------------------------------
1    Edit RPMS Lab Parameters ...    
2    RPMS Lab Parameter's Description ... 
3    Edit RPMS Lab Mail Groups ...   
4    Mail Group's Description ...   
Select:  (1-2):
```

Figure 5-5: PAMG Option Menu

Selecting the EDIT RPMS Lab Mail Groups option will display the Mail Groups menu.

```
IHS Database LR1041
Date:09/28/17                        RPMS Lab                        Time:2:35 PM
Mail Groups                           BLRPAMGE
--------------------------------------------------------------------------------
1    LAB HIGH URGENCY NOTIFICATION Mail Group
2    LAB RESULTS CHANGED Mail Group
3    LAB QUALITATIVE ALERT Mail Group
4    LMI Mail Group
5    BLR ERROR OVERFLOW WARNING Mail Group
6    BLR LAB PATIENT MERGE Mail Group
7    BLRLINK Mail Group
8    LAB MESSAGING Mail Group
9    BLR APPLICATION PLUGIN WARNING Mail Group
10   LAB Mail Group
11   LAB TECHS Mail Group
Select:  (1-11):
```

Figure 5-6: Mail Groups Edit sub-Menu

Selecting the Edit LAB RESULTS CHANGED Mail Group option, the following menu displays:

```
Date:09/28/17                        2013 DEMO HOSPITAL (CMBA)
RPMS Lab                             Time:8:44 AM
LAB RESULTS CHANGED                  BLREMERMA
Mail Group Modifications
```

MAIN MENU

1) Add User to Mail Group  2) Delete User From Mail Group
3) List Users on Mail Group

Select:  (1-3):

Figure 5-7: Mail Group Modifications menu

5.2.1.1 Selecting Add User to Mail Group

If Add User to Mail Group is selected, the following menu will display:

Figure 5-8: Adding User menu

A person from the NEW PERSON (#200) file can be selected; for example:

Figure 5-9: Example of adding a user

Pressing Enter will return to the "add user" menu

Figure 5-10: Adding User menu
After all the users are entered, pressing RETURN at the NEW PERSON prompt will display something similar to the following:

```
Select NEW PERSON:
   Exit/No Entry.

Press RETURN Key:
1 Users added to LAB RESULTS CHANGED
0 Errors when trying to add users to LAB RESULTS CHANGED

Press RETURN Key:
```

Figure 5-11: Adding User report

### 5.2.1.2 Selecting Delete User from Mail Group

```
Select one of the users below:
1 USER1,USER1
2 USER2,USER2
3 USER3,USER3

Enter Number:
```

Figure 5-12: Mail Group Modifications menu

If Delete User From Mail Group is selected, the menu will alphabetically display all the current users on the Mail group, similar to the following:
Figure 5-13: Delete User From Mail Group

Once the user has entered the number, the person listed will be removed from the Mail Group and a message displayed, similar to the following:

```
2013 DEMO HOSPITAL (CMBA)
Date:09/28/17                       Time:8:44 AM
RPMS Lab                        BLREMERA
LAB RESULTS CHANGED
Delete User from Mail Group
--------------------------------------------------------------------------------
Select one of the users below:
1 USER1,USER1
2 USER2,USER2
3 USER3,USER3
Enter Number: 2
USER2,USER2 deleted from LAB RESULTS CHANGED Mail Group
Press RETURN Key:
```

Figure 5-14: Delete User From Mail Group

When the RETURN key is pressed, the display will reflect that the current members of the Mail group, similar to the following:

```
2013 DEMO HOSPITAL (CMBA)
Date:09/28/17                       Time:8:44 AM
RPMS Lab                        BLREMERA
LAB RESULTS CHANGED
Delete User from Mail Group
--------------------------------------------------------------------------------
Select one of the users below:
1 USER1,USER1
2 USER3,USER3
Enter Number:
```

Figure 5-15: Delete User From Mail Group

If RETURN is pressed here, a brief listing will show how many users were removed from the Mail Group, similar to the following:

```
2013 DEMO HOSPITAL (CMBA)
Date:09/28/17                       Time:8:44 AM
RPMS Lab                        BLREMERA
LAB RESULTS CHANGED
Delete User from Mail Group
--------------------------------------------------------------------------------
```
Select one of the users below:

1 USER1,USER1
2 USER3,USER3

Enter Number:

Exit/No Entry.

Press RETURN Key:

1 User deleted from LAB RESULTS CHANGED
0 Errors when trying to delete users from LAB RESULTS CHANGED

Press RETURN Key:

Figure 5-16: Deleted User From Mail Group

5.2.1.3 Selecting List Users on Mail Group

If List Users on Mail Group is selected an option will then prompt the user if they want to list all of the members of the mail group without paging. The default will be NO. It will look similar to the following:

Once the prompt has been answered, a report, similar to the following, will display to the screen.

<table>
<thead>
<tr>
<th>DUZ</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2929</td>
<td>USER,TEST 1</td>
</tr>
<tr>
<td>2916</td>
<td>USER,TEST 2</td>
</tr>
<tr>
<td>2859</td>
<td>USER,TEST 3</td>
</tr>
</tbody>
</table>

3 Members

Press RETURN Key:
5.3 MailMan Message Example

An example MailMan message follows:

```
Subj: Accession CH 1003 1 Lab Results Changed  [#107694] 10/01/17@15:55
10 lines
From: LRDIDLE0 In 'IN' basket. Page 1

_**CHLORIDE** reported incorrectly as 23 by [2859].
Changed to 93 on Nov 16, 2016@15:55 by [2859].
_**CHLORIDE** flagged incorrectly as L* by [2859].
Changed to L on Nov 16, 2016@15:55 by [2859].

Patient:TEST,TESTING TEST
Accession:CH 1003 1
UID:1062770001

Results Changed by:USER,TEST [2859]

