



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Laboratory Reference COVID-19 ID NOW

(LR)

User Manual

Version 5.2 Patch 1045
April 2020

Office of Information Technology
Division of Information Technology

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Revision History

Version	Date	Author	Section	Page #	Summary of Change
5.2, P1045	April 2020	Karen Romancito	All Sections	All pages	New publication

Preface

Due to the recent COVID-19 pandemic, the Indian Health Service (IHS) Office of Information Technology (OIT) is providing an *urgent*, rapid patch release for the LR namespace, the RPMS Laboratory Information System: LR*5.2*1045.

This software release is required due to the recent availability of a standardized testing platform and test method. The standardized testing is the Abbott ID NOW and the ID NOW COVID-19. The test platform and kits are being provided to 250 Indian Health Service sites to expedite testing capabilities for rural healthcare facilities and improve testing turnaround times for COVID-19.

LR*5.2*1045 includes two atomic test entries and a cosmic test panel in the RPMS VA FileMan test library, File 60 LABORATORY TEST. These are specifically intended for the Abbott ID NOW COVID-19 test system. LR*5.2*1045 also includes an entry in the IHS LAB CPT CODE file for the new COVID-19 test panel with the correct CPT/HCPCS codes.

There are a few easy activation steps for both the atomic and cosmic files. Please read through this guide and review the LR*5.2*1045 Patch Release and KIDS notes, if available. The new COVID-19 test will not work until activated.

<p>Note: As with other RPMS laboratory test file additions, local testing should be completed and documented prior to making available for local test ordering and resulting.</p>
--

1.0 IHS Lab Version & Patch Report

The Lab Version & Patch Report Option was added to the **IHS Lab Main Support Menu (BLRMENU)**. The report allows the Laboratorian to display the site's Lab Version number and latest patch.

1.1 LVP IHS Lab Version & Patch Report

The **LVP** option is available on the **BLRMENU** as shown in Figure 1-1.

LR	Laboratory DHCP Menu ...
	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
	Press 'RETURN' to continue, '^' to stop:
EMGP	Edit LAB HIGH URGENCY NOTIFICATION Mail Group
ERRT	Error Trap Reporting
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
LRAS	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
ORDO	'Open Lab Orders' Reports ...
ORPH	Remove Orphans from # 68
ORPR	BROWSER REPORT ON ORPHANS FROM # 68
PAMG	Edit IHS Lab Parameters and/or Mail Groups ...
PDOC	Patient Reminder Document
POCA	Edit BLR AGE DETAIL Parameter

```

PURA  Purge VA Alerts
        Press 'RETURN' to continue, '^' to stop:
RBE    Clear ALL BLR Errors from Error Log
REFL   Reference Lab Main Menu ...
REPL   Replace Lab Order/Test Status ...
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 ...
        IHS Lab Ask-At-Order ...
    
```

Figure 1-1: Full display of BLR MENU and LVP Option

1.2 IHS Lab Version & Patch Report for LR*5.2*1045

When the **LVP** option is selected, the report will look similar to Figure 1-2.

```

                                DEMO HOSPITAL
Date:04/13/20                    IHS LAB Package                    Time:10:15 AM
                                Current VERSION & PATCH Report
-----
                                IHS Lab Version 5.2
                                Latest IHS Lab Patch: LR*5.2*1045
                                Latest IHS Lab Patch Install Date/Time: APR 09, 2020 6:39 PM
    
```

Figure 1-2: Example of the IHS Lab Version & Patch Report

2.0 LS Link Transaction Processor Status

The **Link Transaction Processor Status** option was added to the **IHS Lab Main Support Menu (BLRMENU)**. This option allows the user to determine whether the processor that passes data from the Transaction Log to PCC is currently running and whether there are any delays in the transmission of data.

2.1 LS Option Link Transaction Processor Status

The **LS** option is available on the **BLRMENU** as shown in Figure 2-1.

```

LR      Laboratory DHCP Menu ...
        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
CPT    Enter/edit IHS Lab CPT File
STP    Stop/restart Lab to PCC Transaction Processor
PAMG   Edit IHS Lab Parameters and/or Mail Groups ...
LVP    IHS Lab Version & Patch Report
    
```

Figure 2-1: Shorten BLR Menu – LS option for PCC LINKER

2.2 Monitoring the Link Transaction Processor Status

Installation of laboratory patches often requires the processor to be turned off. To assure the PCC Linker was turned on, post installation of the patch, Laboratorians should check the PCC Linker using the **LS Link Transaction Processor Status** option.

The **Currently processing day** should match the current date.

The **LS** option is available on the **BLRMENU** as shown in Figure 2-2.

```

                                DEMO HOSPITAL
                                Processor Status
                                APR 13, 2020@10:40:05

                                Currently processing day APR 13, 2020

                                Event          Entry #      Entry #      IHS Lab Transaction
                                Event          in Queue     in Queue     Sequence #    Date         Time
                                -----
Last Entry Assigned           28           193          79,770 04/13/2020    10:03
Last Entry Processed          28           193          79,770 04/13/2020    10:03
    
```

Figure 2-2: Processor Status example

2.3 Link Transaction Processor Status – HALTED

Installation of Laboratory patches often requires the processor to be turned off. Occasionally the PCC Linker will not be turned back to on after the patch is installed.

The Processor Status displays **Halted by user** when the PCC Linker is not restarted. Figure 2-3 provides an example of the Processor Status showing the Halted by user; notice the **Currently processing day** does not match the current date.

```

                                DEMO HOSPITAL
                                Processor Status
                                APR 13, 2020@12:18:30

Currently processing day APR 09, 2020

                                Entry #      ==== IHS Lab Transaction ====
                                Event        in Queue      Sequence #      Date      Time
-----
Last Entry Assigned           10           1           2,358      04/09/2020
23:02
Last Entry Processed          10           1           2,358      04/09/2020      23:02
-- Halted by user
    
```

Figure 2-3: Example of HALTED Lab processor

2.4 Restart Lab to PCC Transaction Processor

Laboratories are able to restart the PCC Linker using the **STP Stop/restart Lab to PCC Transaction Processor** option.

To restart the PCC Linker, select the **STP** option, type your institution name at the “BLR MASTER CONTROL SITE” prompt, and type **NO** at the “STOP PROCESSOR” prompt.

Figure 2-4 displays an example of restarting the PCC Linker.

Important: It is recommended to check, again, the status of the Link Transaction Processor Status after restarting the PCC Linker.

```

LR      Laboratory DHCP Menu ...
        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
CPT     Enter/edit IHS Lab CPT File
STP   Stop/restart Lab to PCC Transaction Processor
PAMG    Edit IHS Lab Parameters and/or Mail Groups ...
LVP     IHS Lab Version & Patch Report
POCA    Edit BLR AGE DETAIL Parameter
    
```

```
Select IHS Lab Main Support Menu Option: STP  Stop/restart Lab to  
PCC Transaction Processor  
  
Select BLR MASTER CONTROL SITE:      DEMO HOSPITAL  
STOP PROCESSOR: YES// NO
```

Figure 2-4: Shorten BLR Menu – Restart PCC Linker

3.0 Laboratory Test for COVID-19 (Abbott ID NOW)

With the installation of LR*5.2*1045, the pre-built COVID-19 atomic tests and the COVID-19 test panel for immediate test ordering and reporting will be available. Test files should only be used for the Abbott ID NOW COVID-19 test method.

The Lab atomic tests include appropriate LOINC entry and the IHS LAB CPT CODE file definition for CPT/HCPCS pointers.

Important: To complete the setup of the test after the installation is complete, the following steps *must* be performed in RPMS VA FileMan, File 60.

See Figure 3-1 for an example of adding both the appropriate **Institution** and **Accession Area** fields.

```
Access FileMan

      Enter or Edit File Entries
      Search File Entries
      Inquire to File Entries

INPUT TO WHAT FILE: LABORATORY TEST
EDIT WHICH FIELD: ACCESSION AREA
EDIT WHICH ACCESSION AREA SUB-FIELD: ALL//
THEN EDIT FIELD:

Select LABORATORY TEST NAME: _COVID-19 (Abbott ID NOW)
Select INSTITUTION: _____
      ACCESSION AREA: _____

Select LABORATORY TEST NAME: _PROCEDURAL CONTROL
Select INSTITUTION: _____
      ACCESSION AREA: _____

Select LABORATORY TEST NAME: COVID-19 (Abbott ID NOW)
Select INSTITUTION: _____
      ACCESSION AREA: _____
```

Figure 3-1: RPMS VA FileMan, File 60

Note: Test the new COVID-19 test panel in RPMS/EHR for quality assurance *prior* to making available for computer provider order entry or point-of-care utilization.

If RPMS/EHR is a multi-divisional configuration, the same fields will need to be defined as applicable.

3.1 INQUIRE to File 60: COVID-19 Lab Tests

Figure 3-2 displays a Laboratory Test inquiry.

```

VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

Select VA FileMan Option: INquire to File Entries

OUTPUT FROM WHAT FILE: LABORATORY TEST//
Select LABORATORY TEST NAME: COVID-19 (Abbott ID NOW)
ANOTHER ONE: _COVID-19(Abbott ID NOW)
ANOTHER ONE: _PROCEDURAL CONTROL
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes// (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// BOTH Computed Fields and Record
Number
(IEN)
DISPLAY AUDIT TRAIL? No// NO

LABTEST IEN: 2001553                      NAME: COVID-19 (Abbott ID NOW)
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
UNIQUE ACCESSION #: YES                  LAB COLLECTION SAMPLE: SWAB-COVID19
HIGHEST URGENCY ALLOWED: ASAP            REQUIRED TEST: YES
FORCED URGENCY: ASAP                     REQUIRED COMMENT: ORDER COMMENT
COMBINE TEST DURING ORDER: NO            PRINT NAME: ABBOTT ID NOW
NUMBER: 1                                 LAB TEST: _COVID-19(Abbott ID NOW)
NUMBER: 2                                 LAB TEST: _PROCEDURAL CONTROL
COLLECTION SAMPLE: SWAB-COVID19
CONTAINER (c): SWAB
SYNONYM: CORONAVIRUS
SYNONYM: ABBOTT ID NOW
SYNONYM: COVID19
INSTITUTION:
SITE NOTES DATE: APR 08, 2020
NOTE: LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020

LABTEST IEN: 2001554                      NAME: _COVID-19(Abbott ID NOW)
TYPE: OUTPUT (CAN BE DISPLAYED)
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
Enter RETURN to continue or '^' to exit:
LOCATION (DATA NAME): CH;12570001;1       FIELD: DD(63.04,12570001,
HIGHEST URGENCY ALLOWED: ASAP            REQUIRED TEST: YES
PRINT NAME: _COVID RESULT                DATA NAME: COVID19A
SITE/SPECIMEN: NASOPHARYNGEAL MUCUS     REFERENCE LOW: "Negative"
INTERPRETATION: A Negative Result does not rule out co-infections with
other
pathogens.
LOINC CODE: 94534-5
QUALITATIVE VALUES: P
QUALITATIVE VALUES: p
QUALITATIVE VALUES: POSITIVE
QUALITATIVE VALUES: positive
COLLECTION SAMPLE: SWAB-COVID19

