RESOURCE AND PATIENT MANAGEMENT SYSTEM

Laboratory Reference

(LR)

Addendum to User Manual

Version 5.2 Patch 1052
May 2023

Office of Information Technology
Division of Information Resource Management

Table of Contents

1.0 Introduction

This document lists various additions/changes to the RPMS Lab package that were brought about by IHS Lab Patch LR*5.2*1052.

This guide provides IHS Laboratorians with descriptions of the changes and/or enhancements and other information

2.0 LOINC Updates

2.1 VA VistA LOINC Version 2.72 Update

IHS RPMS Lab Patch LR*5.2*1052 brings in one (1) VA VistA Lab Patch that will update the LOINC files to LOINC Version 2.72.

2.1.1 VA VistA LOINC Patch LR*5.2*556

Laboratory Logical Observation Identifiers Names and Codes (LOINC) are intended to incorporate efficiencies in the Department of Veterans to the LOINC in use. The LAB LOINC file (#95.3) currently contains LOINC version 2.69 which was released in 2021. The goal of this patch is to update the LAB LOINC file (#95.3) and related files to version 2.72. Please note that this patch cumulates version 2.71 and version 2.72

Files Updated in this patch:

95.3	LAB LOINC
95.31	LAB LOINC COMPONENT
64	WKLD CODE
64.061	LAB ELECTRONIC CODES
64.2	WKLD SUFFIX CODES

2.2 Monkeypox LOINC

The Monkeypox LOINCs are not incorporated in VA VistA LOINC patch LR*5.2*556, nor in LOINC 2.72, but are included in LOINC Version 2.73. Those LOINCs were extracted from the LOINC Version 2.73 file and will be incorporated into RPMS during the post-install phase of the LR*5.2*1052 RPMS Lab Patch.

The Monkeypox LOINC are:

Table 2-1: Monkeypox LOINC

LOINC	Component	Shortname
100383-9	Monkeypox virus DNA	MVPX DNA Spec Ql NAA+probe
100888-7	West African monkeypox virus DNA	WA MVPX DNA Spec Ql NAA+probe
100889-5	Congo Basin monkeypox virus DNA	CB MVPX DNA Spec Ql NAA+probe
100890-3	Poxvirus DNA panel	Poxvirus DNA panel Patient

The files updated to include the Monkyepox LOINC are:

95.3	LAB LOINC
95.31	LAB LOINC COMPONENT
64	WKLD CODE
64.061	LAB ELECTRONIC CODES
64.2	WKLD SUFFIX CODES

3.0 Estimated Glomerular Filtration Rate

3.1 2021 CKD-EPI eGFR

The National Kidney Foundation's latest recommended eGFR is the 2021 CKD-EPI eGFR. The algorithm no longer incorporates race as a parameter. It is described as:

eGFRcr= 142 x min(Scr/κ, 1)α x max(Scr/κ, 1)-1.200 x 0.9938Agex 1.012 [if female] where

Scr = standardized serum creatinine in mg/dL

κ = 0.7 (females) or 0.9 (males)

α = -0.241 (female) or -0.302 (male)

min(Scr/κ, 1) is the minimum of Scr/κ or 1.0

max(Scr/κ, 1) is the maximum of Scr/κ or 1.0

Age (years)

Figure 3-1: 2021 CKD-EPI eGFR equation

3.1.1 Delta Check Routine

The BLREXEC5 routine is called by the new delta check and it actually performs the CKD-EPI eGFR calculation.

3.1.2 Delta Check Creation Option

The new BLR CKD-EPI (2021) Create option allows the user with the LRSUPER Security Key the ability to create the CKD-EPI Creatinine Equation (2021) Delta Check. The new option with the GFRC synonym will be added to the BLRMENU during the post-install phase of the patch.

3.2 2021 CKD-EPI eGFR Set Up

The **2021 CKD-EPI** Laboratory Test was included in this LR*5.2*1052 RPMS Lab Patch.

This section provides instructions for setting up the 2021 CKD-EPI eGFR.

Items to set up the 2021 CKD-EPI eGFR:

- Review & update lab test **2021 CKD-EPI**.

- Create a new lab test **CREATININE**.
- Create a new **Delta Check**.
- Add the new **Delta Check** to the new **CREATININE** lab test.
- Test the new 2021 CKD-EPI eGFR.

3.2.1 Review & Update the 2021 CKD-EPI Laboratory Test.

The first task is to review the Laboratory Test that was included in this LR*5.2*1052 RPMS Lab Patch, and add the Institution & Accession Area, Collection Sample, and Site Notes.

Review and update the 2021 CKD-EPI Laboratory Test:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the lab test named: **2021 CKD-EPI**
4. **Review** the Laboratory Test.
5. **Add INSTITUTION** and **ACCESSION**
6. Review the SERUM Site/Specimen, and the reference low, units & LOINC code 98979-8 that were included.

> **Note**: It is optional to add Plasma or/and Blood & add reference low, units, LOINC 98979-8.

7. **Add** the **COLLECTION SAMPLE(S)** to match Serum, Plasma, and/or Blood site/specimens.
8. Add SITE/NOTES with your updates.
9. See the example below:

```
           VA FileMan Version 22.0

          Enter or Edit File Entries
          Print File Entries
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...

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

```
INPUT TO WHAT FILE: AUTO INSTRUMENT// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: 2021 CKD-EPI
NAME: 2021 CKD-EPI//
TEST COST:
Select SYNONYM:
TYPE: BOTH//
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: 2021 CKD-EPI//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: SERUM//
  SITE/SPECIMEN: SERUM//
  REFERENCE LOW: 60//
  REFERENCE HIGH:
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS: mL/min//
  TYPE OF DELTA CHECK:
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 98979-8//
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN:
GENERAL PROCESSING INST.:
  No existing text
  Edit? NO//
Select LAB TEST:
```

```
Select COLLECTION SAMPLE: SERUM (SST)
GENERAL WARD INSTRUCTIONS:
  No existing text
  Edit? NO//
REQUIRED COMMENT:
DATA NAME: 2021 CKD-EPI//
CULTURE ID PREFIX:
Select VERIFY WKLD CODE:
Select ACCESSION WKLD CODE:
*ASK AMIS/CAP CODES:
COMBINE TEST DURING ORDER:
CIS TEST CODE:
Select SITE NOTES DATE: FEB 16,2023//
  SITE NOTES DATE: FEB 16,2023//
  TEXT:
Created by LR*5.2*1052 Post-Install.
    Edit? NO//
DEFAULT SITE/SPECIMEN CPT:
HCPCS CODE:
AMA COMPLIANT/BILLABLE PANEL:
IHS PCC DISPLAY FLAG:
IHS LOINC: 98979//
IHS SEX RESTRICTION:
```

Figure 3-2: 2021 CKD-EPI Laboratory Test file

3.2.2 Create a new CREATININE Laboratory Test for 2021 CKD-EPI eGFR

We are recommending creating a new Creatinine Laboratory Test and creating a new Delta Check for the new 2021 CKD-EPI eGFR. It is not recommended to add the new Delta Check to the current Creatinine Laboratory Test.

Steps to create a new Creatinine Laboratory Test:

Create a new DATA NAME.

Create a new lab test for Creatinine.

Create a new DATA NAME:

1. Access the Laboratory Menu.
2. Access the Supervisor Menu.
3. Access the Lab Liaison Menu.
4. Select the ADD A NEW DATA NAME option.
5. Create the Data Name: **CREATININE 2021**.
6. See the example below:

```
   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 ...
          Add a new WKLD code to file
          AP Microfiche Archive
          Archiving Menu ...
          Check files for inconsistencies
          Check patient and lab data cross pointers
          Download Format for Intermec Printer
          Edit atomic tests
          Edit cosmic tests
          File list for lab
          LAB ROUTINE INTEGRITY MENU ...
          Lab Tests and CPT Report
          LIM workload menu ...
          Manually compile WKLD and workload counts
          OE/RR interface parameters ...
          Outline for one or more files

Select Lab liaison menu Option: ADD
    1    Add a new data name
    2    Add a new internal name for an antibiotic
    3    Add a new WKLD code to file
CHOOSE 1-3: 1  Add a new data name

This option will add a new data name to the lab package.

DATA NAME: CREATININE 2021
ARE YOU ADDING CREATININE 2021 (SUBFIELD # 2907679)
     AS A NEW DATA NAME? No// Y  (Yes)
Enter data type for test: (N)umeric, (S)et of Codes, or (F)ree text? N
Minimum value: : 0
Maximum value: : 1// 75
Decimal value: : 1// 1

You must now add a new test in the LABORATORY TEST file and use
CREATININE 2021 as the entry for the DATA NAME field.
```

Figure 3-3: Data Name Created

Create a new Laboratory Test for Creatinine 2021:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the LABORATORY TEST file.
4. Create a new lab test: **CREATININE 2021**.
5. Add CH for Subscript; add Highest Urgency, add Print Name;
6. Add Data Name: **CREATININE 2021**.
7. Add INSTITUTION and ACCESSION
8. Add SITE/SPECIMEN(S) – reference ranges, units & **LOINC: 2160**-0.

9. Add COLLECTION SAMPLE(S) to match the Site/Specimen(s).
10. Add SITE/NOTES with your updates.
11. See the example below:

```
           VA FileMan Version 22.0

          Enter or Edit File Entries
          Print File Entries
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...

Select VA FileMan Option: ENter or Edit File Entries


INPUT TO WHAT FILE: V LAB// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: CREATININE 2021
  Are you adding 'CREATININE 2021' as a new LABORATORY TEST (the 3526TH)? No// Y
(Yes)
   LABORATORY TEST LABTEST IEN: 2001634//
   LABORATORY TEST SUBSCRIPT: CH  CHEM, HEM, TOX, SER, RIA, ETC.
   LABORATORY TEST HIGHEST URGENCY ALLOWED: ASAP
   LABORATORY TEST PRINT NAME: CREAT 2021
   LABORATORY TEST DATA NAME: CREATININE 2021
TEST COST:
Select SYNONYM:
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION:  DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ASAP
FORCED URGENCY:
PRINT NAME: CREAT 2021
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
```

```
Select SITE/SPECIMEN: SERUM       119364003
Are you adding 'SERUM' as a new SITE/SPECIMEN (the 1ST for this LABORATORY
TEST)?No// Y  (Yes)
  REFERENCE LOW: 0.6
  REFERENCE HIGH: 10
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS: mg/dL
  TYPE OF DELTA CHECK:
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 2061
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN:
GENERAL PROCESSING INST.:
  No existing text
  Edit? NO//
Select LAB TEST:
Select COLLECTION SAMPLE: SERUM (SST)
GENERAL WARD INSTRUCTIONS:
  No existing text
  Edit? NO//
REQUIRED COMMENT:
DATA NAME: CREATININE 2021//
CULTURE ID PREFIX:
Select VERIFY WKLD CODE:
Select ACCESSION WKLD CODE:
*ASK AMIS/CAP CODES:
COMBINE TEST DURING ORDER:
CIS TEST CODE:
Select SITE NOTES DATE:
DEFAULT SITE/SPECIMEN CPT:
HCPCS CODE:
AMA COMPLIANT/BILLABLE PANEL:
IHS PCC DISPLAY FLAG:
IHS LOINC: 2160
IHS SEX RESTRICTION:
```

Figure 3-4: Creatinine 2021 Laboratory Test Created

3.2.3 Create a new Delta Check for 2021 CKD-EPI eGFR

The new BLR CKD-EPI (2021) Create option allows the user with the LRSUPER Security Key the ability to create the CKD-EPI Creatinine Equation (2021) Delta Check. The new option with the GFRC synonym will be added to the BLRMENU during the post-install phase of the patch.

> **Note**: If using multiple Sites/Specimens for the 2021 CKD-EPI and CREATININE 2021 Laboratory Tests, create the Delta Check Individually per Site/Specimen. Name the new Delta Checks to include the Site/Specimen; for example, CKD-EPI 2021 SERUM, CKD-EPI 2021 PLASMA, and CKD-EPI 2021 BLOOD.

Steps to create a new Delta Check for 2021 CKD-EPI eGFR:

1. Access the Laboratory Menu.
2. Access the **BLR** IHS Lab Main Support Menu.
3. Select the **Create 2021 CKD-EPI eGFR Delta Check** Option.
4. See the example below:

```
  BLR  IHS Lab Main Support Menu

   LS     Link Transaction Processor Status
   INQ    Inquire into the IHS LAB Transaction Log
   PC41   Will restart the label routine if turned off.
   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
   EAPE   Edit BLR EMERGENCY ALERT Parameter
   EDCC   BLR CC DATA Parameter Edit
   EMGP   Edit LAB HIGH URGENCY NOTIFICATION Mail Group
   ERRT   Error Trap Reporting
   ETP    LA7 Message Queue Error Messages to Purgeable
   GFRC   Create 2021 CKD-EPI eGFR Delta Check
   GFRT   Test CKD-EPI Equation Logic
   IHSM   RPMS 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


Select IHS Lab Main Support Menu <TEST ACCOUNT> Option: CREATE
    1    Create 2021 CKD-EPI eGFR Delta Check
    2    Create Bedside Schwartz eGFR Delta Check
    3    Create Creatinine Clearance Delta Check
CHOOSE 1-3: 1  Create 2021 CKD-EPI eGFR Delta Check
```

Figure 3-5: Shorten BLR Menu – Select GFRC Option

Steps to create a new Delta Check for 2021 CKD-EPI eGFR continued:

5. Add the lab test named: **2021 CKD-EPI**

6. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                          Time:8:09 AM
NEWDELTA              2021 CKD-EPI Delta Check Creation               BLREXEC5
------------------------------------------------------------------------------

Test to hold 2021 CKD-EPI Results: 2021 CKD-EPI
```

Figure 3-6: Add the 2021 CKD-EPI Laboratory Test

7. Add the site/specimen for 2021 CKD-EPI lab test: **SERUM**

> **Note**: This Option allows only one site/specimen entry.

8. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                 Time:8:26 AM
NEWDELTA              2021 CKD-EPI Delta Check Creation       BLREXEC5
------------------------------------------------------------------------

SITE/SPECIMEN of 2021 CKD-EPI Test to use for Ref Ranges: SERUM
```

Figure 3-7: Add the SITE/SPECIMEN of 2021 CKD-EPI Laboratory Test

9. Add the lab test named: **CREATININE 2021**

10. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                          Time:8:32 AM
NEWDELTA              2021 CKD-EPI Delta Check Creation               BLREXEC5
------------------------------------------------------------------------------

Creatinine Test to use for 2021 CKD-EPI calculation: CREATININE 2021
```

Figure 3-8: Add the Creatinine 2021 Laboratory Test

11. **Create a name** for the new Delta Check for the 2021 CKD-EPI eGFR.

12. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                          Time:8:35 AM
NEWDELTA              2021 CKD-EPI Delta Check Creation               BLREXEC5
------------------------------------------------------------------------------

Create a name for the Delta Check: CKD-EPI 2021 SERUM
```

Figure 3-9: Create a name for the new Delta Check

3.2.4 Add the DELTA CHECK to the Creatinine Laboratory Test

Steps to add the new CKD-EPI 2021 Delta Check Name to the new Creatinine lab test.

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the LABORATORY TEST file.
4. Access the **CREATININE 2021** Laboratory Test.
5. Return to the **SITE/SPECIMEN** field.
6. Return to the **TYPE OF DELTA CHECK** subfield.
   - Add "CKD-EPI 2021 SERUM"
7. See the example below:

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


INPUT TO WHAT FILE: V LAB// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: CREATININE 2021
NAME: CREATININE 2021//
TEST COST:
Select SYNONYM:
TYPE: BOTH//
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: CREAT 2021//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: SERUM//
  SITE/SPECIMEN: SERUM//
```

```
  REFERENCE LOW: 0.6
  REFERENCE HIGH: 10
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS: mg/dL
  TYPE OF DELTA CHECK: CKD-EPI 2021 SERUM
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 2160
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN: ^
```

Figure 3-10: Add the Delta Check to the Laboratory Test

8. When using multiple Site/Specimens;
9. Add the new Delta Check Name to its respective Site/Specimen.
10. See the CREATININE 2021 & CKD-EPI 2021 Laboratory Tests with multiple site/specimens & collection samples example below:

```
LABTEST IEN: 2001619                    NAME: CREATININE 2021
  TYPE: BOTH
  SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
  LOCATION (DATA NAME): CH;2907750;1    FIELD: DD(63.04,2907750,
  HIGHEST URGENCY ALLOWED: ASAP         REQUIRED TEST: YES
  PRINT NAME: CREAT 2021                PRINT ORDER: 20
  DATA NAME: CREATININE 2021
SITE/SPECIMEN: BLOOD
   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: CKD-EPI 2021 BLOOD
  LOINC CODE: 2160-0
SITE/SPECIMEN: SERUM
   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: CKD-EPI 2021 SERUM
  LOINC CODE: 2160-0
SITE/SPECIMEN: PLASMA                   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: CKD-EPI 2021 PLASMA
  LOINC CODE: 2160-0
COLLECTION SAMPLE: SERUM (SST)
  CONTAINER (c): SST(GEL)
COLLECTION SAMPLE: PLASMA (PST)
  CONTAINER (c): PST/GRN GEL
COLLECTION SAMPLE: BLOOD (SST)
```

```
  CONTAINER (c): SST
INSTITUTION: DEMO HOSPITAL              ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: MAY 8, 2023
NOTE:   CREATED NEW LAB TEST TO TEST LR1052.
  INPUT TRANSFORM (c): S Q9="0,50,1" D ^LRNUM
  DATA TYPE (c): NUMERIC

LABTEST IEN: 2001633                    NAME: 2021 CKD-EPI
  TYPE: BOTH
  SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
  LOCATION (DATA NAME): CH;2907756;1    FIELD: DD(63.04,2907756,
  HIGHEST URGENCY ALLOWED: ASAP         REQUIRED TEST: YES
  PRINT NAME: 2021 CKD-EPI              DATA NAME: 2021 CKD-EPI
SITE/SPECIMEN: BLOOD                    REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 98979-8
SITE/SPECIMEN: SERUM                    REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 98979-8
SITE/SPECIMEN: PLASMA                   REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 98979-8
COLLECTION SAMPLE: SERUM (SST)
  CONTAINER (c): SST(GEL)
COLLECTION SAMPLE: PLASMA (PST)
  CONTAINER (c): PST/GRN GEL
COLLECTION SAMPLE: BLOOD (SST)
  CONTAINER (c): SST
INSTITUTION: DEMO HOSPITAL              ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: FEB 08, 2023
 NOTE:   Created by LR*5.2*1052 Post-Install.
  IHS LOINC: 98979
  INPUT TRANSFORM (c): K:$L(X)>20!($L(X)<1) X
  DATA TYPE (c): FREE TEXT
```

Figure 3-11: Creatinine 2021 & 2021 CKD-EPI Laboratory Tests

3.2.5 Test the CREATININE 2021 and 2021 CKD-EPI eGFR.

Order and result the CREATININE 2021 Laboratory Test with the 2021 CKD-EPI eGFR.

1. OPTIONAL, create a Panel/Cosmic Test that includes both Laboratory Tests.
2. Order and result the Cosmic Test or the CREATININE 2021 Atomic Test.
3. See the results on the Interim Report below:

```
                        DR SMITH LABORATORY DIRECTOR
                    801 THOMPSON AVE, ROCKVILLE MD 20852

DEMO,PATIENT                                    Date/Time Printed: 05/09/23@17:33
     HRCN:114649    SEX:F  DOB:Feb 25, 2000                    LOC:LAB
Accession [UID]: CH 23 43 [1023000043]
     Provider: RADON,NICHOLAS M JR         Lab Arrival Date/Time:05/09/23@17:32
     Specimen:SERUM                       Spec Collect Date/Time:05/09/23@17:32
                         Res
Test name         Result Flg units         Ref.   range     Site  Result Dt/Time
2021 CKD-EPI        5.12  L  mL/min        Ref: >60        [2906] 05/09/23@17:33
CREATININE 2021     10.0     mg/dL         0.6 - 10        [2906] 05/09/23@17:33
```

```
================================================================================
KEY: A=Abnormal   L=Abnormal Low   H=Abnormal High   *=Critical   TR=Therapeutic
[2906]  DEMO HOSPITAL    90001 1ST AVE   WASHINGTON, NM 87000

DEMO,PATIENT                              HRCN:114649          5/9/2023
```

Figure 3-12: Interim Report Example

1. Reivew the CPT, LOINC, RESULTS, UNITS, and FLAGS by:
2. Access the BLR menu.
3. Select the IHS LAB TRANSATION LOG SEQUENCE NUMBER option.
4. Type the full accession number, for this example: **CH 23 43**.
5. Select each Transaction to review the data per Laboratory Test.
6. See the example below:

```
Select IHS Lab Main Support Menu Option: INQ   Inquire into the IHS LAB Transaction
Log

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: CH 23 43
     1   CH 23 43  2016
     2   CH 23 43  2017
     3   CH 23 43  2018
CHOOSE 1-3:


IHS LAB TRANSACTION LOG LIST                    MAY  9,2023  17:44    PAGE 1
--------------------------------------------------------------------------------
SEQUENCE NUMBER: 2016                    LRFILE: 2
  PATIENT POINTER VALUE: 5920
  PANEL/TEST POINTER: CREATININE/EGFR (2021) PANEL
  LAB MODULE: GENERAL                    DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT              STATUS FLAG: RESULTED
  ENTRY DATE/TIME: MAY 09, 2023@17:32:51
  ASSOCIATED V FILE: V LAB               IEN OF V FILE ENTRY: 4295726
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  CPT LAB CODE POINTER: CREATININE/EGFR 2021
  BILLING CPT STRING: 82565|||||         CLINICAL INDICATOR: 202356017
  ORDER DATE: MAY 09, 2023@17:32:48      ORDER SEQUENCE NUMBER: 3
  ORDER NUMBER: 1336
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@17:32:48
  ACCESSION NUMBER: CH 23 43             COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@17:33:03   LOINC CODE: 45066
  PROVIDER NARRATIVE: Chart evaluation by healthcare professional
  SNOMED: 202356017                      ICD: Z02.9

SEQUENCE NUMBER: 2017                    LRFILE: 2
  PATIENT POINTER VALUE: 5920
  PANEL/TEST POINTER: CREATININE 2021
  LAB MODULE: GENERAL                    DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT              PARENT POINTER: 2016
```

```
  STATUS FLAG: RESULTED                  ENTRY DATE/TIME: MAY 09, 2023@17:32:51
  ASSOCIATED V FILE: V LAB               IEN OF V FILE ENTRY: 4295727
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  ORDER DATE: MAY 09, 2023@17:32:48      ORDER SEQUENCE NUMBER: 3
  ORDER NUMBER: 1336
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@17:32:48
  ACCESSION NUMBER: CH 23 43             COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@17:33:03   LOINC CODE: 2160
  RESULT: 10                             UNITS: mg/dL
  SITE/SPECIMEN POINTER: SERUM           VERIFIER POINTER: DEMO, LAB TECH
  REFERENCE LOW: .6                      REFERENCE HIGH: 10

SEQUENCE NUMBER: 2018                    LRFILE: 2
  PATIENT POINTER VALUE: 5920            PANEL/TEST POINTER: 2021 CKD-EPI
  LAB MODULE: GENERAL                    DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT              PARENT POINTER: 2016
  STATUS FLAG: RESULTED                  ENTRY DATE/TIME: MAY 09, 2023@17:32:51
  ASSOCIATED V FILE: V LAB               IEN OF V FILE ENTRY: 4295728
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  ORDER DATE: MAY 09, 2023@17:32:48      ORDER SEQUENCE NUMBER: 3
  ORDER NUMBER: 1336
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@17:32:48
  ACCESSION NUMBER: CH 23 43             COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@17:33:03   LOINC CODE: 98979
  RESULT: 5.12                           RESULT N/A FLAG: L
  UNITS: mL/min                          SITE/SPECIMEN POINTER: SERUM
  VERIFIER POINTER: DEMO, LAB TECH       REFERENCE LOW: 60
  SITE/SPECIMEN POINTER: SERUM

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER:
```

Figure 3-13: IHS LAB TRANSACTION LOG Example

3.3 "Bedside Schwartz" eGFR For Children < 18 Years Old

The National Kidney Foundation states that the "Bedside Schwartz" eGFR is currently the best method for estimating GFR in children.

It is described as:

```
eGFR = 0.413 x (height/Scr) (height expressed in centimeters)
where
Scr = standardized serum creatinine in mg/dL
```

Figure 3-14: CKD-EPI eGFR Equation

3.3.1 Height Measurement

The height measurement will be retrieved from the V MEASUREMENT (#9000010.01) file.

3.3.1.1 Height Measurement Date

If the latest height measurement for the patient was conducted more than 90 days in the past, it will be regarded as invalid due to the rapidity (approximately 0.54 centimeters a month) with which children grow.

3.3.2 Delta Check Routine

The BLREXEBS routine is called by the new delta check and it actually performs the Bedside Schwartz eGFR calculation.

3.3.3 Delta Check Creation Option

The new BLR Bedside Schwartz eGFR Make option allows the user with the LRSUPER Security Key the ability to create the Bedside Schwartz Delta Check. The new option with the BGFR synonym will be added to the BLRMENU during the post-install phase of the patch.

3.4 BEDSIDE SCHWARTZ eGFR Set Up

The BEDSIDE SCHWARTZ Laboratory Test was included in this LR*5.2*1052 RPMS Lab Patch. This section provides instructions for setting up the Bedside Schwartz eGFR.

Items to set up the Bedside Schwartz eGFR:

- Review & update lab test **BEDSIDE SCHWARTZ**.
- Create a new lab test **CREATININE**.
- Create a new **Delta Check**.
- Add the new **Delta Check** to the new **CREATININE** lab test.
- Test the new Bedside Schwartz eGFR.

3.4.1 Review & Update the Bedside Schwartz Laboratory Test.

The first task is to review the Laboratory Test that was included in this LR*5.2*1052 RPMS Lab Patch, add the Institution & Accession Area, Collection Sample, and Site Notes.

Review and update the Bedside Schwartz Laboratory Test:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the LABORATORY TEST file.

