

Laboratory Data Sharing and Interoperability (LDSI)

Laboratory Electronic Data Interchange IV (LEDI IV)



LDSI/LEDI IV User Manual

**Version 2.0
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**Department of Veterans Affairs (VA)
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Revision History

Date	Revision	Description	Authors
09/14/12	2.0	<ul style="list-style-type: none"> Added the words “Lab System” to the end of the page 1 Introduction sentence that describes the Future of Lab. Clerical fix only. 	J. Rogers
09/10/12	2.0	<ul style="list-style-type: none"> Added a reference to the LEDI IV FAQs 	J. Rogers
09/05/12	1.9	<ul style="list-style-type: none"> Added a hyperlink that takes the reader directly to the LEDI IV Install Guide. 	J. Rogers
09/04/12	1.8	<ul style="list-style-type: none"> Removed certain references to “Lab System” and replaced it with future LEDI patch since the AP/MICRO and LOINC features will be in a future LEDI patch. Removed all references to LSRP and replaced it with “Lab System”. Replaced the LSRP on the screen shots with LEDI. Input from Claudette Murch of CLIN 4. Copied over more detailed steps for the IRM and LIM to follow from the Install Guide (Section 2.2), Reformatted Section 3.3 and reduced the white space in the screen shots, (Non-content changes.) Reformatted the File 63 Remediation section to make the bullets consistent. Modified User Manual to match Terri Conlin’s comments on the Installation Guide. That is, replaced several “Laboratory System” references with “Future LEDI patch” since there will be another LEDI patch that will include AP/MICRO prior to the implementation of the Laboratory System. 	J. Rogers, L. Teitelbaum, T. Conlin, C. Murch
07/23/12	1.7	<ul style="list-style-type: none"> Updates from the LEDI IV, Implementation team and CLIN 4 users’ review. Updated File 63 Remediation section to reflect that when the Lab personnel run the remediation tool manually, the tool will repair the errors that were known at the time the tool was developed. Specified that File 63 Remediation errors be handled by local site personnel with VistA Programmer access. Added that the File 63 Analysis and Reporting process can be manually kicked off by the local site personnel. Also, that the File 63 	J. Rogers

Date	Revision	Description	Authors
		<p>Remediation errors be cleaned up prior to the site converting to the LSRP COTS system.</p> <ul style="list-style-type: none"> • Input from Levi on section 5.3.1, 5.4.14 and 5.4.16. • Added in CR00008076. New Sort for 'CH' File 63 Remediation report. See section 5.5. • Added that the AP lab alerts are sent to the Primary Care Provider for outpatients. • Modified the File 63 Remediation functionality to reflect changes arising from testing. It now runs monthly, not nightly. • Renamed LR MANIFEST DEFLT ACCESSION from LA to LR. Also removed "7S" in the title. • Removed three duplicate entries from the General Lab Parameters table. • Renamed LR MANIFEST EXC PREV TEST from LA to LR. Also removed "7S" in the title. • Added a new Parameter to the LEDI IV Patch Parameters "Prompt CPRS Alert in CH Result Entry". • Procedures for the Addition of Mycobacterium Antibiotics to File #62.06, per Field Input. • Added functionality to allow users to edit reference ranges. Now users who have the LRDATA key can enter a tilde (~) at the result prompt to edit units/reference ranges for lab tests. • Added that the SNOMED CT Codes must match between two sites. • Added the setting and sending of three lab result alert types to the Chemistry/Hematology section. • CCR 7961 CLOSED Shipping Manifest allows a site to add/remove tests from an Open or a Closed manifest. No longer from a "Canceled Manifest". • Modified the File 63 Remediation mail group back to where it was before – the LMI group is notified of File 63 Remediation errors whether in test or in production. • Removed the references to the error messages for the entering of SNOMED CT IDs since they are listed in the Install Guide. Avoids duplication. 	
04/13/12	1.6	<ul style="list-style-type: none"> • Minor changes to section numbering to bring it up to date. No content changes. 	J. Rogers

Revision History

Date	Revision	Description	Authors
04/03/12	1.6	<ul style="list-style-type: none"> • Updated per Feedback from Claudette Murch of CLIN 4: • Clarified in section 1.14 that the (CH) subscript is available prior to the LSRP COTS being implemented, • Clarified in the Scope section that the AP/MICRO interface is not enabled in LEDI IV until the release of the LSRP COTS system. • Removed an ambiguous line from section 2 pertaining to the use of LEDI IV. • Removed “For Government Use Only” from the footer since this document will be placed on the VDL. • Clarified that the LRAP VR option will only be used by those sites that have been part of the prior testing, • Clarified that the LA7VPFL option will not be used until a future date. (To support LSRP COTS.) • Clarified that the LA7V 62.47 ADD DOD option will not be used until a future date. (To support LSRP COTS.) • De-identified certain data elements (accession number, street name and patient name) per VHA standards. • Moved and aligned the text clouds with the sentences they pertained to – for 508 compliance. • Met with Internal Development team. Went over additional CLIN 4 comments. • Incorporated Team Input from 3/30 and 4/2 reviews. Also, clarified several points for CLIN 4. 	J. Rogers
03/22/12	1.5	<ul style="list-style-type: none"> • Minor updates per Questions from T. Blom: Added File #64 to two WKLD References. • Removed the second (duplicate) screen shot under the LRAPLG Log-In Anatomy Pathology Log in Section. 	J. Rogers
03/20/12	1.5	<p>Tech edit review:</p> <ul style="list-style-type: none"> • Updated the document to follow the current national documentation standards and styles. • Updated the document for formatting and styles to conform to the LSRP document template. • Added section breaks before each major section/chapter. 	T. Blom

Date	Revision	Description	Authors
		<ul style="list-style-type: none"> • Modified document for double-sided printing: <ul style="list-style-type: none"> ○ Added Odd and Even pages. ○ Updated Headers and Footers in all sections. ○ Made sure all sections end on an even page. ○ Fixed all page numbering to be continuous. • Added a "Figures and Tables" section. • Added an "Orientation" section; copy taken from current LSRP document modified to fit LDSI/LEDI IV. • Moved the "Blood Bank" section into the added "Orientation" section. • Promoted some bulleted items to Heading 3 style and reformatted other lists throughout the document. • Added file names to file number references throughout this document. • Added user entries in boldface and yellow highlights to screen capture figures throughout. • Added captions to all tables and figures throughout. • Corrected/Added organization acronyms and references for first occurrence in each chapter and as needed. • Made minor grammar, punctuation, and spelling updates as needed. 	
03/16/12	1.4	<ul style="list-style-type: none"> • Removed the Lexicon note under Section 4.12 – SNOMED CT. It was deemed irrelevant by the developers and STS. • Input from Claudette Murch & Mike Belschwinder of CLIN 4 to the document. • Added Dev Team modifications to the Manual post CLIN 4 Review Meeting. • Added Parameter list, options and screen captures. • Updated how Non-Performed "NP" tests are handled in the New LEDI IV Options section per input from Becky Youngblood. 	J. Rogers
02/29/12	1.3	<ul style="list-style-type: none"> • Included the HDI*1.0*7 patch within the LEDI IV build. • Added the message that displays when the File 63 Remediation tool finds an error after the install or after completing the nightly data 	J. Rogers

Revision History

Date	Revision	Description	Authors
		dictionary check. <ul style="list-style-type: none"> • Clarified that the LEDI IV Install Guide covers the Installation and not the configuration, aka Setup of LEDI IV in Section 6.2 below. 	
02/02/12	1.2	Removed section on CCR 5519 and placed the setting up of lab names in to the Install manual. Renamed Document as LEDI IV User Manual.	J. Rogers
01/27/12	1.1	<ul style="list-style-type: none"> • Removed all references to "Cerner", "Pathnet" and "Millennium". Replaced said references with "LSRP COTS". This change will prevent any legal issues from arising since LSRP is not yet fully released to Production. • Removed the LEDI IV interface set-up instructions for both the VistA Host Facility Communicating with LSRP COTS Collecting Facility & the VistA Collecting facility communicating with the LSRP COTS Host facility. The LSRP team will be documenting these steps. 	J. Rogers
01/11/12	1.0	Base line version for ORR, removed Draft.	J. Rogers, S. Bunker
01/09/12	0.16	<ul style="list-style-type: none"> • Added details on eGFR per PM direction, • Accepted revision marks from ESE input, • Removed General Lab from Section 4 per Development input, • Updated the first new option for LEDI IV in section 5 with a screen shot. (Ask Performing Lab.) 	J. Rogers
12/22/11	0.15	Include VA to LSRP COTS set ups toward the end of the manual.	L. Teitelbaum, J. Rogers
12/14/11	0.14	Additional input from Levi both technical as well as form and style.	L. Teitelbaum, J. Rogers
12/13/11	0.13	<ul style="list-style-type: none"> • Combined Impl. Guide with the User Manual due to overlapping instructions. • Updated the CCRs with additional info from Development. 	J. Rogers,
12/07/11	0.12	Updates from Dev Team Meeting.	L.Harmon J. Rogers
11/16/11	0.11	<ul style="list-style-type: none"> • Incorporated feedback from team members. • Added the 5 CCRs arising from the Alpha Test. • Removed Glossary Terms that are not used in the software or this manual. 	J. Rogers
11/10/11	0.11	Removed References to LSRP as well as	J. Rogers

Date	Revision	Description	Authors
		Micro/AP Electronic Ordering and Resulting for Use at the LEDI IV BETA Sites.	
7/27/2011	0.10	Updated section 2.4.	Y. Munipalli
6/1/11	0.9	Updated section 3.1.4.	B. Youngblood
5/18/11	0.8	<ul style="list-style-type: none"> • Section 3.1.2 added step 4 Becky Youngblood. • Section 2.3 added 2nd Bullet. 	M. Blendell
5/18/11	0.7	Added section 2.6 per Becky Youngblood.	M. Blendell
05/17/11	0.6	Updated document content.	B. Youngblood
05/06/11	0.5	Applied LSRP standard template to the guide.	S. Bunker
05/05/11	0.4	Cleaned up rough tech edit.	M. Blendell
05/04/11	0.3	Updated document content.	B. Youngblood E. Harrison
04/01/11	0.2	Updates.	C. Anderson C. Beynon
03/01/11	0.1	Initial document:	C. Anderson C. Beynon

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Orientation

How to Use this Manual

This manual is intended for use in conjunction with the Laboratory Data Sharing and Interoperability (LDSI) Laboratory Electronic Data Interchange IV (LEDI IV). This manual provides instructions for using LEDI IV.

Intended Audience

The intended audience of this manual includes the following stakeholders:

- (Primary) Information Resource Management (IRM), system administrators, or other technical staff who are tasked with installation and implementation of LEDI IV related software in all VistA environments.
- Laboratory Automated Data Processing Application Coordinators (ADPACS) and Laboratory Information Managers (LIM).
- Product Support (PS).

Legal Requirements

There are no special legal requirements involved in the use of the LDSI LEDI IV software.

Blood Bank Clearance

VistA Blood Bank Software V5.2 Device Product Labeling Statement

VistA Laboratory Package patches LA*5.2*74/LR*5.2*350 contain changes to software controlled by VHA Directive 2004-053, titled VistA Blood Bank Software.

Changes involve two routines: LRU and LRX.

These changes were reviewed by the VistA Blood Bank Developer and found to have no impact on the VistA Blood Bank Software control functions.

Risk Analysis

Changes made by patches LA*5.2*74/LR*5.2*350 have no effect on Blood Bank software functionality, therefore Risk is none.

Effect on Blood Bank Functional Requirements

Patches LA*5.2*74/LR*5.2*350 do not alter or modify any software design safeguards or safety critical elements functions.

Potential Impact on Sites

These patches contain changes to two routines and 0 files identified in Veterans Health Administration (VHA) Directive 2004-053, group B listing. The changes have no effect on Blood Bank functionality or medical device control functions. There is no adverse potential to sites.

Validation Requirements by Option

There are no validation requirements by option for these patches.

Minimal Test Case Scenarios by Option, Inclusive of All Control Functions: There are no test case scenarios for these patches.

Disclaimers

This manual provides an overall explanation of how to use the LEDI IV software options; however, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA websites on the Internet and VA Intranet for a general orientation to VistA. For example, go to the Office of Information and Technology (OIT) VistA Development VA Intranet website: <http://vista.med.va.gov>



DISCLAIMER: The appearance of any external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this website or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of the VA.

Documentation Conventions

This manual uses several methods to highlight different aspects of the material:

- Various symbols/terms are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols/terms:

Table ii. Documentation symbol/term descriptions

Symbol	Description
	NOTE/REF: Used to inform the reader of general information including references to additional reading material. In most cases, you will need this information, or at least it will make the installation smoother and more understandable. Please read each note <i>before</i> executing the steps that follow it!
	CAUTION, DISCLAIMER, or RECOMMENDATION: Used to inform the reader to take special notice of critical information.

- Descriptive text is presented in a proportional font (as represented by this font).

- "Snapshots" of computer commands and online displays (i.e., screen captures/dialogues) and computer source code, if any, are shown in a *non*-proportional font and may be enclosed within a box.
 - User's responses to online prompts will be **bold** typeface and highlighted in yellow (e.g., **<Enter>**).
 - Some software code reserved/key words will be **bold** typeface with alternate color font.
 - Author's comments, if any, are displayed in italics or as "callout" boxes.



NOTE: Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.

- Besides established styles and conventions, the following additional text formatting will be used to further highlight or emphasize specific document content:
 - Bold Typeface:
 - All computer keys when referenced with a command (e.g., "press **Enter**" or "click **OK**").
 - All references to computer dialogue tab or menu names (e.g., "go to the **General** tab" or "choose **Properties** from the **Action** menu").
 - All values entered or selected by the user in computer dialogues (e.g., "Enter '**xyz**' in the Server Name field" or "Choose the **ABCD** folder entry from the list").
 - All user text (e.g., commands) typed or entered in a Command-Line prompt (e.g., "Enter the following command: **cd xyz**").
 - Italicized Typeface:
 - Emphasis (e.g., do *not* proceed or you *must* do the following steps).
 - All reference to computer dialogue or screen titles (e.g., "in the *Add Entries* dialogue...").
 - All document or publication titles and references (e.g., "see the *ABC Installation Guide*").
- Step-by-Step Instructions—For documentation purposes, explicit step-by-step instructions for repetitive tasks (e.g., "Open a Command-Line prompt") are generally only provided once. For subsequent steps that refer to that same procedure or task, please refer back to the initial step where those instructions were first described.