```

```

CONTAINER (c): SWAB
INSTITUTION:                               ACCESSION AREA:
SITE NOTES DATE: APR 08, 2020
NOTE:   LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020
INPUT TRANSFORM (c): P:COVID-19 POSITIVE;N:COVID-19 Negative;
DATA TYPE (c): SET

LABTEST IEN: 2001555                         NAME: _PROCEDURAL CONTROL
TYPE: OUTPUT (CAN BE DISPLAYED)
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
LOCATION (DATA NAME): CH;12570002;1   FIELD: DD(63.04,12570002,
Enter RETURN to continue or '^' to exit:
HIGHEST URGENCY ALLOWED: ASAP           REQUIRED TEST: YES
PRINT NAME: Procedural QC               DATA NAME: PROCCONT
SITE/SPECIMEN: NASOPHARYNGEAL MUCUS
COLLECTION SAMPLE: SWAB-COVID19
CONTAINER (c): SWAB
INSTITUTION:                               ACCESSION AREA:
SITE NOTES DATE: APR 08, 2020
NOTE:   LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020
INPUT TRANSFORM (c): V:Valid;          DATA TYPE (c): SET

Select LABORATORY TEST NAME:
    
```

Figure 3-2: Laboratory Test inquiry

3.2 Review the ACCESSION File

Determine which Accession area entry will be used for the COVID-19 Lab Tests. Access VA FileMan and review the Accession entries before adding to the new COVID-19 Lab Tests as shown in Figure 3-3.

```

VA FileMan Version 22.0

Enter or Edit File Entries
Print File Entries
Search File Entries
Modify File Attributes
Inquire to File Entries

Select VA FileMan Option: ENTER or Edit File Entries

INPUT TO WHAT FILE: LABORATORY TEST// ACCESSION
  1  ACCESSION                               (56 entries)
  2  ACCESSION TEST GROUP                     (1 entry)
CHOOSE 1-2: 1  ACCESSION                     (56 entries)
EDIT WHICH FIELD: ALL//

Select ACCESSION AREA: ?
Answer with ACCESSION AREA, or UID, or HOST UID
Do you want the entire 56-Entry ACCESSION List? Y (Yes)
Choose from:
BLOOD BANK
CHEMISTRY
COAGULATION
HEMATOLOGY
MANUAL TESTING
MICROBIOLOGY
PHARM POCT
    
```

```

POINT OF CARE
SENDOUTS
STATE LAB ODH
URINALYSIS
ZZAZ STATELAB
ZZCH MANUAL TESTING
      ^
      You may enter a new ACCESSION, if you wish
      ANSWER MUST BE 2-20 CHARACTERS IN LENGTH

Select ACCESSION AREA:

```

Figure 3-3: ACCESSION file review

3.3 Add INSTITUTION and ACCESSION to COVID-19 Tests

Figure 3-4 displays how to add Institution and Accession to lab tests.

```

VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

Select VA FileMan <TEST ACCOUNT> Option: ENTer or Edit File Entries

INPUT TO WHAT FILE: ACCESSION// 60 LABORATORY TEST (3438 entries)
EDIT WHICH FIELD: ALL// ACCESSION
      1 ACCESSION AREA (multiple)
      2 ACCESSION WKLD CODE (multiple)
CHOOSE 1-2: 1 ACCESSION AREA (multiple)
      EDIT WHICH ACCESSION AREA SUB-FIELD: ALL//
THEN EDIT FIELD:

Select LABORATORY TEST NAME: COVID-19 (Abbott ID NOW)
Select INSTITUTION: DEMO HOSPITAL
      INSTITUTION: DEMO HOSPITAL//
      ACCESSION AREA: ?
      You can not select an accession area designated Work Area only.
      Answer with ACCESSION AREA, or UID, or HOST UID
      Do you want the entire ACCESSION List? Y (Yes)
      Choose from:
      BLOOD BANK
      CHEMISTRY
      COAGULATION
      HEMATOLOGY
      MANUAL TESTING
      MICROBIOLOGY
      PHARM POCT
      POINT OF CARE
      SENDOUTS
      STATE LAB ODH
      URINALYSIS
      ZZAZ STATELAB
      ZZCH MANUAL TESTING
      ^
      ACCESSION AREA: CHEMISTRY

```

```

Select LABORATORY TEST NAME: _COVID-19 (Abbott ID NOW)
Select INSTITUTION: DEMO HOSPITAL
  INSTITUTION: DEMO HOSPITAL//
  ACCESSION AREA: CHEMISTRY

Select LABORATORY TEST NAME: _PROCEDURAL CONTROL
Select INSTITUTION: DEMO HOSPITAL
  INSTITUTION: DEMO HOSPITAL//
  ACCESSION AREA: CHEMISTRY

Select LABORATORY TEST NAME:

```

Figure 3-4: Adding Institution and Accession to lab tests

3.4 INQUIRE to File 60: Ready for Use – COVID-19 Tests

Figure 3-5 displays how to review the added Institution and Accession.

```

VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

Select VA FileMan Option: INquire to File Entries

OUTPUT FROM WHAT FILE: LABORATORY TEST//
Select LABORATORY TEST NAME: COVID-19 (Abbott ID NOW)
ANOTHER ONE: _COVID-19 (Abbott ID NOW)
ANOTHER ONE: _PROCEDURAL CONTROL
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes// (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// BOTH Computed Fields and Record
Number
(IEN)
DISPLAY AUDIT TRAIL? No// NO

LABTEST IEN: 2001553                NAME: COVID-19 (Abbott ID NOW)
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
UNIQUE ACCESSION #: YES            LAB COLLECTION SAMPLE: SWAB-COVID19
HIGHEST URGENCY ALLOWED: ASAP      REQUIRED TEST: YES
FORCED URGENCY: ASAP              REQUIRED COMMENT: ORDER COMMENT
COMBINE TEST DURING ORDER: NO      PRINT NAME: ABBOTT ID NOW
NUMBER: 1                          LAB TEST: _COVID-19 (Abbott ID NOW)
NUMBER: 2                          LAB TEST: _PROCEDURAL CONTROL
COLLECTION SAMPLE: SWAB-COVID19
CONTAINER (c): SWAB
SYNONYM: CORONAVIRUS
SYNONYM: ABBOTT ID NOW
SYNONYM: COVID19
INSTITUTION: DEMO HOSPITAL
SITE NOTES DATE: APR 08, 2020
NOTE: LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020

```

```

LABTEST IEN: 2001554                                NAME: _COVID-19(Abbott ID NOW)
TYPE: OUTPUT (CAN BE DISPLAYED)
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
Enter RETURN to continue or '^' to exit:
LOCATION (DATA NAME): CH;12570001;1    FIELD: DD(63.04,12570001,
HIGHEST URGENCY ALLOWED: ASAP        REQUIRED TEST: YES
PRINT NAME: _COVID RESULT            DATA NAME: COVID19A
SITE/SPECIMEN: NASOPHARYNGEAL MUCUS  REFERENCE LOW: "Negative"
INTERPRETATION:  A Negative Result does not rule out co-infections with
other
pathogens.
LOINC CODE: 94534-5
QUALITATIVE VALUES: P
QUALITATIVE VALUES: p
QUALITATIVE VALUES: POSITIVE
QUALITATIVE VALUES: positive
COLLECTION SAMPLE: SWAB-COVID19
CONTAINER (c): SWAB
INSTITUTION: DEMO HOSPITAL            ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: APR 08, 2020
NOTE:  LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020
INPUT TRANSFORM (c): P:COVID-19 POSITIVE;N:COVID-19 Negative;
DATA TYPE (c): SET

LABTEST IEN: 2001555                                NAME: _PROCEDURAL CONTROL
TYPE: OUTPUT (CAN BE DISPLAYED)
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
LOCATION (DATA NAME): CH;12570002;1    FIELD: DD(63.04,12570002,
Enter RETURN to continue or '^' to exit:
HIGHEST URGENCY ALLOWED: ASAP        REQUIRED TEST: YES
PRINT NAME: Procedural QC            DATA NAME: PROCCONT
SITE/SPECIMEN: NASOPHARYNGEAL MUCUS
COLLECTION SAMPLE: SWAB-COVID19
CONTAINER (c): SWAB
INSTITUTION: DEMO HOSPITAL            ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: APR 08, 2020
NOTE:  LAB TEST CREATED IN LAB PATCH 1045, APRIL 2020
INPUT TRANSFORM (c): V:Valid;        DATA TYPE (c): SET

Select LABORATORY TEST NAME:

```

Figure 3-5: Review the added Institution and Accession

4.0 Data Names for COVID-19 Lab Tests

Each individual test (atomic) in the **LABORATORY TEST** file requires a Data Name entry in file #60. Each test that will have results associated with it must have a data name created. The **LAB DATA** file is where results are stored in the Laboratory package for report retrieval.

With the installation of LR*5.2*1045, two new Data Names for the COVID-19 lab tests will be added post-installation of the patch. The new Data Names are **COVID19 ABBOTT ID NOW** and **PROCEDURAL CONTROL**.

4.1 Data Names Included in Lab Patch – Review by MODify

Figure 4-1 displays data names as new entries.

```

LR      Laboratory DHCP Menu ...
        Supervisor menu ...
        Lab liaison menu ...

ANT     Add a new internal name for an antibiotic
BCF     Lab Bar Code Label Formatter
BCZ     Lab Zebra Label Utility
DATA    Add a new data name
HDR     Recover/Transmit Lab HDR Result Messages
MOD     Modify an existing data name
SMGR    Lab Shipping Management Menu ...

Select Supervisor menu Option: MOD  Modify an existing data name

This option allows modifying an existing data name.

Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD: COVID19 ABBOTT ID NOW

Data Name: COVID19 ABBOTT ID NOW      Subfield #: 2907703      Type: SET OF
CODES
P - COVID-19 POSITIVE
N - COVID-19 Negative

Do you wish to modify this data name? No//
This option will add a new data name to the lab package.

AND

Select Lab liaison menu Option: MOD  Modify an existing data name

This option allows modifying an existing data name.

Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD: PROCEDURAL CONTROL

Data Name: PROCEDURAL CONTROL      Subfield #: 2907704      Type: SET OF CODES
V - Valid

Do you wish to modify this data name? No//      (No)
This option will add a new data name to the lab package.

```

Figure 4-1: Data Name new entries

5.0 Collection Sample for COVID-19 Lab Test

The COLLECTION SAMPLE file (#62) contains all information specific for the collection sample requirements for a particular laboratory. Each collection sample entry is defined in this file, and the site-specific information contained includes the default type of specimen and type of collection, and tube top color.