Enter message action (in IN basket): Ignore//
```
6.0 Qualitative Critical Alert Flag

With the installation of LR*5.2*1041, RPMS Lab will allow alerts for qualitative flags.

See Section A.3 for further instructions.

6.1 File 60 New Site/Specimen Field

In order to accommodate qualitative values, a new, free-text field, QUALITATIVE VALUES, was created under the Site/Specimen field in File 60. The new field is a multiple, which means it can hold many values.

Please note that the logic of the routine that determines a qualitative flag requires the result must match, exactly, what is entered into the QUALITATIVE VALUES field. For example, if the result is POS, then an entry in the QUALITATIVE VALUES must also be POS.

6.2 New LAB QUALITATIVE ALERT Mail Group and New LAB QUALITATIVE ALERT Parameter

A new Mail Group and a new Parameter will also be installed into the RPMS Lab system during the installation of LR*5.2*1041.

The LAB QUALITATIVE ALERT parameter is a YES/NO parameter that regulates whether MailMan Messages are sent to the new LAB QUALITATIVE ALERT mail group.

The LAB QUALITATIVE ALERT parameter can be modified by the new BLR PARMETERS AND MAIL GROUPS option that will be added to the BLRMENU with the PAMG menu option.

See Section 4.1 for an example BLRMENU listing showing the new PAMG option.

6.2.1 Modify LAB QUALITATIVE ALERT Parameter

If a user selects the PAMG option, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>IHS Database LR1041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:09/28/17</td>
</tr>
<tr>
<td>RPMS Lab</td>
</tr>
<tr>
<td>Parameters/Mail Groups</td>
</tr>
<tr>
<td>Time:2:31 PM</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
</tbody>
</table>

| 1 | Edit RPMS Lab Parameters ... |
| 2 | RPMS Lab Parameter's Description ... |
| 3 | Edit RPMS Lab Mail Groups ... |
| 4 | Mail Group's Description ... |
Select: (1-4):

Figure 6-1: PAGM option Main Menu

When the user selects the Edit RPMS Lab Parameters, the sub-menu will be similar to the following:

<table>
<thead>
<tr>
<th>IHS Database LR1041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:09/28/17</td>
</tr>
<tr>
<td>RPMS Lab Parameters</td>
</tr>
<tr>
<td>Time:3:06 PM</td>
</tr>
<tr>
<td>BLRPAMGE</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>1 Edit BLR CC DATA parameter</td>
</tr>
<tr>
<td>2 Edit BLR AGE DETAIL parameter</td>
</tr>
<tr>
<td>3 Edit BLR EMERGENCY ALERT parameter</td>
</tr>
<tr>
<td>4 Edit BLR COLL DT PCC VISIT CREATION parameter</td>
</tr>
<tr>
<td>5 Edit BLR DOB ONLY parameter</td>
</tr>
<tr>
<td>6 Edit BLR LAB RESULTS CHANGED NOTIFY parameter</td>
</tr>
<tr>
<td>7 Edit BLR QUALITATIVE ALERT parameter</td>
</tr>
<tr>
<td>8 Edit BLR DAYS TO ACCESSION parameter</td>
</tr>
<tr>
<td>9 Edit BLR PT CONFIRM parameter</td>
</tr>
</tbody>
</table>

Select: (1-9):

Figure 6-2: Parameters Edit Sub-Menu

When the user selects the Edit BLR QUALITATIVE ALERT parameter, the modify menu will look similar to the following:

<table>
<thead>
<tr>
<th>IHS Database LR1041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:09/28/17</td>
</tr>
<tr>
<td>IHS Laboratory</td>
</tr>
<tr>
<td>Time:3:10 PM</td>
</tr>
<tr>
<td>BLREMERA</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>BLR QUALITATIVE ALERT (YES/NO)? NO//</td>
</tr>
</tbody>
</table>

Figure 6-3: BLR QUALITATIVE ALERT Edit Sub-Menu

The only selections possible are YES or NO. Once the user has changed the selection, the changed value will be displayed, similar to the following:

<table>
<thead>
<tr>
<th>IHS Database LR1041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:09/28/17</td>
</tr>
<tr>
<td>IHS Laboratory</td>
</tr>
<tr>
<td>Time:3:10 PM</td>
</tr>
<tr>
<td>BLREMERA</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>BLR QUALITATIVE ALERT (YES/NO)? NO// YES</td>
</tr>
</tbody>
</table>

Press RETURN Key:

Figure 6-4: Example of parameter edit

An example LAB QUALITATIVE ALERT message follows:
6.2.2 Modify LAB QUALITATIVE ALERT Mail Group

In order for the users on the new LAB QUALITATIVE ALERT Mail Group to receive messages related to qualitative results, they must be added to the mail group.

To edit the LAB QUALITATIVE ALERT Mail Group, a user must have the LRSUPER Security Key and select the new PAMG option from the BLRMENU. The PAMG main menu will look similar to the following:

Figure 6-6: PAGM option Main Menu

When the user selects the Edit RPMS Lab Mail Groups, the sub-menu will be similar to the following:

Figure 6-7: Mail Groups Edit Sub-Menu
When the user selects the Edit LAB QUALITATIVE ALERT Mail Group option, the sub-menu will be similar to the following:

![Figure 6-8: LAB QUALITATIVE ALERT Mail Group Edit menu](image_url)

### 6.2.2.1 Selecting Add User to Mail Group

If Add User to Mail Group is selected, the following menu will display:

![Figure 6-9: LAB QUALITATIVE ALERT Mail Group Add User](image_url)

A person from the NEW PERSON (#200) file can be selected; for example:

![Figure 6-10: Example of adding a user](image_url)

Pressing Enter will return to the "add user" menu.
Select NEW PERSON:

Figure 6-11: Add User menu

After all the users are entered, pressing RETURN at the NEW PERSON prompt will display something similar to the following:

Select NEW PERSON:

Exit/No Entry.

Press RETURN Key:

1 Users added to LAB RESULTS CHANGED

0 Errors when trying to add users to LAB RESULTS CHANGED

Press RETURN Key:

Figure 6-12: Adding User report

6.2.2.2 Selecting Delete User From Mail Group

If Delete User From Mail Group is selected, the menu will alphabetically display all the current users on the Mail group, similar to the following:

Select one of the users below:
Once the user has entered the number, the person listed will be removed from the Mail Group and a message displayed, similar to the following:

**Figure 6-14: Delete User From Mail Group**

Once the user has entered the number, the person listed will be removed from the Mail Group and a message displayed, similar to the following:

```
2013 DEMO HOSPITAL (CMBA)                                   Time:8:44 AM
Date:09/28/17                                               Rpms Lab
LAB QUALITATIVE ALERT                                      BLREMERAL
Delete User from Mail Group
--------------------------------------------------------------------------------
Select one of the users below:
1 USER1,USER1
2 USER2,USER2
3 USER3,USER3
Enter Number: 2
USER2,USER2 deleted from LAB RESULTS CHANGED Mail Group
Press RETURN Key:
```

**Figure 6-15: Delete User From Mail Group**

When the RETURN key is pressed, the display will reflect that the current members of the Mail group, similar to the following:

```
2013 DEMO HOSPITAL (CMBA)                                   Time:8:44 AM
Date:09/28/17                                               Rpms Lab
LAB QUALITATIVE ALERT                                      BLREMERAL
Delete User from Mail Group
--------------------------------------------------------------------------------
Select one of the users below:
1 USER1,USER1
2 USER3,USER3
Enter Number:
```

**Figure 6-16: Delete User From Mail Group**

If RETURN is pressed here, a brief listing will show how many users were removed from the Mail Group, similar to the following:
Select one of the users below:

1 USER1,USER1
2 USER3,USER3

Enter Number:

Exit/No Entry.

Press RETURN Key:

1 User deleted from LAB RESULTS CHANGED
0 Errors when trying to delete users from LAB RESULTS CHANGED

Press RETURN Key:

Figure 6-17: Deleted User From Mail Group

### 6.2.2.3 Selecting List Users on Mail Group

If List Users on Mail Group is selected an option will then prompt the user if they want to list all of the members of the mail group without paging. The default will be NO. It will look similar to the following:

Once the prompt has been answered, a report, similar to the following, will display to the screen.

<table>
<thead>
<tr>
<th>DUZ</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2929</td>
<td>USER,TEST 1</td>
</tr>
<tr>
<td>2916</td>
<td>USER,TEST 2</td>
</tr>
<tr>
<td>2859</td>
<td>USER,TEST 3</td>
</tr>
</tbody>
</table>
6.3 MailMan Message Example

An example MailMan message follows:

```plaintext
Subj: Accession SO 16 371 Qualitative Alert  [#107764] 12/09/16@15:37 9 lines
From: LRVER4 In 'IN' basket.  Page 1
-------------------------------------------------------------------------------
Accession SO 16 371 has a result that has triggered a Qualitative Alert.