Documentation Navigation

Document Navigation—This document uses Microsoft® Word's built-in navigation for internal hyperlinks. To add **Back** and **Forward** navigation buttons to your toolbar, do the following:

1. Right-click anywhere on the customizable Toolbar in Word 2007 (not the Ribbon section).
2. Select **Customize Quick Access Toolbar** from the secondary menu.
3. Press the dropdown arrow in the "Choose commands from:" box.
4. Select **All Commands** from the displayed list.
5. Scroll through the command list in the left column until you see the **Back** command (green circle with arrow pointing left).
6. Click/Highlight the **Back** command and press the **Add** button to add it to your customized toolbar.
7. Scroll through the command list in the left column until you see the Forward command (green circle with arrow pointing right).
8. Click/Highlight the Forward command and press the **Add** button to add it to your customized toolbar.
9. Press **OK**.

You can now use these **Back** and **Forward** command buttons in your Toolbar to navigate back and forth in your Word document when clicking on hyperlinks within the document.



NOTE: This is a one-time setup and will automatically be available in any other Word document once you install it on the Toolbar.

Definitions, Acronyms, and Abbreviations

All LEDI IV definitions are included in the "[Glossary](#)" section in this manual

Assumptions

This manual is written with the assumption that the reader is experienced or familiar with the following:

- VistA computing environment:
 - Laboratory—VistA M Server software
 - Blood Bank
 - Anatomic Pathology
 - Microbiology
 - Chemistry
 - Previous versions of the LEDI software
 - Kernel—VistA M Server software
 - VA FileMan data structures and terminology—VistA M Server software
- Microsoft Windows
- M programming language

Reference Materials

Readers who wish to learn more about LEDI installations should consult the *LEDI IV Installation Guide* available at the following link:

<http://www.va.gov/vdl/application.asp?appid=75>

VistA documentation is made available online in Microsoft Word format and Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader, which is freely distributed by Adobe Systems Incorporated at the following website: <http://www.adobe.com/>

VistA documentation can be downloaded from the VA Software Documentation Library (VDL) website: <http://www.va.gov/vdl/>

There is a LEDI IV Frequently Asked Questions (FAQ) Guide available on the LEDI Lab Share Point.

Because LEDI IV is a controlled release, access to the software will be provided to sites on a case-by-case basis depending on the implementation schedule. However, the VistA documentation can be downloaded from the Product Support (PS) anonymous directories.

- Preferred Method download.vista.med.va.gov



NOTE: This method transmits the files from the first available File Transfer Protocol (FTP) server.

- Albany OIFO ftp.fo-albany.med.va.gov
- Hines OIFO ftp.fo-hines.med.va.gov
- Salt Lake City OIFO ftp.fo-slc.med.va.gov

1 Introduction

Laboratory Electronic Data Interchange (LEDI) IV introduces enhancements to the bi-directional interface that allows Department of Veterans Affairs (VA) laboratories to communicate with other VA facilities, Commercial Reference Laboratories and DoD and sets the foundation for future communication of Anatomic Pathology (AP) and Microbiology (Micro) orders and results with a future LEDI patch.



NOTE: The functionality to electronically transmit AP orders and AP and Micro results are not being made available for this patch. AP and Micro orders and results will be available in a future LEDI patch.

NOTE 2: The LEDI IV software is released as a multi-package host build that includes the following builds: HDI*1.0*7, LR*5.2*350, and LA*5.2*74.

The purpose of this Manual is two-fold:

- Serve as the user manual.
- Provide instructions to implement Laboratory Electronic Data Interchange version IV (LEDI IV) after installing the software.

The software has the capacity and features necessary for sharing secure, encrypted laboratory data between:

- VA to VA
- VA to Commercial Reference Laboratories
- VA to Department of Defense (DoD)
- (Future) VA to Lab System

The LEDI IV software is an extension of the LEDI III software. It includes this new functionality:

- SNOMED CT Mapping (collection samples, etiology, topography).
- AP Orderable configuration.
- Adding and editing antimicrobials & drugs.
- File 63 Remediation
- New Parameters
- Recording of the performing laboratory for AP and Micro.

Intended Users

The intended users of LEDI IV include the laboratory personnel of the VA Medical Centers.

1.1 Communication Interfaces

1.1.1 VA to VA

LEDI IV enhances the general LEDI III functionality.

1.1.2 VA to Commercial Reference Laboratories

LEDI IV enhances the general LEDI III functionality.

1.1.3 VA to Department of Defense (DoD)

LEDI IV enhances LEDI III functionality.

1.1.4 (Future) VA to Lab System

LEDI IV software enhances the current LEDI functionality.

It supports the sending and receiving of Microbiology and Anatomic Pathology (AP) orders and results between the Lab System and the associated Veterans Health Information Systems and Technology Architecture (VistA) database with the future release of the Laboratory System.

NOTE: A future LEDI patch that will be released to the field prior to the Laboratory System will also allow for MICRO and AP orders and results.

1.2 File #63 Remediation Tool

The LEDI IV software creates a tool to check the LAB DATA File (#63) for data dictionary issues.

- Checks for the following issues:
 - Errors that might have occurred when an antibiotic was added by the local site to the ORGANISM sub-field (#63.3) of the LAB DATA file (#63).
 - Errors with data names in the LABORATORY TEST file (#60), for tests in the Clinical Chemistry (Chemistry and Hematology) section. It checks the CHEM, HEM, TOX, RIA, SER, etc. sub-file (#63.04) of the LAB DATA file (#63) looking for possible discrepancies in the data dictionary.
- **File Remediation runs on three occasions:**
 - Automatically during install in Analyze and Report mode. .
 - Runs automatically once each month as part of the LR NIGHTY task in analyze mode after the successful installation of LEDI IV.
 - .
- **For errors in a Production (or test) database, the system generates an email message and sends it to the LMI Mail Group.**
- **For the remaining (unrepaired) File 63 issues, the site should then log a Remedy ticket and not try to fix the error(s) on its own.**

The error message that displays to the users after the LR NIGHTY run, reads as follows:

"Contact the National Service Desk to request assistance from the Clin 4 Product Support team in resolving the following errors identified in the VistA Laboratory package:"

If you see this message, enter a Help Desk ticket or have the National Service Desk enter a ticket for you. CLIN 4 personnel will assist the site in correcting the reported errors.

NOTE: It is very important to analyze and fix the critical errors to ensure accurate lab results.

2 LEDI IV Requirements

2.1 Messaging Interface Implementation Requirements

Implementation of the Laboratory Electronic Data Interchange (LEDI) IV Health Level Seven (HL7) messaging interface between VA to VA and VA to external reference laboratories consists of three parts:

- **VA to VA:**
 - Veterans Health Information Systems and Technology Architecture (VistA) Laboratory LEDI IV software
 - VistA HL7 application software
- **VA to Commercial Reference Laboratory:**
 - VistA Laboratory LEDI IV software
 - VistA HL7 application software
 - Commercial Reference Laboratory non-VA information system capable of sending and receiving Laboratory HL7 order and result messages (i.e., LabCorp, Quest)
- **VA to Department of Defense (DoD):**
 - VistA Laboratory LEDI IV software
 - VistA HL7 application software
 - Vitria Interface Engine.

2.2 Staffing Requirements for LEDI IV

2.2.1 Information Resource Management (IRM) staff is required for software installation, including:

1. Installing the LEDI IV bundle (HDI*1.0*7, LA*5.2*74 and LR*5.2*350).
2. Establishing mail groups and menu assignments.
3. Loading the SNOMED CT mapping file.

2.2.2 LIMS staff is needed for any software configurations including:

1. Setting up the AP Collection Sample and Test(s).
2. Adding existing mycobacterium drugs to the Antimicrobial Susceptibility File.
3. Editing Package level Parameters if needed.

The LEDI IV installation process *must* be performed in the sequence specified in the Veterans Health Information Systems and Technology Architecture (VistA) *LEDI IV Installation Guide*.

2.3 Disk Space Requirements

A 5-15% increase in disk space can be expected in the ^LR and ^LRO globals due to new fields. This 5-15% increase includes the AP data entered into the LAB ORDER ENTRY file (#69).

2.4 Performance/Capacity Impact

Performance estimates and capacity measures are difficult to obtain, because LEDI IV software has components in several applications. It is estimated that LAB SERVICE and AUTOMATED LAB INSTRUMENTS applications may impact the system by requiring more Central Processing Unit (CPU) cycles.

2.5 Memory Constraints

No memory constraints are associated with the release of the LEDI IV software.

3 Implementation

3.1 LEDI IV Implementation Instructions

The Laboratory Information Managers (LIMs) should refer to the Laboratory Electronic Data Interchange (LEDI) III implementation and user guides in the VA Software Document Library (VDL) for setting up the following LEDI interface types:

- VA to VA—Host and Collection as well as Intra Division
- VA to Commercial Reference Labs—Collection
- VA to DOD Labs—Host and Collection



REF: The LIMs should follow the detailed setup instructions in the LEDI III Implementation Guide (patches LA*5.2*64/LR*5.2*286) at this link:

<http://www.va.gov/vdl/application.asp?appid=75>

Users *must* also follow the LEDI IV configuration steps in the "Use of the LEDI IV Software" section in this manual.



NOTE: To assist with training end users, review this manual.

3.2 Parameter Setup Level Descriptions

The following are the three precedence levels that the user can use to set the parameter (listed in order of precedence):

1. User
2. Division
3. Package

For example, if a site sets the "Ask Performing Lab Micro" parameter to "NO" on the division level, but a specific user sets that parameter to "YES" on the User level, then all users in the division will *not* get prompted for a performing lab, except the user who sets it to "YES".

The Lab **User** parameters only control what an *individual* user sees. Each parameter can have different precedence levels defined.

Table 1. Precedence of parameters

Parameter	Level/Precedence	File
USR	User	NEW PERSON (#200)
DIV	Division	INSTITUTION (#4)
PKG	Package	PACKAGE (#9.4)

For example, the "EGFR Patient's Age Cutoff" parameter is only configurable at the Package and Division levels. The Division level takes precedence over the Package level.

See Section 5 for details on the Parameters you can edit.

3.3 Add Existing or Create New Mycobacterium Antibiotic Procedures

LEDI IV changes the way Mycobacterium Antibiotics are handled. Mycobacterium Antibiotics are handled similar to Bacterial Antibiotics, and need to have an entry in the Antimicrobial Susceptibility File (#62.06).

3.3.1 Adding Existing Mycobacterium Antibiotics to the Antimicrobial Susceptibility File

To add existing Mycobacterium Antibiotics (that were created pre-LEDI IV) to the Antimicrobial Susceptibility File (#62.06), use the option 'Edit an Antibiotic' [LRWU7 EDIT]. However, first you will need a listing of your current Mycobacterium Antibiotics. There are two methods to obtain a listing of Mycobacterium Antibiotics that exist in the Lab Data File (#63). The first method requires FileMan Data Dictionary access to the Lab Data File (#63); the other method requires access to the option 'Outline for one or more files' [LRUFILE] under the 'Lab liaison menu' [LRLIAISON]. For both methods, it's easiest if the output is captured in a text file, and then the user can search for '63.39'; the existing Mycobacterium Antibiotics will be displayed a few lines under '63.39'.

Note: To capture or log the session for a text file, the LIM should follow the specific documentation of the Terminal Emulator that they use.

Method 1: Using the FileMan 'Data Dictionary Utilities' menu [DI DDU], select the option 'List File Attributes' [DILIST]. Enter '63' for the 'Start with what' and 'Go to what' File, and then enter 'Microbiology' for the 'Sub-File'.

(Note: The output below has been shortened; some text has been replaced with ‘...’)