4. **Review** the lab test named: **BEDSIDE SCHWARTZ**
5. **Add INSTITUTION** and **ACCESSION.**
6. **Review** the **SERUM** Site/Specimen, the reference low, units & LOINC code 50384-7 that were included.
7. **Note**: it is optional to add Plasma, or/and Blood & add reference low, units, LOINC 50384-7.
8. **Add** the **COLLECTION SAMPLE(S)** to match Serum, Plasma, and/or Blood site/specimens.
9. Add SITE/NOTES with your updates.
10. See the example below:

```
           VA FileMan Version 22.0

          Enter or Edit File Entries
          Print File Entries
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...

Select VA FileMan Option: ENter or Edit File Entries


INPUT TO WHAT FILE: AUTO INSTRUMENT// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: BEDSIDE SCHWARTZ
NAME: BEDSIDE SCHWARTZ//
TEST COST:
Select SYNONYM:
TYPE: BOTH//
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: BEDSIDE SCHWARTZ//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
```

```
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: SERUM//
  SITE/SPECIMEN: SERUM//
  REFERENCE LOW: 60//
  REFERENCE HIGH:
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS: mL/min//
  TYPE OF DELTA CHECK:
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 50384-7//
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN:
GENERAL PROCESSING INST.:
  No existing text
  Edit? NO//
Select LAB TEST:
Select COLLECTION SAMPLE:
GENERAL WARD INSTRUCTIONS:
  No existing text
  Edit? NO//
REQUIRED COMMENT:
DATA NAME: BEDSIDE SCHWARTZ//
CULTURE ID PREFIX:
Select VERIFY WKLD CODE:
Select ACCESSION WKLD CODE:
*ASK AMIS/CAP CODES:
COMBINE TEST DURING ORDER:
CIS TEST CODE:
Select SITE NOTES DATE: FEB 16,2023//
  SITE NOTES DATE: FEB 16,2023//
  TEXT:
Created by LR*5.2*1052 Post-Install.

    Edit? NO//
DEFAULT SITE/SPECIMEN CPT:
HCPCS CODE:
AMA COMPLIANT/BILLABLE PANEL:
IHS PCC DISPLAY FLAG:
IHS LOINC: 50384//
IHS SEX RESTRICTION:
```

Figure 3-15: Bedside Schwartz Laboratory Test File

3.4.2 Create a new CREATININE Laboratory Test Bedside Schwartz eGFR

We are recommending creating a new Creatinine Laboratory Test and creating a new Delta Check for the new BEDSIDE SCHWARTZ eGFR. It is not recommended to add the new Delta Check to the current Creatinine Laboratory Test.

Steps to create a new Creatinine Laboratory Test:

Create a new DATA NAME.

Create a new lab test for Creatinine.

Create a new DATA NAME:

1. Access the Laboratory Menu.
2. Access the Supervisor Menu.
3. Access the Lab Liaison Menu.
4. Select the ADD A NEW DATA NAME option.
5. Create the Data Name: **CREATININE SCHWARTZ**
6. See the example below:

```
   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 ...
          Add a new WKLD code to file
          AP Microfiche Archive
          Archiving Menu ...
          Check files for inconsistencies
          Check patient and lab data cross pointers
          Download Format for Intermec Printer
          Edit atomic tests
          Edit cosmic tests
          File list for lab
          LAB ROUTINE INTEGRITY MENU ...
          Lab Tests and CPT Report
          LIM workload menu ...
          Manually compile WKLD and workload counts
          OE/RR interface parameters ...
          Outline for one or more files

Select Lab liaison menu Option: ADD
    1    Add a new data name
    2    Add a new internal name for an antibiotic
    3    Add a new WKLD code to file
CHOOSE 1-3: 1  Add a new data name

This option will add a new data name to the lab package.
```

```
DATA NAME: CREATININE SCHWARTZ
ARE YOU ADDING CREATININE SCHWARTZ (SUBFIELD # 2907679)
     AS A NEW DATA NAME? No// Y  (Yes)
Enter data type for test: (N)umeric, (S)et of Codes, or (F)ree text? N
Minimum value: : 0
Maximum value: : 1// 75
Decimal value: : 1// 1

You must now add a new test in the LABORATORY TEST file and use
CREATININE SCHWARTZ the entry for the DATA NAME field.
```

Figure 3-16: Data Name Created

Create a new Laboratory Test for Creatinine Schwartz:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the LABORATORY TEST file.
4. Create a new lab test: **CREATININE SCHWARTZ**.
5. Add CH for Subscript, add Highest Urgency, add Print Name.
6. Add Data Name: **CREATININE SCHWARTZ**.
7. Add INSTITUTION and ACCESSION.
8. Add SITE/SPECIMEN(S) – reference ranges, units & **LOINC: 2160**-0.
9. Add COLLECTION SAMPLE(S) to match the Site/Specimens.
10. Add SITE/NOTES with your updates.
11. See the example below:

```
           VA FileMan Version 22.0

          Enter or Edit File Entries
          Print File Entries
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...

Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: V LAB// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: CREATININE SCHWARTZ
```

```
Are you adding 'CREATININE SCHWARTZ' as a new LABORATORY TEST (the 3526TH)?
No//Y(Yes)
   LABORATORY TEST LABTEST IEN: 2001635//
   LABORATORY TEST SUBSCRIPT: CH  CHEM, HEM, TOX, SER, RIA, ETC.
   LABORATORY TEST HIGHEST URGENCY ALLOWED: ASAP
   LABORATORY TEST PRINT NAME: CREAT SCHWARTZ
   LABORATORY TEST DATA NAME: CREATININE SCHWARTZ
TEST COST:
Select SYNONYM:
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: CREAT SCHWARTZ//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: SERUM//
  SITE/SPECIMEN: SERUM//
  REFERENCE LOW:
  REFERENCE HIGH:
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS:
  TYPE OF DELTA CHECK:
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 2061
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN:
GENERAL PROCESSING INST.:
  No existing text
```

```
  Edit? NO//
Select LAB TEST:
Select COLLECTION SAMPLE:
GENERAL WARD INSTRUCTIONS:
  No existing text
  Edit? NO//
REQUIRED COMMENT:
DATA NAME: CREATININE SCHWARTZ//
CULTURE ID PREFIX:
Select VERIFY WKLD CODE:
Select ACCESSION WKLD CODE:
*ASK AMIS/CAP CODES:
COMBINE TEST DURING ORDER:
CIS TEST CODE:
Select SITE NOTES DATE:
DEFAULT SITE/SPECIMEN CPT:
HCPCS CODE:
AMA COMPLIANT/BILLABLE PANEL:
IHS PCC DISPLAY FLAG:
IHS LOINC: 2160
IHS SEX RESTRICTION:
```

Figure 3-17: Creatinine Schwartz Laboratory Test Created

3.4.3 Create a new Delta Check for Bedside Schwartz

The new BLR Bedside Schwartz eGFR Make option allows the user with the LRSUPER Security Key the ability to create the Bedside Schwartz Delta Check. The new option with the BGFR synonym will be added to the BLRMENU during the post-install phase of the patch.

> **Note**: If using multiple Site/Specimens for BEDSIDE SCHWARTZ and CREATININE SCHWARTZ Laboratory Tests, create the Delta Check individually per Site/Specimen. Name the new Delta Checks to include the Site/Specimen; for example. BEDSIDE SCHWARTZ SERUM, BEDSIDE SCHWARTZ PLASMA, and BEDSIDE SCHWARTZ BLOOD.

Steps to create a new Delta Check for Bedside Schwartz eGFR:

1. Access the Laboratory Menu.
2. Access the **BLR** IHS Lab Main Support Menu.
3. Select the **Create Bedside Schwartz eGFR Delta Check** Option.
4. See the example below:

```
  BLR  IHS Lab Main Support Menu

   LS     Link Transaction Processor Status
   INQ    Inquire into the IHS LAB Transaction Log
```

```
   PC41   Will restart the label routine if turned off.
   FLD    Search Transactions for PCC LINK DISABLE Error
   CPT    Enter/edit IHS Lab CPT File
   FAL    Find ALL PCC Link Errors from Lab
   STP    Stop/restart Lab to PCC Transaction Processor
   BGFR   Create Bedside Schwartz eGFR Delta Check
   BZY    RPMS Taskman Busy Device Rpt
   CACC   IHS Count accessioned tests
   CCCD   Create Creatinine Clearance Delta Check
   CDVC   Edit BLR COLL DT PCC VISIT CREATION Parameter
   CLR    Clear BLR errors from error log
   CUM    IHS CUMULATIVE MENU ...
   DADD   Add Completed Date to Accession Tests
   DCL    DISPLAY BUILDING COLLECTION LIST
   IHSM   RPMS 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


Select IHS Lab Main Support Menu <TEST ACCOUNT> Option: CREATE
    1    Create 2021 CKD-EPI eGFR Delta Check
    2    Create Bedside Schwartz eGFR Delta Check
    3    Create Creatinine Clearance Delta Check
CHOOSE 1-3: 2    Create Bedside Schwartz eGFR Delta Check
```

Figure 3-18: Shorten BLR Menu – Select BGFR Option

Steps to create a new Delta Check for Bedside Schwartz eGFR continued:

5. Add the lab test named: **BEDSIDE SCHWARTZ**
6. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                        Time:6:33 PM
NEWDELTA            Bedside Schwartz Delta Check Creation           BLREXEBS
------------------------------------------------------------------------------

Test to hold Bedside Schwartz Results: BEDSIDE SCHWARTZ
```

Figure 3-19: Add the BEDSIDE SCHARTZ Laboratory Text

7. Add the site/specimen for Bedside Schwartz lab test: **SERUM**

> **Note**: This Option allows only one site/specimen entry.

8. See the example below:

```
                              DEMO HOSPITAL
Date:05/09/23                    IHS LAB                        Time:6:36 PM
NEWDELTA            Bedside Schwartz Delta Check Creation           BLREXEBS
------------------------------------------------------------------------------
```

```
SITE/SPECIMEN of BEDSIDE SCHWARTZ Test to use for Ref Ranges: SERUM
```

Figure 3-20: Add the SITE/SPECIMEN of Bedside Schwartz Laboratory Test

9. Add the lab test named: **CREATININE SCHWARTZ**
10. See the example below:

```
                                DEMO HOSPITAL
Date:05/09/23                      IHS LAB                          Time:6:39 PM
NEWDELTA            Bedside Schwartz Delta Check Creation               BLREXEBS
-------------------------------------------------------------------------------

Creatinine Test to use for Bedside Schwartz calculation: CREATININE SCHWARTZ
```

Figure 3-21: Add the Creatinine Schwartz Laboratory Test

11. **Create a name** for the new Delta Check for the Bedside Schwartz eGFR.
12. See the example below:

```
                                DEMO HOSPITAL
Date:05/09/23                      IHS LAB                          Time:6:41 PM
NEWDELTA            Bedside Schwartz Delta Check Creation               BLREXEBS
-------------------------------------------------------------------------------

Create a name for the Delta Check: BEDSIDE SCHWARTZ SERUM
```

Figure 3-22: Create a Name for the new Delta Check

3.4.4 Add the DELTA CHECK to the Creatinine Laboratory Test

Steps to add the new BEDSIDE SCHWARTZ Delta Check Name to the new Creatinine lab test.

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the LABORATORY TEST file.
4. Access the **CREATININE SCHWARTZ** Laboratory Test.
5. Return to the **SITE/SPECIMEN** field.
6. Return to the **TYPE OF DELTA CHECK** subfield.
   - Add “BEDSIDE SCHWARTZ SERUM”
7. See the example below:

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


INPUT TO WHAT FILE: V LAB// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME: CREATININE SCHWARTZ
NAME: CREATININE SCHWARTZ//
TEST COST:
Select SYNONYM:
TYPE: BOTH//
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2907675;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL
  ACCESSION AREA: CHEMISTRY
UNIQUE ACCESSION #: YES//
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: YES//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: CREAT SCHWARTZ//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: SERUM//
  SITE/SPECIMEN: SERUM//
  REFERENCE LOW: 0.6
  REFERENCE HIGH: 10
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS: mg/dL
  TYPE OF DELTA CHECK:BEDSIDE SCHWARTZ SERUM
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 2160
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN: ^
```

Figure 3-23: Add the Delta Check to the Laboratory Test

8. When using multiple Site/Specimens;
9. Add the new Delta Check name to its respective Site/Specimen.
10. See the CREATININE SCWARTZ & BEDSIDE SCHWARTZ Laboratory Tests with multiple site/specimens & collection samples example below:

```
LABTEST IEN: 2001619                    NAME: CREATININE SCHWARTZ
  TYPE: BOTH
  SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
  LOCATION (DATA NAME): CH;2907750;1    FIELD: DD(63.04,2907750,
  HIGHEST URGENCY ALLOWED: ASAP         REQUIRED TEST: YES
  PRINT NAME: CREAT SCHWARTZ                PRINT ORDER: 20
  DATA NAME: CREATININE SCHWARTZ
SITE/SPECIMEN: BLOOD
   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: BEDSIDE SCHWARTZ BLOOD
  LOINC CODE: 2160-0
SITE/SPECIMEN: SERUM
   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: BEDSIDE SCHWARTZ SERUM
     LOINC CODE: 2160-0
SITE/SPECIMEN: PLASMA                   REFERENCE LOW: 0.6
  REFERENCE HIGH: 10                    UNITS: mg/dL
  TYPE OF DELTA CHECK: BEDSIDE SCHWARTZ PLASMA
  LOINC CODE: 2160-0
COLLECTION SAMPLE: SERUM (SST)
  CONTAINER (c): SST(GEL)
COLLECTION SAMPLE: PLASMA (PST)
  CONTAINER (c): PST/GRN GEL
COLLECTION SAMPLE: BLOOD (SST)
  CONTAINER (c): SST
INSTITUTION: DEMO HOSPITAL              ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: MAY 8, 2023
NOTE:   CREATED NEW LAB TEST TO TEST LR1052.
  INPUT TRANSFORM (c): S Q9="0,50,1" D ^LRNUM
  DATA TYPE (c): NUMERIC

LABTEST IEN: 2001633                    NAME: BEDSIDE SCHWARTZ
  TYPE: BOTH
  SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
  LOCATION (DATA NAME): CH;2907757;1    FIELD: DD(63.04,2907756,
  HIGHEST URGENCY ALLOWED: ASAP         REQUIRED TEST: YES
  PRINT NAME: BEDSIDE SCHWARTZ          DATA NAME: BEDSIDE SCHWARTZ
SITE/SPECIMEN: BLOOD                    REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 50384-7
SITE/SPECIMEN: SERUM                    REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 50384-7
SITE/SPECIMEN: PLASMA                   REFERENCE LOW: 60
  UNITS: mL/min                         LOINC CODE: 50384-7
COLLECTION SAMPLE: SERUM (SST)
  CONTAINER (c): SST(GEL)
```

```
COLLECTION SAMPLE: PLASMA (PST)
  CONTAINER (c): PST/GRN GEL
COLLECTION SAMPLE: BLOOD (SST)
  CONTAINER (c): SST
INSTITUTION: DEMO HOSPITAL              ACCESSION AREA: CHEMISTRY
SITE NOTES DATE: FEB 08, 2023
 NOTE:   Created by LR*5.2*1052 Post-Install.
  IHS LOINC: 50384-7
  INPUT TRANSFORM (c): K:$L(X)>20!($L(X)<1) X
  DATA TYPE (c): FREE TEXT
```

Figure 3-24: Creatinine Schwartz & Bedside Schwartz Laboratory Tests

3.4.5 Test the Creatinine Schwartz and Bedside Schwartz eGFR

Order and result the CREATININE SCHWARTZ Laboratory Test with the Bedside Schwartz eGFR.