    Patient: DEMO,TEST
    Test: _HIV SCREEN 4TH GEN [2001503]
    Result: R
    DATE/TIME: 12/09/2016 3:37 PM
Enter message action (in IN basket): Ignore//
```

Figure 6-20: Mail Group MailMan message
7.0 Reminder Document for Patient

With the installation of LR*5.2*1041, two new reports will be available to show a patient's future/current orders as well as all orders the patient has in the LAB ORDER ENTRY file.

See Section A.4 for further instructions.

7.1 New PDOC Option on BLRMENU

The new PDOC option, Patient Reminder Document, will be added to the BLRMENU during the post install phase of the LR*5.2*1041 install.

An example BLRMENU listing showing the new PDOC option follows:

```
IHS Lab Main Support Menu

LS    Link Transaction Processor Status
7421  Will restart the 7421 label routine if turned off.
INQ   Inquire into the IHS LAB Transaction Log
FLD   Search Transactions for PCC LINK DISABLE Error
RSN   Requeue by Sequence Number
RST   Requeue Transaction by Sort Template
CPT   Enter/edit IHS Lab CPT File
FAL   Find ALL PCC Link Errors from Lab
STP   Stop/restart Lab to PCC Transaction Processor
MSTR  Enter/edit BLR MASTER CONTROL FILE
POV   Purpose of Visit Compliance Report
6249  Display File 62.49 HL7 Segments
BZY   IHS Taskman Busy Device Rpt
CCCD  Create Creatinine Clearance Delta Check
CDVC  Edit BLR COLL DT PCC VISIT CREATION Parameter
CGFR  Create CKD-EPI Equation Delta Check
CLR   Clear BLR errors from error log
CUM   IHS CUMULATIVE MENU ...
DADD  Add Completed Date to Accession Tests
EAPE  Edit BLR EMERGENCY ALERT Parameter
EDCC  BLR CC DATA Parameter Edit
EMGP  Edit LAB HIGH URGENCY NOTIFICATION Mail Group

Press 'RETURN' to continue, '^' to stop:
ETP   LA7 Message Queue Error Messages to Purgeable
IHSM  IHS Lab Microbiology Report
ILUM  IHS LOINC/UCUM MENU ...
LABT  Determine if Required RPMS Lab Options Tasked
LOI   IHS Lab Package LOINC Percentage Report
LRAAS Accession IHS Lab Microbiology Report
LROS  Order/test status by Order Number
LTRR  Laboratory Test (#60) File's Reference Ranges
LVP   IHS Lab Version & Patch Report
MACC  Mark Multiple Accessions as Not Performed
MILO  Micro Interim Report by Location
MMR   Lab Description Abbreviation Report
NLO   Lab Tests Without LOINC Entries Report
ORPH  Remove Orphans from # 68
```
7.2 Selecting PDOC option

Once the PDOC option is selected, the following menu displays:

```
    2013 DEMO HOSPITAL (CMBA)            Time:6:51 AM
       Patient Reminder Document          BLDOCRMM
      MAIN MENU

1) Future/Current Orders          2) All Orders

Select: (1-2):
```

The user will then have to select a patient from the PATIENT file. For example,
Figure 7-4: Selecting Patient

Then the user will have to select the output device. In this example, the current terminal is selected.

Figure 7-5: Selecting Output Device

The Report will then print. For example:

Figure 7-6: Example report

Note that if an order was entered without a time component, no time will be displayed.

7.2.2 All Orders option

Once the PDOC option is selected, the following menu displays:

Figure 7-6: Patient Reminder Document Main Menu
If the All Orders option is selected, the following menu displays:

<table>
<thead>
<tr>
<th>Order #</th>
<th>Date/Time Collect</th>
<th>Test Description</th>
<th>Urgency</th>
<th>Ordering Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>2921</td>
<td>01/23/2017 3:08 PM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2901</td>
<td>01/11/2017 9:32 AM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ASAP</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2920</td>
<td>01/09/2017 3:08 PM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2900</td>
<td>12/28/2016 9:32 AM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ASAP</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2919</td>
<td>12/26/2016 3:08 PM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2899</td>
<td>12/14/2016 9:32 AM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ASAP</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2918</td>
<td>12/12/2016 3:08 PM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>2898</td>
<td>11/30/2016 9:32 AM</td>
<td>CBC W/Auto DIFF (OIT)</td>
<td>ASAP</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>858</td>
<td>11/29/2016</td>
<td>CALCIUM</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>857</td>
<td>11/29/2016</td>
<td>GLUCOSE</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>849</td>
<td>11/08/2016</td>
<td>GLUCOSE</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>838</td>
<td>10/12/2016</td>
<td>GLUCOSE</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
</tbody>
</table>

The user will then have to select a patient from the PATIENT file. For example,

Then the user will have to select the output device. In this example, the current terminal is selected.

The Report will then print. For example:
<table>
<thead>
<tr>
<th>Order</th>
<th>Date/Time</th>
<th>Test</th>
<th>Status</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>837</td>
<td>10/12/2016</td>
<td>GLUCOSE</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>833</td>
<td>09/30/2016</td>
<td>BASIC MET PANEL</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>825</td>
<td>09/28/2016 7:29 AM</td>
<td>BASIC MET PANEL</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>815</td>
<td></td>
<td>BASIC MET PANEL</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>803</td>
<td>09/22/2016 6:36 AM</td>
<td>BASIC MET PANEL</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
<tr>
<td>795</td>
<td>09/15/2016 7:00 AM</td>
<td>GLUCOSE</td>
<td>ROUTINE</td>
<td>USER, PHYSICIAN</td>
</tr>
</tbody>
</table>

18 Orders.

Press RETURN Key:

Figure 7-10: Example report

Note that if an order was entered without a time component, no time will be displayed.
8.0 Interim Report Option to Display Date of Birth Only

With the installation of LR*5.2*1041, there will be a new parameter that can be set, BLR DOB ONLY, that will modify how the Interim Report will print patient information in the header.

If set to YES, only the Date of Birth (DOB) will be printed on the Interim Report. If it is not set (or set to NO), the DOB and the Current Age of the patient (if no Date of Death) will be printed.

See Section A.5 further instructions.

8.1 New PAMG Option on the BLRMENU

The BLR DOB ONLY parameter can either be modified via the XPAR MENU or by the new BLR PARAMETERS AND MAIL GROUPS option that will be added to the BLRMENU with the PAMG menu option.

See Section 6.1 for an example BLRMENU listing showing the new PAGM option.

If a user selects the PAMG option, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Select: (1-4):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit RPMS Lab Parameters ...</td>
</tr>
<tr>
<td>2 RPMS Lab Parameter's Description ...</td>
</tr>
<tr>
<td>3 Edit RPMS Lab Mail Groups ...</td>
</tr>
<tr>
<td>4 Mail Group's Description ...</td>
</tr>
</tbody>
</table>

Figure 8-1: PAMG Option Menu

8.1.1 Edit RPMS Lab Parameters Options

If a user selects Edit RPMS Lab Parameters, the sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Select: (1-6):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Edit BLR CC DATA parameter</td>
</tr>
<tr>
<td>2 Edit BLR AGE DETAIL parameter</td>
</tr>
<tr>
<td>3 Edit BLR EMERGENCY ALERT parameter</td>
</tr>
<tr>
<td>4 Edit BLR COLL DT FCC VISIT CREATION parameter</td>
</tr>
<tr>
<td>5 Edit BLR DOB ONLY parameter</td>
</tr>
<tr>
<td>6 Edit BLR LAB RESULTS CHANGED NOTIFY parameter</td>
</tr>
</tbody>
</table>
8.1.2 Selecting Edit BLR DOB ONLY parameter option

Once the Edit BLR DOB ONLY parameter option is selected from the Edit RPMS Lab Parameters Option, the following menu displays:

![Figure 8-3: Selection of Edit BLR DOB ONLY Parameter option]

The only input values accepted are YES or NO.

If set to YES, only the Date of Birth (DOB) will be printed on the Interim Report. If it is not set (or set to NO), the DOB and the Current Age of the patient (if no Date of Death) will be printed.

8.2 Interim Report Header

If the parameter is set to YES, the Interim Report header will only display the Date of Birth of the Patient. An example follows:

![Figure 8-4: BLR DOB ONLY Parameter set to YES example]

If the parameter is not set or is NO, both the Date of birth and the patient's current age (as of the printing of the report) will print in the header. An example follows:
Figure 8-5: BLR DOB ONLY Parameter set to NO example
9.0 Open Lab Order with Non-Active Providers

With the installation of LR*5.2*1041, two reports regarding open lab orders with ordering providers who are no longer active will be available in the RPMS Lab package.

See Section A.6 for further instructions.

9.1 ORDO Option on BLRMENU

The new BLROLOR option, 'Open Lab Orders' Reports, will be added to the BLRMENU with the ORDO synonym during the post install phase of the LR*5.2*1041 install.

An example BLRMENU listing showing the new ORDO option follows:

```
<table>
<thead>
<tr>
<th></th>
<th>IHS Lab Main Support Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS</td>
<td>Link Transaction Processor Status</td>
</tr>
<tr>
<td>7421</td>
<td>Will restart the 7421 label routine if turned off.</td>
</tr>
<tr>
<td>INQ</td>
<td>Inquire into the IHS LAB Transaction Log</td>
</tr>
<tr>
<td>FLD</td>
<td>Search Transactions for PCC LINK DISABLE Error</td>
</tr>
<tr>
<td>RSN</td>
<td>Requeue by Sequence Number</td>
</tr>
<tr>
<td>RST</td>
<td>Requeue Transaction by Sort Template</td>
</tr>
<tr>
<td>CPT</td>
<td>Enter/edit IHS Lab CPT File</td>
</tr>
<tr>
<td>FAL</td>
<td>Find ALL PCC Link Errors from Lab</td>
</tr>
<tr>
<td>STP</td>
<td>Stop/restart Lab to PCC Transaction Processor</td>
</tr>
<tr>
<td>MSTR</td>
<td>Enter/edit BLR MASTER CONTROL FILE</td>
</tr>
<tr>
<td>POV</td>
<td>Purpose of Visit Compliance Report</td>
</tr>
<tr>
<td>6249</td>
<td>Display File 62.49 HL7 Segments</td>
</tr>
<tr>
<td>BZY</td>
<td>RPMS Taskman Busy Device Rpt</td>
</tr>
<tr>
<td>CCCD</td>
<td>Create Creatinine Clearance Delta Check</td>
</tr>
<tr>
<td>CDVC</td>
<td>Edit BLR COLL DT PCC VISIT CREATION Parameter</td>
</tr>
<tr>
<td>CGFR</td>
<td>Create CRD=EPI Equation Delta Check</td>
</tr>
<tr>
<td>CLR</td>
<td>Clear BLR errors from error log</td>
</tr>
<tr>
<td>CUM</td>
<td>RPMS Cumulative Menu ...</td>
</tr>
<tr>
<td>DADD</td>
<td>Add Completed Date to Accession Tests</td>
</tr>
<tr>
<td>DOBP</td>
<td>Edit BLR DOB ONLY Parameter</td>
</tr>
<tr>
<td>EAPE</td>
<td>Edit BLR EMERGENCY ALERT Parameter</td>
</tr>
<tr>
<td>EDCC</td>
<td>Edit BLR CC DATA Parameter</td>
</tr>
</tbody>
</table>
```

Press 'RETURN' to continue, '^' to stop.

EMGP | Edit LAB HIGH URGENCY NOTIFICATION Mail Group |
ETP | LA7 Message Queue Error Messages to Purgeable |
IHSM | RPMS Lab Microbiology Report |
ILUM | RPMS LOINC/UCUM Menu ... |
LABT | Determine if Required RPMS Lab Options Tasked |
LCP | Edit BLR LAB RESULTS CHANGED NOTIFY Parameter |
LOI | RPMS Lab Package LOINC Percentage Report |
LRAS | Accession IHS Lab Microbiology Report |
LROS | Order/test status by Order Number |
LTRR | Laboratory Test (#60) File's Reference Ranges |
LVP | RPMS Lab Version & Patch Report |
MACC | Mark Multiple Accessions as Not Performed |
MIL0 | Micro Interim Report by Location |
MMR | Lab Description Abbreviation Report |
9.2 Selecting ORDO option

Once the ORDO option is selected from the BLRMENU, the following menu displays:

---

**Figure 9-2: PURGE OLD ORDERS & ACCESSIONS Reports menu**

9.2.1 Report by Order Number

If the Report By Order Number Report option is selected, the produced report lists only those non-accessioned orders with an inactive ordering provider. The report will look similar to the following:

---

**Figure 9-1: Example BLRMENU with ORDO option**

<table>
<thead>
<tr>
<th>NLO</th>
<th>Lab Tests Without LOINC Entries Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDO</td>
<td>'Open Lab Orders' Reports</td>
</tr>
<tr>
<td>ORPH</td>
<td>Remove Orphans from # 68</td>
</tr>
<tr>
<td>ORFR</td>
<td>BROWSER REPORT ON ORPHANS FROM # 68</td>
</tr>
<tr>
<td>PAMG</td>
<td>Edit IHS Lab Parameters and/or Mail Groups ...</td>
</tr>
<tr>
<td>PDOC</td>
<td>Patient Reminder Document</td>
</tr>
<tr>
<td>POCA</td>
<td>Edit BLR AGE DETAIL Parameter</td>
</tr>
<tr>
<td>PURG</td>
<td>PURGE OLD ORDERS &amp; ACCESSIONS Reports</td>
</tr>
</tbody>
</table>

Press 'RETURN' to continue, '^' to stop:

PURG  Purge ALL VA Alerts
RBE  Clear ALL BLR Errors from Error Log
REFL  Reference Lab Main Menu ...
REPL  Replace Lab Order/Test Status ...
RESC  Edit LAB RESULTS CHANGED Mail Group
RSNL  Reprint/Reship a Non LEDI Order
SF60  IHS Search File 60
SHDR  State Health Dept Report
TCCR  Test Creatinine Clearance Logic
TGFR  Test CKD-EPI Equation Logic

Count Accessioned Tests Using Lab Data File ...
RPMS Lab Ask-At-Order ...

Select IHS Lab Main Support Menu Option:
9.2.2 Report by Ordering Provider

If the Report by Ordering Provider option is selected, the produced report will list non-accessioned orders, sorted by the inactive ordering providers. The report will look similar to the following:

```
2013 DEMO HOSPITAL (CMBA)
Date:09/28/17                      Non-Accessioned Orders            Page 1
Time:10:00 AM                      With Non-Active Providers          BLROLOR
Ordering Provider Sort

==== Ordering Provider =====  =========== Patient ===========
Order #  Ord Dt   IEN       Name                IEN       Name
--------------------------------------------------------------------------------
 31       02/08/17  6196      DEMO,DOCTOR         40172     TEST,AMANDA LYNN

117 Orders analyzed.
1 Order with Non-Active Provider.
```

Press RETURN Key:

Figure 9-4: Report by Ordering Provider
10.0 ‘Purge Old Orders & Accessions’ Report

With the installation of LR*5.2*1041, a new file and a new report regarding when and who selected the Purge old orders & accessions option will be installed into the RPMS Lab module.

10.1 New PURGE OLD ORDERS & ACCESSIONS (#90475.8) File

A new FileMan file has been created that will store the appropriate information regarding when and who selected the Purge old orders & accessions option to run.

The Standard FileMan listing for the new PURGE OLD ORDERS & ACCESSIONS (#90475.8) FILE looks like the following:

```
STANDARD DATA DICTIONARY #90475.8 -- PURGE OLD ORDERS & ACCESSIONS FILE
STORED IN ^BLRPURGU( (5 ENTRIES) SITE: LR1034 Database UCI: LA1034,LR1034 (VERSION 5.2)

DATA NAME GLOBAL DATA
ELEMENT TITLE LOCATION TYPE
-------------------------------------------------------------------------------
This file will store the date/time and the DUZ of the user who has selected the 'Purge old orders & accessions' option.