Figure 1. List File Attributes for File #63 from Data Dictionary

```

VA FileMan 22.0

Select OPTION: 8 <ENTER> DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES <ENTER>
  START WITH WHAT FILE: LAB DATA// <ENTER>
    GO TO WHAT FILE: LAB DATA// <ENTER>
      Select SUB-FILE: MICROBIOLOGY <ENTER>
        Select SUB-FILE:
          Select LISTING FORMAT: STANDARD// GLOBAL MAP <ENTER>
            DEVICE: 0;80;999 <ENTER> VIRTUAL TELNET
              GLOBAL MAP DATA DICTIONARY #63.05 -- MICROBIOLOGY SUB-FILE
                APR 30,2012@09:12:33 PAGE 1
                STORED IN ^LR(D0,"MI", SITE: MHC DEVELOPMENT ACCOUNT UCI: MHCVSS,MHCVSS
                -----
                This is microbiology data associated with this patient.

                CROSS
                REFERENCED BY: MYCOBACTERIUM(AC), FUNGUS/YEAST(AD), PARASITE(AE), VIRUS(AF)

                ^LR(D0,"MI",D1,0)= (#.01) DATE/TIME SPECIMEN TAKEN [1D] ^ (#.02) DATE/TIME
                ==>OBTAINED INEXACT [2S] ^ (#.03) DATE REPORT COMPLETED [3D]
                ==>^ (#.04) VERIFY PERSON [4P:200] ^ (#.05) SITE/SPECIMEN
                ==>[5P:61] ^ (#.06) MICROBIOLOGY ACCESSION [6F] ^ (#.07)
                ==>PHYSICIAN [7P:200] ^ (#.08) WARD [8F] ^ (#.09) AMENDED
                ==>REPORT [9S] ^ (#.1) DATE/TIME RECEIVED [10D] ^ (#.055)
                ==>COLLECTION SAMPLE [11P:62] ^ (#.2) RESULTS ENTRY DATE
                ==>[12D] ^ (#.111) REQUESTING LOC/DIV [13V] ^ (#.112)
                ==>ACCESSIONING INSTITUTION [14P:4] ^
                ...
                ...
                ...

                ^LR(D0,"MI",D1,12,0)=^63.39PA^^ (#26) MYCOBACTERIUM
                ^LR(D0,"MI",D1,12,D2,0)= (#.01) MYCOBACTERIUM [1P:61.2] ^ (#1) QUANTITY [2F]
                ==>^
                ^LR(D0,"MI",D1,12,D2,.1)= (#.1) ISOLATE ID [1F] ^
                ^LR(D0,"MI",D1,12,D2,1,0)=^63.4A^^ (#2) COMMENT
                ^LR(D0,"MI",D1,12,D2,1,D3,0)= (#.01) COMMENT [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0001)= (#5) STR [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0002)= (#10) PAS [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0003)= (#15) INH [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0004)= (#20) ETH [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0005)= (#25) RIF [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0006)= (#30) KANAMYCIN [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0007)= (#35) CAPREOMYCIN [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0008)= (#40) CYCLOSERINE [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0009)= (#45) ETHIONAMIDE [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.001)= (#50) PYRAZINAMIDE [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.0011)= (#55) MIOMYCIN [1F] ^
                ^LR(D0,"MI",D1,12,D2,2.00170001)= (#2.00170001) NEWBIOTIC [1F] ^

```

```

^LR(D0,"MI",D1,12,D2,2.00522001)= (#2.00522001) TEST2 [1F] ^
^LR(D0,"MI",D1,12,D2,2.00522002)= (#2.00522002) TEST [1F] ^
^LR(D0,"MI",D1,12,D2,2.00636002)= (#65) STREPTOMYCIN 10.0 [1F] ^
^LR(D0,"MI",D1,13,0)=^63.41A^^ (#27) TB RPT REMARK
^LR(D0,"MI",D1,13,D2,0)= (#.01) TB RPT REMARK [1F] ^
...
...
...

```

Method 2: Alternatively, the option ‘Outline for one or more files’ [LRUFILE] under the ‘Lab liaison menu’ [LRLIAISON] can be used. When prompted to select a File, enter ‘63’.

(Note: The output below has been shortened; some text has been replaced with ‘...’)

Figure 2. List File Attributes from [LRUFILE]

```

Select Lab liaison menu Option: Outline for one or more files <ENTER>
Select FILE: 63 <ENTER> LAB DATA
Select FILE:

Brief listing: ? YES// <ENTER> (YES)
DEVICE: HOME// 0;80;99999 <ENTER> VIRTUAL TELNET

Apr 30, 2012 LAB DATA (63) Pg 1
-----
.01 LRDFN
.02 PARENT FILE
.03 NAME
.04 DO NOT TRANSFUSE
.05 ABO GROUP
.06 RH TYPE
...
...
...
22 TB RPT DATE APPROVED
22.1 TB RE DATE
23 TB RPT STATUS
24 ACID FAST STAIN
25 QUANTITY
25.5 TB ENTERING PERSON
26 MYCOBACTERIUM (Subfile 63.39)
.001 ISOLATE NUMBER
.01 MYCOBACTERIUM
.1 ISOLATE ID
1 QUANTITY
2 COMMENT (Subfile 63.4)
.01 COMMENT
2.00170001 NEWBIOTIC
2.00522001 TEST2
2.00522002 TEST
5 STR
10 PAS
15 INH
20 ETH

```

Implementation

```
25  RIF
30  KANAMYCIN
35  CAPREOMYCIN
40  CYCLOSERINE
45  ETHIONAMIDE
50  PYRAZINAMIDE
55  MIOMYCIN
65  STREPTOMYCIN 10.0
26.4 TB TEST(S) (Subfile 63.181)
.01 TB TEST(S)
...
...
...
```

Once you have the list of existing Mycobacterium Antibiotics setup in the Lab Data File (#63), use the option 'Edit an Antibiotic' [LRWU7 EDIT] to add the desired Mycobacterium Antibiotics to the Antimicrobial Susceptibility File (#62.06).

Note: For Mycobacterium Antibiotics, **do not** enter anything for the 'ANTIMICROBIAL SUSCEPTIBILITY INTERNAL NAME' prompt.

For the 'AFB INTERNAL NAME' prompt, the name must be entered exactly as seen in the Lab Data File (#63).

Figure 3. Antibiotic' Using the Edit an Antibiotic [LRWU7 EDIT] Option

```
Select Lab liaison menu Option: ANTE <ENTER> Edit an Antibiotic

Select one of the following:

1      Bacterial Antibiotic
2      Mycobacterium Antibiotic

Select Antibiotic Type to Edit: 1// 2 <ENTER> Mycobacterium Antibiotic
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: STREPTOMYCIN 10.0 <ENTER>
Are you adding 'STREPTOMYCIN 10.0' as
a new ANTIMICROBIAL SUSCEPTIBILITY? No// Y <ENTER> (Yes)
ANTIMICROBIAL SUSCEPTIBILITY NUMBER: 111// <ENTER>
ANTIMICROBIAL SUSCEPTIBILITY INTERNAL NAME: <ENTER>
NAME: STREPTOMYCIN 10.0// <ENTER>
AFB INTERNAL NAME: STREPTOMYCIN 10.0 <ENTER>
NATIONAL VA LAB CODE: STREPTOMYCIN 10 UG/ML AFB SUSC <ENTER> 93690.0000

Select Lab liaison menu Option: Map the entry to an NLT Code.
```

For Mycobacterium Antibiotics, do not enter anything for this prompt.

This is the Field Name or Number from File #63 (Subfile #63.39).

3.3.2 Creating New Mycobacterium Antibiotics

LEDI IV also changes the method used for creating new Mycobacterium Antibiotics; it is now similar to how Bacterial Antibiotics are created. When creating new Mycobacterium Antibiotics (that did not exist pre-LEDI IV), you do not need to go into FileMan any more to add the new Drug Node. Instead, you use

the option 'Add a new internal name for an antibiotic' [LRWU7]. This option now allows a user to create a new Mycobacterium Antibiotic; the option will automatically add the new drug to the Lab Data File (#63, Subfile #63.39), as well as create a new entry in the Antimicrobial Susceptibility File (#62.06).

This option should only be used when creating **new** Mycobacterium Drugs that never existed before ((both in the Lab Data File (#63) and the Antimicrobial Susceptibility File (#62.06)). However, for Mycobacterium Drugs whose drug nodes already existed in the Lab Data File (#63), but now need to be added to the Antimicrobial Susceptibility File (#62.06), the option 'Edit an Antibiotic' [LRWU7 EDIT] should be used instead.

Figure 4. Create New Mycobacterium Drugs for Files

```
Select Lab liaison menu Option: ANT <ENTER> Add a new internal name for an antibiotic

Select one of the following:

    1          Bacterial Antibiotic
    2          Mycobacterium Antibiotic

Select Antibiotic Type to Add: 1// 2 <ENTER> Mycobacterium Antibiotic
Enter the name of the new antibiotic you wish to create: KANAMYCIN 6.0

Checking if field exists...OK
(DRUG NODE will be 2.00500008)
Are you sure you wish to create KANAMYCIN 6.0? NO// YES <ENTER>

KANAMYCIN 6.0 has now been created.
You must now add a new antibiotic in the ANTIMICROBIAL SUSCEPTIBILITY file
and use KANAMYCIN 6.0 as the entry for the AFB INTERNAL NAME field.

Do you want to setup KANAMYCIN 6.0 as a new Mycobacterium Antibiotic? NO// YES <ENTER>
NAME: KANAMYCIN 6.0// <ENTER>
AFB INTERNAL NAME: 2.00500008// <ENTER> KANAMYCIN 6.0
NATIONAL VA LAB CODE: Kanamycin 6 ug/mL AFB Susc <ENTER>          93697.0000

Select Lab liaison menu Option:
```

4 New Features for LEDI IV

Laboratory Electronic Data Interchange (LEDI) IV brings new features to the legacy Veterans Health Information Systems and Technology Architecture (VistA) Laboratory 5.2 software.

4.1 SNOMED CT Functionality

LEDI IV introduces new functionality for the SNOMED CT codes.

4.1.1 Data Standardization of SNOMED CT Codes

The following files will be mapped to SNOMED CT codes:

- TOPOGRAPHY FIELD (#61)
- ETIOLOGY FIELD (#61.2)
- COLLECTION SAMPLE (#62)

In addition, the SNOMED CT codes are standardized for General Lab, Microbiology, and AP data in these files. Standards & Terminology Service (STS) will provide a SNOMED CT Mapping File for each site to load and apply the mappings. See section 5.6.1.21 for more information on the option Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT].

NOTE: To prevent any data transfer errors, the SNOMED CT IDs (SCT IDs) for the specimen and the tests need to match between the collecting and the host sites.



REF: IRM should reference the *LEDI IV Installation Guide* for directions on how to load the SNOMED CT files.

4.1.2 All SNOMED CT Codes are Available in the Lexicon Utility

The Lexicon Utility provides the following functionality:

- Legacy VistA Laboratory software can now access SNOMED CT data stored in the Lexicon database.
- Provides Application Program Interfaces (APIs) to the legacy VistA Laboratory software to support SNOMED access by all VistA applications.

VistA Laboratory uses the Lexicon APIs, \$\$CODE^LEXTRAN API, to retrieve SNOMED CT codes and use the established hierarchy to retrieve SNOMED CT codes for organisms.

- Provides a mechanism for updating future SNOMED codes.
- Provides new reports for mapped and unmapped SNOMED codes available through the VistA Laboratory application.
- When the Lexicon Utility receives an unknown term, VistA Laboratory notifies members of the local LAB MAPPING mail group of exception handling instances and sends an exception handling notification to VA Standards and Terminology Services for resolution via an HDI LABXCPT^HDISVAP1 API.

The Laboratory package uses the API for three exceptions/events:

- Errors encountered while loading STS mapped SCT code into the target database.
- Loading new/additional terms received from another system via HL7 messaging.
- New terms entered locally.
- Unknown terms can originate within VA or a clinical partner. The Laboratory package can receive a patient care term (clinical term) that is from a non-VA information system not known to the VA clinical Lexicon.
- The term can be a clinical term stored and displayed in a report to the provider who interprets and/or acts on the term in the report.
- The term can be a valid national term not represented in the Lexicon, due to sequencing or database update lag.
- The term can be a valid clinical term not yet modeled or issued by the national code set provider.
- The term can be a local term originating with the clinical data provider partner that may or may not be included in the national code set.

4.2 LEDI IV Microbiology

LEDI IV introduces new enhancements for Microbiology.

4.2.1 New Methods to Enter and Edit Microbiology Options

- The Edit an Antibiotic [LRWU7 EDIT], located under the Lab Liaison Menu, allows the LIM to edit an antibiotic rather than going through VA FileMan. This option allows the entry of existing mycobacterial drugs to the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06).
- The modification of the option Add a new internal name for an antibiotic [LRWU7] also located under the Lab Liaison Menu, now allows the creation of a new internal name for an antibiotic in LAB DATA file #63 for mycobacterium drugs. This action needs to be done first before the LRWU7 option is run.
- In Microbiology data entry options, the fields xxx RPT DATE APPROVED (e.g., BACT RPT DATE APPROVED, MYCOLOGY RPT DATE APPROVED, etc.) must now contain a date and time entry (i.e., "N" to designate "Now"; "T" can no longer be used).
- Within Microbiology result entry options, the user can opt to send one of three alert types to the ordering provider and additional recipients and/or mail groups. Depending on how the parameter is set, will determine whether the user is prompted to send an alert. The three alert types are:
 - Lab results available
 - Abnormal lab results
 - Critical lab results



NOTE: The type of alert generated either depends on whether the clinician has set the parameter for personal alerts in CPRS, or if the alert is mandatory at the system level.



REF: For additional details on these alerts, see the "Enabling Notification" section in the CPRS *Consult/Request Tracking User Manual* in the VDL:
<http://www.va.gov/vdl/application.asp?appid=62>.

- Under the Microbiology Result entry option, the LIM can designate to:
 - Set the performing laboratory for the entire report.
 - Set the performing laboratory for specific sections of the report. If choosing to enter the performing laboratory for specific report sections, only those sections that have data entered will appear for selection.

4.3 LAB CODE MAPPING



NOTE: This functionality is reserved for future use with the Labs and Associated VistA databases once converted to Laboratory Systems (timeframe TBD).

- Modified the HL7 messaging structure to support SNOMED CT coding.
- Added the option Manage MI/AP Test Mappings [LRCAPFF] to establish the relationships between the LABORATORY TEST (#60), the WKLD CODE (#64) and the LAB ELECTRONIC CODES (#64.061) files for LEDI MI/AP tests.

4.3.1 LAB CODE MAPPING File (#62.47)

The LAB CODE MAPPING file (#62.47) is used to map standard code system concepts to the related area of the Laboratory package database, as well as support mapping codes used in the role identifying the result or expressing the answer. The LAB CODE MAPPING file (#62.47) was created to enhance the legacy VistA Laboratory software.

4.3.1.1 Examples of Result Codes

LOINC and VA NLT Test Result codes, such as LOINC code 11475-1 MICROORGANISM IDENTIFIED: PRID:PT:XXX:NOM:CULTURE, which represent the concept of the organism identified.

4.3.1.2 Examples of Answer Codes

SNOMED CT code 23506009, which is the term normal flora or SNOMED CT code 30334005 AEROMONAS SALMONICIDA (ORGANISM), which represents the name of the organism identified.