With the installation of LR*5.2*1045, a new entry to the **COLLECTION SAMPLE** file named **SWAB-COVID19** will be added to the file and to the COVID-19 Laboratory Tests.

5.1 Collection Sample Named SWAB-COVID19

Figure 5-1 displays a collection sample named **SWAB-COVID19**.

```
VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

Select VA FileMan Option: INquire to File Entries

OUTPUT FROM WHAT FILE: V LAB// COLLECTION SAMPLE      (167 entries)
Select COLLECTION SAMPLE NAME: SWAB-COVID19          NASOPHARYNGEAL MUCUS
SWAB
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes//      (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// BOTH Computed Fields and Record
Number
      (IEN)

NUMBER: 214                                NAME: SWAB-COVID19
      DEFAULT SPECIMEN: NASOPHARYNGEAL MUCUS
      TUBE TOP COLOR: SWAB

Select COLLECTION SAMPLE NAME:
```

Figure 5-1: Collection Sample named SWAB-COVID19

6.0 IHS LAB CPT CODE for COVID-19 Lab Test

To capture the CPT DATA to pass from the Laboratory Package to the Patient Care Component (PCC), an entry must exist in the **IHS LAB CPT CODE** file for each billable lab test associated with the lab order. The entry must identify the associated panel or test.

With the installation of LR*5.2*1045, a new entry to **the IHS LAB CPT CODE** file, will be added for the orderable Lab Test named **COVID-19** (Abbott ID NOW).

6.1 CPT CODES Added for COVID-19 (Abbott ID NOW)

Figure 6-1 displays the **IHS LAB CPT CODE** file as an added entry.

```

VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

Select VA FileMan <TEST ACCOUNT> Option: INquire to File Entries

OUTPUT FROM WHAT FILE: COLLECTION SAMPLE// IHS LAB CPT CODE
Select IHS LAB CPT CODE NAME: COVID-19 (ABBOTT ID NOW)
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes// (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// BOTH Computed Fields and Record
Number
(IEN)

NUMBER: 1397                                NAME: COVID-19 (ABBOTT ID NOW)
LAB SECTION: COVID                          CREATE DATE: APR 07, 2020@09:06:29
DATE/TIME ACTIVE: APR 07, 2020@09:06:31
PANEL/TEST: COVID-19 (Abbott ID NOW)
CPT CODE: 87635
CPT CODE: U0002

Select IHS LAB CPT CODE NAME:

```

Figure 6-1: IHS LAB CPT CODE file added entry

7.0 Testing the New Lab Test

To confirm that all results posted on EHR correctly with all information relating to units, reference ranges, or abnormal flags, the best practice is to test the new Lab Test by ordering and resulting before adding to the Electronic Health Record (EHR) Lab Menu. The information below provides the outline of how to order, accession, and result within the RPMS Lab Package.

RPMS Lab Package: ORDER & ACCESSION Using Multipurpose Accessioning

LABORATORY DHCP MENU

Accessioning menu

1. Select **LABORATORY TEST NAME**.
2. Select **PATIENT NAME**.
3. Select **PATIENT LOCATION**.
4. Select **PROVIDER**.
5. Select **NATURE OF ORDER/CHANGE**.
6. Add **COLLECTION DATE/TIME: NOW**.
7. Select **SNOMED CODE** or Add **CLINICAL INDICATION**.
8. Capture/write down accession number to be result.

RPMS Lab Package: RESULT/ VERIFY Using Enter/Verify/Modify Data (Manual)

LABORATORY DHCP MENU

Process data in lab menu

1. EM Enter/verify/modify data (manual).
2. Verify by: 1// Accession Number.
3. Select **ACCESSION _____** (type Accession number).
4. **ENTER RESULTS**.
5. Approve for release by entering your initials: **.

RPMS Lab Package: REVIEW RESULTS Using INTERIM REPORT and EHR LAB TAB

LABORATORY DHCP MENU

Results menu

1. **INTERIM REPORT**
2. Select **PATIENT NAME**
3. DATE TO START WITH: **Today**
4. DATE TO END: **T-7**
5. PRINT or DISPLAY results

ELECTRONIC HEALTH RECORD

1. **PATIENT NAME**
2. **LAB TAB** review results

7.1 RPMS Lab Package: ORDER & ACCESSION

Multipurpose accessioning is a menu under the Laboratory Menu that can be used to order and accession a test within the RPMS Laboratory Package. Figure 7-1 displays a typical script for a **Multipurpose accessioning** session.

```
Laboratory DHCP Menu

1      Phlebotomy menu ...
2      Accessioning menu ...
3      Process data in lab menu ...
4      Quality control menu ...
5      Results menu ...
6      Information-help menu ...
10     Microbiology menu ...
11     Supervisor menu ...
BLR    IHS Lab Main Support Menu ...

Select Laboratory DHCP Menu Option: 2  Accessioning menu

RSM    Reprint Shipping Manifest
        Accessioning tests ordered by provider order entry
        Accessioning, standard (Microbiology)
        Add tests to a given accession.
        Bypass normal data entry
        Delete entire order or individual tests
        Delete test from an accession
        Fast lab test order (IMMEDIATE COLLECT)
        Fast lab test order (ROUTINE)
        Fast lab test order (SEND PATIENT)
        Inquiry to LAB TEST file
        Lab add test(s) to an existing order
```

```

Lab orders by collection type
Lookup accession
Manually accession QC, Environmental, etc.
Merge Accessions
Multipurpose accessioning
Order/test status

Select Accessioning menu Option: MULTipurpose accessioning

WANT TO ENTER COLLECTION TIMES? YES//
Select ACCESSION TEST GROUP:
Select one or more tests from which you will be generating your entries.
Select LABORATORY TEST NAME: COVID-19 (Abbott ID NOW)
Is SWAB-COVID19 SWAB the correct sample to collect? Y//
Same specimen/source for the rest of the order? No// (No)
Select LABORATORY TEST NAME:

Select Patient Name: DEMO, ALISTER LANE
DEMO,ALISTER LANE <A> M 05-20-1980 XXX-XX-4693 TST
124625

Select one of the following:

LC LAB COLLECT(INPATIENTS-MORN. DRAW)
SP SEND PATIENT
WC WARD/CLINIC COLLECT
I Immed COLLECT

Specimen collected how ? : SP// SEND PATIENT
PATIENT LOCATION: LAB
PROVIDER: DEMO,PROVIDER
LAB Order number: 554
For COVID-19 (Abbott ID NOW)
Other tests? N//
Nature of Order/Change: POLICY//
You have just selected the following tests for DEMO,ALISTER LANE 124625
entry no. Test Sample
1 COVID-19 (Abbott ID NOW) SWAB-COVID19 NASOPHARYNGEAL
MUCUS

All satisfactory? Yes// (Yes)

LAB Order number: 554

Collection Date @Time: NOW (APR 14, 2020@13:01:49)
~For Test: COVID-19 (Abbott ID NOW) SWAB-COVID19 NASOPHARYNGEAL MUCUS
Enter Order Comment: TESTING MULTPURPOSE ACCESSIONING (~TESTING
MULTPURPOSE ACC
ESSIONING)
OK? Yes// (Yes)

BLR SNOMED SELECT Apr 14, 2020 13:02:08 Page: 1 of 1
Select an appropriate SNOMED code from the Patient's 16 Problems.

SNOMED SNOMED DESCRIPTION ICD
1) 418928016 Well woman health examination ZZZ.999
2) 418926017 Well man health examination ZZZ.999
3) 2472274014 Well child visit ZZZ.999
4) 674991000124Stress fracture of right radius ZZZ.999
5) 642100011911Compression fracture of thoracic vertebra, nontrau ZZZ.999
6) 650100011911Compression fracture of lumbosacral vertebra, nont ZZZ.999
7) 318474013 Closed compression fracture sacrum ZZZ.999
    
```

```

8) 420087013 Burst fracture of thoracic vertebra ZZZ.999
9) 420098014 Burst fracture of lumbar vertebra ZZZ.999
10) 301485011 Asthma J45.909
11) 406636013 Anemia D64.9
12) 208625010 Mammographic breast mass R92.8
13) 41990019 Headache ZZZ.999
14) 197761014 Type 2 diabetes mellitus E11.9
15) 95910010 Joint pain M25.50
16) 398001015 Sore throat symptom J02.9
S Select SNOMED Number or Other Action
Select Action: NEXT SCREEN// S Select SNOMED Number or Other Action

ACCESSION: CH 0414 7 <1001050007>
COVID-19 (Abbott ID NOW) SWAB-COVID19 NASOPHARYNGEAL MUCUS

Select Patient Name:
    
```

Figure 7-1: Example of Multipurpose Accessioning

7.2 RPMS Lab Package: RESULT/VERIFY

Verifying the laboratory accession is Resulting the laboratory accession. The following script (Figure 7-2) provides steps to VERIFY a lab test within the RPMS Laboratory Package.

```

Laboratory DHCP Menu

1 Phlebotomy menu ...
2 Accessioning menu ...
3 Process data in lab menu ...
4 Quality control menu ...
5 Results menu ...
6 Information-help menu ...
10 Microbiology menu ...
11 Supervisor menu ...
BLR IHS Lab Main Support Menu ...

Select Laboratory DHCP Menu Option: 3 Process data in lab menu

EA Enter/verify data (auto instrument)
EL Enter/verify data (Load list)
EM Enter/verify/modify data (manual)
EW Enter/verify data (Work list)
GA Group verify (EA, EL, EW)
MP Misc. Processing Menu ...
Fast Bypass Data Entry/Verify
Lookup accession
Order/test status
Print a load/work list
Std/QC/Reps Manual Workload count
Unload Load/Work List

Select Process data in lab menu Option: EM Enter/verify/modify data
(manual)

Do you want to review the data before and after you edit? YES//
Do you wish to see all previously verified results? NO//

Select one of the following:
    
```

```

1          Accession Number
2          Unique Identifier (UID)

Verify by: 1//  Accession Number
Select Accession: CH 7
CHEMISTRY (APR 14, 2020) 3
Select Referring Laboratory: DEMO HOSPITAL//
DEMO,ALISTER LANE          124625  LOC:GENERAL

Sample: SWAB-COVID19
Specimen: NASOPHARYNGEAL MUCUS
1  COVID-19 (Abbott ID NOW)
      Test ordered ASAP

DEMO,ALISTER LANE  HRCN: 124625      LOC: GENERAL
Pat Info:          Sex: MALE      Age: 39yr as of Apr 14,
2020
Provider: DEMO,PROVIDER              Voice pager:
      Phone:                          Digital pager:

ACCESSION:          CH 0414 7
                   04/14 1301d

      Test ordered ASAP
COMMENTS: ~For Test: COVID-19 (Abbott ID NOW)
COMMENTS: ~TESTING MULTPURPOSE ACCESSIONING

_COVID-19(Abbott ID NOW) //P COVID-19 POSITIVE CRITICAL !!
_PROCEDURAL CONTROL //V Valid
Select COMMENT: ~TESTING MULTPURPOSE ACCESSIONING //
      COMMENT: ~TESTING MULTPURPOSE ACCESSIONING  Replace
Select COMMENT:

DEMO,ALISTER LANE  HRCN: 124625      LOC: GENERAL
Pat Info:          Sex: MALE      Age: 39yr as of Apr 14,
2020
Provider: DEMO,PROVIDER              Voice pager:
      Phone:                          Digital pager:

ACCESSION:          CH 0414 3
                   04/14 1301d

      Test ordered ASAP
_COVID-19(Abbott ID NOW)          COVID-19 POSITIVE A*
CRITICAL !!
_PROCEDURAL CONTROL          Valid
COMMENTS: ~For Test: COVID-19 (Abbott ID NOW)
COMMENTS: ~TESTING MULTPURPOSE ACCESSIONING

SELECT ('E' to Edit, 'C' for Comments, 'W' Workload):
Approve for release by entering your initials: **
LAST IN WORK LIST

```

Figure 7-2: Example of verifying laboratory results

7.3 RPMS Lab Package: INTERIM REPORT – Results

After verifying/resulting the lab tests, the laboratory results will be available on the INTERIM REPORT and the Electronic Health Record Lab Tab. Review the results.