DD ACCESS: @
RD ACCESS: @
WR ACCESS: @
DEL ACCESS: @
LAYGO ACCESS: @
AUDIT ACCESS: @

CROSS REFERENCED BY: PURGE DATE/TIME(B), USER(C)

CREATED ON: NOV 14,2016 by DEVELOPER,RPMS LAB

90475.8,.01 PURGE DATE/TIME 0;1 DATE (Required)
INPUT TRANSFORM: S %DT="ESTR" D %DT S X=Y K:Y<1 X
LAST EDITED: NOV 15, 2016
CROSS-REFERENCE: 90475.8^B
1)= S ^BLRPURGU("B",SE(X,1,30),DA)="
2)= K ^BLRPURGU("B",SE(X,1,30),DA)

90475.8,1 USER 0;2 POINTER TO NEW PERSON FILE (#200)
(Required)
LAST EDITED: NOV 15, 2016
CROSS-REFERENCE: 90475.8^C
1)= S ^BLRPURGU("C",SE(X,1,30),DA)="
2)= K ^BLRPURGU("C",SE(X,1,30),DA)
```
10.2 Data Storage Process

After LR*5.2*1041 has been installed, each time a user selects the Purge old orders & accessions option, the date/time and the DUZ of the user selecting that option is automatically stored into the PURGE OLD ORDERS & ACCESSIONS (#90475.8) file. It can then be reported upon.

**Note:** When generating these reports, it is possible you may not generate any data to display or print. If the option to ‘Purge old orders & accessions’ was not run, you will not have any data to produce the reports.

DO NOT purge old orders & accessions to generate these reports.

10.3 New PURG Option on Supervisor menu

The new report can be accessed by the new BLRPURGU option, PURGE OLD ORDERS & ACCESSIONS Reports, that will be added to the Supervisor Menu with the PURR synonym during the post install phase of the LR*5.2*1041 install.

An example Supervisor Menu listing showing the new PURR option follows:

```
Supervisor menu

PURR  PURGE OLD ORDERS & ACCESSIONS Reports ...
        Add/edit QC name &/or edit test means
        Change Load/Work list type.
        Changes in verified lab data
```

Figure 10-1: Standard FileMan Listing of PURGE OLD ORDERS & ACCESSIONS (#90475.8) file
10.3.1 Non-Standard Supervisor Menu

If a site has a non-standard Supervisor Menu (i.e., the LRSUPERVSIOR option is not being used) the site must add the new option, PURGE OLD ORDERS & ACCESSIONS Reports, to the appropriate menu option with the PURR synonym manually.

10.4 Selecting PURR option

Once the PURR option is selected from the Supervisor Menu, the following menu displays:

Figure 10-3: PURGE OLD ORDERS & ACCESSIONS Reports menu

10.4.1 Main Report

If the Main Report option is selected, the report lists the date/time and the user(s) who have selected the Purge old orders & accessions option. It is sorted by reverse date/time order. The report will look similar to the following:
<table>
<thead>
<tr>
<th>Purge Date/Time</th>
<th>DUZ</th>
<th>Name</th>
<th>Division</th>
<th>Division Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/30/2016@07:16</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@08:38</td>
<td>6357</td>
<td>LAB, TESTER U</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@07:55</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@08:38</td>
<td>6357</td>
<td>LAB, TESTER U</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@07:55</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
</tbody>
</table>

5 'Purge Old Orders & Accessions' entries.

**Figure 10-4: PURGE OLD ORDERS & ACCESSIONS Main Report**

### 10.4.2 Report By User

If the Report By User option is selected, the produced report will list the date/time when the Purge old orders & accessions option was selected, grouped by User.

<table>
<thead>
<tr>
<th>Purge Date/Time</th>
<th>DUZ</th>
<th>Name</th>
<th>Division</th>
<th>Division Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/15/2016@07:55</td>
<td>1</td>
<td>ADAM, ADAM</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/30/2016@07:16</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@08:04</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@07:55</td>
<td>6045</td>
<td>DEVELOPER, RPMS LAB</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
<tr>
<td>11/15/2016@08:38</td>
<td>6357</td>
<td>LAB, TESTER U</td>
<td>2582</td>
<td>2013 DEMO HOSPITAL</td>
</tr>
</tbody>
</table>

5 'Purge Old Orders & Accessions' entries.

**Figure 10-5: PURGE OLD ORDERS & ACCESSIONS Sorted By User report**
11.0 Interim Report Date of Death (DoD) on Referral Patients

The Interim Report did not report Date of Death correctly for Referral Patients. The LRRP1 routine was modified to correctly display Date of Death for Referral Patients and is included in LR*5.2*1041.

11.1 Referral Patient

A Referral Patient with a Date of Death will look similar to the following in the Referral Patient (#67) file:

<table>
<thead>
<tr>
<th>NAME: TEST,TEST</th>
<th>SEX: MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOB: 02/29/64</td>
<td>MARITAL STATUS: MARRIED</td>
</tr>
<tr>
<td>RACE: WHITE</td>
<td>RELIGION: CATHOLIC</td>
</tr>
<tr>
<td>IDENTIFIER: TUC</td>
<td>DATE OF DEATH: JUN 01, 2016</td>
</tr>
<tr>
<td>LABORATORY REFERENCE: 60</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11-1: Example Referral Patient with Date Of Death

11.2 Interim Report Header Showing Referral Patient Date Of Death

The Interim Report header will be similar to the following for referral patients that have a Date of Death:

<table>
<thead>
<tr>
<th>Printed at:</th>
<th>Date/Time Printed: 02/23/17@08:57</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHS Database LR1039 (2582)</td>
<td></td>
</tr>
<tr>
<td>TEST,TEST</td>
<td></td>
</tr>
<tr>
<td>HRCN:</td>
<td></td>
</tr>
<tr>
<td>SEX: M</td>
<td></td>
</tr>
<tr>
<td>DOB: Feb 29, 1964</td>
<td></td>
</tr>
<tr>
<td>DIED: Jun 01, 2016</td>
<td></td>
</tr>
<tr>
<td>LOC: LAB ONLY</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11-2: Interim Report Header example with Referral Patient with Date Of Death
12.0 **EHR All Tests By Date Report**

A bug was detected in the BLR7OGMP routine that produces the "All Tests By Date" report in EHR: if a UNITS field for a test began with a number, the units field would not be displayed in the report.

This bug has been corrected and now, if a test has UNITS, they will display.
13.0 LOINC Codes Not Populating PCC Files

A bug was detected in the BLRLINK3 routine that was interfering with the correct retrieval of LOINC codes and storing incorrect LOINC codes into the various PCC Lab Files (V LAB, etc.).

The bug has been corrected and LOINC codes are now storing correctly.

See Section A.7 for further instructions.

13.1 Inquire into the BLR IHS Lab Transaction Log

The IHS Lab Transaction Log file serves as a holding place for all laboratory data that will potentially be passed to the Patient Care Component (PCC). A transaction is initiated at the time a laboratory order is placed and its status is subsequently updated to accessioned, resulted, or deleted, depending upon activity initiated from the Laboratory package.

The Inquire into the IHS Lab Transaction Log for the resulted cosmic test, including its individual resulted atomic tests, will be similar to the following display:

<table>
<thead>
<tr>
<th>Inquire into the IHS LAB Transaction Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: POCT 17 95</td>
</tr>
<tr>
<td>1  POCT 17 95 9350</td>
</tr>
<tr>
<td>2  POCT 17 95 9351</td>
</tr>
<tr>
<td>3  POCT 17 95 9352</td>
</tr>
<tr>
<td>4  POCT 17 95 9353</td>
</tr>
<tr>
<td>5  POCT 17 95 9354</td>
</tr>
<tr>
<td>CHOOSE 1-5: 1 9350</td>
</tr>
</tbody>
</table>