4.3.1.3 Fields

- SEQUENCE field (#62.47,.001): This field is the Internal Entry Number (IEN) (sequence number).
- CONCEPT field (#62.47,.01): This field contains the nature of the codes and the area of the laboratory to which the concept relates.
- LR SUBSCRIPT field (#62.47,.02): This field is the LAB DATA file (#63) subscript for this entry.
- DATABASE CODE field (#62.47,.03): For **result** type codes, this field indicates the related area of the Laboratory package database in which answers to the code are stored. The database code indicates the storage location within the Laboratory package.
- ALTERNATE CONCEPT field (#62.47,.04): This field designates an alternate concept when the answer associated with the concept is not in a form that can be stored within the current VistA database. For example:

When VistA expects to store the answer as a pointer to a VistA file and the instance of an answer is free text, this field points to a concept that allows the answer to be stored in a field that can accept the answer.

- IDENTIFIER field (#62.47,1): This field contains the codes/codesets associated with the concept.
 - IDENTIFIER field (#62.4701,.01): This field is the code or ID associated with an instance of the concept. The identifier in conjunction with Coding System field (#.02) indicates use and source.
 - CODING SYSTEM field (#62.4701,.02): This field contains the name of the coding system from which the code is derived.
 - PURPOSE field (#62.4701,.03): This field classifies the code as a result or answer code.



NOTE: Codes from the HL7 OBX segment field OBX-3 must be classified as result codes. Codes from the HL7 OBX segment field OBX-5 must be classified as answer codes.

- OVERRIDE CONCEPT field (#62.4701,.04): For **answer** type codes, this field indicates the related area of the Laboratory package database in which answers to the code are stored.

Use it when the answer associated with a **result** code cannot be stored in the usual VistA Laboratory LAB DATA file (#63) field. For example:

SNOMED CT code 23506009 is the term normal flora. This term is the **answer** used within the LAB DATA file (#63). If it is associated as the **answer** to a microorganism identified code, instead of stored as an entry in the ETIOLOGY FIELD file (#61.2), it is stored as a **comment**.

- NATIONAL STANDARD field (#62.4701,.05): This field flags an entry as nationally distributed or local.

- RELATED ENTRY field (#62.4701,2.1): This field links the code/codeset to an entry in one of the pointed-to files, which allows the system to determine how to translate a code/codeset to a file entry.
- MESSAGE CONFIGURATION field (#62.4701,2.2): When the related identifier (code) is from a local coding system, this field indicates the specific interface with which the code is associated. Local codes are interface-specific.

4.4 LEDI IV Anatomic Pathology

The LEDI IV patch provides several enhancements for Anatomic Pathology.

4.4.1 New Options to Enter and Edit for AP Functionality

The new functionality in the VistA Laboratory Anatomic Pathology section includes:

- Populating the LAB DATA (#63), ACCESSION (#68), and LAB ORDER ENTRY (#69) files with:
 - AP accession to be consistent with the rest of laboratory's accession process.
 - The creation and storing of the UID, ordering data, and order number.
- Creation of the ORDERED TEST sub-file (#63.53) for the SP, EM, and CY sections. This sub-file contains information about the ordered tests for this accession. The ORDERED TEST field (#.01) contains the ordered test NLT code requested by the clinical provider. This sub-file contains fifteen fields.
- Enhanced the generation of the CPRS Anatomic Pathology alerts/notifications to the following recipients:
 - Outpatient Primary Care Provider if patient is Outpatient – new feature.
 - If it is a related surgery case, then the following providers receive the alerts/notifications:
 - The current surgeon if different from surgeon used as ordering provider when specimen was logged in.
 - Attending surgeon.

The list of recipients is displayed to the releasing pathologist/user.

- Modified the laboratory user login process for SP, CY, and EM. The process was modified to require an entry from the COLLECTION SAMPLE file (#62), an entry from the TOPOGRAPHY FIELD file (#61), and a selection of multiple orderable test code names from LABORATORY TEST file (#60), during AP login.



REF: For a sample of this AP login process, see Chapter 5, "Use of the LEDI IV Software."

- Modified Print log book [LRAPBK]:
 - If the site has the Document Surgery Package Case Info Parameter set to Yes, then when copying surgical case information from the Surgery package during surgical pathology login a statement will be added to the copied information documenting the source of the copied information..
 - The LIM may also set a prompt for printing a single accession. The accession number can be entered by using the <ACCESSION AREA> <DATE> <NUMBER> format or UID in the 10-15 character formats. The Log Book now displays the UID for all entries.
- Within Anatomic Pathology result entry options, the user can designate the performing laboratory for the entire report or for specific sections of the report. If choosing to enter the performing laboratory for specific sections, only the sections that have data entered will appear.
- This option is being released but will not be used at this time: Added the option AP LEDI Data Entry [LRAP VR]. This option allows data from an automated instrument for Anatomic Pathology (LDSI results) to be reviewed individually by accession or by UID. If the user holds the LRAPMOD security key, the data can also be verified. Once verified, the data is not available for viewing with this option.



NOTE: The AP LEDI Data Entry option will only be used by the LEDI IV BETA test sites who previously used the software to send and receive Anatomic Pathology (AP).



REF: For examples of new or modified options and prompts, see Chapter 5, "Use of the LEDI IV Software."

4.5 LEDI IV LOINC Functionality



NOTE: This functionality is reserved for future use with a subsequent release of the LEDI software (timeframe TBD).

Several modifications are provided by the LEDI IV Patch for LOINC functionality.

- The LAB CODE MAPPING file (#62.47) provides the ability to map the LOINC codes of external systems to corresponding Microbiology and Anatomic Pathology concepts.

This file is used to map standard code system concepts to the related area of the Laboratory package database, as well as to support mapping codes used in the roles of identifying the result or expressing the answer.

- The VistA Laboratory LEDI software provides the ability to report Microbiology and AP results with pre-determined and site-configurable mapping of LOINC codes.
- The VistA Laboratory LEDI software allows standardized reporting of Microbiology tests results and site-mapped antibiotics to LOINC.
- SNOMED CT hierarchy concepts added to the LAB ELECTRONIC CODES file (#64.061) to support routing of SNOMED CT concepts to corresponding sections of the VistA Laboratory database.
- LOINC codes received from external systems are accepted and mapped to corresponding VistA Laboratory database concepts via the .01 Concept field of the LAB CODE MAPPING file (#62.47).

4.6 LEDI IV Chemistry/Hematology (CH)

- The LEDI IV patch provides new enhancements for Chemistry and Hematology.

Within Chemistry and Hematology result entry options, the user can opt to send one of three alert types to the ordering provider and additional recipients and/or mail groups. Depending on how the parameter is set, will determine whether the user is prompted to send an alert. The three alert types are:

- Lab results available
- Abnormal lab results
- Critical lab results



NOTE: The type of alert generated either depends on whether the clinician has set the parameter for personal alerts in CPRS, or if the alert is mandatory at the system level.



REF: For additional details on these alerts, see the "Enabling Notification" section in the *CPRS Consult/Request Tracking User Manual* in the VDL:
<http://www.va.gov/vdl/application.asp?appid=62>.

5 Use of the LEDI IV Software

5.1 VistA Laboratory New Menus



NOTE: For LIMs and IRM personnel, follow the Installation steps in the *LEDI IV Install Guide* prior to using this software: <http://www.va.gov/vdl/application.asp?appid=75>

The following new menus accommodate the new LEDI IV functionality.

5.1.1 New Laboratory Menu—Lab Code Mapping File Menu [LA7V 62.47 MENU]

The Lab Code Mapping File menu [LA7V 62.47 MENU] is the main menu that allows access to the LAB CODE MAPPING file (#62.47). This menu is located on the Lab Shipping Management Menu [LA7S MGR MENU]. This menu gets used for preparation for conversion to the Laboratory System.

Figure 5. Lab Code Mapping File menu [LA7V 62.47 MENU] options

Select Lab Shipping Management Menu Option: LAB CODE MAPPING FILE	
AEL	Add/Edit Local Identifier
CMC	Clone a Message Configuration
CSM	Code/Set Mismatches
DOD	Initialize DOD Codes
ECH	Error Code Help
ES	Edit Susceptibility
FI	Find Identifier
MAS	Map All Susceptibilities
PL	Print Local Codes
PMC	Print by Message Configuration
PS	Print Susceptibilities

5.2 Parameters and Hierarchies with LEDI IV

This section lists the parameters that are new with LEDI IV. These parameters can be edited using one of these three options:

- Package Level Parameter Edit [LR70 PAR PKG] **NOTE:** There is a restriction on which user level at each site is allowed to edit Package Level Parameters.
- Domain Level Parameter Edit, The Domain Level Option is used to modify Division Level Parameters [LR70 PAR DOMAIN].
- General Lab User Parameters [LR USER PARAM].

5.2.1 Parameter Precedence Order

A single parameter may be set for several different types of entities. The Precedence Order lists the order in which entities are searched for a defined value.

For example, if a parameter may be set for a Package, a Division, and a User and the respective precedents are 3, 2, 1, the value of the User parameter would be used. If it did not exist, then the value of the Division parameter would be used. If that did not exist, then the value of the Package parameter would be used.

The table below provides the Parameters that are new and accessible by the users with the LEDI IV patch. The display text, parameter name, description and precedence order are all included.

Table 2. LEDI IV patch parameters

Display Text	Name	Description	Precedence Order
Default manual verify method	LR VER EM VERIFY BY UID	Used to designate the default verification method presented to the user when verifying laboratory results in the "CH" subscript via options that do not use a load/work list . Parameter can be set at the package, division or user level. Division level takes precedence over the package level. User level takes precedence over division level. Site can also force verification by UID only. The available values that can be selected are: Accession number, UID (Unique Identifier) and only UID.	1. User 2. Division 3. Package
Default load/work list verify method	LR VER EA VERIFY BY UID	Used to designate the default verification method presented to the user when verifying laboratory results in the "CH" subscript via options that use a load/work list . Parameter is associated with the accession area linked to the load/worklist profile selected by the user. Parameter can be set at the package or user	1. User 2. Package

Display Text	Name	Description	Precedence Order
		level. User level takes precedence over package level. The available values that can be selected are: Accession number, UID (Unique Identifier) and only UID.	
Display Provider in Micro Result Entry	LR MI VERIFY DISPLAY PROVIDER	This parameter allows the site/division/user to indicate if the ordering provider information should be displayed to the user during microbiology result data entry. The information displayed to the user is: <ul style="list-style-type: none"> • Provider Name • Voice Pager • Office Phone • Digital Pager 	<ol style="list-style-type: none"> 1. User 2. Division 3. Package
Prompt CPRS Alert in Micro Result Entry	LR MI VERIFY CPRS ALERT	Used to allow the user to determine if they want to be prompted to send a CPRS alert after editing a microbiology accession. The user can indicate: <ul style="list-style-type: none"> • They do not want to be asked • The user can request that they be asked and have the default prompt to be set to NO, or • The user can request to be asked and have the default prompt to be set to Yes. The default Package level setting is 'Don't Ask'.	<ol style="list-style-type: none"> 1. User 2. Division 3. Package
EGFR Creatinine IDMS-traceable Method	LR EGFR METHOD	Used to designate if the EGFR calculation should calculate the EGFR based on an IDMS-traceable method. This parameter is configurable at both the package and division level.	<ol style="list-style-type: none"> 1. Division 2. Package
EGFR Patient's Age Cutoff	LR EGFR AGE CUTOFF	Used to designate if the EGFR calculation should not be performed on creatinine when executing the delta check EGFR when the patient's age is <18 or >70. This parameter is configurable at both the Package and division level and can be set for either or both age cutoffs	<ol style="list-style-type: none"> 1. Division 2. Package
EGFR Result Cutoff	LR EGFR RESULT SUPPRESS	Used to designate if the EGFR calculation should be suppressed when the value is >60. If enabled then ">60" is reported in lieu of the actual EGFR calculated value. This parameter is configurable at both the package and division level.	<ol style="list-style-type: none"> 1. Division 2. Package
Send an alert after AP release	LRAPRES1 AP ALERT	After Anatomic Pathology report is released, this will be the default answer to the "Send an alert" message. The default Package level setting is 'NO'.	<ol style="list-style-type: none"> 1. User 2. Division 3. Package

Display Text	Name	Description	Precedence Order
Default AP Report Selection Prompt	LR AP REPORT SELECTION	Allows the package/facility/user to set a default report selection method to present to the user.	1. User 2. Division 3. Package
Ask Performing Lab AP	LR ASK PERFORMING LAB AP	<ul style="list-style-type: none"> Enter YES to be prompted for Performing Lab. Enter NO to <i>not</i> be prompted for Performing Lab. <p>If the user chooses not to be prompted for performing laboratory, the system will assign the performing laboratory based on the user's Default Performing Laboratory parameter and if the parameter is not set for the user, it defaults to the user's Institution (DUZ(2)). The default Package level setting is 'YES'.</p>	1. User 2. Division 3. Package
Ask Performing Lab Micro	LR ASK PERFORMING LAB MICRO	<ul style="list-style-type: none"> Enter YES to be prompted for Performing Lab. Enter NO to <i>not</i> be prompted for Performing Lab. <p>If the user chooses not to be prompted for performing laboratory, the system will assign the performing laboratory based on the user's 'Default Performing Laboratory' parameter and if the parameter is not set for the user, it defaults to the user's Institution (DUZ(2)). The default Package level setting is 'YES'.</p>	1. User 2. Division 3. Package
Print SNOMED Code System	LR AP SNOMED SYSTEM PRINT	Parameter to allow the site/division to indicate which version of SNOMED to print or display on Anatomic Pathology reports. The default Package level setting is 'SNOMED I'.	1. Division 2. Package
Document Surgery Package Case Info	LR AP SURGERY REFERENCE	Allows site/division to indicate when copying surgical case information from the Surgery package during surgical pathology login if a statement is also added to the copied information documenting the source of the copied information. The default Package level setting is 'NO'.	1. Division 2. Package
Chemistry GUI Report Right Margin	LR CH GUI REPORT RIGHT MARGIN	This is the value to use for the right margin (column) when formatting chemistry/hematology type laboratory reports within a GUI display/client.	1. User 2. Division 3. Package
Microbiology GUI Report Right Margin	LR MI GUI REPORT RIGHT MARGIN	This is the value to use for the right margin (column) when formatting microbiology type laboratory reports within a GUI display/client.	1. User 2. Division 3. Package
AP GUI Report	LR AP GUI	This is the value to use for the right margin	1. User