1. OPTIONAL, create a Panel/Cosmic Test that includes both Laboratory Tests.
2. Order and result of the Cosmic Test or the CREATININE SCHWARTZ Atomic Test.
3. The Bedside Schwartz eGFR will be calculated if and only if the height & weight was captured during the visit.
4. In the example below, the height & weight was not available for the calculation, therefore, the eGFR result will not display.
5. See the Interim Report below without the Bedside Schwartz result not displaying:

```
                        DR SMITH LABORATORY DIRECTOR
                    801 THOMPSON AVE, ROCKVILLE MD 20852
DEMO,CDSCHILD                                Date/Time Printed: 05/09/23@19:09
     HRCN:999997    SEX:F  DOB:May 22, 2015                     LOC:LAB
Accession [UID]: CH 23 44 [1023000044]
     Provider: RADON,NICHOLAS M JR         Lab Arrival Date/Time:05/09/23@19:08
     Specimen:SERUM                       Spec Collect Date/Time:05/09/23@19:08
                         Res
Test name         Result Flg units         Ref.   range     Site  Result Dt/Time
BEDSIDE SCHWARTZ   Ht.Zero   mL/min        Ref: >60        [2906] 05/09/23@19:08
CREAT SCHWARTZ     10.0   H  mg/dL         0.4 - 1.4       [2906] 05/09/23@19:08
================================================================================
KEY: A=Abnormal   L=Abnormal Low   H=Abnormal High   *=Critical   TR=Therapeutic

[2906] DEMO HOSPITAL        90001 1ST AVE   WASHINGTON, NM 87000
DEMO,CDSCHILD                   HRCN:999997           5/9/2023
```

Figure 3-25: Interim Report without Bedside Schwartz result

6. When the height & weight is available for the calculation, the eGFR result will display, see Interim Report example below:

```
                          DR SMITH LABORATORY DIRECTOR
                      801 THOMPSON AVE, ROCKVILLE MD 20852
DEMO,CDSCHILD                                 Date/Time Printed: 05/09/23@19:09
     HRCN:999997    SEX:F  DOB:May 22, 2015                     LOC:LAB
Accession [UID]: CH 23 44 [1023000044]
     Provider: RADON,NICHOLAS M JR         Lab Arrival Date/Time:05/09/23@19:08
     Specimen:SERUM                       Spec Collect Date/Time:05/09/23@19:08
                          Res
Test name         Result Flg units         Ref.   range     Site  Result Dt/Time
BEDSIDE SCHWARTZ   92.26     mL/min        Ref: >60        [2906] 05/09/23@19:08
CREAT SCHWARTZ     1.0   H   mg/dL         0.4 - 1.4       [2906] 05/09/23@19:08
================================================================================
KEY: A=Abnormal   L=Abnormal Low   H=Abnormal High   *=Critical   TR=Therapeutic

[2906] DEMO HOSPITAL        90001 1ST AVE   WASHINGTON, NM 87000
DEMO,CDSCHILD                   HRCN:999997           5/9/2023
```

Figure 3-26: Interim Report with Bedside Schwartz results

7. Review the CPT, LOINC, RESULTS, UNITS, and FLAGS by:
8. Access the BLR menu.
9. Select the IHS LAB TRANSATION LOG SEQUENCE NUMBER option.
10. Type the full accession number, for this example: CH 23 44.
11. Select each Transaction to review the data per Laboratory Test.
12. See the example below:

```
Select IHS Lab Main Support Menu Option: INQ   Inquire into the IHS LAB Transaction
Log

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: CH 23 44
     1   CH 23 44  2019
     2   CH 23 44  2020
     3   CH 23 44  2021
CHOOSE 1-3:

IHS LAB TRANSACTION LOG LIST                    MAY 10,2023  13:27    PAGE 1
--------------------------------------------------------------------------------

SEQUENCE NUMBER: 2019                    LRFILE: 2
  PATIENT POINTER VALUE: 26460
  PANEL/TEST POINTER: CREATININE/EGFR (SCHWARTZ) PANEL
  LAB MODULE: GENERAL                    DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT              STATUS FLAG: RESULTED
  ENTRY DATE/TIME: MAY 09, 2023@19:08:10
  ASSOCIATED V FILE: V LAB               IEN OF V FILE ENTRY: 4295729
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  CPT LAB CODE POINTER: CREATININE/EGFR (SCHWARTZ)
  BILLING CPT STRING: 82565|||||         CLINICAL INDICATOR: 210604017
  ORDER DATE: MAY 09, 2023@19:08:07      ORDER SEQUENCE NUMBER: 4
  ORDER NUMBER: 1337
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
```

```
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@19:08:07
  ACCESSION NUMBER: CH 23 44            COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@19:08:17
  PROVIDER NARRATIVE: Health seeking behavior
  SNOMED: 210604017                     ICD: Z76.89
  SITE/SPECIMEN POINTER: SERUM

SEQUENCE NUMBER: 2020                   LRFILE: 2
  PATIENT POINTER VALUE: 26460
  PANEL/TEST POINTER: CREATININE SCHWARTZ
  LAB MODULE: GENERAL                   DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT             PARENT POINTER: 2019
  STATUS FLAG: RESULTED                 ENTRY DATE/TIME: MAY 09, 2023@19:08:10
  ASSOCIATED V FILE: V LAB              IEN OF V FILE ENTRY: 4295730
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  ORDER DATE: MAY 09, 2023@19:08:07     ORDER SEQUENCE NUMBER: 4
  ORDER NUMBER: 1337
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@19:08:07
  ACCESSION NUMBER: CH 23 44            COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@19:08:17  LOINC CODE: 2160
  RESULT: 10                            RESULT N/A FLAG: H
  UNITS: mg/dL                          SITE/SPECIMEN POINTER: SERUM
  VERIFIER POINTER: DEMO, LAB TECH      REFERENCE LOW: .4
  REFERENCE HIGH: 1.4

SEQUENCE NUMBER: 2021                   LRFILE: 2
  PATIENT POINTER VALUE: 26460          PANEL/TEST POINTER: BEDSIDE SCHWARTZ
  LAB MODULE: GENERAL                   DUZ(2): 2906
  I/O CATEGORY: OUT PATIENT             PARENT POINTER: 2019
  STATUS FLAG: RESULTED                 ENTRY DATE/TIME: MAY 09, 2023@19:08:10
  ASSOCIATED V FILE: V LAB              IEN OF V FILE ENTRY: 4295731
  CLINIC STOP CODE POINTER: LABORATORY SERVICES
  ORDER DATE: MAY 09, 2023@19:08:07     ORDER SEQUENCE NUMBER: 4
  ORDER NUMBER: 1337
  ORDERING PROVIDER POINTER: DEMO, DOCTOR
  ORDERING LOCATION POINTER: LAB HOSPITAL
  COLLECTION DATE/TIME: MAY 09, 2023@19:08:07
  ACCESSION NUMBER: CH 23 44            COLLECTION SAMPLE POINTER: SERUM (SST)
  COMPLETE DATE: MAY 09, 2023@19:08:17  LOINC CODE: 50384
  RESULT: 92.26                         UNITS: mL/min
  SITE/SPECIMEN POINTER: SERUM          VERIFIER POINTER: DEMO, LAB TECH
  REFERENCE LOW: 60

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER:
```

Figure 3-27: IHS LAB TRANSACTION LOG Example

4.0 IHS Count Accessioned Tests

There are 5 new reports that are included in the LR*5.2*1052 RPMS Lab Patch. They emulate the Count Accessioned Tests option of the Supervisor's Reports option of the Supervisor option of the LRMENU.

The reports utilize the Lab Data file and, as such, are not limited in their date range inputs.

4.1 CACC Menu OPTION

The main option for the report is the CACC option of the IHS Lab Main Support menu (the BLRMENU).

```
   LS     Link Transaction Processor Status
   INQ    Inquire into the IHS LAB Transaction Log
   PC41   Will restart the label routine if turned off.
   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
   BB     Blood bank ...
   BGFR   Create Bedside Schwartz eGFR Delta Check
   BZY    IHS Taskman Busy Device Rpt
   CACC   IHS Count accessioned tests
   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
               Press 'RETURN' to continue, '^' to stop:
   EAPE   Edit BLR EMERGENCY ALERT Parameter
   EDCC   BLR CC DATA Parameter Edit
   EMGP   Edit LAB HIGH URGENCY NOTIFICATION Mail Group
   ERRT   Error Trap Reporting
   ETP    LA7 Message Queue Error Messages to Purgeable
   GFRC   Create 2021 CKD-EPI eGFR Delta Check
   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 ...

               Press 'RETURN' to continue, '^' to stop:
   PDOC   Patient Reminder Document
   POCA   Edit BLR AGE DETAIL Parameter
   PURA   Purge VA Alerts
   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 ...

Select IHS Lab Main Support Menu Option:
```

Figure 4-1: IHS Lab Main Support Menu

4.2 IHS Count Accessioned Tests MENU

The main menu for the IHS Count Accessioned Tests

```
                                DEMO HOSPITAL
Date:04/28/23                     Count Tests                      Time:12:03 PM
                                 Locations/Tests
BLRUTILB
-------------------------------------------------------------------------------
    1    Test Counts By Type …
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Tests Counts
    5    Microbiology Location Counts

Select:  (1-5):
```

Figure 4-2: IHS Count Accessioned Tests Menu

4.3 CHEMISTRY TEST Counts Report

When selected (**#2**), the user will be prompted for a date range.

```
                                DEMO HOSPITAL
Date:04/28/23                     Count Tests                      Time:12:42 PM
                                Locations/Tests
BLRUTILB
-------------------------------------------------------------------------------
    1    Test Counts By Type …
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Tests Counts
    5    Microbiology Location Counts
```

```
Select:  (1-5): 2
```

Figure 4-3: Select Chemistry Test Counts Option

4.3.1 Enter Date Range for Report

```
                                DEMO HOSPITAL
Date:04/28/23                    Test Counts                      Time:12:03 PM
------------------------------------------------------------------------------
Start with Date: TODAY// Apr 28, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-4: Enter Start and End Dates

4.3.2 Compile Report for Print

Once the date range is entered, the compilation of data will commence, and the option to print the report.

```
                                DEMO HOSPITAL
Date:04/28/23                    Test Counts                      Time:12:42 PM
                  Date Range: Jan 01, 2023 thru Apr 28, 2023           BLRUTILB
------------------------------------------------------------------------------
    Compiling.. Compilation Complete.

    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-5: Compilation completed and Device prompted

4.3.3 CHEMISTRY TEST Counts Report Example

```
                                DEMO HOSPITAL
Date:04/28/23                    Test Counts                        Page 1
Time:1:15 PM       Date Range: Jan 01, 2023 thru Apr 28, 2023         BLRUTILB

    ================ LABORATORY TEST (#60) FILE ================
    IEN       Description                                      TEST COUNT
------------------------------------------------------------------------------
    1         LEUKOCYTES                                               1
    4         HEMATOCRIT (OIT)                                         1
    129       _SQL FTA-Abs                                             1
    137       _REAGIN AB Titer                                         1
    175       GLUCOSE, PLASMA -OIT                                     5
    952       RSV SCREEN (POCT)                                        1
    2001394   GLUCOSE, CAPILLARY (POCT)                                1
    2001424   TSH (R)                                                  1
    2001458   _COVID-19(Abbott ID NOW)                                 1
    2001459   _PROCEDURAL CONTROL                                      1
    2001463   _HGB(c)                                                  1
    2001465   _WBC(c)                                                  1
    2001466   _PLT(C)                                                  1
    2001467   _EVEROLIMUS(C)                                           1
```

```
    2001470   Color of Urine (C)                                          1
    2001471   Appearance of Urine (C)                                     1
    2001472   Specific Gravity Urine by Strip (C)                         1
    2001473   pH of Urine by Test strip (C)                               1
    2001474   Glucose (M/V) Urine by Strip (C)                            1
    2001475   Ketones (M/V) Urine by Strip (C)                            1
    2001476   Protein (M/V) Urine by Strip (C)                            1
    2001497   GLUCOSE, SERUM -OIT                                         2
    2001514   ZZEST GFR 2021                                             11
    2001518   ZZESTIMATED GFR (SCHWARTZ) V3                               1
    2001519   ZZEST GFR 2021 V2                                           1
    2001520   CREATININE [2021]                                          10
    2001522   CREATININE [SCHWARTZ]                                       2
    2001524   BEDSIDE SCHWARTZ                                            1
    2001525   2021 CKD-EPI                                                2
    2001530   CREATININE-2021                                             2
    9999114   ABO blood grouping (OIT)                                    3
    9999115   RH Factor (OIT)                                             3
    9999266   _RPR TITER                                                  1
    9999549   SQL CHOLESTEROL 1017                                        1
    9999758   GLUCOSE, PLASMA (R)                                         2
                                                                  ----------
                                                 All Tests Total          67


    Total # of Patients analyzed: 16
```