```plaintext
IHS LAB TRANSACTION LOG LIST                   DEC 11,2017 09:56  PAGE 1
---------------------------------------------------------------------------------------------------------------------------
SEQUENCE NUMBER: 9350                     LRFILE: 2
PATIENT POINTER VALUE: 8791               PANEL/TEST POINTER: LIPID -POCT
LAB MODULE: GENERAL                      DUZ(2): 2906
I/O CATEGORY: OUT PATIENT                STATUS FLAG: RESULTED
ENTRY DATE/TIME: SEP 26, 2017@16:41:44    IEN OF V FILE ENTRY: 4292874
ASSOCIATED V FILE: V LAB                 LAB TEST LIST COST: 6.29
CLINIC STOP CODE POINTER: LABORATORY SERVICES
CPT LAB CODE POINTER: LIPID PANEL
BILLING CPT STRING: 80061|94.00|||90|
CLINICAL INDICATOR: 3013049012           ORDER DATE: SEP 26, 2017@16:41:43
ORDER SEQUENCE NUMBER: 9                  ORDER NUMBER: 312
ORDERING PROVIDER POINTER: ROMANCITO,KAREN
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: SEP 26, 2017@13:18
ACCESSION NUMBER: POCT 17 95             COLLECTION SAMPLE POINTER: SERUM (SST)
COMPLETE DATE: SEP 26, 2017@13:19:42     PROVIDER NARRATIVE: Diabetes mellitus type 2 without retinopathy
SNOMED: 3013049012                       ICD: E11.9
SITE/SPECIMEN POINTER: SERUM
```
Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: POCT 17 95
1  POCT 17 95 9350
2  POCT 17 95 9351
3  POCT 17 95 9352
4  POCT 17 95 9353
5  POCT 17 95 9354
CHOOSE 1-5: 2  9351

IHS LAB TRANSACTION LOG LIST                   DEC 11,2017  09:57    PAGE 1
--------------------------------------------------------------------------------
SEQUENCE NUMBER: 9351                   LRFILE: 2
PATIENT POINTER VALUE: 8791           PANEL/TEST POINTER: CHOLESTEROL (POCT)
LAB MODULE: GENERAL                   DUZ(2): 2906
I/O CATEGORY: OUT PATIENT             PARENT POINTER: 9350
STATUS FLAG: RESULTED                 ENTRY DATE/TIME: SEP 26, 2017@16:41:44
ASSOCIATED V FILE: V LAB              IEN OF V FILE ENTRY: 4292875
LAB TEST LIST COST: 2.26
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: SEP 26, 2017@16:41:43     ORDER SEQUENCE NUMBER: 9
ORDER NUMBER: 312
ORDERING PROVIDER POINTER: ROMANCITO,KAREN
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: SEP 26, 2017@13:18
ACCESSION NUMBER: POCT 17 95 COLLECTION SAMPLE POINTER: SERUM (SST)
COMPLETE DATE: SEP 26, 2017@13:19:42  LOINC CODE: 2093
RESULT: 430                           RESULT N/A FLAG: H
UNITS: mg/dL                          SITE/SPECIMEN POINTER: SERUM
VERIFIER POINTER: ROMANCITO,KAREN     REFERENCE LOW: 97
REFERENCE HIGH: 230

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: POCT 17 95
1  POCT 17 95 9350
2  POCT 17 95 9351
3  POCT 17 95 9352
4  POCT 17 95 9353
5  POCT 17 95 9354
CHOOSE 1-5: 3  9352

IHS LAB TRANSACTION LOG LIST                   DEC 11,2017  09:58    PAGE 1
--------------------------------------------------------------------------------
SEQUENCE NUMBER: 9352                   LRFILE: 2
PATIENT POINTER VALUE: 8791           PANEL/TEST POINTER: TRIGLYCERIDE (POCT)
LAB MODULE: GENERAL                   DUZ(2): 2906
I/O CATEGORY: OUT PATIENT             PARENT POINTER: 9350
STATUS FLAG: RESULTED                 ENTRY DATE/TIME: SEP 26, 2017@16:41:44
ASSOCIATED V FILE: V LAB              IEN OF V FILE ENTRY: 4292876
LAB TEST LIST COST: 2.26
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: SEP 26, 2017@16:41:43     ORDER SEQUENCE NUMBER: 9
ORDER NUMBER: 312
ORDERING PROVIDER POINTER: ROMANCITO,KAREN
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: SEP 26, 2017@13:18
ACCESSION NUMBER: POCT 17 95 COLLECTION SAMPLE POINTER: SERUM (SST)
COMPLETE DATE: SEP 26, 2017@13:19:42  LOINC CODE: 2571
RESULT: 300                           RESULT N/A FLAG: H
UNITS: mg/dL                          SITE/SPECIMEN POINTER: SERUM
VERIFIER POINTER: ROMANCITO,KAREN     REFERENCE LOW: 40
REFERENCE HIGH: 170

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: POCT 17 95
1  POCT 17 95 9350
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Figure 13-1: BLR IHS Lab Transaction Log display
14.0 Anatomic Pathology GS Option Modification

Within the Anatomic Pathology sub-module of RPMS Lab, the main menu looks similar to the following:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Data entry, anat path</td>
</tr>
<tr>
<td>E</td>
<td>Edit/modify data, anat path</td>
</tr>
<tr>
<td>I</td>
<td>Inquiries, anat path</td>
</tr>
<tr>
<td>L</td>
<td>Log-in menu, anat path</td>
</tr>
<tr>
<td>P</td>
<td>Print, anat path</td>
</tr>
<tr>
<td>R</td>
<td>SNOMED field references</td>
</tr>
<tr>
<td>S</td>
<td>Supervisor, anat path</td>
</tr>
<tr>
<td>V</td>
<td>Verify/release menu, anat path</td>
</tr>
<tr>
<td>C</td>
<td>Clinician options, anat path</td>
</tr>
<tr>
<td>W</td>
<td>Workload, anat path</td>
</tr>
</tbody>
</table>

Select Anatomic pathology Option:

Figure 14-1: Anatomic Pathology Data Entry Main Menu

If a user selects the D option, the data entry sub-menu looks similar to the following:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Data entry for autopsies</td>
</tr>
<tr>
<td>BS</td>
<td>Blocks, Stains, Procedures, anat path</td>
</tr>
<tr>
<td>CO</td>
<td>Coding, anat path</td>
</tr>
<tr>
<td>GD</td>
<td>Clinical Hx/Gross Description/FS</td>
</tr>
<tr>
<td>GM</td>
<td>FS/Gross/Micro/Dx</td>
</tr>
<tr>
<td>GS</td>
<td>FS/Gross/Micro/Dx/SNOMED Coding</td>
</tr>
<tr>
<td>GI</td>
<td>FS/Gross/Micro/Dx/ICD9CM Coding</td>
</tr>
<tr>
<td>OR</td>
<td>Enter old anat path records</td>
</tr>
<tr>
<td>SR</td>
<td>Supplementary Report, Anat Path</td>
</tr>
<tr>
<td>SS</td>
<td>Spec Studies-EM;Immuno;Consult;Pic, Anat Path</td>
</tr>
</tbody>
</table>

Select Data entry, anat path Option:

Figure 14-2: Anatomic Pathology Data Entry sub-Menu

The GS option, FS/Gross/Micro/Dx/SNOMED Coding, has been modified so that it can only be selected by those users with the LRAPSUPER Security Key. Other users will not even see the option.
15.0 Reference Laboratory Interface Enhancements

15.1 Introduction

There are several enhancements made to the Reference Laboratory Interface by IHS Lab Patch LR*5.2*1041.

15.2 Tasked Restart of The Reference Lab Interface

An enhancement was made to both the BLR REFLAB RESTART TRANSMITTER and BLR REFLAB RESTART RECEIVER. The task now checks to see if the transmitter or receiver are running before attempting to stop and restart.

15.3 RLDI And RPMS Navigation

A fix was made to this option so that user variables would not be lost after running this option, causing the user to have to re-login.

15.4 Electronic Order Cannot Be Generated Without a Valid Account Number

A fix was made so that a Reference Lab order cannot be generated without the account number being stored in the BLR REFERENCE LAB ORDER/ACCESSION file.
16.0 LR*5.2*1041 Components

The following is a listing of the various files, options, routines, etc. that are included in the IHS LR*5.2*1041 Lab Patch.

16.1 Files

The following table lists the files included LR*5.2*1041.

<table>
<thead>
<tr>
<th>File #</th>
<th>File Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>LABORATORY TEST</td>
</tr>
<tr>
<td>90475.8</td>
<td>PURGE OLD ORDERS &amp; ACCESSIONS</td>
</tr>
</tbody>
</table>

16.2 Mail Groups