Display Text	Name	Description	Precedence Order
Right Margin	REPORT RIGHT MARGIN	(column) when formatting anatomic pathology type laboratory reports within a GUI display/client.	2. Division 3. Package
Default Accessioning Specimen	LR ACCESSION DEFAULT SPECIMEN	Allows the package/facility/user to set a default topography presented to the user when accessioning specimens into the Laboratory system.	1. User 2. Division 3. Package
Default Accessioning Collection Sample	LR ACCESSION DEFAULT COL SAMP	Allows the package/facility/user to set a default collection sample presented to the user when accessioning specimens into the Laboratory system.	1. User 2. Division 3. Package
Default Accessioning Lab Test	LR ACCESSION DEFAULT LAB TEST	Allows the package/facility/user to set a default laboratory test presented to the user when accessioning specimens into the Laboratory system.	1. User 2. Division 3. Package
Exclude removed tests from building	LR MANIFEST EXC PREV TEST	Allows package or user to select the default value presented to the user when building a shipping configuration to the prompt "Exclude previously removed tests from building?"	1. User 2. Package
Use default accession dates	LR MANIFEST DEFLT ACCESSION	Allows package or user to select the default value presented to the user when building a shipping configuration to the prompt "Use default accession dates?"	1. User 2. Package
Print Reporting/Printing Facility	LR REPORTS FACILITY PRINT	Determines if the name and address of the: <ul style="list-style-type: none"> Laboratory that is responsible for the report display on the Laboratory report. Facility where the report is printed display on the Laboratory report. Both names display on the Laboratory report. The default Package level setting is 'None'. NOTE: Setting of the Print Reporting /Printing Facility is not fully functional for Multi-Divisional sites. It also has no impact on the Performing Lab that displays in CPRS.	1. Division 2. Package
Lab STS Default Mapping Files Directory	LR MAPPING DEFAULT DIRECTORY	This parameter holds the name of the default directory, which contains the STS mapping of standard code sets to VistA Laboratory system files. Should be expressed as a full directory specification.	1. User 2. Package 3. System
Lab STS Default Mapping Filespec	LR MAPPING DEFAULT FILESPEC	This parameter holds the file specification used to screen which files in a given directory are presented to the user for loading. These files contain the STS mapping of standard code sets to VistA Laboratory system files.	1. User 2. Package 3. System

Display Text	Name	Description	Precedence Order
		The default Package level setting is '*.TXT'.	
Default lab label printer	LR LABEL PRINTER DEFAULT	Allows selection of default lab label printer presented to the user when selecting the label device to use to print accession and order labels. User can specify default printer by division.	1. User
Default Performing Laboratory	LR VER DEFAULT PERFORMING LAB	Allows the user to designate a default performing lab that is presented to the user when specifying the performing lab. Normally the lab software defaults to the user's institution. This parameter allows the user to specify a different institution.	1. User
Lab Messaging - Parse HL7 Messages	LA7UTILA PARSE	Allows the User to select the default setting for "Parse HL7 Message" prompt when using [LA7 PRINT LAB UI MESSAGE]. "LAST" means the user wants the system to keep track of their last response to this prompt and use that as their default.	1. User 2. System
Lab Messaging - Display using Browser	LA7UTILA USE BROWSER	Allows the User to select the default setting for the "Use Browser to display HL7 Message" prompt when using [LA7 PRINT LAB UI MESSAGE]. "LAST" means the User wants the system to keep track of their last response to this prompt and use that as their default.	1. User 2. System
Lab Messaging - Show Identifiers	LA7UTILA SHOIDS	Allows the user to select the default setting for the "Display identifiers during message selection?" prompt when using [LA7 PRINT LAB UI MESSAGE].	1. User 2. System
Prompt CPRS Alert in CH Result Entry	LR CH VERIFY CPRS ALERT	Used to allow the user to determine if they want to be prompted to send a CPRS alert after editing a Chem/Heme accession. The user can indicate: <ul style="list-style-type: none"> • They do not want to be asked • The user can request that they be asked and have the default prompt to be set to NO, • The user can request to be asked and have the default prompt to be set to Yes. 	1. User 2. Division 3. Package

5.2.2 Package Level Parameter Edit [LR70 PAR PKG]

Package Level Parameter Setup should be performed by the LIM. The option Package Level Parameter Edit [LR70 PAR PKG] specifies LAB package settings for the new parameters introduced with LEDI IV (see list below). The Lab LIM should configure these as appropriate for their package. The option is located on the Update CPRS Parameters menu [LR70 PARAM MENU].



NOTE: During data entry, the LIM can enter two question marks next to a field and VistA provides a short explanation of the parameter.

- Default manual verify method
- Default load/work list verify method
- Display Provider in Micro Result Entry
- Prompt CPRS Alert in Micro Result Entry
- Prompt CPRS Alert in CH Result Entry
- EGFR Creatinine IDMS-traceable Method
- EGFR Patient's Age Cutoff
- EGFR Result Cutoff
- Send an alert after AP release
- Default AP Report Selection Prompt
- Ask Performing Lab AP
- Ask Performing Lab Micro
- Print SNOMED Code System
- Document Surgery Package Case Info
- Chemistry GUI Report Right Margin
- Microbiology GUI Report Right Margin
- AP GUI Report Right Margin
- Default Accessioning Specimen
- Default Accessioning Collection Sample
- Default Accessioning Lab Test
- Exclude removed tests from building
- Use default accession dates
- Print Reporting/Printing Facility
- Lab STS Default Mapping Files Directory
- Lab STS Default Mapping Filespec

Figure 6. Package Level Parameter Edit [LR70 PAR PKG]

```

Select Laboratory DHCP Menu Option: SUPER <Enter> visor menu
Select Supervisor menu Option: LAB LIA <Enter> ison menu
Select Lab liaison menu Option: OE/RR <Enter> interface parameters
Select OE/RR interface parameters Option: CC <Enter> Update CPRS Parameters
Select Update CPRS Parameters Option: ?

    PA    Update CPRS with Lab order parameters
    SI    Update CPRS with Single Lab test
    UP    Update CPRS with all Lab test parameters
    DO    Domain Level Parameter Edit
    LO    Location Level Parameter Edit
    PP    Package Level Parameter Edit
    UL    Display Lab User Parameters

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Update CPRS Parameters Option: PP <Enter> Package Level Parameter Edit
Lab Package Level Parameters for Package: LAB SERVICE
-----
Collect on Monday                                YES
Collect on Tuesday                              YES
Collect on Wednesday                            YES
Collect on Thursday                             YES
Collect on Friday                               YES
Collect on Saturday                             NO
Collect on Sunday                               NO
Lab Collects on Holidays                        YES
Lab Collect Days Allowed in Future              365
Maximum Days for Continuous Orders              270
Default manual verify method
Default load/work list verify method
Display Provider in Micro Result Entry
Prompt CPRS Alert in Micro Result Entry        Don't Ask
Prompt CPRS Alert in CH Result Entry
EGFR Creatinine IDMS-traceable Method
EGFR Patient's Age Cutoff
EGFR Result Cutoff
Send an alert after AP release
Default AP Report Selection Prompt
Ask Performing Lab AP                            YES
Ask Performing Lab Micro                         YES
Print SNOMED Code System                       SNOMED I
Document Surgery Package Case Info
Chemistry GUI Report Right Margin
Microbiology GUI Report Right Margin
AP GUI Report Right Margin
Default Accessioning Specimen
Default Accessioning Collection Sample
Default Accessioning Lab Test
Exclude removed tests from building
Use default accession dates
Print Reporting/Printing Facility              None
Lab STS Default Mapping Files Directory
Lab STS Default Mapping Filespec               *.TXT
-----
COLLECT MONDAY: YES// <Enter>
COLLECT TUESDAY: YES// <Enter>
COLLECT WEDNESDAY: YES// <Enter>
COLLECT THURSDAY: YES// <Enter>
COLLECT FRIDAY: YES// <Enter>

```

```

COLLECT SATURDAY: NO// <Enter>
COLLECT SUNDAY: NO// <Enter>
IGNORE HOLIDAYS: YES// <Enter>
LAB COLLECT DAYS ALLOWED IN FUTURE: 365// <Enter>
MAXIMUM DAYS FOR CONTINUOUS ORDERS: 270// <Enter>
Default manual verify method: <Enter>
For Default load/work list verify method -
Select Accession Area: <Enter>
Display Provider in Micro Result Entry: <Enter>
Send CPRS Alert in Micro Result Entry: Don't Ask// <Enter>
Send CPRS Alert in CH Result Entry: <Enter>
Creatinine IDMS-traceable Method: <Enter>
Suppress EGFR When Patient's Age: <Enter>
Report EGFR as >60: <Enter>
Send alert for released AP: <Enter>
AP Report Selection Default: <Enter>
Ask Performing Lab AP: YES// ?
Enter yes to be prompted for Performing Lab for Anatomic Pathology tests.
Ask Performing Lab AP: YES// <Enter>
Ask Performing Lab for MICRO: YES// ?
Enter yes to be prompted for Performing Lab for Microbiology tests.
Ask Performing Lab for MICRO: YES// <Enter>
Print SNOMED Version: SNOMED I// <Enter>
Document Surgery Case Info: <Enter>
Chemistry GUI Report Right Margin: <Enter>
Microbiology GUI Report Right Margin: <Enter>
AP GUI Report Right Margin: <Enter>
For Default Accessioning Specimen -
Select Lab Section: <Enter>
For Default Accessioning Collection Sample -
Select Lab Section: <Enter>
For Default Accessioning Lab Test -
Select Lab Section: <Enter>
For Exclude removed tests from building -
Select Shipping Configuration: <Enter>
For Use default accession dates -
Select Shipping Configuration: <Enter>
Print Reporting/Printing Facility: None// <Enter>
Default Directory: ?
The directory that contains the STS mapping files.
Default Directory: <Enter>
Default FileSpec: *.TXT// <Enter>
Select Update CPRS Parameters Option:

```

5.2.3 General Lab User Parameters [LR User Param]

General Lab user parameter setup should be performed by the Lab users. The General Lab User Parameters [LR USER PARAM] option specifies user level default settings that a user can set to override corresponding package or domain level parameters for these settings (see list below). This option is located on the Information-help menu [LRHELP].



NOTE: During data entry, the LIM can type in two question marks next to a field and Vista provides a short explanation of the parameter.

- Default lab label printer
- Display previous comments for test
- Default Performing Laboratory
- Ask Performing Lab AP
- Ask Performing Lab Micro
- Display Provider in Micro Result Entry
- Prompt CPRS Alert in CH Result Entry
- Prompt CPRS Alert in Micro Result Entry
- Default AP Report Selection Prompt
- Send an alert after AP release
- Default Accessioning Specimen
- Default Accessioning Collection Sample
- Default Accessioning Lab Test
- Exclude removed tests from building
- Use default accession dates
- Lab Messaging - Parse HL7 Messages
- Lab Messaging - Display using Browser
- Lab Messaging - Show Identifiers
- Chemistry GUI Report Right Margin
- Microbiology GUI Report Right Margin
- AP GUI Report Right Margin
- Lab STS Default Mapping Files Directory
- Lab STS Default Mapping Filespec

Figure 7. General Lab User Parameters [LR USER PARAM]

```
Select OPTION NAME: LRMENU <Enter> Laboratory DHCP Menu

Select Laboratory DHCP Menu Option: ?

1      Phlebotomy menu ...
2      Accessioning menu ...
3      Process data in lab menu ...
4      Quality control menu ...
5      Results menu ...
6      Information-help menu ...
7      Ward lab menu ...
8      Anatomic pathology ...
9      Blood bank ...
10     Microbiology menu ...
11     Supervisor menu ...
LSM    Lab Shipping Menu ...

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Laboratory DHCP Menu Option: 6 <Enter> Information-help menu

Select Information-help menu Option: PP <Enter> General Lab User Parameters

Lab User Level Parameters for User: LRUSER,TWO
-----
Default lab label printer
Display previous comments for test
Default Performing Laboratory
Ask Performing Lab AP
Ask Performing Lab Micro
Display Provider in Micro Result Entry
Prompt CPRS Alert in CH Result Entry
Prompt CPRS Alert in Micro Result Entry
Default AP Report Selection Prompt
Send an alert after AP release
Default Accessioning Specimen
Default Accessioning Collection Sample
Default Accessioning Lab Test
Exclude removed tests from building
Use default accession dates
Lab Messaging - Parse HL7 Messages
Lab Messaging - Display using Browser
Lab Messaging - Show Identifiers
Chemistry GUI Report Right Margin
Microbiology GUI Report Right Margin
AP GUI Report Right Margin
Lab STS Default Mapping Files Directory          USER$:[LRUSERT]
Lab STS Default Mapping Filespec
-----

For Default lab label printer -
Select Division: ?

There are currently no entries for Division.

Answer with INSTITUTION NAME, or STATUS, or STATION NUMBER, or
OFFICIAL VA NAME, or CURRENT LOCATION, or CODING SYSTEM/ID PAIR, or
NPI, or STATUS, or NAME (CHANGED FROM), or CODING SYSTEM
Do you want the entire INSTITUTION List? Y <Enter> (Yes)
```

Choose from:

...

List of Institutions displays.

Select Division: **<Enter>**

For Display previous comments for test -
Select Laboratory Test: **?**

There are currently no entries for Laboratory Test.