Figure 4-6: Chemistry Test Counts Report Example

4.4 CHEMISTRY LOCATION Counts Report

When selected (**#3**), the user will be prompted for a date range:

```
                                DEMO HOSPITAL
Date:05/01/23                     Count Tests                    Time:1:24 PM
                                Locations/Tests
BLRUTILB
-------------------------------------------------------------------------------
    1    Test Counts By Type …
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Tests Counts
    5    Microbiology Location Counts

Select:  (1-5): 3
```

Figure 4-7: Chemistry Location Counts Menu Option

4.4.1 Enter Date Range for Report

```
                                DEMO HOSPITAL
Date:05/01/23                Location Tests Counts             Time:1:24 PM
-------------------------------------------------------------------------------

Start with Date: TODAY// May 01, 2023
```

```
Go back to   Date TODAY// 0101 (JAN 01, 2023)
```

Figure 4-8: Enter Start and End Dates

4.4.2 Compile Report for Print

Once the date range is entered, the compilation of data will commence, and the option to print the report.

```
                              DEMO HOSPITAL
Date:05/01/23               Location Tests Counts                   Time:1:24 PM
                  Date Range: Jan 01, 2023 thru May 01, 2023           BLRUTILB
------------------------------------------------------------------------------
    Compiling.. Compilation Complete.

    Press RETURN Key:
DEVICE: HOME//   Virtual
```

Figure 4-9: Compilation Completed and Device prompted

4.4.3 CHEMISTRY LOCATION Counts Report Example.

```
                              DEMO HOSPITAL
Date:05/01/23               Location Tests Counts                     Page 1
Time:1:24 PM       Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILB

===== HOSP LOC (#44) FILE ======  == LABORATORY TEST (#60) FILE ===
Description                     IEN       Description               Loc Count
------------------------------------------------------------------------------
INPATIENT ICU                   1         LEUKOCYTES                        1
                                                                   ----------
                                                  Location Total             1

EMERGENCY DEPARTMENT            2001394   GLUCOSE, CAPILLARY (PO            1
                                                                   ----------
                                                  Location Total             1

PEDIATRICS                      952       RSV SCREEN (POCT)                 1
                                                                   ----------
                                                  Location Total             1

DEMO CLINIC                     2001514   ZZEST GFR 2021                    1
DEMO CLINIC                     2001530   CREATININE-2021                   1
DEMO CLINIC                     9999114   ABO blood grouping (OI            1
DEMO CLINIC                     9999115   RH Factor (OIT)                   1
                                                                   ----------
                                                  Location Total             4

LAB HOSPITAL (LOC)              129       _SQL FTA-Abs                      1
LAB HOSPITAL (LOC)              137       _REAGIN AB Titer                  1
LAB HOSPITAL (LOC)              175       GLUCOSE, PLASMA -OIT              5
LAB HOSPITAL (LOC)              2001458   _COVID-19(Abbott ID NO            1
LAB HOSPITAL (LOC)              2001459   _PROCEDURAL CONTROL               1
LAB HOSPITAL (LOC)              2001497   GLUCOSE, SERUM -OIT               2
LAB HOSPITAL (LOC)              2001514   ZZEST GFR 2021                    9
LAB HOSPITAL (LOC)              2001518   ZZESTIMATED GFR (SCHWA            1
```

```
LAB HOSPITAL (LOC)                2001519   ZZEST GFR 2021 V2                 1
LAB HOSPITAL (LOC)                2001520   CREATININE [2021]                10
LAB HOSPITAL (LOC)                2001522   CREATININE [SCHWARTZ]             2
LAB HOSPITAL (LOC)                2001524   BEDSIDE SCHWARTZ                  1
LAB HOSPITAL (LOC)                2001525   2021 CKD-EPI                      2
LAB HOSPITAL (LOC)                9999114   ABO blood grouping (OI            2
LAB HOSPITAL (LOC)                9999115   RH Factor (OIT)                   2
LAB HOSPITAL (LOC)                9999266   _RPR TITER                        1
LAB HOSPITAL (LOC)                9999758   GLUCOSE, PLASMA (R)               2
                                                                         ----------
                                                  Location Total           44

                                DEMO HOSPITAL
Date:05/01/23                 Location Tests Counts                        Page 2
Time:1:24 PM       Date Range: Jan 01, 2023 thru May 01, 2023             BLRUTILB

===== HOSP LOC (#44) FILE ======  == LABORATORY TEST (#60) FILE ===
Description                       IEN       Description                Loc Count
-------------------------------------------------------------------------------
BLUE CLINIC                       4         HEMATOCRIT (OIT)                  1
                                                                         ----------
                                                  Location Total            1

GENERAL MEDICINE                  2001463   _HGB(c)                           1
GENERAL MEDICINE                  2001465   _WBC(c)                           1
GENERAL MEDICINE                  2001466   _PLT(C)                           1
GENERAL MEDICINE                  2001467   _EVEROLIMUS(C)                    1
GENERAL MEDICINE                  2001470   Color of Urine (C)                1
GENERAL MEDICINE                  2001471   Appearance of Urine (C            1
GENERAL MEDICINE                  2001472   Specific Gravity Urine            1
GENERAL MEDICINE                  2001473   pH of Urine by Test st            1
GENERAL MEDICINE                  2001474   Glucose (M/V) Urine by            1
GENERAL MEDICINE                  2001475   Ketones (M/V) Urine by            1
GENERAL MEDICINE                  2001476   Protein (M/V) Urine by            1
GENERAL MEDICINE                  9999549   SQL CHOLESTEROL 1017              1
                                                                         ----------
                                                  Location Total           12

                                                                         ----------
                                              All Locations Total          67

    Total # of Patients analyzed:16
```

Figure 4-10: Chemistry Location Tests Count Report

4.5 MICROBIOLOGY TESTS Counts Report

When selected (**#4**), the user will be prompted for a date range:

```
                                DEMO HOSPITAL
Date:04/28/23                     Count Tests                    Time:2:06 PM
                                Locations/Tests
BLRUTILB
-------------------------------------------------------------------------------
    1    Test Counts By Type …
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Tests Counts
```

```
    5    Microbiology Location Counts

Select:  (1-5): 4
```

Figure 4-11: Microbiology Tests Counts Option

4.5.1 Enter Date Range for Report.

```
                              DEMO HOSPITAL
Date:04/28/23              Microbiology Test Counts                Time:2:06 PM
------------------------------------------------------------------------------

Start with Date: TODAY// Apr 28, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-12: Enter Start and End Dates

4.5.2 Compile Report for Print.

Once the date range is entered, the compilation of data will commence, and the option to print the report.

```
                              DEMO HOSPITAL
Date:04/28/23              Microbiology Test Counts                Time:2:06 PM
                  Date Range: Jan 01, 2023 thru Apr 28, 2023           BLRUTILB
------------------------------------------------------------------------------
    Compiling Compilation Complete.


    Press RETURN Key:
DEVICE: HOME//   Virtual
```

Figure 4-13: Compilation completed and Device prompted

4.5.3 MICROBIOLOGY TESTS Counts Report Example.

```
                              DEMO HOSPITAL
Date:04/28/23              Microbiology Test Counts                  Page 1
Time:2:06 PM       Date Range: Jan 01, 2023 thru Apr 28, 2023         BLRUTILB

    ================ LABORATORY TEST (#60) FILE ================
    IEN       Description                                        TEST COUNT
------------------------------------------------------------------------------
    548       AEROBIC CULTURE (MI)                                        3
    1142      BLOOD CULTURE (MI)                                          5
    2000176   SPUTUM CULTURE (MI)                                         2
    2001458   ID/SENS FOR MICRO (MI)                                      5
    2001584   URINE CULTURE (MI)                                          3
                                                                  ----------
                                                 All Tests Total         18

    Total # of Patients analyzed:11
```

Figure 4-14: Microbiology Tests Counts Report

4.6 MICROBIOLOGY LOCATION Counts Report

When selected (**#5**), the user will be prompted for a date range:

```
                                DEMO HOSPITAL
Date:04/28/23                    Count Tests                        Time:3:47 PM
                               Locations/Tests                          BLRUTILB
------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts


Select:  (1-5): 5
```

Figure 4-15: Select Microbiology Location Counts Option

4.6.1 Enter Date Range for Report.

```
                             DEMO HOSPITAL
Date:04/28/23         Microbiology Locations Tests Counts           Time:3:47 PM
------------------------------------------------------------------------------

Start with Date: TODAY// Apr 28, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-16: Enter Start and End dates

4.6.2 Compile Report for Print.

Once the date range is entered, the compilation of data will commence, and the option to print the report.

```
                                DEMO HOSPITAL
Date:04/28/23         Microbiology Locations Tests Counts           Time:3:47 PM
                   Date Range: Jan 01, 2023 thru Apr 28, 2023           BLRUTILB
------------------------------------------------------------------------------
    Compiling Compilation Complete.

    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-17: Compilation completed and Device prompted

4.6.3 MICROBIOLOGY LOCATION Counts Report Example.

```
                                DEMO HOSPITAL
```

```
Date:04/28/23         Microbiology Locations Tests Counts                Page 1
Time:3:50 PM       Date Range: Jan 01, 2023 thru Apr 28, 2023          BLRUTILB

===== HOSP LOC (#44) FILE ======  == LABORATORY TEST (#60) FILE ===
Description                      IEN       Description              TEST COUNT
-------------------------------------------------------------------------------
LAB HOSPITAL (LOC)               548       AEROBIC CULTURE (MI)              3
LAB HOSPITAL (LOC)               1142      BLOOD CULTURE (MI)                5
LAB HOSPITAL (LOC)               2000176   SPUTUM CULTURE (MI)               2
LAB HOSPITAL (LOC)               2001458   ID/SENS FOR MICRO (MI)            5
LAB HOSPITAL (LOC)               2001584   URINE CULTURE (MI)                3
                                                                        ----------
                                                    Location Total           18

    Total # of Patients analyzed:11
```

Figure 4-18: Microbiology Location Counts Report

4.7 TEST COUNTS BY TYPE REPORTS

The Test Counts by Type Reports can be captured by the TYPE entry within the Laboratory Test file configuration. The TYPE entry allows a selection of how each test is orderable and displayable by the system.

Type **INPUT** indicates that the test can be ordered, but the answer or result will not be displayed. An example of this type is a request for a Basic Metabolic Panel.

Type **OUTPUT** indicates that the test and results can be displayed, but not ordered by itself. An example of this type would be any of the individual tests which make up a Urinalysis or CBC panel.

Tests that are both orderable and displayable are designated as type **BOTH**. Type BOTH tests will make up the majority of the tests you will be using.

The fourth type of **NEITHER** indicates that the test cannot be ordered or displayed. The most common use for this type is to deactivate or lockout tests that would not be available for ordering or displaying.

For example, if there are test names in the file that were exported with the lab package and not used in your lab, you can ignore the tests by changing the Type field entries to NEITHER. If you change the type to NEITHER, users will not be able to lookup results.

An example of the Type entry in a Laboratory Test file is below:

```
Select VA FileMan Option: Enter or Edit File Entries

INPUT TO WHAT FILE: VA PATIENT// 60   LABORATORY TEST
EDIT WHICH FIELD: ALL//

Select LABORATORY TEST NAME:    CBC W/Auto Diff
```

```
NAME: CBC W/Auto Diff
TEST COST:
Select SYNONYM: CBC//
TYPE: BOTH// ??
        I == (Input) test can be ordered but not displayed by the computer.
        O == (Output) test can be displayed but never ordered by itself.
        B == (Both) test can be ordered and displayed.
        N == (Neither) test is internal to lab only.

     Choose from:
       I        INPUT (CAN BE ORDERED)
       O        OUTPUT (CAN BE DISPLAYED)
       B        BOTH
       N        NEITHER
TYPE: BOTH//
```

Figure 4-19: Laboratory Test displaying the different TYPE options

4.8 CHEMISTRY TESTS – OUTPUT TYPE Report

When selected (**#1**), the user will be prompted to review the chemistry or microbiology test counts using the TYPE.

```
                                  DEMO HOSPITAL
Date:05/01/23                      Count Tests                      Time:8:45 AM
                                 Locations/Tests                        BLRUTILB
------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts

Select:  (1-5): 1
```

Figure 4-20: Test Counts by a Type menu option

4.8.1 Select the Chemistry Tests Counts Option.

When selected (**#1**), the user will be prompted for the TYPE:

```
                                  DEMO HOSPITAL
Date:05/01/23                      Count Tests                     Time:10:41 AM
                              Chemistry/Microbiology                    BLRUTILC
------------------------------------------------------------------------------
    1    Chemistry Tests ...
    2    Microbiology Tests ...

Select:  (1-2): 1
```

Figure 4-21: Chemistry Tests menu option

4.8.2 Chemistry Tests Counts – OUTPUT Type.

When selected (**#2**), the user will be prompted for the OUTPUT Type Tests.

```
                                DEMO HOSPITAL
Date:05/01/23              Chemistry Count Tests                Time:10:42 AM
                               TYPE Selection                       BLRUTILC
--------------------------------------------------------------------------------
    1    INPUT Type
    2    OUTPUT Type
    3    BOTH Type
    4    NEITHER Type
    5    All Types

Select:  (1-5): 2
```

Figure 4-22: OUTPUT Type menu option

4.8.3 Enter Date Range for Report.