Figure 7-3 displays an example of Interim Report lab results.

```

Laboratory DHCP Menu

1      Phlebotomy menu ...
2      Accessioning menu ...
3      Process data in lab menu ...
4      Quality control menu ...
5      Results menu ...
6      Information-help menu ...
10     Microbiology menu ...
11     Supervisor menu ...
BLR    IHS Lab Main Support Menu ...

Select Laboratory DHCP Menu Option: 5  Results menu

      Interim report
      Interim report by provider
      Interim report for chosen tests
      Interim report for selected tests as ordered
      Interim reports by location (manual queue)
      Interim reports for 1 location (manual queue)
      Interim reports for 1 provider (manual queue)
      Order/test status
      Print a full patient summary
      Review by order number

Select Results menu Option: INTERIM
1      Interim report
2      Interim report by provider
3      Interim report for chosen tests
CHOOSE 1-7: 1  Interim report

Select Patient Name:
      DEMO,ALISTER LANE          <A>   M 05-20-1980 XXX-XX-4693   TST
124625
Date to START with: TODAY// (APR 14, 2020)
Date to END with: T-7// (APR 07, 2020)
DEVICE: HOME// Virtual
Printed at:
                                                    page 1

                        DR SMITH LABORATORY DIRECTOR
                        90001 1ST AVE WASHINGTON, NM 87000

DEMO,ALISTER LANE          Date/Time Printed:
04/14/20@15:59
      HRCN:124625   SEX:M   DOB:May 20, 19XX          LOC:LAB
Accession [UID]: CH 0414 7 [1001050007]
      Provider: DEMO,PROVIDER          Lab Arrival
Date/Time:04/14/20@15:55
      Specimen:NASOPHARYNGEAL MUCUS          Spec Collect
Date/Time:04/14/20@15:55

Test name      Result Flg units      Ref. range Site Result Dt/Time
COVID RESULT   COVID-19 POSITIVE A*      Ref: Negative [2906]
04/14/20@15:58
      Eval: A Negative Result does not rule out co-infections with other
      Eval: pathogens.
Procedural QC   Valid          [2906] 04/14/20@15:58
=====
    
```

```

KEY: A=Abnormal   L=Abnormal Low   H=Abnormal High   *=Critical
TR=Therapeutic

[2906]  2013 DEMO HOSPITAL (CMBA)  90001 1ST AVE  WASHINGTON, DC 20000
    
```

Figure 7-3: Example of INTERIM REPORT Lab Results

7.4 Electronic Health Record: LAB Tab – Results

Figure 7-4 displays an example of Electronic Health Record Lab Results.

Test	Result	Flag	Units	Ref Range
COVID-19 (Abbott ID NOW)	COVID-19 POSITIVE	A*		Ref Negative
PROCEDURAL CONTROL	Valid			

Specimen: NASOPHARYNGEAL MUCUS; Accession: CH 0414 7; Provider: [REDACTED]

Lab Arrival Date/Time: 04/14/2020 3:55 PM
 Report Released Date/Time: 04/14/2020 3:58 PM

COVID RESULT Eval: A Negative Result does not rule out co-infections with other
 COVID RESULT Eval: pathogens.

Comment:
 -For Test: COVID-19 (Abbott ID NOW)
 -TESTING MULTIPURPOSE ACCESSIONING

Performing Lab: 2019 DEMO HOSPITAL (INST) 90001 1ST AVE WASHINGTON, NM 87000

Figure 7-4: Example of Electronic Health Record Lab results

8.0 Review DATA for LOINC and CPT CODES

Confirming all laboratory data passes to Patient Care Component (PCC), Laboratorians should review the data using the INQ Inquire into the **IHS LAB Transaction Log** option.

For the PCC to accept **CPT DATA** that is passed from the Laboratory Package, an entry must exist in the **IHS LAB CPT CODE** file for each billable lab test associated with the lab order. The entry must identify the associated panel or test.

For the PCC to accept **LOINC DATA** that is passed from the Laboratory Package, an entry must exist in the Site/Specimen for the result-able laboratory test that contains the result.

Other entries in the **IHS LAB TRANSACTION LOG LIST** to review are **PANEL/TEST POINTER**, **STATUS FLAG** as **RESULTED**, and **RESULT** fields.

Follow the steps below to review laboratory data using INQ:

LR Laboratory DHCP Menu .

IHS Lab Main Support Menu

1. INQ Inquire into the IHS LAB Transaction Log.
 2. Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER:
 - CH 0414 7**
 - 1 CH 0414 7 211 *(This is the Panel Test)*
 - 2 CH 0414 7 212 *(This is the First Atomic Test in the Panel)*
 - 3 CH 0414 7 213 *(This is the Second Atomic Test in the Pane)*

8.1 INQ Inquire Into the IHS LAB Transaction Log

The INQ option (Figure 8-1) is available on the BLRMENU.

```

LR      Laboratory DHCP Menu ...
        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
CPT     Enter/edit IHS Lab CPT File
STP     Stop/restart Lab to PCC Transaction Processor
PAMG    Edit IHS Lab Parameters and/or Mail Groups ...
LVP     IHS Lab Version & Patch Report
    
```

Figure 8-1: Shorten BLR Menu – INQ option review lab data

8.2 Reviewing Laboratory Data Using INQ

Figure 8-2 displays how to review laboratory data using the **INQ** option.

```

LR   Laboratory DHCP Menu ...
      IHS Lab Main Support Menu
      INQ   Inquire into the IHS LAB Transaction Log

Select IHS Lab Main Support Menu <TEST ACCOUNT> Option: INQ   Inquire into
the IH
S LAB Transaction Log

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: CH 0414 7
  1  CH 0414 7  211
  2  CH 0414 7  212
  3  CH 0414 7  213
CHOOSE 1-3: 1  211

DEVICE:   Virtual
IHS LAB TRANSACTION LOG LIST                      APR 14,2020  19:49  PAGE 1
-----
SEQUENCE NUMBER: 211                               LRFILE: 2
PATIENT POINTER VALUE: 11189
PANEL/TEST POINTER: COVID-19 (Abbott ID NOW)
LAB MODULE: GENERAL                                DUZ(2): 2906
I/O CATEGORY: IN PATIENT                           STATUS FLAG: RESULTED
ENTRY DATE/TIME: APR 14, 2020@15:55:42
ASSOCIATED V FILE: V LAB                            IEN OF V FILE ENTRY: 4294095
CLINIC STOP CODE POINTER: LABORATORY SERVICES
CPT LAB CODE POINTER: COVID-19 (ABBOTT ID NOW)
BILLING CPT STRING: 87635|||||;U0002|||||
CLINICAL INDICATOR: 301485011                       ORDER DATE: APR 14, 2020@15:55:21
ORDER SEQUENCE NUMBER: 1                             ORDER NUMBER: 668
ORDERING PROVIDER POINTER: DEMO,PROVIDER
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: APR 14, 2020@15:55:21
ACCESSION NUMBER: CH 0414 7                         COLLECTION SAMPLE POINTER: SWAB-
COVID19
COMPLETE DATE: APR 14, 2020@15:58:09  PROVIDER NARRATIVE: Asthma
SNOMED: 301485011                                ICD: J45.909
SITE/SPECIMEN POINTER: NASOPHARYNGEAL MUCUS

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: CH 0414 7
  1  CH 0414 7  211
  2  CH 0414 7  212
  3  CH 0414 7  213
CHOOSE 1-3: 2  212

DEVICE:   Virtual
IHS LAB TRANSACTION LOG LIST                      APR 14,2020  19:49  PAGE 1
-----
SEQUENCE NUMBER: 212                               LRFILE: 2
PATIENT POINTER VALUE: 11189
PANEL/TEST POINTER: _COVID-19 (Abbott ID NOW)
LAB MODULE: GENERAL                                DUZ(2): 2906
I/O CATEGORY: IN PATIENT                           PARENT POINTER: 211
    
```

```

STATUS FLAG: RESULTED                                ENTRY DATE/TIME: APR 14,
2020@15:55:42
ASSOCIATED V FILE: V LAB                                IEN OF V FILE ENTRY: 4294096
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: APR 14, 2020@15:55:21                     ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 668
ORDERING PROVIDER POINTER: DEMO, PROVIDER
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: APR 14, 2020@15:55:21
ACCESSION NUMBER: CH 0414 7                           COLLECTION SAMPLE POINTER: SWAB-
COVID19
COMPLETE DATE: APR 14, 2020@15:58:09 LOINC CODE: 94534
RESULT: P                                           RESULT N/A FLAG: A*
SITE/SPECIMEN POINTER: NASOPHARYNGEAL MUCUS
VERIFIER POINTER: DEMO, PROVIDER                       REFERENCE LOW: Negative
COMMENTS: ~For Test: COVID-19 (Abbott ID NOW)
COMMENTS: ~TESTING MULTIPURPOSE ACCESSIONING

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: CH 0414 7
      1  CH 0414 7  211
      2  CH 0414 7  212
      3  CH 0414 7  213
CHOOSE 1-3: 3  213

DEVICE: Virtual
IHS LAB TRANSACTION LOG LIST                            APR 14,2020  19:49                PAGE
1
-----
SEQUENCE NUMBER: 213                                  LRFILE: 2
PATIENT POINTER VALUE: 11189                          PANEL/TEST POINTER: _PROCEDURAL CONTROL
LAB MODULE: GENERAL                                   DUZ(2): 2906
I/O CATEGORY: IN PATIENT                              PARENT POINTER: 211
STATUS FLAG: RESULTED                                ENTRY DATE/TIME: APR 14, 2020@15:55:42
ASSOCIATED V FILE: V LAB                                IEN OF V FILE ENTRY: 4294097
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: APR 14, 2020@15:55:21                     ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 668
ORDERING PROVIDER POINTER: DEMO, PROVIDER
ORDERING LOCATION POINTER: LAB OIT (HOSP)
COLLECTION DATE/TIME: APR 14, 2020@15:55:21
ACCESSION NUMBER: CH 0414 7                           COLLECTION SAMPLE POINTER: SWAB-
COVID19
COMPLETE DATE: APR 14, 2020@15:58:09 RESULT: V
SITE/SPECIMEN POINTER: NASOPHARYNGEAL MUCUS
VERIFIER POINTER: DEMO, PROVIDER
COMMENTS: ~For Test: COVID-19 (Abbott ID NOW)
COMMENTS: ~TESTING MULTIPURPOSE ACCESSIONING

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER:

```

Figure 8-2: INQ for LAB DATA REVIEW

9.0 EHR Lab Menu: Quick Order and Order Menu

To make the Laboratory Test(s) available for Order, create the Lab Quick Order and add the Lab Quick Order to the EHR lab menu.