Answer with LABORATORY TEST NAME, or LOCATION (DATA NAME), or
PRINT NAME

Do you want the entire LABORATORY TEST List? **Y <Enter>** (Yes)

Choose from:

1,25-DIHYDROXYVIT D3	1,25-DI
1/2HR LTT	1/2HR L
1/2Hr.GTT	1/2Hr.G
1/2Hr.GTT (URINE)	1/2Hr.G
11-DEOXYCORTISOL	11-DEOX
17-HYDROXYCORTICOSTEROIDS	17-HYDR
1HR LTT	1HR LTT
1Hr.GTT	1Hr.GTT
1Hr.GTT (URINE)	1Hr.GTT
25 OH VITAMIN D	25 OH V
2HR LTT	2HR LTT
2Hr.GTT	2Hr.GTT
2Hr.GTT (URINE)	2Hr.GTT
3HR LTT	3HR LTT
3Hr.GTT	3Hr.GTT
3Hr.GTT (URINE)	3Hr.GTT
4Hr.GTT	4Hr.GTT
4Hr.GTT (URINE)	4Hr.GTT
5' NUCLEOTIDASE	5' N
5Hr.GTT	5Hr.GTT

^

Select Laboratory Test: **<Enter>**

Default Performing Laboratory: **?**

Answer with INSTITUTION NAME, or STATUS, or STATION NUMBER, or
OFFICIAL VA NAME, or CURRENT LOCATION, or CODING SYSTEM/ID PAIR, or
NPI, or STATUS, or NAME (CHANGED FROM), or CODING SYSTEM

Do you want the entire INSTITUTION List? **Y <Enter>** (Yes)

Choose from:

DOD-SAIC	CA
LAB RE-ENGINEERING - REGION 1	TX OTHER 200LR1
LABORATORY CORPORATION	NC
MILWAUKEE VAMC	WI VAMC 695
REGION 7 ISC,TX (FS)	TX 170
TRIPLER ARMY MEDICAL CENTER	HI USAH 459CN
ZZ BONHAM	TX VAMC 522 INACTIVE Jan 01, 1997

Default Performing Laboratory: **<Enter>**

Ask Performing Lab AP: **?**

Enter yes to be prompted for Performing Lab for Anatomic Pathology tests.

Ask Performing Lab AP: **<Enter>**

Ask Performing Lab for MICRO: **?**

Enter yes to be prompted for Performing Lab for Microbiology tests.

Ask Performing Lab for MICRO: **<Enter>**

Display Provider in Micro Result Entry: **?**

Enter yes/no to display ordering provider information during micro result entry.

Display Provider in Micro Result Entry: **<Enter>**

Send CPRS Alert in CH Result Entry: **?**

Specify if user should be prompted to send a CPRS Alert.

Select one of the following:

- 0 Don't Ask
- 1 Ask - Default NO
- 2 Ask - Default YES

Send CPRS Alert in CH Result Entry: **<Enter>**

Send CPRS Alert in Micro Result Entry: **?**

Specify if user should be prompted to send a CPRS Alert.

Select one of the following:

- 0 Don't Ask
- 1 Ask - Default NO
- 2 Ask - Default YES

Send CPRS Alert in Micro Result Entry: **<Enter>**

AP Report Selection Default: **?**

Specify the default report selection method presented to user.

Select one of the following:

- 1 Accession Number
- 2 Unique Identifier (UID)
- 3 Patient Name

AP Report Selection Default: **<Enter>**

Send alert for released AP: **?**

Enter either 'Y' or 'N'.

Send alert for released AP: **<Enter>**

For Default Accessioning Specimen -

Select Lab Section: **?**

There are currently no entries for Lab Section.

Answer with ACCESSION AREA, or UID, or HOST UID
Do you want the entire ACCESSION List? y (Yes)

Choose from:

CYTOPATHOLOGY

CYTOPATHOLOGY-GYN

EM

SURGICAL PATHOLOGY

Select Lab Section: **<Enter>**

For Default Accessioning Collection Sample -
Select Lab Section: ?

There are currently no entries for Lab Section.

Answer with ACCESSION AREA, or UID, or HOST UID
Do you want the entire ACCESSION List? y (Yes)
Choose from:
CYTOPATHOLOGY
CYTOPATHOLOGY-GYN
EM
SURGICAL PATHOLOGY

Select Lab Section: <Enter>

For Default Accessioning Lab Test -
Select Lab Section: ?

There are currently no entries for Lab Section.

Answer with ACCESSION AREA, or UID, or HOST UID
Do you want the entire ACCESSION List? y (Yes)
Choose from:
CYTOPATHOLOGY
CYTOPATHOLOGY-GYN
EM
SURGICAL PATHOLOGY

Select Lab Section: <Enter>

For Exclude removed tests from building -
Select Shipping Configuration: ?

There are currently no entries for Shipping Configuration.

Answer with LAB SHIPPING CONFIGURATION NAME, or COLLECTING FACILITY, or
HOST FACILITY'S SYSTEM, or COLLECTING FACILITY'S SYSTEM
Do you want the entire LAB SHIPPING CONFIGURATION List? y (Yes)
Choose from:
CERNER #1
DOD HOST
LABCORP
LEDI HOST LAB
MHC TO VRR
TRIPLER AMC

Select Shipping Configuration: <Enter>

For Use default accession dates -
Select Shipping Configuration: ?

There are currently no entries for Shipping Configuration.

Answer with LAB SHIPPING CONFIGURATION NAME, or COLLECTING FACILITY, or
HOST FACILITY'S SYSTEM, or COLLECTING FACILITY'S SYSTEM
Do you want the entire LAB SHIPPING CONFIGURATION List? y (Yes)
Choose from:
CERNER #1
DOD HOST
LABCORP
LEDI HOST LAB

MHC TO VRR
TRIPLER AMC

Select Shipping Configuration: **<Enter>**

Lab Messaging - Parse HL7 Messages: **?**

Enter a code from the list.

Select one of the following:

Y	YES
N	NO
L	LAST

Lab Messaging - Parse HL7 Messages: **<Enter>**

Lab Messaging - Use Browser to display: **?**

Enter a code from the list.

Select one of the following:

Y	YES
N	NO
L	LAST

Lab Messaging - Use Browser to display: **<Enter>**

Lab Messaging - Show Identifiers: **?**

Enter a code from the list.

Select one of the following:

Y	YES
N	NO
L	LAST

Lab Messaging - Show Identifiers: **<Enter>**

Chemistry GUI Report Right Margin: **?**

Enter the value to be used for the right margin when formatting lab reports.

Chemistry GUI Report Right Margin: **<Enter>**

Microbiology GUI Report Right Margin: **?**

Enter the value to be used for the right margin when formatting lab reports.

Microbiology GUI Report Right Margin: **<Enter>**

AP GUI Report Right Margin: **?**

Enter the value to be used for the right margin when formatting lab reports.

AP GUI Report Right Margin: **<Enter>**

Default Directory: USER\$:[LRUSER]// **?**

The directory that contains the STS mapping files.

Default Directory: USER\$:[LRUSER]// **<Enter>**

Default FileSpec: **?**

The filespec to screen the display of files.

Default FileSpec: **<Enter>**

Select Information-help menu Option: Select Laboratory DHCP Menu Option:

5.2.4 Domain Level Parameter Edit [LR70 PAR DOMAIN]

Use the option Domain Level Parameter Edit [LR70 PAR DOMAIN] to edit the parameters at the Division level. The LIM performs the Domain Level Parameter Edit to configure the parameters appropriately for their system. The Domain Level Parameter Edit [LR70 PAR DOMAIN] specifies Division level settings that can be set to override corresponding Package level settings for the following parameters.



NOTE: During data entry, the LIM can type in two question marks next to a field and VistA provides a short explanation of the parameter.

- Lab Collect Days Allowed in Future
- Default manual verify method
- Default load/work list verify method
- EGFR Creatinine IDMS-traceable Method
- EGFR Patient's Age Cutoff
- EGFR Result Cutoff
- Default AP Report Selection Prompt
- Ask Performing Lab AP
- Ask Performing Lab Micro
- Print SNOMED Code System
- Document Surgery Package Case Info
- Default Accessioning Specimen
- Default Accessioning Collection Sample
- Default Accessioning Lab Test
- Display Provider in Micro Result Entry
- Prompt CPRS Alert in Micro Result Entry
- Prompt CPRS Alert in CH Result Entry
- Chemistry GUI Report Right Margin
- Microbiology GUI Report Right Margin
- AP GUI Report Right Margin
- Print Reporting/Printing Facility

Figure 8. Domain Level Parameter Edit [LR70 PAR DOMAIN]

```
Select Laboratory DHCP Menu Option: SUPER <Enter> visor menu
Select Supervisor menu Option: LAB LIA <Enter> ison menu
Select Lab liaison menu Option: OE/RR <Enter> interface parameters
Select OE/RR interface parameters Option: CC <Enter> Update CPRS Parameters
Select Update CPRS Parameters Option: ?

PA      Update CPRS with Lab order parameters
SI      Update CPRS with Single Lab test
UP      Update CPRS with all Lab test parameters
DO      Domain Level Parameter Edit
LO      Location Level Parameter Edit
PP      Package Level Parameter Edit
UL      Display Lab User Parameters

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Update CPRS Parameters Option: DO <Enter> Domain Level Parameter Edit

Select INSTITUTION NAME: ZZ BONHAM <Enter>          TX  VAMC          522          INACTIVE
Jan 01, 1997

Lab Domain Level Parameters for Division: ZZ BONHAM
-----
Phlebotomy Collection Time      27000          0800
                                54000          1530
                                55200          1530

Lab Collect Days Allowed in Future
Default manual verify method
Default load/work list verify method
EGFR Creatinine IDMS-traceable Method
EGFR Patient's Age Cutoff
EGFR Result Cutoff
Default AP Report Selection Prompt
Ask Performing Lab AP           YES
Ask Performing Lab Micro       YES
Print SNOMED Code System       SNOMED I
Document Surgery Package Case Info
Default Accessioning Specimen
Default Accessioning Collection Sample
Default Accessioning Lab Test
Display Provider in Micro Result Entry
Prompt CPRS Alert in Micro Result Entry
Prompt CPRS Alert in CH Result Entry
Chemistry GUI Report Right Margin
Microbiology GUI Report Right Margin
AP GUI Report Right Margin
Print Reporting/Printing Facility
-----

For Phlebotomy Collection Time -
Select Instance: <Enter>
LAB COLLECT DAYS ALLOWED IN FUTURE: <Enter>
Default manual verify method: <Enter>
For Default load/work list verify method -
Select Accession Area: <Enter>
Creatinine IDMS-traceable Method: <Enter>
Suppress EGFR When Patient's Age: <Enter>
Report EGFR as >60: <Enter>
AP Report Selection Default: <Enter>
Ask Performing Lab AP: YES// ?
Enter yes to be prompted for Performing Lab for Anatomic Pathology tests.
```

```
Ask Performing Lab AP: YES// <Enter>
Ask Performing Lab for MICRO: YES// ?
Enter yes to be prompted for Performing Lab for Microbiology tests.
Ask Performing Lab for MICRO: YES// <Enter>
Print SNOMED Version: SNOMED I// <Enter>
Document Surgery Case Info: <Enter>
For Default Accessioning Specimen -
Select Lab Section: <Enter>
For Default Accessioning Collection Sample -
Select Lab Section: <Enter>
For Default Accessioning Lab Test -
Select Lab Section: <Enter>
Display Provider in Micro Result Entry: <Enter>
Send CPRS Alert in Micro Result Entry: <Enter>
Send CPRS Alert in CH Result Entry: <Enter>
Chemistry GUI Report Right Margin: <Enter>
Microbiology GUI Report Right Margin: <Enter>
AP GUI Report Right Margin: <Enter>
Print Reporting/Printing Facility: <Enter>
Select Update CPRS Parameters Option:
```

5.3 New LEDI IV Options

5.3.1 Edit an Antibiotic [LRWU7 EDIT]

The Edit an Antibiotic [LRWU7 EDIT] allows the editing of an existing bacterial antibiotic or mycobacterium antibiotic.

Figure 9. Edit an Antibiotic [LRWU7 EDIT]

```
Select Lab liaison menu Option: ?

ANT      Add a new internal name for an antibiotic
ANTE     Edit 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
LNC      LOINC Main Menu ...
MOD      Modify an existing data name
SMGR     Lab Shipping Management Menu ...
         Add a new WKLD code to file
         AP Microfiche Archive
         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
         Print AMA CPT Panel Pending List
         Re-index Antimicrobial Suscept File (62.06)
         Restart processing of instrument data
         Turn on site workload statistics
         Turn on workload stats for accession area
         User selected lab test/patient list edits ...

Select Lab liaison menu Option: EDIT AN ANTIBIOTIC

      Select one of the following:

          1      Bacterial Antibiotic
          2      Mycobacterium Antibiotic

Select Antibiotic Type to Edit: 1// <Enter> Bacterial Antibiotic
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: PENICILLIN <Enter> PENICILLIN
NAME: PENICILLIN// <Enter>
INTERNAL NAME: PENICILLIN// <Enter>
DISPLAY COMMENT: <Enter>
ABBREVIATION: PEN// <Enter>
DEFAULT SCREEN: ALWAYS DISPLAY// <Enter>
PRINT ORDER: 23// <Enter>
Select SUSCEPTIBILITY RESULT: <Enter>
NATIONAL VA LAB CODE: Penicillin//
```

5.3.2 Manage MI/AP Test Mappings [LRCAPFF]

In preparation for converting to the next LEDI patch, the Manage MI/AP Test Mappings [LRCAPFF] establishes the relationships between the LABORATORY TEST (#60), the WKLD CODE (#64) and the LAB ELECTRONIC CODES (#64.061) files for LEDI MI/AP tests.