```
                                DEMO HOSPITAL
Date:05/01/23                OUTPUT Type Counts                 Time:10:49 AM
--------------------------------------------------------------------------------

Start with Date: TODAY// May 01, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-23: Enter Start and End dates

4.8.4 Compile Report for Print.

```
                                DEMO HOSPITAL
Date:05/01/23                OUTPUT Type Counts                 Time:10:49 AM
                  Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILC
--------------------------------------------------------------------------------
    Compiling.. Compilation Complete.


    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-24: Compilation completed and Device prompted

4.8.5 Chemistry Tests – OUTPUT TYPE Report Example

```
                                DEMO HOSPITAL
Date:05/01/23                OUTPUT Type Counts                   Page 1
Time:10:57 AM      Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILC

                                ====== HOSP LOC (#44) FILE ======
IEN      Description             Description                    TEST COUNT
--------------------------------------------------------------------------------
```

```
129      _SQL FTA-Abs             LAB HOSPITAL (LOC)                      1
                                                                  ----------
                                                  Test Total              1

137      _REAGIN AB Titer         LAB HOSPITAL (LOC)                      1
                                                                  ----------
                                                  Test Total              1

2001458  _COVID-19(Abbott ID NO   LAB HOSPITAL (LOC)                      1
                                                                  ----------
                                                  Test Total              1

2001459  _PROCEDURAL CONTROL      LAB HOSPITAL (LOC)                      1
                                                                  ----------
                                                  Test Total              1

2001463  _HGB(c)                  GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001465  _WBC(c)                  GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001466  _PLT(C)                  GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001470  Color of Urine (C)       GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001471  Appearance of Urine (C   GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001472  Specific Gravity Urine   GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001473  pH of Urine by Test st   GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1


                              DEMO HOSPITAL
Date:05/01/23                OUTPUT Type Counts                      Page 2
Time:10:57 AM      Date Range: Jan 01, 2023 thru May 01, 2023       BLRUTILC

                              ====== HOSP LOC (#44) FILE ======
IEN      Description             Description                    TEST COUNT
-------------------------------------------------------------------------
2001474  Glucose (M/V) Urine by   GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001475  Ketones (M/V) Urine by   GENERAL MEDICINE                        1
                                                                  ----------
                                                  Test Total              1

2001476  Protein (M/V) Urine by   GENERAL MEDICINE                        1
```

```
                                                                    ----------
                                                  Test Total             1

9999114  ABO blood grouping (OI   DEMO CLINIC                            1
9999114  ABO blood grouping (OI   LAB HOSPITAL (LOC)                      2
                                                                    ----------
                                                  Test Total             3

9999115  RH Factor (OIT)          DEMO CLINIC                            1
9999115  RH Factor (OIT)          LAB HOSPITAL (LOC)                     2
                                                                    ----------
                                                  Test Total             3

9999266  _RPR TITER               LAB HOSPITAL (LOC)                     1
                                                                    ----------
                                                  Test Total             1


                                                                    ----------
                                              All Tests Total           21

    Total # of Patients analyzed: 16
```

Figure 4-25: Type OUTPUT Chemistry Counts Report Example

4.9 CHEMISTRY TESTS – BOTH TYPE Report

When selected (**#1**), the user will be prompted to review the chemistry or microbiology test counts using the TYPE.

```
                                DEMO HOSPITAL
Date:05/01/23                    Count Tests                    Time:8:45 AM
                               Locations/Tests                      BLRUTILB
------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts

Select:  (1-5): 1
```

Figure 4-26: Test Counts by a Type menu option

4.9.1 Select the Chemistry Tests Counts option.

```
                                DEMO HOSPITAL
Date:05/01/23                    Count Tests                   Time:10:41 AM
                            Chemistry/Microbiology                   BLRUTILC
------------------------------------------------------------------------------
    1    Chemistry Tests ...
    2    Microbiology Tests ...

Select:  (1-2): 1
```

Figure 4-27: Chemistry Tests menu option

4.9.2 Chemistry Tests Counts – BOTH Type.

When selected (**#3**), the user will be prompted for the BOTH Chemistry Tests reports:

```
                                DEMO HOSPITAL
Date:05/01/23               Chemistry Count Tests                Time:10:42 AM
                                TYPE Selection                        BLRUTILC
--------------------------------------------------------------------------------
    1    INPUT Type
    2    OUTPUT Type
    3    BOTH Type
    4    NEITHER Type
    5    All Types

Select:  (1-5): 2
```

Figure 4-28: BOTH Type Menu Option

4.9.3 Enter Date Range for Report.

```
                                DEMO HOSPITAL
Date:05/01/23                  BOTH Type Counts                  Time:10:49 AM
--------------------------------------------------------------------------------

Start with Date: TODAY// May 01, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-29: Enter Start and End Dates

4.9.4 Compile Report for Print.

```
                                DEMO HOSPITAL
Date:05/01/23                  BOTH Type Counts                  Time:10:49 AM
                  Date Range: Jan 01, 2023 thru May 01, 2023           BLRUTILC
--------------------------------------------------------------------------------
    Compiling.. Compilation Complete.


    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-30: Compilation completed and Device prompted

4.9.5 Chemistry Tests – BOTH TYPE Report Example.

```
                                DEMO HOSPITAL
Date:05/01/23                  BOTH Type Counts                    Page 1
Time:10:49 AM       Date Range: Jan 01, 2023 thru May 01, 2023     BLRUTILC

                                ====== HOSP LOC (#44) FILE ======
IEN      Description            Description                   TEST COUNT
--------------------------------------------------------------------------------
```

```
1        LEUKOCYTES               INPATIENT ICU                          1
                                                                    ----------
                                                  Test Total            1

4        HEMATOCRIT (OIT)         BLUE CLINIC                            1
                                                                    ----------
                                                  Test Total            1

175      GLUCOSE, PLASMA -OIT     LAB HOSPITAL (LOC)                     5
                                                                    ----------
                                                  Test Total            5

952      RSV SCREEN (POCT)        PEDIATRICS                             1
                                                                    ----------
                                                  Test Total            1

2001394  GLUCOSE, CAPILLARY (PO   EMERGENCY DEPARTMENT                   1
                                                                    ----------
                                                  Test Total            1

2001424  TSH (R)                  DEMO CLINIC 2                          1
                                                                    ----------
                                                  Test Total            1

2001467  _EVEROLIMUS(C)           GENERAL MEDICINE                       1
                                                                    ----------
                                                  Test Total            1

2001497  GLUCOSE, SERUM -OIT      LAB HOSPITAL (LOC)                     2
                                                                    ----------
                                                  Test Total            2

2001520  CREATININE [2021]        LAB HOSPITAL (LOC)                    10
                                                                    ----------
                                                  Test Total           10

2001522  CREATININE [SCHWARTZ]    LAB HOSPITAL (LOC)                     2
                                                                    ----------
                                                  Test Total            2

2001524  BEDSIDE SCHWARTZ         LAB HOSPITAL (LOC)                     1
                                                                    ----------
                                                  Test Total            1

                                  DEMO HOSPITAL
Date:05/01/23                   BOTH Type Counts                      Page 2
Time:10:49 AM       Date Range: Jan 01, 2023 thru May 01, 2023       BLRUTILC

                                  ====== HOSP LOC (#44) FILE ======
IEN      Description              Description                      TEST COUNT
-------------------------------------------------------------------------------
2001525  2021 CKD-EPI             LAB HOSPITAL (LOC)                     2
                                                                    ----------
                                                  Test Total            2

2001530  CREATININE-2021          DEMO CLINIC                            1
2001530  CREATININE-2021          CLINIC DEMO-2                          1
                                                                    ----------
                                                  Test Total            2

9999549  SQL CHOLESTEROL 1017     GENERAL MEDICINE                       1
```

```
                                                                  ----------
                                                  Test Total             1

9999758  GLUCOSE, PLASMA (R)      LAB HOSPITAL (LOC)                     2
                                                                  ----------
                                                  Test Total             2
                                                                  ----------
                                              All Tests Total           33

    Total # of Patients analyzed: 16

                                                  Test Total            10
```

Figure 4-31: Type BOTH Chemistry Counts Report Example

4.10 CHEMISTRY TESTS – ALL TYPES Report

When selected (**#1**), the user will be prompted to review the chemistry or microbiology test counts using the TYPE.

```
                                DEMO HOSPITAL
Date:05/01/23                    Count Tests                    Time:8:45 AM
                               Locations/Tests                      BLRUTILB
------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts

Select:  (1-5): 1
```

Figure 4-32: Test Counts by a Type menu option

4.10.1 Select the Chemistry Tests Counts Option.

```
                                DEMO HOSPITAL
Date:05/01/23                    Count Tests                   Time:10:41 AM
                           Chemistry/Microbiology                   BLRUTILC
------------------------------------------------------------------------------
    1    Chemistry Tests ...
    2    Microbiology Tests ...

Select:  (1-2): 1
```

Figure 4-33: Chemistry Tests menu option

4.10.2 Chemistry Tests Counts – ALL Types.

When selected (**#5**), the user will be prompted for the OUTPUT Chemistry Tests reports:

```
                                DEMO HOSPITAL
Date:05/01/23               Chemistry Count Tests                 Time:10:42 AM
                              TYPE Selection                          BLRUTILC
------------------------------------------------------------------------------
    1    INPUT Type
    2    OUTPUT Type
    3    BOTH Type
    4    NEITHER Type
    5    All Types

Select:  (1-5): 5
```

Figure 4-34: ALL Types menu option

4.10.3 Enter Date Range for Report.

```
                                DEMO HOSPITAL
Date:05/01/23                 ALL Type Counts                   Time:10:49 AM
------------------------------------------------------------------------------

Start with Date: TODAY// May 01, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-35: Enter Start and End Dates

4.10.4 Compile Report for Print.

```
                                DEMO HOSPITAL
Date:05/01/23                 ALL Types Counts                  Time:10:49 AM
                  Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILC
------------------------------------------------------------------------------
    Compiling.. Compilation Complete.


    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-36: Compilation completed and Device prompted

4.10.5 Chemistry Tests – ALL TYPES Report Example.

```
                                DEMO HOSPITAL
Date:05/01/23                 ALL Type Counts                          Page 1
Time:10:49 PM       Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILC

                                        ==== HOSP LOC FILE ====
IEN      Description              TYPE      Description              TEST COUNT
------------------------------------------------------------------------------
3        HGB.                     OUTPUT    LAB HOSPITAL (LOC)                1
                                                                    ----------
                                                    Test Total                1

165      Urine Am Urate Crystal   OUTPUT    LAB HOSPITAL (LOC)                2
```

```
                                                                        ----------
                                                        Test Total               2

166      Urine Am Phos Crystals   OUTPUT    LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2

167      _CRSU Urine Triple Pho   OUTPUT    LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2

168      _CRSU Urine Ca Ox Crys   OUTPUT    LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2

169      _CRSU Urine Uric Acid    OUTPUT    LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2

173      CREATININE (MDRD)        BOTH      LAB HOSPITAL (LOC)                   1
                                                                        ----------
                                                        Test Total               1

2000966  ESTIMATED AVERAGE GLUC   OUTPUT    LAB HOSPITAL (LOC)                   8
                                                                        ----------
                                                        Test Total               8

2001394  GLUCOSE POCT             BOTH      LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2

2001448  _HEMOGLOBIN A1C          OUTPUT    LAB HOSPITAL (LOC)                   8
                                                                        ----------
                                                        Test Total               8

2001449  _eAG (mg/dL)             OUTPUT    LAB HOSPITAL (LOC)                   1
                                                                        ----------
                                                        Test Total               1

                                 DEMO HOSPITAL
Date:05/01/23                   ALL Type Counts                          Page 2
Time:10:49 PM       Date Range: Jan 01, 2023 thru May 01, 2023          BLRUTILC

                                            ==== HOSP LOC FILE ====
IEN      Description              TYPE      Description               TEST COUNT
--------------------------------------------------------------------------------
2001456  EST GFR                  OUTPUT    LAB HOSPITAL (LOC)                   1
                                                                        ----------
                                                        Test Total               1

2001583  TSH (BC)                 BOTH      LAB HOSPITAL (LOC)                   1
                                                                        ----------
                                                        Test Total               1

2001598  CREATININE (SCHWARTZ)    BOTH      LAB HOSPITAL (LOC)                   3
                                                                        ----------
                                                        Test Total               3

2001617  EST GFR 2021 V7          BOTH      LAB HOSPITAL (LOC)                   2
                                                                        ----------
                                                        Test Total               2
```

```
2001619  CREATININE 2021 (1.18.   BOTH      LAB HOSPITAL (LOC)              6
                                                                  ----------
                                             Test Total                   6

2001621  ESTIMATED GFR (SCHWART   OUTPUT    LAB HOSPITAL (LOC)              2
                                                                  ----------
                                             Test Total                   2

2001622  EST GFR 2021 V8          BOTH      LAB HOSPITAL (LOC)              9
                                                                  ----------
                                             Test Total                   9

2001624  CREATININE LAB PROG TE   BOTH      LAB HOSPITAL (LOC)              9
                                                                  ----------
                                             Test Total                   9

9999114  ABO Grouping (CH)        BOTH      LAB HOSPITAL (LOC)              1
                                                                  ----------
                                             Test Total                   1

9999115  Rh TYPE (CH)             OUTPUT    LAB HOSPITAL (LOC)              1
                                                                  ----------
                                             Test Total                   1

9999524  GLUCOSE, SERUM (R)       BOTH      LAB HOSPITAL (LOC)             19
                                                                  ----------
                                             Test Total                  19

                              DEMO HOSPITAL
Date:05/01/23                ALL Type Counts                          Page 3
Time:10:49 PM       Date Range: Jan 01, 2023 thru May 01, 2023       BLRUTILC

                                        ==== HOSP LOC FILE ====
IEN      Description              TYPE      Description              TEST COUNT
-------------------------------------------------------------------------------
9999761  PAH SODIUM               BOTH      LAB HOSPITAL (LOC)              4
                                                                  ----------
                                             Test Total                   4

9999762  PAH POTASSIUM            BOTH      LAB HOSPITAL (LOC)              2
                                                                  ----------
                                             Test Total                   2

9999763  PAH CHLORIDE             BOTH      LAB HOSPITAL (LOC)              2
                                                                  ----------
                                             Test Total                   2

9999764  PAH CARBON DIOXIDE       BOTH      LAB HOSPITAL (LOC)              2
                                                                  ----------
                                             Test Total                   2

9999765  PAH Anion Gap            OUTPUT    LAB HOSPITAL (LOC)              2
                                                                  ----------
                                             Test Total                   2

9999782  _HGB A1C                 OUTPUT    LAB HOSPITAL (LOC)              1
                                                                  ----------
                                             Test Total                   1

                                                                 ----------
```

```
                                                All Tests Total          98

    Total # of Patients analyzed: 20
```

Figure 4-37: ALL Types Chemistry Counts Report Example

4.11 MICROBIOLOGY TESTS – BOTH TYPE Report

When selected (**#1**), the user will be prompted to review the chemistry or microbiology test counts using the TYPE.