Note: Not all users will have access to the **EHR Order Management** menu. Work with your local CAC if additional assistance is needed for access issues, order menu names, and conventions.

9.1 Create Lab Quick Order

Figure 9-1 is an example of creating a Lab Quick Order.

```
Order Menu Management

OI      Manage orderable items ...
PM      Enter/edit prompts
GO      Enter/edit generic orders
QO      Enter/edit quick orders
QU      Edit personal quick orders by user
ST      Enter/edit order sets
AC      Enter/edit actions
MN      Enter/edit order menus
AO      Assign Primary Order Menu
CP      Convert protocols
SR      Search/replace components
LM      List Primary Order Menus
DS      Disable/Enable order dialogs
CS      Review Quick Orders for Inactive ICD9 Codes
MR      Medication Quick Order Report
CV      Convert IV Inpatient QO to Infusion QO

Select Order Menu Management Option: QO  Enter/edit quick orders
Select QUICK ORDER NAME: LRZ COVID-19 ABBOTT ID NOW
  Are you adding 'LRZ COVID-19 ABBOTT ID NOW' as
    a new ORDER DIALOG? No// Y  (Yes)
TYPE OF QUICK ORDER: LAB  LABORATORY
NAME: LRZ COVID-19 ABBOTT ID NOW  Replace
DISPLAY TEXT: COVID19 (Abbott ID NOW)
VERIFY ORDER: Y  YES
DESCRIPTION:
  No existing text
  Edit? NO//
ENTRY ACTION:

Lab Test: COVID-19 (ABBOTT ID NOW)          COVID-19 (Abbott ID NOW)

SEND TO LAB - Means the patient is ambulatory and will be sent to the
Laboratory draw room to have blood drawn.
WARD COLLECT - Means that either the physician or a nurse will be
collecting
the sample on the ward.
LAB BLOOD TEAM - Means the phlebotomist from Lab will draw the blood on the
ward. This method is limited to laboratory defined collection times.
```

```

IMMEDIATE COLLECT BY BLOOD TEAM - Means the phlebotomist from Lab is on
call to draw blood on the ward. This method is available during times
defined by Laboratory.

      SP      Send patient to lab
      WC      Ward collect & deliver
      LC      Lab blood team
      I      Immediate collect by blood team
Collected By: WC Ward collect & deliver
Collection Sample: SWAB-COVID19//
Collection Date/Time: NOW (APR 14, 2020@19:51)
Urgency:
Enter Order Comment:
How often:
Indication://

-----
                        Lab Test: COVID-19 (Abbott ID NOW)
                        Collected By: Ward collect & deliver
                        Collection Sample: SWAB-COVID19
                        Specimen: NASOPHARYNGEAL MUCUS
                        Collection Date/Time: NOW
                        Indication:
                        SNOMED Concept ID:
-----

(P)lace, (E)dit, or (C)ancel this quick order? PLACE//
Auto-accept this order? NO//

Select QUICK ORDER NAME:
    
```

Figure 9-1: Example of creating a Lab Quick Order

9.2 Review Lab Quick Order

Figure 9-2 displays an example of an Electronic Health Record Lab QUICK ORDER.

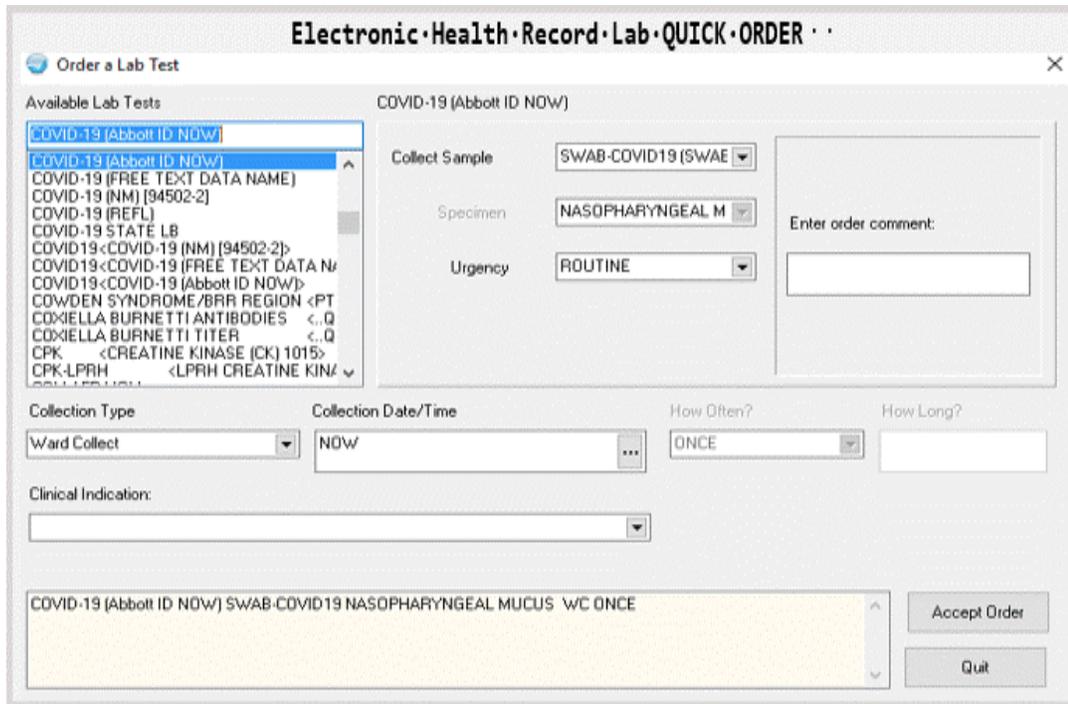
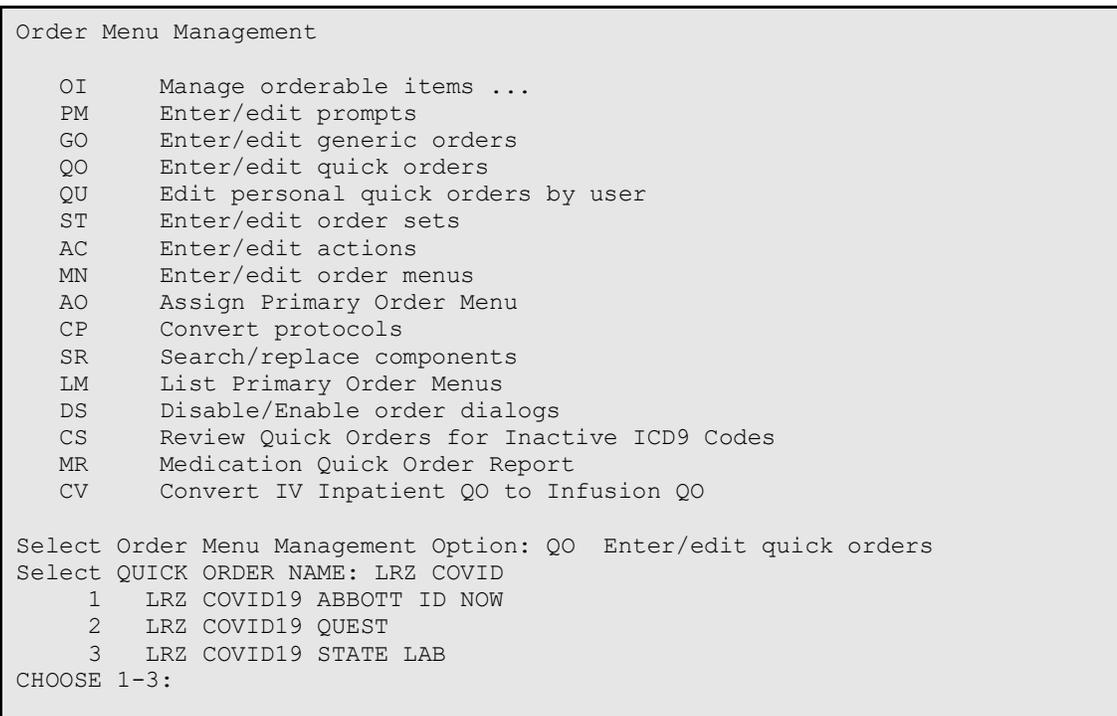


Figure 9-2: Example of Electronic Health Record Lab QUICK ORDER

9.3 Naming Lab Quick Orders – Best Practice

Figure 9-3 displays an example of Lab QUICK ORDER naming.



```
Select QUICK ORDER NAME:
```

Figure 9-3: Example of Lab QUICK ORDER naming

9.4 Add Lab Quick Order to ORDER Menu

Important: When adding the Lab Quick Order to the EHR Lab Menu, the lab test is ready for active order.