The following table lists the Mail Groups included LR*5.2*1041.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAB QUALITATIVE ALERT</td>
<td>RPMS Lab Mail Group to receive messages regarding tests that have a result that matches a Qualitative flag (see the ABNORMAL FLAG field under the Site/Specimen in file 60).</td>
</tr>
<tr>
<td>LAB RESULTS CHANGED</td>
<td>Mail Group to receive notifications when Lab Results have been changed.</td>
</tr>
</tbody>
</table>

16.3 Options

The following table lists the options included LR*5.2*1041.

<table>
<thead>
<tr>
<th>Name</th>
<th>BLRMENU Option</th>
<th>Menu Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLR PARAMETERS AND MAIL GROUPS</td>
<td>PAGM</td>
<td>Edit RPMS Lab Parameters and/or Mail Groups</td>
</tr>
<tr>
<td>BLR PATIENT REMINDER DOCUMENT</td>
<td>PDOC</td>
<td>Patient Reminder Document</td>
</tr>
<tr>
<td>BLROLOR</td>
<td>ORDO</td>
<td>'Open Lab Orders' Reports</td>
</tr>
<tr>
<td>BLRPURGU</td>
<td>PURG</td>
<td>PURGE OLD ORDERS &amp; ACCESSIONS Reports</td>
</tr>
<tr>
<td>LRAPDGS</td>
<td>GS</td>
<td>FS/Gross/Micro/Dx/SNOMED Coding</td>
</tr>
</tbody>
</table>

16.4 Parameter Definitions

The following table lists the parameters included LR*5.2*1041.
## Name | Description
---|---
BLR DOB ONLY | If set to YES, only the patient's Date-of-Birth will be displayed in the Interim Report's header and not the DoB and patient's Current Age.
BLR LAB RESULTS CHANGED NOTIFY | If set to YES, whenever a "CH" subscripted Lab Result is changed, a MailMan message will be sent to the LAB RESULTS CHANGED Mail Group.
BLR QUALITATIVE ALERT | If YES, a test with a result that matches the File 60 Site/Specimen ABNORMAL FLAG entry will generate an alert and an e-mail message to members of the LAB QUALITATIVE ALERT Mail Group.

### 16.5 Routines

The following table lists the routines included LR*5.2*1041.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLR70GMP</td>
<td>Lab Interim Report for EHR</td>
</tr>
<tr>
<td>BLRDOCRM</td>
<td>Patient Reminder Document</td>
</tr>
<tr>
<td>BLRLINK3</td>
<td>CONT. OF BLR</td>
</tr>
<tr>
<td>BLRLNKU1</td>
<td>IHS Laboratory PCC Visit Creation Utility</td>
</tr>
<tr>
<td>BLROOLOR</td>
<td>Open Lab Orders Report</td>
</tr>
<tr>
<td>BLRPAMGE</td>
<td>BLR Parameters And Mail Group Edits</td>
</tr>
<tr>
<td>BLRPRE41</td>
<td>IHS Lab Patch LR<em>5.2</em>1041 Pre/Post Routine</td>
</tr>
<tr>
<td>BLRPURGU</td>
<td>Purge Old Orders &amp; Accessions Utilities</td>
</tr>
<tr>
<td>BLRQUALU</td>
<td>RPMS LAB QUALitative Utilities</td>
</tr>
<tr>
<td>BLRUTIL7</td>
<td>MISC IHS LAB UTILITIES (Cont)</td>
</tr>
<tr>
<td>LRDIDLE0</td>
<td>Create audit trail of changed values</td>
</tr>
<tr>
<td>LRMIPSU</td>
<td>MICRO PATIENT REPORT</td>
</tr>
<tr>
<td>ROC</td>
<td>ORDER LIST CLEAN-UP</td>
</tr>
<tr>
<td>LRORDST</td>
<td>SET THE ORDER AND ACCESSION</td>
</tr>
<tr>
<td>LRRP1</td>
<td>PRINT THE DATA FOR INTERIM REPORTS</td>
</tr>
<tr>
<td>LRVER4</td>
<td>LAB ROUTINE DATA VERIFICATION</td>
</tr>
<tr>
<td>LRWRKLS1</td>
<td>LRWRKLST CONT.</td>
</tr>
<tr>
<td>LRWRKLST</td>
<td>LONG ACCESSION LIST</td>
</tr>
</tbody>
</table>
16.6 Vista Blood Establishment Computer Software (VBECS) Routines

The VA's VBECS Blood Bank sub-module is not part of RPMS Lab due to FDA regulatory restrictions. However, an earlier VA Lab Patch installed several VBECS routines into the RPMS namespace.

Certain procedures within the EHR have been modified to react to the presence of VBECS routines and will fail within RPMS.

Due to these considerations, it has been determined that the inadvertently installed routines will be removed from RPMS. This will be accomplished via the installation of the LR*5.2*1041 patch.

This section is informational only as there is no action required by Lab personnel.

16.7 VA Patches

The following table lists the VA Patches included LR*5.2*1041. The patches are not utilized by RPMS Lab and this listing is for informational purposes only.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA<em>5.2</em>82</td>
<td>UPDATE PROCEDURES FOR SNOMED CT LABORATORY MAPPINGS. This a VA patch describing how the VA deals with updating their SNOMED codes. It is only included to ensure the Patch Numbering Schema in RPMS Lab stays in synch with the VA.</td>
</tr>
<tr>
<td>LR<em>5.2</em>455</td>
<td>UPDATE DATA EXTRACT LOGIC FOR DSS DSS is not utilized within RPMS Lab and, as such, this patch is included only to ensure the Patch Numbering Schema in RPMS Lab stays in synch with the VA.</td>
</tr>
</tbody>
</table>

16.7.1 LA*5.2*82 VA Patch

The VA patch notes file states:

This patch is an informational patch containing the procedures for updating the SNOMED CT (Systemized Nomenclature of Medicine Clinical Terms) laboratory mappings.

The RPMS Lab Package does not utilize the VA's mapping schema and, as such, this patch is only included to ensure the VA's Patch Number schema is maintained. Note that there are no routines, files, etc. included in this patch.
16.7.2 LR*5.2*455 VA Patch

The VA patch notes file states:

The logic for storing test results in the Decision Support Software (DSS) laboratory results (LAR) extract is being modified.

The RPMS Lab Package does not utilize the DSS module and, as such, this patch is only included to ensure the VA's Patch Number schema is maintained.

16.7.2.1 File

The following table lists the file included LR*5.2*455.

<table>
<thead>
<tr>
<th>File #</th>
<th>File Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.036</td>
<td>LAB DSS LAR EXTRACT</td>
</tr>
</tbody>
</table>

16.7.2.2 Routines

The following table lists the routine included LR*5.2*455.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRCAPDAR</td>
<td>LAB DSS RESULTS EXTRACT (LAR)</td>
</tr>
</tbody>
</table>
Appendix A: Test Scripts

Software changes should be tested in the manner that you use the feature/function in your environment. If, for example, lab results are viewed and printed in the EHR, the EHR should be included in your testing. The test scripts below are meant to provide a place for you to begin creating your own test script.

A.1 File 60 Print Name Character Limit Extended

The field PRINT NAME in the Laboratory Test (#60) file will be modified with the installation of LR*5.2*1041. The field length will be increased from 8 characters to 16 characters.

Access VA FileMan, ENTER or EDIT a Lab Test file.

1. Select a LABORATORY TEST.
2. Review PRINT NAME.
3. Modify PRINT NAME up to 16 characters.
4. Order and Accession this LABORATORY TEST.
5. Review the Lab Label print.
6. Result the Accession.
7. Review the Interim Report (IR) in RPMS Lab Package for the display of Test name.

**Note:** The Print Name will display on the IR report when the Laboratory Test name exceeds 15 characters.

8. Review the EHR Labs Tab for results.

**Note:** EHR Labs Tab for results display the Laboratory Test Name and not the Print Name.

9. You may review the Cumulative Report as needed.

**Note:** The cumulative report will always display up to 7 characters and does not display the Print Name from File 60.

10. Repeat as needed.
☐ PASS ☐ FAIL ☐ N/A

A.2 Change Lab Results MailMan Messages