```
                                DEMO HOSPITAL
Date:05/02/23                    Count Tests                      Time:1:55 PM
                               Locations/Tests                        BLRUTILB
------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts

Select:  (1-5): 1
```

Figure 4-38: Test Counts by a Type menu option

4.11.1 Select the Microbiology Tests Counts Option.

```
                                DEMO HOSPITAL
Date:05/02/23                    Count Tests                      Time:1:56 PM
                            Chemistry/Microbiology                    BLRUTILC
------------------------------------------------------------------------------
    1    Chemistry Tests ...
    2    Microbiology Tests ...

Select:  (1-2): 2
```

Figure 4-39: Microbiology Tests menu option

4.11.2 Microbiology Tests Counts – BOTH Type.

When selected (**#3**), the user will be prompted for the BOTH Type Tests.

```
                                DEMO HOSPITAL
Date:05/02/23                Microbiology Count Tests                 Time:1:56 PM
                                 TYPE Selection                          BLRUTILC
------------------------------------------------------------------------------
    1    INPUT Type
    2    OUTPUT Type
    3    BOTH Type
    4    NEITHER Type
    5    All Types
```

```
Select:  (1-5): 3
```

Figure 4-40: BOTH Types menu option

4.11.3 Enter Date Range for Report.

```
                              DEMO HOSPITAL
Date:05/02/23     BOTH Type Microbiology Test Locations Counts      Time:1:56 PM
------------------------------------------------------------------------------

Start with Date: TODAY// May 02, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-41: Enter Start and End Dates

4.11.4 Compile Report for Print.

```
                              DEMO HOSPITAL
Date:05/02/23     BOTH Type Microbiology Test Locations Counts      Time:1:56 PM
                   Date Range: Jan 01, 2023 thru May 02, 2023           BLRUTILC
------------------------------------------------------------------------------
    Compiling Compilation Complete.



    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-42: Compilation completed and Device prompted

4.11.5 Microbiology Tests – BOTH TYPE Report Example.

```
                              DEMO HOSPITAL
Date:05/02/23     BOTH Type Microbiology Test Locations Counts            Page 1
Time:1:57 PM       Date Range: Jan 01, 2023 thru May 02, 2023           BLRUTILC

                                  ====== HOSP LOC (#44) FILE ======
IEN      Description              Description                          TEST COUNT
------------------------------------------------------------------------------
548      AEROBIC CULTURE (MI)     LAB HOSPITAL (LOC)                            3
                                                                        ----------
                                                  Test Total                    3

1142     BLOOD CULTURE (MI)       LAB HOSPITAL (LOC)                            5
                                                                        ----------
                                                  Test Total                    5

2000176  SPUTUM CULTURE (MI)      LAB HOSPITAL (LOC)                            2
                                                                        ----------
                                                  Test Total                    2

2001458  ID/SENS FOR MICRO (MI)   LAB HOSPITAL (LOC)                            5
                                                                        ----------
                                                  Test Total                    5
```

```
2001584  URINE CULTURE (MI)       LAB HOSPITAL (LOC)                            3
                                                                       ----------
                                                       Test Total               3


                                                                       ----------
                                                   All Tests Total             18


    Total # of Patients analyzed: 11
```

Figure 4.11.5: BOTH TYPES Microbiology Tests Counts Report Example

4.12 MICROBIOLOGY TESTS – ALL TYPES Report

When selected (**#1**), the user will be prompted to review the chemistry or microbiology test counts using the TYPE.

```
                                DEMO HOSPITAL
Date:05/02/23                    Count Tests                         Time:1:55 PM
                               Locations/Tests                           BLRUTILB
--------------------------------------------------------------------------------
    1    Test Counts By Type ...
    2    Chemistry Test Counts
    3    Chemistry Location Counts
    4    Microbiology Test Counts
    5    Microbiology Location Counts

Select:  (1-5): 1
```

Figure 4-43: Test Counts by a Type menu option

4.12.1 Select the Microbiology Tests Counts Option.

```
                                DEMO HOSPITAL
Date:05/02/23                    Count Tests                         Time:1:56 PM
                            Chemistry/Microbiology                       BLRUTILC
--------------------------------------------------------------------------------
    1    Chemistry Tests ...
    2    Microbiology Tests ...

Select:  (1-2): 2
```

Figure 4-44: Microbiology Tests menu option

4.12.2 Microbiology Tests Counts – ALL Types.

When selected (**#5**), the user will be prompted for the ALL Types Tests.

```
                                 DEMO HOSPITAL
Date:05/02/23               Microbiology Count Tests                 Time:1:56 PM
```

```
                                TYPE Selection                          BLRUTILC
------------------------------------------------------------------------------
    1    INPUT Type
    2    OUTPUT Type
    3    BOTH Type
    4    NEITHER Type
    5    All Types

Select:  (1-5): 5
```

Figure 4-45: ALL Types menu option

4.12.3 Enter Date Range for Report.

```
                            DEMO HOSPITAL
Date:05/02/23     ALL Type Microbiology Test Locations Counts      Time:1:56 PM
------------------------------------------------------------------------------

Start with Date: TODAY// May 02, 2023
Go back to   Date TODAY// 0101  (JAN 01, 2023)
```

Figure 4-46: Enter Start and End dates

4.12.4 Compile Report for Print.

```
                            DEMO HOSPITAL
Date:05/02/23     ALL Type Microbiology Test Locations Counts      Time:1:56 PM
                   Date Range: Jan 01, 2023 thru May 02, 2023           BLRUTILC
------------------------------------------------------------------------------
    Compiling Compilation Complete.


    Press RETURN Key:
DEVICE: HOME//
```

Figure 4-47: Compilation completed and Device prompted

4.12.5 Microbiology Tests – ALL TYPES Report Example.

```
                            DEMO HOSPITAL
Date:05/02/23     ALL Type Microbiology Test Locations Counts            Page 1
Time:1:58 PM       Date Range: Jan 01, 2023 thru May 02, 2023          BLRUTILC

                                       = HOSP LOC FILE ==
IEN      Description              TYPE                              TEST COUNT
------------------------------------------------------------------------------
548      AEROBIC CULTURE (MI)     BOTH      LAB HOSPITAL (LOC)              3
                                                                    ----------
                                                Test Total              3

1142     BLOOD CULTURE (MI)       BOTH      LAB HOSPITAL (LOC)              5
                                                                    ----------
                                                Test Total              5
```

```
2000176  SPUTUM CULTURE (MI)      BOTH      LAB HOSPITAL (LOC)                2
                                                                     ----------
                                                      Test Total              2

2001458  ID/SENS FOR MICRO (MI)   BOTH      LAB HOSPITAL (LOC)                5
                                                                     ----------
                                                      Test Total              5

2001584  URINE CULTURE (MI)       BOTH      LAB HOSPITAL (LOC)                3
                                                                     ----------
                                                      Test Total              3


                                                                     ----------
                                                  All Tests Total            18


    Total # of Patients analyzed: 11
```

Figure 4-48: ALL TYPES Microbiology Tests Counts Report Example

5.0 ARE YOU SURE Delta Check: Safeguard When Resulting

A new delta check, ARE YOU SURE, will be added to the Delta Check (#62.1) dictionary.

The ARE YOU SURE delta check only takes effect when resulting.

When entering results, the user is presented with the ARE YOU SURE? prompt. If the user enters N or NO, then the user is dropped to the SELECT ('E' to Edit, 'C' for Comments, 'W' Workload) prompt, allowing the user, if they want, to edit the results.

Once the ARE YOU SURE? prompt is answered Y or YES the user can continue processing as normal.

Nothing regarding this prompt is recorded, i.e., it will not be possible to know if a user answered YES or NO to the prompt.

5.1 How to use the Are You Sure Delta Check

The first task is to review a Laboratory Test to use the Are You Sure Delta Check.

Items to set up the Are You Sure Delta Check:

- Select a lab test.
- Add the delta check to the lab test.
- Test the delta check.

For example, review and update the **ABO Grouping** Laboratory Test:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter 60 for the lab test named: **ABO Grouping**
4. Review the lab test.
5. Return to the **SITE/SPECIMEN** field.
6. Return to the **TYPE OF DELTA CHECK** subfield.
   - Add “ARE YOU SURE”
7. See the example below:

```
          VA FileMan Version 22.0

        Enter or Edit File Entries
        Print File Entries
```

```
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...

Select VA FileMan Option: ENter or Edit File Entries


INPUT TO WHAT FILE: AUTO INSTRUMENT// 60  LABORATORY TEST
EDIT WHICH FIELD: ALL//


Select LABORATORY TEST NAME: ABO GROUPING
NAME: ABO GROUPING//
TEST COST:
Select SYNONYM: ABO//
TYPE: BOTH//
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.//
LOCATION (DATA NAME): CH;2906087;1//   (No Editing)
Select INSTITUTION: DEMO HOSPITAL//
  INSTITUTION: DEMO HOSPITAL//
  ACCESSION AREA: TRANSFUSION (CH)//
UNIQUE ACCESSION #:
UNIQUE COLLECTION SAMPLE:
LAB COLLECTION SAMPLE:
REQUIRED TEST: NO//
PROCEDURE (SNOMED):
*QUICK INDEX:
EXTRA LABELS:
HIGHEST URGENCY ALLOWED: ROUTINE//
FORCED URGENCY:
PRINT NAME: ABO Grouping//
Reserved:
PRINT CODE:
PRETTY PRINT ENTRY:
PRETTY PRINT ROUTINE:
PRINT ORDER: 10//
INACTIVATION DATE:
NATIONAL VA LAB CODE:
RESULT NLT CODE:
CATALOG ITEM:
EDIT CODE:
*BATCH DATA CODE:
EXECUTE ON DATA REVIEW:
Select SITE/SPECIMEN: BLOOD//
  SITE/SPECIMEN: BLOOD//
  REFERENCE LOW:
  REFERENCE HIGH:
  CRITICAL LOW:
  CRITICAL HIGH:
  INTERPRETATION:
    No existing text
    Edit? NO//
  UNITS:
  TYPE OF DELTA CHECK: ARE YOU SURE
  DELTA VALUE:
  DEFAULT VALUE:
  THERAPEUTIC LOW:
```

```
  THERAPEUTIC HIGH:
  Select *AMIS/RCS 14-4:
  USE FOR REFERENCE TESTING:
  CPT CODE:
  PANEL (CPT):
  Select FOREIGN COMPUTER SYSTEM:
  LOINC CODE: 883-9//
  Select SPECIMEN CPT:
  Select QUALITATIVE VALUES:
Select SITE/SPECIMEN:
```

Figure 5-1: Add Delta Check to Laboratory Test

5.1.1 Test the Are You Sure Delta Check

Order and result the lab test that the Are You Sure Delta Check was added.

1. Order lab test, for example, ABO GROUPING lab test.
2. Result the lab test.
3. Notice the prompt for ARE YOU SURE?
4. See the example below:

```
Select Process data in lab menu <TEST ACCOUNT> 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: BCH 2
TRANSFUSION (CH)  (MAY 10, 2023)  2
Select Referring Laboratory: DEMO HOSPITAL//

DEMO, PATIENT                     456123   LOC:LAB
Sample: BLOOD (EDTA)
Specimen: BLOOD
1   ABO Grouping (CH)

DEMO, PATIENT     HRCN: 456123      LOC: LAB
Pat Info:                          Sex: FEMALE   Age: 63yr as of May 10, 2023
Provider: DEMO, PROVIDER           Voice pager:
   Phone:                              Digital pager:

ACCESSION:                                  BCH 23 2
                                            05/10 1509d
ABO Grouping (CH) //?
 ??
Enter * to report "canc" for canceled.
Enter # to report "comment".
```

```
Choose from:
A        A
B        B
O        O
AB        AB
ABO Grouping (CH) //A  A
ARE YOU SURE? ?

Enter either 'Y' or 'N'.

ARE YOU SURE? Y

Select COMMENT:

DEMO, PATIENT     HRCN: 456123      LOC: LAB
Pat Info:                          Sex: FEMALE   Age: 63yr as of May 10, 2023
Provider: DEMO, PROVIDER           Voice pager:
   Phone:                              Digital pager:

ACCESSION:                                  BCH 23 2
                                            05/10 1509d
ABO Grouping (CH)                                  A
SELECT ('E' to Edit, 'C' for Comments, 'W' Workload):
Approve for release by entering your initials: **
LAST IN WORK LIST
```

Figure 5-2: Resulting the lab test with ARE YOU SURE Delta check

1. Reivew the results on Interim Report below:
2. Notice the ARE YOU SURE delta check does not display.