Figure 9-4 displays an example of adding the Lab Quick Order to the EHR Lab Menu.

```
Order Menu Management
  OI      Manage orderable items ...
  PM      Enter/edit prompts
  GO      Enter/edit generic orders
  QO      Enter/edit quick orders
  QU      Edit personal quick orders by user
  ST      Enter/edit order sets
  AC      Enter/edit actions
  MN      Enter/edit order menus
  AO      Assign Primary Order Menu
  CP      Convert protocols
  SR      Search/replace components
  LM      List Primary Order Menus
  DS      Disable/Enable order dialogs
  CS      Review Quick Orders for Inactive ICD9 Codes
  MR      Medication Quick Order Report
  CV      Convert IV Inpatient QO to Infusion QO

Select Order Menu Management Option: MN  Enter/edit order menus
Select ORDER MENU: LRZM
  1  LRZM CMBA Lab Orders
  2  LRZM CQM LABS
  3  LRZM ER DEPART
  4  LRZM LAB INPT
  5  LRZM LAB MENU

Press <RETURN> to see more, '^' to exit this list, OR

Menu Editor          Apr 14, 2020 19:51:28          Page:    1 of    3
Menu: LRZM CMBA Lab Orders          Column Width: 44

      1                      2
|      INPATIENT WARD          Glucose RAPID
|      BMP NEW
|
|                      STD Order Set (R)
+      GLUCOSE (R)            Diabetes/Lipid Order Set (R)
|      CBC W/AUTO DIFF
|      HGB A1c (R)
|      RPR with Reflex(R)    AEROBIC CULTURE OIT
|      HCG (R)
1      Ammonia                Glucose (Ser.Plas.bLD)
|      BMP (R)
|      CMP (R)
|      CRP                    Other Laboratory Tests...
```

```

| Lipase
+ LIPID PANEL (R) General Sendout
| Ferritin PKU State Lab
| PSA SERUM (R)

+ + Next Screen - Prev Screen ?? More Actions
Add ... Edit ... Assign to User(s) Select New Menu
Remove ... Toggle Display Order Dialogs ...
Select Action: Next Screen// ADD Add ...
Menu Items Text or Header Row

Add: M Menu Items
ITEM: LRZ COVID
1 LRZ COVID-19 ABBOTT ID NOW
2 LRZ COVID19 QUEST
3 LRZ COVID19 STATE LAB

CHOOSE 1-4: 1 LRZ COVID-19 ABBOTT ID NOW
ROW: 2
COLUMN: 2
DISPLAY TEXT:
MNEMONIC:
ITEM:
Menu Editor Apr 14, 2020 19:51:54 Page: 1 of 3
Menu: LRZM CMBA Lab Orders Column Width: 44
1 2
| INPATIENT WARD Glucose RAPID
| BMP NEW COVID19 (Abbott ID NOW)
| STD Order Set (R)
|
+ GLUCOSE (R) Diabetes/Lipid Order Set (R)
| CBC W/AUTO DIFF
| HGB Alc(R)
| RPR with Reflex(R) AEROBIC CULTURE OIT
| HCG (R)
1 Ammonia Glucose (Ser.Plas.bLD)
| BMP (R)
| CMP (R)
| CRP Other Laboratory Tests...
| Lipase
+ LIPID PANEL (R) General Sendout
| Ferritin PKU State Lab
| PSA SERUM (R)

+ + Next Screen - Prev Screen ?? More Actions
Add ... Edit ... Assign to User(s) Select New Menu
Remove ... Toggle Display Order Dialogs ...
Select Action: Next Screen// TOG Toggle Display

Menu Editor Apr 14, 2020 19:52:01 Page: 1 of 3
Menu: LRZM CMBA Lab Orders Column Width: 44
1 2
|
| LRZ COVID-19 ABBOTT ID NOW
|
|
+ LRZ CMBA GLUCOSE (R) ORZ CMBA DM LIPID
| LRZ CMBA CBC (R)
| LRZ CMBA HGB Alc (R)
| LRZ CMBA RPR w/rfx (R) LRZ AEROBIC CULTURE (INHOUSE)
| LRZ CMBA HCG (GIS)
1 LRZ CMBA AMMONIA LRZ GLUCOSE (SER, PLAS, BLD)

```

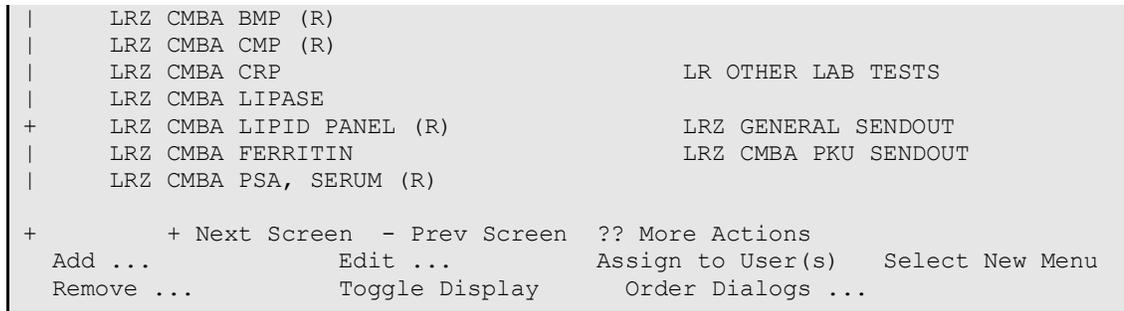


Figure 9-4: Example of adding the Lab Quick Order to EHR Lab Menu

9.5 Review Lab Test Added to ORDER Menu

Figure 9-5 displays an example of an Electronic Health Record Lab MENU.

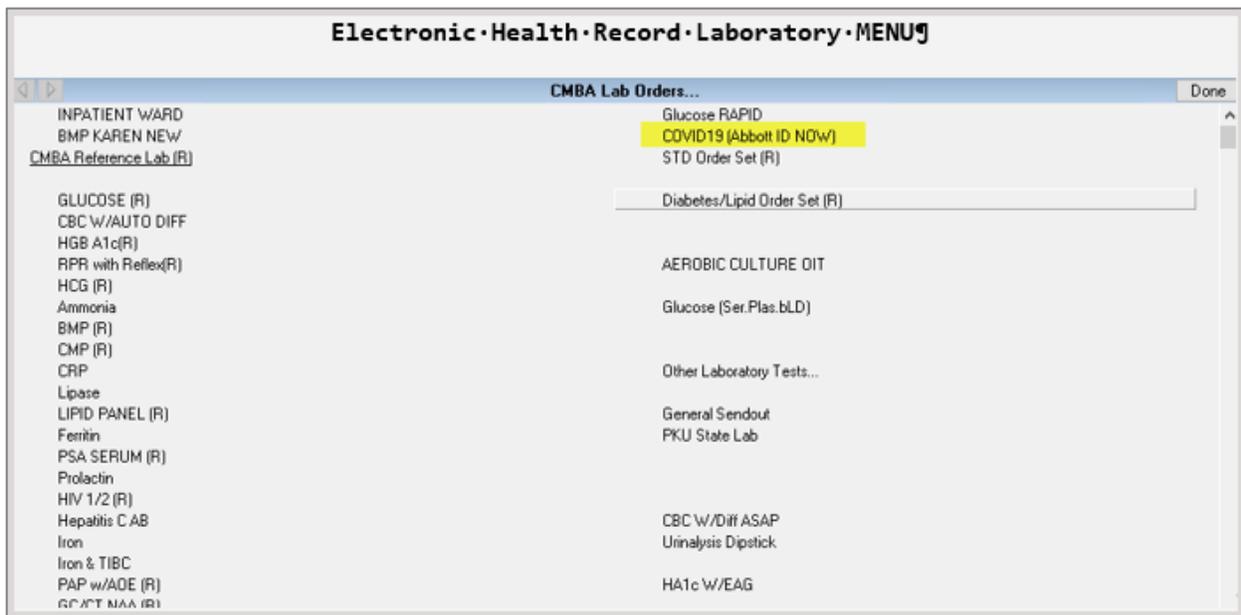


Figure 9-5: Example of Electronic Health Record Lab menu

10.0 EHR POINT OF CARE Lab Entry Button

To allow the **POINT OF CARE** lab test(s) available for the **EHR POC Lab Entry** button, the **POINT OF CARE** lab test(s) is required to be added to the **BLR BEHO POC CONTROL** file within VA FILEMAN.

The **BLR BEHO POC CONTROL NAME** is the **INSTITUTION** name for your facility. When adding the **POINT OF CARE** lab test to the **EHR POC Lab Entry** button for multiple divisions, select the appropriate **BLR BEHO POC CONTROL NAME (INSTITUTION)** and add the **POINT OF CARE** lab test as needed.

After adding the **POINT OF CARE** lab test(s) to the **BLR BEHO POC CONTROL NAME**, process the order on the **EHR POC Lab Entry** Button on the GUI. Then save and review the Laboratory Results on the **EHR LAB** tab.

Important: When adding the **POINT OF CARE** Lab Test(s) to the **EHR POC Lab Entry** button, the Point of Care Test is ready for active ordering and resulting.

10.1 Adding to BLR BEHO POC CONTROL File

Figure 10-1 displays a multi-division example of how to add to the **BLR BEHO POC CONTROL** file.

```

VA FileMan Version 22.0

      Enter or Edit File Entries
      Print File Entries
      Search File Entries
      Modify File Attributes
      Inquire to File Entries

INPUT TO WHAT FILE: V LAB// BLR BEHO POC CONTROL      (5 entries)
EDIT WHICH FIELD: ALL//

Select BLR BEHO POC CONTROL NAME: ?
  Answer with BLR BEHO POC CONTROL NAME
  Choose from:
  DEMO HOSPITAL
  DEMO CLINIC ONE
  DEMO CLINIC TWO
  DEMO CLINIC THREE

      You may enter a new BLR BEHO POC CONTROL, if you wish

Answer with LOCATION NAME
Do you want the entire 8742-Entry LOCATION List?

      You may enter a new LOCATION, if you wish

NAME: DEMO HOSPITAL
ENFORCE RESTRICT TO LOCATION: NO//
ENFORCE RESTRICT TO USER: NO//

```

```
Select LAB TEST: COVID-19 (Abbott ID NOW) Are you adding 'COVID-19
(Abbott ID NOW)' as a new LAB TEST (the 23RD for this BLR BEHO POC
CONTROL)? No// Y (Yes)
  Select RESTRICT TO LOCATION:
  Select RESTRICT TO USER:
Select LAB TEST:
Select AVAILABLE LAB DESCRIPTIONS: PNAR//

Select BLR BEHO POC CONTROL NAME: DEMO CLINIC ONE
ENFORCE RESTRICT TO LOCATION: NO//
ENFORCE RESTRICT TO USER: NO//
Select LAB TEST: COVID-19 (Abbott ID NOW) Are you adding 'COVID-19
(Abbott ID NOW)' as a new LAB TEST (the 23RD for this BLR BEHO POC
CONTROL)? No// Y (Yes)
  Select RESTRICT TO LOCATION:
  Select RESTRICT TO USER:
Select LAB TEST:
Select AVAILABLE LAB DESCRIPTIONS: PNAR//

Select BLR BEHO POC CONTROL NAME: DEMO CLINIC TWO
ENFORCE RESTRICT TO LOCATION: NO//
ENFORCE RESTRICT TO USER: NO//
Select LAB TEST: COVID-19 (Abbott ID NOW) Are you adding 'COVID-19
(Abbott ID NOW)' as a new LAB TEST (the 23RD for this BLR BEHO POC
CONTROL)? No// Y (Yes)
  Select RESTRICT TO LOCATION:
  Select RESTRICT TO USER:
Select LAB TEST:
Select AVAILABLE LAB DESCRIPTIONS: PNAR//
```

Figure 10-1: Adding to BLR BEHO POC CONTROL file – multi-division example

10.2 Using the EHR POC Lab Entry Button

Figure 10-2 displays an example of an Electronic Health Record **POC Lab Entry** button.