With the installation of LR 1041, users assigned to the new LAB RESULTS CHANGED Mail Group will receive a message each time any Chemistry lab results is changed within RPMS Lab Package. NOTE: Lab tests using the CH SUBSCRIPT only applies.

Set up to receive Mailman messages for the Lab Result changes.

**Step 1**: BLR Menu - Turn on the parameter

Access RPMS Lab Package.

1. Select the BLR- IHS Lab Main Support Menu
2. Confirm that the new PAMG option was added to the BLRMENU.
3. Select PAMG.
4. Select the submenu #1 Edit RPMS Lab Parameters …
5. Select the submenu #6 Edit BLR LAB RESULTS CHANGED NOTIFY parameter.
6. You will be prompted with the following:
   
   BLR LAB RESULTS CHANGED NOTIFY (YES/NO)? NO/

7. Set to YES.

**Step 2**: MailMan setup

8. Select the BLR- IHS Lab Main Support Menu.
9. Select PAMG.
10. Select the submenu #3 Edit RPMS Lab Mail Groups …
11. Select the submenu #2 LAB RESULTS CHANGED Mail Group.
12. You will be prompted to select one of the following:
   
   a. Add User to Mail Group.
   b. Delete User From Mail Group.
   c. List Users on Mail Group.
14. Add selected users.

**Step 3: Test**

15. Order, accession and result a lab test.

16. Modify the result by using the option

   EM Enter/verify/modify data (manual).

17. Modify the result and verify.

18. Capture the MailMan message.

19. Repeat as needed.

☐ PASS ☐ FAIL ☐ N/A

A.3 **Qualitative Critical Alert Flag**

Determine which lab test result will be suitable for a qualitative result that needs to be flagged.

**Step 1: VA Fileman**

1. Access VA Fileman #60, selected a lab test or panel that includes a lab test that requires a qualitative result.

2. Capture the lab tests to recall.

   Cosmic Lab Test: ______________

   Atomic 1: ____________Qualitative Value__________

   Atomic 2: ____________

   or

   Atomic Lab Test: ______________

   Qualitative Value__________

3. In the test file, <ENTER> down to SITE/SPECIMEN field, select your site/specimen and <ENTER> down to the QUALITATIVE VALUE field.

   **Note:** The Qualitative Value field is after the LOINC code field-
   add LOINC code or you may type a caret (^) to the Qualitative Value field.
4. Enter the qualitative result, for example, type POS for a “Positive” result.

   **Note:** You may add “P”, “R”, “REACTIVE”, etc.

**Step 2:** BLR Menu - VA Alert setup.

Access RPMS Lab Package.

5. Select the BLR- IHS Lab Main Support Menu.

6. Select PAMG.

7. Select the submenu #1 Edit RPMS Lab Parameters …

8. Select the submenu #7 Edit BLR LAB QUALITATIVE ALERT parameter.

9. You will be prompted with the following:

   **BLR QUALITATIVE ALERT (YES/NO)? NO//**

10. Set to YES.

**Step 3:** BLR Menu - Mailman messages setup.

11. Select the BLR- IHS Lab Main Support Menu.

12. Select PAMG.

13. Select the submenu #3 Edit RPMS Lab Mail Groups …

14. Select the submenu #3 LAB QUALITATIVE ALERT Mail Group.

15. You will be prompted to select one of the following:

   a. Add User to Mail Group.
   b. Delete User From Mail Group.
   c. List Users on Mail Group.


17. Add selected users.

**Step 4:** Test

18. Order and accession your selected lab test(s).

19. Result the lab test as “POS”, for example.

20. You may perform this test using the EHR point of care Button.
A.4 Reminder document for patient

The reminder document for patient will have two new reports to show a patient’s future and current orders.

Access RPMS Lab Package.

1. Select the BLR- IHS Lab Main Support Menu
2. Confirm that the new PDOC option was added to the BLRMENU.
3. Select PDOC.
4. Select #1 Future/Current Orders.
5. Select a patient.
6. Generate the report, print to HOME or a Device printer.
7. Review report, provide your feedback.
8. Next, select #2 All Orders.
9. Select a patient.
10. Generate the report, print to HOME or a Device printer.

Note: The two reports are generated to print from the RPMS Lab Package. A similar report from the EHR order file will not be generated.

☐ PASS ☐ FAIL ☐ N/A

A.5 Interim Report Option to Display Date of Birth Only

With the installation of LR*5.2*1041, there will be a new parameter that can be set, BLR DOB ONLY, that will modify how the Interim Report will patient information in the header.

Access RPMS Lab Package.

1. Select the BLR- IHS Lab Main Support Menu.
2. Confirm that the new PAMG option was added to the BLRMENU.
3. Select PAMG.
4. Select the submenu #1 Edit RPMS Lab Parameters …
5. Then, select #5 BLR DOB ONLY parameter.
6. You will be prompted with the following:
   
   BLR DOB ONLY (YES/NO)? NO//

7. Set to YES.
8. Display the Interim Report of a Demo Patient or a selected Patient.
9. Review report, provide your feedback.
10. Access BLR ->PAMG ->#1 ->#5 and change YES back to NO.
11. Display the Interim Report of a Demo Patient or a selected Patient.
12. Review report.

**Note:** EHR patient data display will not be affected

☐ PASS ☐ FAIL ☐ N/A

### A.6 Open Lab Orders with Non-Active Providers

With the installation of LR 1041, two reports regarding open lab orders with ordering providers who are no longer active will be available in the RPMS Lab Package.

Access RPMS Lab Package.

1. Select the BLR- IHS Lab Main Support Menu.
2. Confirm that the new ORDO option was added to the BLRMENU.
3. Select ORDO.
4. Select #1 Report by Order Number.
5. Generate the report, print to HOME or a Device printer.
6. Review report, provide your feedback.
7. Next, select #2 Report by Ordering Provider.
8. Generate the report, print to HOME or a Device printer.
☐PASS ☐FAIL ☐N/A

A.7 LOINC terms incorrectly pulling

A bug was detected in the BLRLINK3 routine that was interfering with the correct retrieval of LOINC codes and storing incorrect LOINC codes into the various PCC Lab Files.

RPMS and EHR POC activity:

To complete this test script, it is required to have a point of care lab test that is a panel/cosmic with atomic/children tests- each having a LOINC code.

1. Access RPMS fileman #60, selected a point of care lab test that is a panel/cosmic.

2. Capture the lab tests as follows.
   Cosmic:____________________
   Atomic 1: _____________LOINC code__________
   Atomic 2: _____________LOINC code__________
   Atomic 3: _____________LOINC code__________
   Atomic 4: _____________LOINC code__________

3. Check to see if the point of care panel is added in the BLR BEHO POC CONTROL file in VA Fileman.

4. Access EHR, access the POC button, order and result the selected point of care lab test.

5. Review results on EHR Labs tab and RPMS IR.

6. Access PCC and select your patient.
   a. Look for the LOINC codes in PCC.

7. Access INQ (LR -> BLR -> INQ), enter accession number. Example: POCT 17 95
   a. Look for the LOINC codes.

☐PASS ☐FAIL ☐N/A
Glossary

**FileMan**

The database management system for the VA’s VistA system and IHS’ RPMS system.
# Acronym List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Term Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHS</td>
<td>Indian Health Service</td>
</tr>
<tr>
<td>RPMS</td>
<td>Resource and Patient Management System</td>
</tr>
</tbody>
</table>
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:** [https://www.ihs.gov/helpdesk/](https://www.ihs.gov/helpdesk/)

**Email:** support@ihs.gov