Figure 10. Manage MI/AP Test Mappings [LRCAPFF]

```
Select LIM workload menu Option: NATIONAL LABORATORY FILE
Select National Laboratory File Option: ?
1      Semi-automatic Linking of file 60 to 64
2      Manual Linking of file 60 to 64
3      Result NLT Auto Linker
4      Link Result NLT Manual
5      Manage MI/AP Test Mappings
Select National Laboratory File Option: 5 <Enter>  Manage MI/AP Test Mappings
      Select one of the following:
          MI      Microbiology
          SP      Surgical Pathology
          CY      Cytopathology
          EM      Electron Microscopy
Choose Lab Area Subscript: MI <Enter>  Microbiology
Enter Laboratory Test Name: GRAM STAIN <Enter>  GRAM ST
Editing LABORATORY TEST file (#60)
NATIONAL VA LAB CODE: Gram Stain// <Enter>
60 = GRAM STAIN [362]
64 = Gram Stain (87754.0000) [2851]
      Link the two entries? No// <Enter>  (No)
          No Database Code on file for this NLT code.
Select an MI Database Code: MI Gram Stain Rpt Date
Update complete.
```

5.3.3 Add/Edit Local Identifier [LA7V 62.47 LOCAL IDENTIFIER]

The option Add/Edit Local Identifier [LA7V 62.47 LOCAL IDENTIFIER] allows the user to add and edit local codes.

Figure 11. Add/Edit Local Identifier [LA7V 62.47 LOCAL IDENTIFIER]

```
Select Lab Code Mapping File Option: ADD/EDIT LOCAL IDENTIFIER
Select LAB CODE MAPPING CONCEPT: GRAM STAIN<Enter> MI Gram Stain Rpt Date
Select IDENTIFIER:0410.3 <Enter>99LAB
...OK? Yes// <Enter> (Yes)

IDENTIFIER: 0410.3// <Enter>
CODING SYSTEM: 99LAB// <Enter>
PURPOSE: RESULT// <Enter>
OVERRIDE CONCEPT: <Enter>
RELATED ENTRY: <Enter>
MESSAGE CONFIGURATION: LA7V HOST 170// <Enter>

Select IDENTIFIER: <Enter>

Select LAB CODE MAPPING CONCEPT:
```

5.3.4 Clone a Message Configuration [LA7V 62.47 CLONE MSG CONFIG]

The option Clone a Message Configuration [LA7V 62.47 CLONE MSG CONFIG] copies the entries of the source Message Configuration into entries for the destination message configuration. When local identifiers (codes) are added (using the Add/Edit Local Identifier [LA7V 62.47 LOCAL IDENTIFIER]) those local codes are interface specific. This option allows a user to clone the local identifiers added for one Message Configuration to another. This is useful when setting up a new interface that uses similar local codes to an existing interface.

Figure 12. Clone a Message Configuration [LA7V 62.47 CLONE MSG CONFIG]

```
Select Lab Code Mapping File Option: CLONE A MESSAGE CONFIGURATION
Source Message Configuration: LA7V HOST 981
Destination Message Configuration: LA7V HOST 0109
Continue with cloning? ? N// YES

Records found: 1
Records added: 1
```

5.3.5 Edit Susceptibility [LA7V 62.47 EDIT SUSC]

The option Edit Susceptibility [LA7V 62.47 EDIT SUSC] links Bacteriology and Mycobacteria susceptibilities to existing codes.

Figure 13. Edit Susceptibility [LA7V 62.47 EDIT SUSC]

```
Select Lab Code Mapping File Option: EDIT SUSCEPTIBILITY
Select LAB CODE MAPPING CONCEPT: BACTERIOLOGY SUSCEPTIBILITY MI <Enter> Bacteria
Susceptibility
Select IDENTIFIER: 29-9 <Enter> LN
...OK? Yes// <Enter> (Yes)
  AMPICILLIN:SUSC:PT:ISLT:ORDQN:AGAR DIFFUSION
RELATED ENTRY: AMPICILLIN

  Searching for a Select ANTIBIOTIC
  AMPICILLIN      AMPICILLIN
  ...OK? Yes// <Enter> (Yes)

Select IDENTIFIER:
```

5.3.6 Find Identifier [LA7V 62.47 FIND IDENTIFIER]

The option Find Identifier [LA7V 62.47 FIND IDENTIFIER] searches the entire file for a particular identifier.

Figure 14. Find Identifier [LA7V 62.47 FIND IDENTIFIER]

```
Select Lab Code Mapping File Option: FIND IDENTIFIER
Select IDENTIFIER: 0430.3
... OK Yes// <Enter> YES 0430.3
DEVICE: HOME// <Enter> UCX/TELNET Right Margin: 80// <Enter>

LAB CODE MAPPING (0430.3) Sep 19, 2008@11:09:42 Page: 1
  SEQ      ID      SYSTEM  PURPOSE  NATL
=====
CONCEPT:MYCOLOGY SMEAR/PREP (MI)
      2      0430.3  99LAB   RESULT   NO
      Msg Config: LA7V HOST 170

Select Lab Code Mapping File Option:
```

5.3.7 Print by Msg Config [LA7V 62.47 PRINT BY MSG CONFIG]

The option Print by Msg Config [LA7V 62.47 PRINT BY MSG CONFIG] displays entries in File #62.47 by CONCEPT, sorted by the MESSAGE CONFIGURATION field.

Figure 15. Print by Msg Config [LA7V 62.47 PRINT BY MSG CONFIG]

```
Select Lab Code Mapping File Option: PMC <Enter> Print by Message Configuration
Print All Message Configurations? ? N// Y <Enter> YES
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>

LAB CODE MAPPING (BY MSG CONFIG) Sep 02, 2008@16:14:49 Page: 1
  SEQ          ID SYSTEM  PURPOSE  NATL
=====
CONCEPT:GRAM STAIN (MI)
   2          0410.3 99LAB   RESULT   NO
   Msg Config: LA7V HOST 170

CONCEPT:BACTERIA (MI)
1000004      4796 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
   Msg Config: LA7V COLLECTION 9999

1000002      4796 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
   Msg Config: LA7V HOST 170

1000003      4796 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
   Msg Config: LA7V HOST 9999

CONCEPT:BACTERIOLOGY REPORT (MI)
1000004      0410.2 99LAB   RESULT   NO
   Msg Config: LA7V COLLECTION 9999

1000001      0410.2 99LAB   RESULT   NO
   Msg Config: LA7V HOST 170

1000003      0410.2 99LAB   RESULT   NO
   Msg Config: LA7V HOST 9999

CONCEPT:PARASITE (MI)
  28          486 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:486] PABESIA, NOS
   Msg Config: LA7V COLLECTION 9999

  26          486 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:486] PABESIA, NOS
   Msg Config: LA7V HOST 170

  27          486 99VA61.2 ANSWER   NO
   Related Entry: [#61.2:486] PABESIA, NOS
   Msg Config: LA7V HOST 9999

CONCEPT:PARASITE REPORT REMARK (MI)
   2          0440.3 99LAB   RESULT   NO
   Msg Config: LA7V HOST 170
CONCEPT:FUNGAL REPORT REMARK (MI)
```

2	0430.2	99LAB	RESULT	NO
Msg Config: LA7V HOST 170				
CONCEPT:MYCOBACTERIA REPORT (MI)				
2	0420.2	99LAB	RESULT	NO
Msg Config: LA7V HOST 170				
CONCEPT:VIROLOGY REPORT (MI)				
34	0450.1	99LAB	RESULT	NO
Msg Config: LA7V HOST 170				
CONCEPT:MYCOLOGY SMEAR/PREP (MI)				
2	0430.3	99LAB	RESULT	NO
Msg Config: LA7V HOST 170				
CONCEPT:ACID FAST STAIN (MI)				
3	0420.1	99LAB	RESULT	NO
Override Concept: BACTERIOLOGY REPORT				
Msg Config: LA7V HOST 0052				
CONCEPT:ACID FAST STAIN QUANTITY (MI)				
2	0420.1	99LAB	RESULT	NO
Msg Config: LA7V HOST 170				

5.3.8 Code/Set Mismatches [LA7V 62.47 PRINT CS MISMATCHES]

The option Code/Set Mismatches [LA7V 62.47 PRINT CS MISMATCHES] displays entries in File #62.47, where the Identifier/Coding System pairs are mismatched. It searches for Identifier (Code)/Coding System pairs and validates that the Code is valid for that Coding System. This option validates the Codes from the three Coding Systems listed below.

- LOINC
- SNOMED CT
- NLT WKLD CODES

Figure 16. Code/Set Mismatches [LA7V 62.47 PRINT CS MISMATCHES]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu
Select Lab Shipping Management Menu Option: LCM <Enter> Lab Code Mapping File
Select Lab Code Mapping File Option: CSM <Enter> Code/Set Mismatches
DEVICE: HOME// <Enter> TELNET PORT Right Margin: 80// <Enter>

...HMMM, LET ME PUT YOU ON 'HOLD' FOR A SECOND...

LAB CODE MAPPING (CODE/SET MISMATCHES) Mar 15, 2012@09:20 Page: 1
  SEQ          ID SYSTEM PURPOSE NATL
=====
CONCEPT:BACTERIA (MI)
 1000042      1111222 LN      RESULT NO
      Msg Config: LA7V HOST 981

Select Lab Code Mapping File Option:
```

5.3.9 Print Local Codes [LA7V 62.47 PRINT LOCAL]

The option Print Local Codes [LA7V 62.47 PRINT LOCAL] prints local codes from file (#62.47).

Figure 17. Print Local Codes [LA7V 62.47 PRINT LOCAL]

```
Select Lab Code Mapping File Option: PL <Enter> Print Local Codes
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>

LAB CODE MAPPING -- LOCAL CODES Sep 02, 2008@16:03:57 Page: 1
  SEQ          ID SYSTEM  PURPOSE  NATL
=====
CONCEPT:GRAM STAIN (MI)
  2           0410.3 99LAB   RESULT   NO
  Msg Config: LA7V HOST 170

CONCEPT:BACTERIA (MI)
  249         2 99LRE   ANSWER   NO
  Related Entry: [#61.2:2] STAPHYLOCOCCUS AUREUS

1000002       4796 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
  Msg Config: LA7V HOST 170

1000003       4796 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
  Msg Config: LA7V HOST 9999

1000004       4796 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:4796] STREPTOCOCCUS ALPHA HEMOL.(NOT GP.D OR S.PNEU...
  Msg Config: LA7V COLLECTION 9999

CONCEPT:BACTERIOLOGY REPORT (MI)
1000001       0410.2 99LAB   RESULT   NO
  Msg Config: LA7V HOST 170

1000003       0410.2 99LAB   RESULT   NO
  Msg Config: LA7V HOST 9999

1000004       0410.2 99LAB   RESULT   NO
  Msg Config: LA7V COLLECTION 9999

1000002       BOB 99LAB           NO

CONCEPT:BACTERIOLOGY SUSCEPTIBILITY (MI)
  1019        46 99LRA   RESULT   NO

CONCEPT:PARASITE (MI)
  26          486 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:486] PABESIA, NOS
  Msg Config: LA7V HOST 170

  27          486 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:486] PABESIA, NOS
  Msg Config: LA7V HOST 9999

  28          486 99VA61.2 ANSWER   NO
  Related Entry: [#61.2:486] PABESIA, NOS
  Msg Config: LA7V COLLECTION 9999
```

```

CONCEPT:PARASITE REPORT REMARK (MI)
  1      0440.3  99LAB  RESULT  NO
  2      0440.3  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

CONCEPT:PARASITE STAGE (MI)
  1      63.749  99LAB  RESULT  NO

CONCEPT:FUNGAL REPORT REMARK (MI)
  2      0430.2  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

CONCEPT:MYCOBACTERIA SUSCEPTIBILITY (MI)
1000001      TEST  L                                NO

CONCEPT:MYCOBACTERIA REPORT (MI)
  2      0420.2  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

CONCEPT:VIROLOGY REPORT (MI)
 34      0450.1  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

CONCEPT:MYCOLOGY SMEAR/PREP (MI)
  2      0430.3  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

CONCEPT:ACID FAST STAIN (MI)
  3      0420.1  99LAB  RESULT  NO
Override Concept: BACTERIOLOGY REPORT
Msg Config: LA7V HOST 0052

CONCEPT:ACID FAST STAIN QUANTITY (MI)
  2      0420.1  99LAB  RESULT  NO
Msg Config: LA7V HOST 170

```

5.3.10 Print Susceptibilities [LA7V 62.47 PRINT SUSC]

The option Print Susceptibilities [LA7V 62.47 PRINT SUSC] prints File #62.47 susceptibility codes.

Figure 18. Print Susceptibilities [LA7V 62.47 PRINT SUSC]

```
Select Lab Code Mapping File Option: PRINT SUSCEPTIBILITIES
Print (A)ll, (M)apped, (U)nmapped: (A/M/U): A// <Enter> LL
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>
LAB CODE MAPPING -- SUSCEPTIBILITIES Sep 02, 2008@16:06:19 Page: 1
  SEQ          ID SYSTEM PURPOSE NATL
=====
CONCEPT:BACTERIOLOGY SUSCEPTIBILITY (MI)
  1019         46 99LRA  RESULT  NO
    1           1-8 LN    RESULT  YES
LOINC: Acyclovir:Susc:Pt:Isolate:OrdQn

    10         10-9 LN    RESULT  YES
LOINC: Amdinocillin:Susc:Pt:Isolate+Ser:Ord:SBT

    100        100-8 LN    RESULT  YES
LOINC: Cefoperazone:Susc:Pt:Isolate:OrdQn:MIC

    101        101-6 LN    RESULT  YES
LOINC: Cefoperazone:Susc:Pt:Isolate:OrdQn:Agar diffusion

    102        102-4 LN    RESULT  YES
LOINC: Cefoperazone:Susc:Pt:Isolate+Ser:Ord:SBT

    103        103-2 LN    RESULT  YES
LOINC: Ceforanide:Susc:Pt:Isolate:Qn:MLC

    104        104-0 LN    RESULT  YES
LOINC: Ceforanide:Susc:Pt:Isolate:OrdQn:MIC

    105        105-7 LN    RESULT  YES
LOINC: Ceforanide:Susc:Pt:Isolate:OrdQn:Agar diffusion

    106        106-5 LN    RESULT  YES
LOINC: Ceforanide:Susc:Pt:Isolate+Ser:Ord:SBT

    636        10653-4 LN    RESULT  YES
LOINC: Clotrimazole:Susc:Pt:Isolate:OrdQn:MIC

    637        10654-2 LN    RESULT  YES
LOINC: Clotrimazole:Susc:Pt:Isolate:Qn:MLC

    638        10697-1 LN    RESULT  YES
LOINC: Nystatin:Susc:Pt:Isolate:OrdQn:MIC

    639        10698-9 LN    RESULT  YES
LOINC: Nystatin:Susc:Pt:Isolate:Qn:MLC

    107        107-3 LN    RESULT  YES
LOINC: Cefotaxime:Susc:Pt:Isolate:Qn:MLC
```

5.3.11 Error Code Help [LA7V 62.47 ERROR CODE HELP]

The option Error Code Help [LA7V 62.47 ERROR CODE HELP] adds extended help for error codes. Errors can be looked up in the LA7 MESSAGE LOG BULLETINS file (#62.485).

Figure 19. Error Code Help [LA7V 62.47 ERROR CODE HELP]

```
Select Lab Code Mapping File Option: ERROR CODE HELP

                               LAB CODE MAPPING ERROR CODES
=====

Error #200
  No File #62.47 mapping found for OBX-3

The code set in OBX-3 was not found in the LAB CODE MAPPING file (#62.47).