```
                        DR SMITH LABORATORY DIRECTOR
                    801 THOMPSON AVE, ROCKVILLE MD 20852

DEMO, PATIENT                                  Date/Time Printed: 05/10/23@15:19
     HRCN: 456123    SEX:F  DOB:Jan 01, 1960                    LOC:LAB
Accession [UID]: BCH 23 2 [5523000002]
     Provider: DEMO, PROVIDER            Lab Arrival Date/Time:05/10/23@15:09
     Specimen: BLOOD                      Spec Collect Date/Time:05/10/23@15:09
                         Res
Test name         Result Flg units         Ref.   range     Site  Result Dt/Time
ABO Grouping           A                                   [2906] 05/10/23@15:13
================================================================================
KEY: A=Abnormal   L=Abnormal Low   H=Abnormal High   *=Critical   TR=Therapeutic

[2906] DEMO HOSPITAL           90001 1ST AVE   WASHINGTON, NM 87000

DEMO, PATIENT                    HRCN:456123   5/10/2023
```

Figure 5-3: Interim Report Example

6.0 Add Specimen Number To Lookup Accession

The Specimen Number from the Lab Order Entry (#69) file has been added to the Lookup Accession display if and only if the order is still in file 69.

Prior to the change, a Lookup Accession would look like

```
ACCESSION: CH 1003 1                    PATIENT: DEMO,BEAUTIFUL DAUGHTER
  ORDER #: 1214                            HRCN: 999991
      UID: 1022760011                       DOB: 12/02/2018
 LOCATION: LAB                           ORDERED: 10/03/2022@12:19
                                       COLLECTED: 10/03/2022@12:19
 PROVIDER: RADON,NICHOLAS M JR      LAB ARRIVAL: 10/03/2022@12:19
 ACCESSION PERSON: ROMANCITO,KAREN

  SAMPLE: SERUM  SERUM (SST)
  TEST: CREATININE/EGFR (SCHWARTZ)       ROUTINE
  COMPLETED: 10/03/2022@12:21
ALL COMPLETED
```

Figure 6-1: Lookup Accession

After the change to the LRWKRLS2 routine, the Lookup Accession will look like (the new field is highlighted below):

```
ACCESSION: CH 1003 11                   PATIENT: DEMO,BEAUTIFUL DAUGHTER
      UID: 1022760011                       DOB: 12/02/2018
 LOCATION: LAB                              HRCN: 999991
  ORDER #: 1214                        SPECIMEN #: 1
  ORDERED: 10/03/2022@12:19             COLLECTED: 10/03/2022@12:19
 PROVIDER: RADON,NICHOLAS M JR      LAB ARRIVAL: 10/03/2022@12:19
 ACCESSION PERSON: ROMANCITO,KAREN

  SAMPLE: SERUM  SERUM (SST)
  TEST: CREATININE/EGFR (SCHWARTZ)       ROUTINE         TECH: ROMANCITO,KAREN
  COMPLETED: 10/03/2022@12:21
ALL COMPLETED
```

Figure 6-2: Updated Lookup Accession

7.0 Collected By User Update

The BLRPCCVC routine has been modified to remediate a sporadic issue regarding the "Collected By" User not being correct.

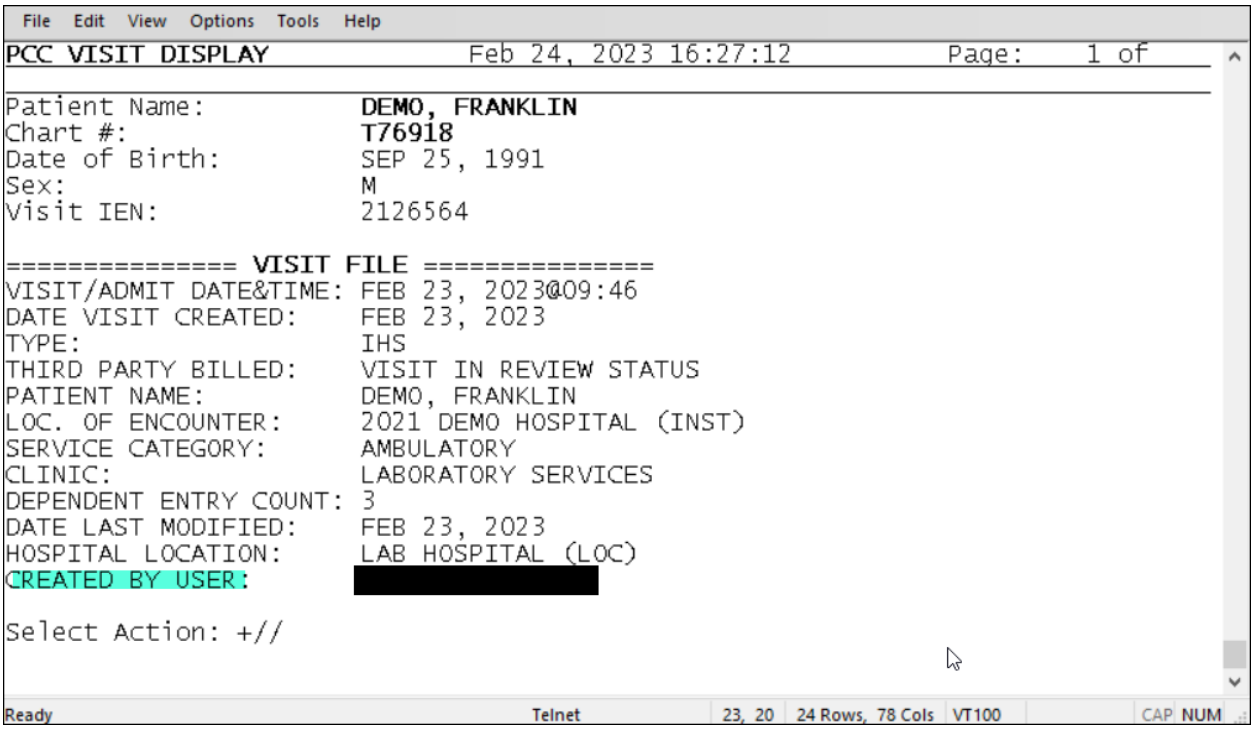

Figure 7-1: PCC Visit Display showing “CREATED BY USER”

8.0 Lab Label UID Routines

The BLRIPLUI and BLRIPLUP routines are incorporated in IHS Lab Patch LR*5.2*1052.

The routines are designed to be used with any Intermec Printer Language (IPL) capable label printers. The routines do not incorporate any special characters and use standard ASCII (American Standard Code for Information Interchange) coding.

The routines are the typical RPMS "pair" of label routines: one initializes the printer and the other prints the labels.

8.1 BLRIPLUI Routine

The BLRIPLUI routine is the initialization routine: it sets up the printer so that the printer can interpret the commands and format the data sent to the printer via the printing routine.

It is advised that the BLRIPLUI be run each time after the printer is turned on.

The routine is normally entered as FMT^BLRIPLUI in the ROUTINE field of the

BLR STARTUP FOR INTERMEC PC option.

8.2 BLRIPLUP Routine

The BLRIPLUP routine is the printing routine: it takes in the Lab variables and sends them with coding to the printer that then interprets the codes to print the label.

9.0 Remediate V LAB Collection Date/Time Issue from LR*5.2*1039

An issue regarding Collection Date/Time was inadvertently introduced via LR*5.2*1039. The issue has been addressed by changes to the BLRLINK3 and BLRLNKU2 routines.

10.0 Microbiology Data To Populate On CCDA

A new API has been created that will allow CCDA to extract Microbiology data from the Lab Data file. It is strictly for use by CCDA only and is mentioned here for completeness.

11.0 Components of LR*5.2*1052

11.1 Routines

There are numerous routines included in LR*5.2*1052.

11.1.1 BLREXEBS

"Bedside Schwartz" eGFR for children (AGE < 18).

11.1.2 BLREXEC5

CKD-EPI eGFR.

11.1.3 BLRIPLUI

Intermec IPL UID barcoded Initialization Routine

11.1.4 BLRIPLUP

Intermec IPL UID barcoded Print Routine.

11.1.5 BLRLINK3

Routine was modified so that the V LAB Date/Time issue from LR*5.2*1039 was remediated.

11.1.6 BLRLNKU2

Routine was modified so that the V LAB Date/Time issue from LR*5.2*1039 was remediated.

11.1.7 BLRLRX

Code added to support the ARE YOU SURE Delta Check.

11.1.8 BLRMIALL

An API that allows the exportation of Microbiology data. CCDA only.

11.1.9 BLRP52P2

Routine that will run during the post-install process to install the Monkeypox LOINCs into RPMS.

11.1.10 BLRP52P3

Routine that will run during the post-install process to create CKD-EPI EGFR and BEDSIDE SCHWARTZ EGFR tests in the Laboratory Test (#60) file.

11.1.11 BLRPCCVC

Routine to standardize data being passed to PCC from the Lab Module.

11.1.12 BLRPRE52

LR*5.2*1052 Pre/Post Routine.

11.1.13 BLRUTILB

Lab utilities.

11.1.14 BLRUTILC

Lab utilities.

11.1.15 LRWRKLS1

Modification will allow the LOOKUP ACCESSION code to print the Specimen number.

11.2 Files

11.2.1 Blood Inventory (#65)

In order to facilitate historical extraction of data, a new cross-reference was added to the file.

11.2.2 Referral Patient (#67)

In order to facilitate historical extraction of data, a new cross-reference was added to the file.

11.3 Options

There are 3 new options included in the patch.

11.3.1 BLR Bedside Schwartz eGFR Make

Option that creates the Bedside Scwartz eGFR delta check. It is added to the BLRMENU with the BGFR label during the post-install phase of the patch.

11.3.2 BLR CKD-EPI (2021) Create

Option that creates the CKD-EPI (2021) eGFR delta check. It is added to the BLRMENU with the GFRC label during the post-install phase of the patch.

11.3.3 BLR COUNT ACC TESTS

Option that allows access to 4 new reports that Count Accessioned tests using the Lab Data file. It is added to the BLRMENU with the CACC label during the post-install phase of the patch.

11.4 VA Lab Patch 556

The VA Lab Patch LR*5.2*556 that updates the LOINC files to LOINC version 2.72 is included in RPMS Lab Patch LR*5.2*1052.

11.4.1 Routine

There is one routine in LR*5.2*556.

11.4.1.1 LR556

Includes environment checking as well as various post install processing subroutines.

11.4.2 Files That Are Updated

There are numerous files that must be updated to LOINC Version 2.72

11.4.2.1 WKLD CODE (#64) File

This file contains the list of WKLD Codes, which are used to compile Laboratory workload statistics.

11.4.2.2 LAB ELECTRONIC CODES (#64.061) File

This file contains a collection of codes used in electronic messaging.

11.4.2.3 WKLD SUFFIX CODES (#64.2) File

This file contains a listing of National approved Workload Suffix codes.

11.4.2.4 LAB NLT/CPT CODES (#64.81) File

This file is used primarily as a National Laboratory Test (NLT) database upgrade source file.

11.4.2.5 LAB LOINC (#95.3) File

The LAB LOINC file contains an extraction of the LOINC database.

11.4.2.6 LAB LOINC COMPONENT (#95.31) File

This file contains the name of the component or analyte measured for the LAB LOINC file (#95.3).

Glossary

Accession Area

A functional area or department in the laboratory where specific tests are performed.

Accession Number

A unique alpha-numeric (combination of letters and numbers) assigned to an individual patient specimen when it is received in the laboratory.

File

A set of related records or entries treated as a single unit.

FileMan

The database management system for the VA's VistA system and IHS' RPMS system.

HL7

Health Level Seven. An ANSI approved American National Standard for electronic data exchange in health care.

ICD

International Classification of Diseases. It is formally known as the International Statistical Classification of Diseases and Related Health Problems, a medical classification list by the World Health Organization (WHO).

IEN

Internal Entry Number. A unique number used to identify an entry within a file.

IHS

Indian Health Service. An Operating Division (OPDIV) within the U.S. Department of Health and Human Services (HHS).

Menu

A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection.

MUMPS

MUMPS (Massachusetts General Hospital Utility Multi-Programming System) or alternatively M, is a general-purpose computer programming language that provides ACID (Atomic, Consistent, Isolated, and Durable) transaction processing.

Parameter

A name in a function or subroutine definition that is replaced by, or bound to, the corresponding actual argument when the function or subroutine is called.

RPC

Remote Procedure Call. A client/server system within Department of Veterans Affairs (VA) Veterans Health Information Systems and Technology Architecture (VistA) environment. It establishes a common and consistent foundation for client/server applications to communicate and exchange data with M Servers.

RPMS

Resource and Patient Management System. A suite of software applications used at IHS facilities to support administrative, clerical, and clinical functions.

SNOMED

Systematized Nomenclature of Medicine. A systematic, computer-processable collection of medical terms, in human and veterinary medicine, to provide codes, terms, synonyms and definitions which cover anatomy, diseases, findings, procedures, microorganisms, substances, etc.

TaskMan

A Kernel sub module that allows tasks (e.g., VA FileMan prints and sorts) to run in the background.

VA

Veteran's Administration. United States Department of Veterans Affairs

VistA

The Veterans Health Information Systems and Technology Architecture. An enterprise-wide information system built around an Electronic Health Record (EHR), used throughout the VA medical system.

Acronym List

Acronym	Term Meaning
CPT	Current Procedural Terminology
EHR	Electronic Health Record
IHS	Indian Health Service
PCC	Patient Care Component
POC	Point Of Care
RPMS	Resource and Patient Management System

Contact Information

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

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

Web: https://www.ihs.gov/itsupport/

Email: itsupport@ihs.gov