The screenshot shows a software interface for entering lab data. At the top, the patient's name 'Demo, Benjamin A SR' and hospital location 'LAB OIT (HOSP)' are displayed. A toolbar contains several icons, with the 'POC Lab Entry' icon highlighted by a green box. Below the toolbar is a form titled 'Lab Point of Care Data Entry Form'. The form includes fields for 'Patient: DEMO, BENJAMIN A SR', 'Hospital Location: LAB OIT (HOSP)', 'Ordering Provider', 'Test', 'Collection Date and Time' (set to 04/14/2020 09:09 PM), and 'Sign or Symptom'. There is also a text area for 'Comment/Lab Description' and an 'Add Canned Comment' button. At the bottom of the form is a table labeled 'TEST RESULTS' with columns for 'Test Name', 'Result', 'Result Range', and 'Units'. 'Save' and 'Cancel' buttons are located at the bottom right of the form.

Figure 10-2: Example of Electronic Health Record POC Lab Entry button

10.3 Resulting the Point of Care Lab Test

Figure 10-3 displays as example of RESULTING the POINT OF CARE.

Electronic Health Record POC Lab Entry Button

Lab Point of Care Data Entry Form

Patient: DEMO.BENJAMIN A SR Hospital Location: LAB OIT (HOSP)

Ordering Provider: [Dropdown] Nature of Order/Change: POLICY [Dropdown]

Test: COVID-19 (Abbott ID NOW) [Dropdown] Sample Type: SWAB-COVID19

Collection Date and Time: 04/14/2020 09:09 PM [Dropdown] Sign or Symptom: Pulmonary hypertension | I27.20 [Dropdown]

Comment/Lab Description: [Text Area] Add Canned Comment

TEST RESULTS				
Test Name	Result	Result Range	Units	
_COVID-19 (Abbott ID NOW)	COVID-19 POSITIVE A	Negative		
_PROCEDURAL CONTROL	Valid	N/A		

Save Cancel

Figure 10-3: Example of RESULTING the POINT OF CARE

10.4 Review the Point of Care Lab Results

Figure 10-4 displays an example of EHR POINT OF CARE results.

Electronic Health Record POC Lab results

Most Recent

Oldest Previous Next Newest [Ed] [i]

Most Recent Lab Results
Collected Apr 14, 2020 21:09

Test	Result	Flag	Units	Ref Range
_COVID-19 (Abbott ID NOW)	COVID-19 POSITIVE	A*		Ref: Negative
_PROCEDURAL CONTROL	Valid			

Specimen: NASOPHARYNGEAL MUCUS; Accession: CH 0414 8; Provider: [Dropdown]

Lab Arrival Date/Time: 04/14/2020 10:15 PM
Report Released Date/Time: 04/14/2020 10:15 PM

COVID RESULT Eval: A Negative Result does not rule out co-infections with other
COVID RESULT Eval: pathogens.

Performing Lab: 2019 DEMO HOSPITAL (INST) 90001 1ST AVE WASHINGTON, NM 87000

Figure 10-4: Example of EHR POINT OF CARE results

11.0 Qualitative Critical Alert Flag – Optional

The **Qualitative Critical Alert** flag was included in Lab Patch LR*5.2*1041. Turning on the Qualitative Critical Alert parameter must be a local decision and be included in local policy pertaining to CRITICAL LABORATORY RESULTS reporting.

11.1 File 60 – Site/Specimen Field

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

Note: 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, the laboratory test named **_COVID-19** (Abbott ID NOW) has the following entries for the **QUALITATIVE VALUES** field: **P, p, POSITIVE, positive**.

Figure 11-1 displays the Qualitative Value entries for **_COVID-19** (Abbott ID NOW).

```
Select SITE/SPECIMEN:   NASOPHARYNGEAL MUCUS
SITE/SPECIMEN: NASOPHARYNGEAL MUCUS//
REFERENCE LOW: "Negative"//
REFERENCE HIGH:
CRITICAL LOW:
CRITICAL HIGH:
INTERPRETATION:
A Negative Result does not rule out co-infections with other pathogens.
  Edit? NO//
UNITS:
TYPE OF DELTA CHECK:
LOINC CODE: 94534-5//
Select SPECIMEN CPT:
Select QUALITATIVE VALUES: positive// ?
  Answer with QUALITATIVE VALUES
  Choose from:
P
POSITIVE
p
positive

      You may enter a new QUALITATIVE VALUES, if you wish
      Answer must be 1-40 characters in length.

Select QUALITATIVE VALUES: positive//
Select SITE/SPECIMEN:
```

Figure 11-1: Qualitative Values entries display

11.2 Qualitative Critical Alert Flag Display

Figure 11-2 displays an example of the **Qualitative Critical Alert** flag when the parameter is turned on.

Note: The A* flag indicates **CRITICAL!**

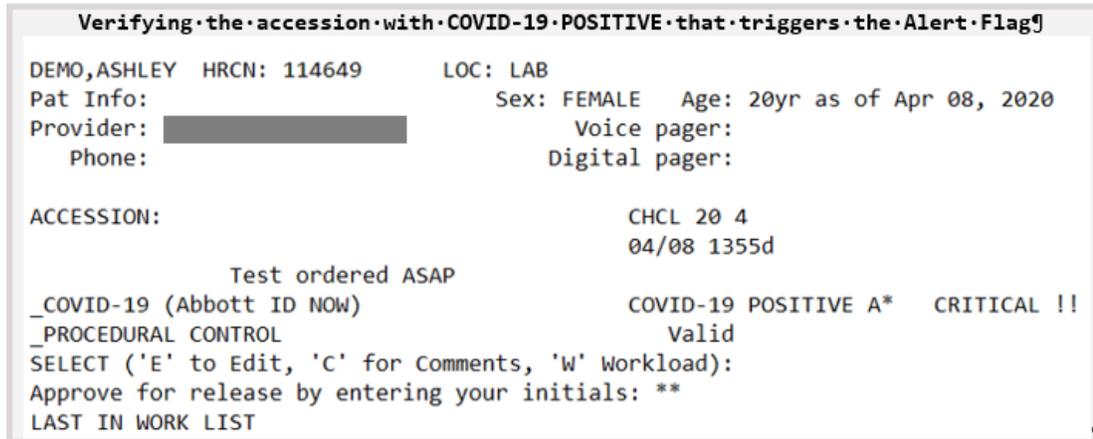


Figure 11-2: Example of Qualitative Critical Alert Flag

11.3 EHR Lab Results – Critical Qualitative Result Flag

Figure 11-3 displays an example of the results of COVID-19 POSITIVE result showing a **Qualitative Critical Alert** flag when the parameter is turned on.

Note: A* flag indicates a Qualitative Critical Alert.

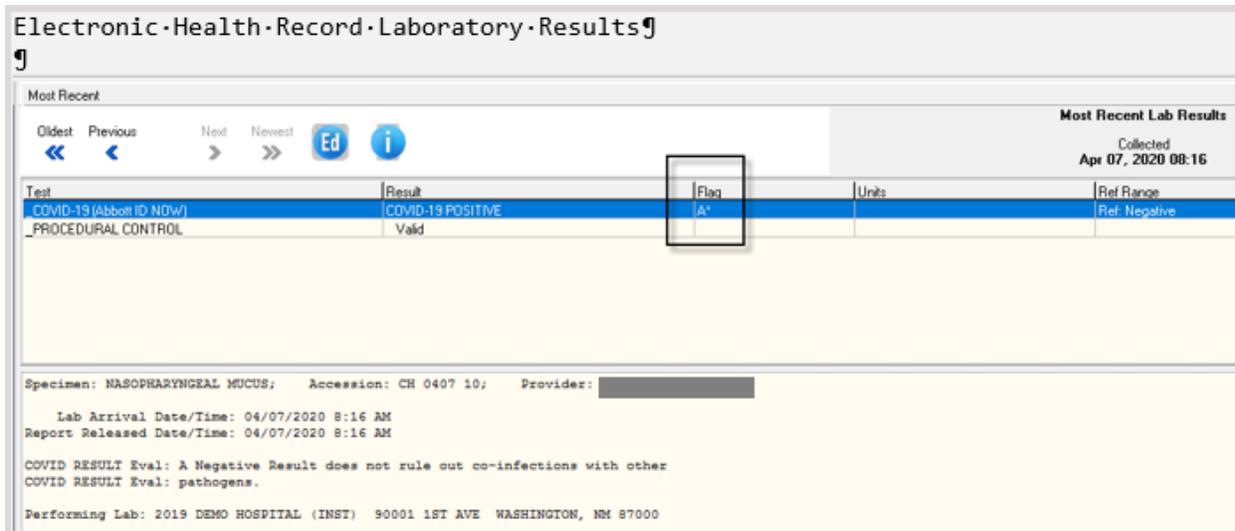


Figure 11-3: Example of Electronic Health Record Lab results

11.4 BLR QUALITATIVE ALERT Parameter Set-up

The **BLR QUALITATIVE ALERT** parameter menu option was added to the **IHS Lab Main Support Menu (BLRMENU)**. To access the **BLR QUALITATIVE ALERT** parameter, the following menu options must be selected:

- LR Laboratory DHCP Menu
- IHS Lab Main Support Menu
- PAMG Edit IHS Lab Parameters and/or Mail Groups
- Edit RPMS Lab Parameters
- Edit BLR QUALITATIVE ALERT parameter

Turning on the **Qualitative Critical Alert** parameter (Figure 11-4) is as follows:

```

LR      Laboratory DHCP Menu ...
        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
CPT     Enter/edit IHS Lab CPT File
STP     Stop/restart Lab to PCC Transaction Processor
PAMG  Edit IHS Lab Parameters and/or Mail Groups ...
LVP     IHS Lab Version & Patch Report
POCA    Edit BLR AGE DETAIL Parameter

Select IHS Lab Main Support Menu Option:

PAMG  Edit IHS Lab Parameters and/or Mail Groups ...

DEMO HOSPITAL
Date:04/13/20                                RPMS Lab                                Time:1:59 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): 1

DEMO HOSPITAL
Date:04/13/20                                RPMS Lab                                Time:1:59 PM
Parameters                                BLRPAMGE
-----
1      Edit BLR CC DATA parameter
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): 7

DEMO HOSPITAL
Date:04/13/20          IHS Laboratory          Time:2:38 PM
                        BLR QUALITATIVE ALERT Parameter      BLREMEREA
Modify Value
-----
BLR QUALITATIVE ALERT (YES/NO)? NO// YES

    BLR QUALITATIVE ALERT Parameter is currently YES

    Press RETURN Key:
```

Figure 11-4: Shorten BLR Menu – Turning on the Qualitative Alert Parameter

12.0 Critical Value Flagged Patient Special Report

The reports for CRITICAL VALUE FLAGGED TESTS can be generated for the “positive” lab tests for the COVID-19 (Abbott ID NOW) when the Qualitative Alert parameter is turned on.

Note: The Critical Value Flagged Tests report can be used for other critical lab results as well.

12.1 Generate Critical Value Flagged Special Report

The menu selection for the **SPECIAL REPORT** for **SEARCHING FOR CRITICAL FLAGS** is available on the **Supervisor** menu. The following menu options must be selected to generate the special report.

- LR Laboratory DHCP Menu
- Supervisor menu
- Supervisor reports
- Search for critical value flagged tests

Figure 12-1 displays how to generate reports for **Critical value flagged tests**.

```

LR      Laboratory DHCP Menu ...
        Supervisor menu ...

PURR    PURGE OLD ORDERS & ACCESSIONS Reports ...
        Add/edit QC name &/or edit test means
        Inquiry to LAB TEST file
        Lab interface menu ...
        Lab liaison menu ...
        Lab statistics menu ...
        Purge old orders & accessions
        Supervisor reports ...

Select Supervisor menu Option: SUPERvisor reports

        Audit of deleted/edited comments
        Changes in verified lab data
        Count accessioned tests
        Search for abnormal and critical flagged tests
        Search for critical value flagged tests
        Search for high/low values of a test
        Summary list (extended supervisors')
        Summary list (supervisors')
        Supervisor's report

Select Supervisor reports Option: SEARCH
        1 Search for abnormal and critical flagged tests
        2 Search for critical value flagged tests
        3 Search for high/low values of a test
CHOOSE 1-3: 2 Search for critical value flagged tests
Date to START with: TODAY// (APR 09, 2020)
Date to END with: T-1// -1 (APR 08, 2020)

```


Appendix A: Laboratory Test Check List

The following is a laboratory test check list:

Step	Description	Complete
1. Know your Institution name. Accession Review	Consider the satellite clinics for the Multi-division facilities See Section 3.2	<input type="checkbox"/>
2. Add Institution and Accession to all lab tests	Add INSTITUTION Add ACCESSION Multi-division, add appropriate Institution and accession See Section 3.3	<input type="checkbox"/>
3. LOINC Codes	Review INQ Inquire into the IHS LAB Transaction Log. See Section 8.2	<input type="checkbox"/>
4. CPT Codes	Review INQ Inquire into the IHS LAB Transaction Log. See Section 8.2	<input type="checkbox"/>
5. Test	Order/Accession/Result and Review lab results See Section 7.0	<input type="checkbox"/>
6. Document	Per local policy, document with laboratory director/medical staff approval deemed ready to go <i>live</i>	<input type="checkbox"/>
7. EHR Lab menu	Create Quick Order Add Quick Order to EHR lab menu See Sections 9.1 and 9.4	<input type="checkbox"/>
8. EHR POC button	OPTIONAL: Add Point of Care lab test to the BLR BEHO POC CONTROL file See Section 10.1	<input type="checkbox"/>

Appendix B: Rules of Behavior

The Resource and Patient Management (RPMS) system is a United States Department of Health and Human Services (HHS), Indian Health Service (IHS) information system that is **FOR OFFICIAL USE ONLY**. The RPMS system is subject to monitoring; therefore, no expectation of privacy shall be assumed. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

All users (Contractors and IHS Employees) of RPMS will be provided a copy of the Rules of Behavior (ROB) and must acknowledge that they have received and read them prior to being granted access to a RPMS system, in accordance IHS policy.

- For a listing of general ROB for all users, see the most recent edition of *IHS General User Security Handbook* (SOP 06-11a).
- For a listing of system administrators/managers rules, see the most recent edition of the *IHS Technical and Managerial Handbook* (SOP 06-11b).

Both documents are available at this IHS Web site:

<https://home.ihs.gov/security/index.cfm>.

<p>Note: Users must be logged on to the IHS D1 Intranet to access these documents.</p>

The ROB listed in the following sections are specific to RPMS.

B.1 All RPMS Users

In addition to these rules, each application may include additional ROB that may be defined within the documentation of that application (e.g., Dental, Pharmacy).

B.1.1 Access

RPMS users shall

- Only use data for which you have been granted authorization.
- Only give information to personnel who have access authority and have a need to know.
- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer before providing any type of information system access, sensitive information, or nonpublic agency information.
- Be aware that personal use of information resources is authorized on a limited basis within the provisions *Indian Health Manual* Part 8, "Information Resources Management," Chapter 6, "Limited Personal Use of Information Technology Resources."

RPMS users shall not

- Retrieve information for someone who does not have authority to access the information.
- Access, research, or change any user account, file, directory, table, or record not required to perform their *official* duties.
- Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.
- Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their jobs or by divulging information to anyone not authorized to know that information.

B.1.2 Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

RPMS users shall

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users may be afforded additional privileges based on the functions they perform, such as system administrator or application administrator.
- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.

B.1.3 Accountability

RPMS users shall

- Behave in an ethical, technically proficient, informed, and trustworthy manner.
- Log out of the system whenever they leave the vicinity of their personal computers (PCs).
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO)
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.

- Abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior, and information technology (IT) information processes.

B.1.4 Confidentiality

RPMS users shall

- Be aware of the sensitivity of electronic and hard copy information and protect it accordingly.
- Store hard copy reports/storage media containing confidential information in a locked room or cabinet.
- Erase sensitive data on storage media prior to reusing or disposing of the media.
- Protect all RPMS terminals from public viewing at all times.
- Abide by all Health Insurance Portability and Accountability Act (HIPAA) regulations to ensure patient confidentiality.

RPMS users shall not

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.
- Store sensitive files on a portable device or media without encrypting.

B.1.5 Integrity

RPMS users shall

- Protect their systems against viruses and similar malicious programs.
- Observe all software license agreements.
- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.
- Comply with all copyright regulations and license agreements associated with RPMS software.

RPMS users shall not

- Violate federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware, or public domain software on/with the system without their manager's written permission and without scanning it for viruses first.

B.1.6 System Logon

RPMS users shall

- Have a unique User Identification/Account name and password.
- Be granted access based on authenticating the account name and password entered.
- Be locked out of an account after five successive failed login attempts within a specified time period (e.g., one hour).

B.1.7 Passwords

RPMS users shall

- Change passwords a minimum of every 90 days.
- Create passwords with a minimum of eight characters.
- If the system allows, use a combination of alpha-numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.
- Change vendor-supplied passwords immediately.
- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts or batch files).
- Change passwords immediately if password has been seen, guessed, or otherwise compromised, and report the compromise or suspected compromise to their ISSO.
- Keep user identifications (IDs) and passwords confidential.

RPMS users shall not

- Use common words found in any dictionary as a password.
- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).
- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.
- Reuse passwords. A new password must contain no more than five characters per eight characters from the previous password.
- Post passwords.
- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.

- Give a password out over the phone.

B.1.8 Backups

RPMS users shall

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.
- Make backups of systems and files on a regular, defined basis.
- If possible, store backups away from the system in a secure environment.

B.1.9 Reporting

RPMS users shall

- Contact and inform their ISSO that they have identified an IT security incident and begin the reporting process by providing an IT Incident Reporting Form regarding this incident.
- Report security incidents as detailed in the *IHS Incident Handling Guide* (SOP 05-03).

RPMS users shall not

- Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

B.1.10 Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 minutes of inactivity.

RPMS users shall

- Utilize a screen saver with password protection set to suspend operations at no greater than 10 minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on the screen after some period of inactivity.

B.1.11 Hardware

RPMS users shall

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).
- Keep an inventory of all system equipment.

- Keep records of maintenance/repairs performed on system equipment.

RPMS users shall not

- Eat or drink near system equipment.

B.1.12 Awareness

RPMS users shall

- Participate in organization-wide security training as required.
- Read and adhere to security information pertaining to system hardware and software.
- Take the annual information security awareness.
- Read all applicable RPMS manuals for the applications used in their jobs.

B.1.13 Remote Access

Each subscriber organization establishes its own policies for determining which employees may work at home or in other remote workplace locations. Any remote work arrangement should include policies that

- Are in writing.
- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.
- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.
- Ensure adequate storage of files, removal, and nonrecovery of temporary files created in processing sensitive data, virus protection, and intrusion detection, and provide physical security for government equipment and sensitive data.
- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote RPMS users shall

- Remotely access RPMS through a virtual private network (VPN) whenever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures.

Remote RPMS users shall not

- Disable any encryption established for network, internet, and Web browser communications.

B.2 RPMS Developers

RPMS developers shall

- Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.
- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.
- Only access information or code within the namespaces for which they have been assigned as part of their duties.
- Remember that all RPMS code is the property of the U.S. Government, not the developer.
- Not access live production systems without obtaining appropriate written access and shall only retain that access for the shortest period possible to accomplish the task that requires the access.
- Observe separation of duties policies and procedures to the fullest extent possible.
- Document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change, and reason for the change.
- Use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.
- Follow industry best standards for systems they are assigned to develop or maintain and abide by all Department and Agency policies and procedures.
- Document and implement security processes whenever available.

RPMS developers shall not

- Write any code that adversely impacts RPMS, such as backdoor access, "Easter eggs," time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

B.3 Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators, have added responsibilities to ensure the secure operation of RPMS.

Privileged RPMS users shall

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.
- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.
- Advise the system owner on matters concerning information technology security.
- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.
- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.
- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need-to-know basis.
- Verify that users have received appropriate security training before allowing access to RPMS.
- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.
- Document and investigate known or suspected security incidents or violations and report them to the ISSO, Chief Information Security Officer (CISO), and systems owner.
- Protect the supervisor, superuser, or system administrator passwords.
- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).
- Watch for unscheduled, unusual, and unauthorized programs.
- Help train system users on the appropriate use and security of the system.
- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.
- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.
- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords and delete or reassign related active and backup files.

- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.
- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.
- Shall follow industry best standards for systems they are assigned to, and abide by all Department and Agency policies and procedures.

Privileged RPMS users shall not

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

Acronym List

Acronym	Term Meaning
CAC	Clinical Application Coordinator
CISO	Chief Information Security Officer
CPT	Current Procedural Terminology
EHR	Electronic Health Record
GUI	Graphical User Interface
HCPCS	Healthcare Common Procedure Coding System
HIPAA	Health Insurance Portability and Accountability Act
IHS	Indian Health Service
ISSO	Information System Security Officer
PCC	Patient Care Component
POC	Point of Care
ROB	Rules of Behavior
RPMS	Resource and Patient Management System
VPN	Virtual Private Network

Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

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