-----

Error #201
  No File #63 field mapping found for OBX-3

Storage location unknown in LAB DATA file (#63).  An organism,
parasite, or susceptibility doesn't have a mapping to or
storage location in the LAB DATA file (#63).  This is usually
caused by an incorrect or missing RELATED ENTRY field (#2.1)
for that code in the LAB CODE MAPPING file (#62.47).

-----

Error #202
  No filing method for CONCEPT # n found for OBX-3
Enter RETURN to continue or '^' to exit:

The Lab package does not have a routine to process the Concept.

-----

Error #203
  No Coding System found in OBX-5

OBX-5 does not have a coding system specified.

-----

Error #204
  Unknown entity in OBX-5

The organism, parasite, etc. being reported does not have
an entry in its associated file (i.e. ETIOLOGY FIELD file (#61.2)).

-----

Error #205
  Invalid SubId in OBX-4
Enter RETURN to continue or '^' to exit:

The SubId in OBX-4 is either empty or invalid.  The processing
logic expected a valid SubId here and cannot continue processing.
Action must be taken by the sender of the HL7 message to correct
```

the invalid SubId.

Error #206

Could not create new entry in file #X (text)

The system needed to add a new entry "on-the-fly" to the file specified to handle this incoming message but failed to create the new entry. This may be a problem on the sender's or the receiver's side.

Select HELP SYSTEM action or <return>:

5.3.12 Map All Susceptibilities [LA7V 62.47 MAP SUSCS]

The option Map All Susceptibilities [LA7V 62.47 MAP SUSCS] displays antibiotics from ANTIMICROBIAL SUSCEPTIBILITY file (#62.06) and suggests which entry from the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06) to map to the LOINC code in the LAB CODE MAPPING file (#62.47).

Figure 20. Map All Susceptibilities [LA7V 62.47 MAP SUSCS]

```
Select Lab Code Mapping File Option: MAP ALL SUSCEPTIBILITIES
Report only? YES// <Enter>
DEVICE: HOME// ;;999 <Enter> TELNET PORT Right Margin: 80// <Enter>

...EXCUSE ME, THIS MAY TAKE A FEW MOMENTS...

---LOINC 3320-9 in #64:27 not a susceptibility (#62.06:1)
-----AMIKACIN~RANDOM:MCNC:PT:SER/PLAS:QN

#62.06:3 #95.3:194 #62.47:7,193
No RELATED ENTRY for LOINC 194-1
CLINDAMYCIN:SUSC:PT:ISLT:ORDQN:AGAR DIFFUSION
Use CLINDAM (CLINDAMYCIN) for this mapping?

#62.06:19 #95.3:13968 #62.47:7,647
No RELATED ENTRY for LOINC 13968-3
PENICILLIN:SUSC:PT:ISLT:ORDQN:AGAR DIFFUSION
Use TOM' WONDER DRUG (PROVIDENCE #8) for this mapping?

#62.06:20 #95.3:117 #62.47:7,117
No RELATED ENTRY for LOINC 117-2
CEFOXITIN:SUSC:PT:ISLT:ORDQN:AGAR DIFFUSION
Use CEFOXITIN for this mapping?

#62.06:21 #95.3:109 #62.47:7,109
No RELATED ENTRY for LOINC 109-9
CEFOTAXIME:SUSC:PT:ISLT:ORDQN:AGAR DIFFUSION
Use CEFOTAXIME for this mapping?

---No NLT code in #62.06 for COMPUCILLIN (22)

#62.06 records searched: 69 of 69
Total #62.47 records searched: 32
Total NATL codes: 32
Total #62.47 codes without mapping: 30
Total #62.06 LOINC codes not in #62.47: 2
```

5.3.13 Interim report for an accession [LRRP1]

Use the option Interim report for an accession [LRRP1] to display an interim report for a selected accession. It will only print verified results. The report prints site codes for tests. The user will be asked if they would like to print an address page. The address page prints on a separate page(s) at the end of the report and lists the performing lab name, address and site code. This option is located on the Results menu [LR OUT], which is located on the Laboratory DHCP Menu [LRMENU].

Figure 21. Interim report for an accession [LRRP1]

```
Select Laboratory DHCP Menu Option: 5 <Enter> Results menu

Select Results menu Option: INTERIM REPORT FOR AN ACCESSION
Print address page? NO// YES
Select Accession or UID: CH 0314 1
CHEMISTRY (MAR 14, 2012) 1
DEVICE: HOME// <Enter> UCX/TELNET

LRPATIENT,TWO                               Report date: Mar 14, 2012@13:23
Pat ID: 000-00-1234   SEX: F   DOB: Jan 01, 1900   LOC: RC

Provider: LRUSER,ONE
Specimen: SERUM
Accession [UID]: CH 0526 1 [0411460001]
Report Released: Jul 14, 2011@13:09

Specimen Collection Date: May 26, 2011@14:10
Test name      Result  units  Ref.  range  Site Code
GLUCOSE        100   mg/dL  60 - 123  [522]
CALCIUM        200 H* mg/dL  9 - 11    [522]
Comment: TEST

=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value
LRPATIENT,TWO      000-00-1234  Mar 14, 2012@13:23  PRESS '^' TO STOP

page 2
LRPATIENT,TWO      000-00-1234      Mar 14, 2012@13:23

Performing Lab Sites:

[522] ZZ BONHAM [CLIA# 987654321]
      BONHAM, TX

Select Accession or UID: <Enter>

Select Results menu Option:
```

5.3.14 Move Cumulative Major/Minor Headers [LRAC MOVE]

Use the option Move Cumulative Major/Minor Headers [LRAC MOVE] to move a cumulative major or minor header to another major header. After moving the header, it deletes the old header. This option is located on the Cumulative menu [LRAC], which is located on the Supervisor menu [LRSUPERVISOR].

Figure 22. Move Cumulative Major/Minor Headers [LRAC MOVE]

```
Select Laboratory DHCP Menu Option: 11 <Enter> Supervisor menu
Select Supervisor menu Option: CUMULATIVE MENU
Select Cumulative menu Option: LACM <Enter> Move Cumulative Major/Minor Headers

  Select one of the following:

      1      Major Header
      2      Minor Header

Select type of header to move: 1// Major Header
Select MAJOR HEADER: RIA
MAJOR HEADER ORDER: 19// <Enter>
MAJOR HEADER: NEW HEADER// RIA NEW
MAJOR HEADER MEDICAL CENTER: ALBANY ISC// <Enter>

Copying major header: RIA
to major header: RIA NEW

Re-indexing new major header: RIA NEW

Deleting major header: RIA

Re-indexing the LAB REPORTS file for:
Mumps "A" index of the LAB TEST subfield
  (contains reference ranges, units, etc. from file 60)
Mumps "AC" index of the LAB TEST LOCATION subfield
  (atomic test x-ref.)
Mumps "AR" index of the LAB TEST subfield
  (site/specimen x-ref.)

HEMATOLOGY
  CBC PROFILE.....

DIFFERENTIAL COUNT
  DIFFERENTIAL COUNTS.....
.....

COAG & MISC. HEM
  COAG PROFILE.....
  MISC. HEM.....

CHEMISTRY (SERUM)
  CHEM PROFILE.....

CHEMISTRY-MISC.
  CARDIAC ENZYMES.....
  MISC. CHEM.....
  HGB A1C...
  AMMONIA...
```

```

CHEMISTRY-GLUCOSE TOL.
  GLUCOSE TOL-(SERUM).....
  GLUCOSE TOL-(URINE).....

TOXICOLOGY
  TOXICOLOGY.....
.....

RIA-(PLASMA)
  RIA-(PLASMA).....

SEROLOGY
  SEROLOGY.....

FLUIDS
  CELL COUNT (CSF).....
  CELL COUNT (SYNOVIAL).....
  CELL COUNT (PLEURAL).....
  CELL COUNT (PERITONEAL).....
  CELL COUNT (PERICARD/THORACIC).....
  CSF CHEMS.....
  SYNOVIAL CHEMS.....
  PLEURAL CHEMS.....
  PERITONEAL CHEMS.....
  PERICARD/THORACIC CHEMS.....

URINALYSIS
  URINALYSIS.....
.....

URINE CHEMS
  URINE CHEMS.....

LAB LONG TERM TESTS
  LAB LONG TERM TESTS...

2ND NEW HEADER
  2ND MINOR NEW...

RIA NEW
  RIA-(SERUM).....

NEW CHEM HEADER
  JEANIE'S MINOR HEADER...

Run Diagnostic Report for LAB REPORTS File
DEVICE: HOME// <Enter> TELNET PORT   Right Margin: 80// <Enter>

          Diagnostic Report for LAB REPORTS FILE (64.5)

HEMATOLOGY
  CBC PROFILE

DIFFERENTIAL COUNT
  DIFFERENTIAL COUNTS

COAG & MISC. HEM
  COAG PROFILE

```

```
MISC. HEM.

CHEMISTRY (SERUM)
  CHEM PROFILE

CHEMISTRY-MISC.
  CARDIAC ENZYMES
  MISC. CHEM
  HGB A1C
  AMMONIA

CHEMISTRY-GLUCOSE TOL.
  GLUCOSE TOL-(SERUM)
  GLUCOSE TOL-(URINE)

TOXICOLOGY
  TOXICOLOGY

RIA-(PLASMA)
  RIA-(PLASMA)

SEROLOGY
  SEROLOGY

FLUIDS
  CELL COUNT (CSF)
  CELL COUNT (SYNOVIAL)
  CELL COUNT (PLEURAL)
  CELL COUNT (PERITONEAL)
  CELL COUNT (PERICARD/THORACIC)
  CSF CHEMS
  SYNOVIAL CHEMS
  PLEURAL CHEMS
  PERITONEAL CHEMS
  PERICARD/THORACIC CHEMS

URINALYSIS
  URINALYSIS

URINE CHEMS
  URINE CHEMS

LAB LONG TERM TESTS
  LAB LONG TERM TESTS

2ND NEW HEADER
  2ND MINOR NEW

RIA NEW
  RIA-(SERUM)

NEW CHEM HEADER
  JEANIE'S MINOR HEADER

Select Cumulative menu Option:
```

5.3.15 AP LEDI Data Entry [LRAP VR]

Use the option AP LEDI Data Entry [LRAP VR] to review and accept AP results from a LEDI Host site. It is located on the Data entry, anat path menu [LRAPD], which is located on the Anatomic pathology menu [LRAP].



NOTE: The AP LEDI Data Entry option will only be used by the LEDI test sites who previously used the software to send and receive AP.

Figure 23. AP LEDI Data Entry [LRAP VR]

```
Select Anatomic pathology Option: D <Enter> Data entry, anat path
Select Data entry, anat path Option: LEDI <Enter> AP LEDI Data Entry
Select LOAD/WORK LIST NAME: LDSI
Select PROFILE: SURGICAL PATHOLOGY <Enter> SURGICAL PATHOLOGY
Select Performing Laboratory: REGION 7 ISC,TX (FS)// <Enter> TX 170
Work Load Area: LDSI// <Enter>
Select one of the following:
1 Accession Number
2 Unique Identifier (UID)
Verify by: 1// 2 <Enter> Unique Identifier (UID)
Unique Identifier: 2211000011
TEST,PATIENT 000-00-1234 Age: 61yr
ORDER #: 196 NSP 11 11 [2211000011]
Seq #: 61 Accession: NSP 11 11 Results received: Oct 19, 2011@15:55
UID: 2211000011 Last updated: Oct 19, 2011@15:55
Enter RETURN to continue or '^' to exit: <Enter>
DEVICE: HOME// <Enter> UCX/TELNET Right Margin: 80// <Enter>
Accession #: NSP 11 11 UID: 2211000011
Name: TEST,PATIENT SSN: 000-00-1234 DOB: Jan 01, 1950 Age: 61yr PAGE: 1
Collection Date: Oct 19, 2011@15:31
-----
Surgical Pathology Diagnosis
TESTING
Do you want to ACCEPT these results? NO// Y <Enter> YES
Current performing lab assignments: None Listed
Select one of the following:
1 Entire report
2 Specific sections of report
```

Designate performing laboratory for: 1// **<Enter>** Entire report
Select Performing Laboratory: ZZ BONHAM// **<Enter>** TX VAMC 522 INACTIVE Jan
01, 1997

Sure you want to add this record? NO// **Y <Enter>** YES
... assignment created.

Current performing lab assignments:

Surgical Pathology Report Performed By:
ZZ BONHAM [CLIA# 987654321]

Select one of the following:

- 1 Entire report
- 2 Specific sections of report
- 3 Delete performing laboratory

Designate performing laboratory for: **<Enter>**

Unique Identifier: **<Enter>**

Select Data entry, anat path Option:

5.3.16 Reprocess Lab HL7 Messages [LA7 REPROCESS HL7 MESSAGES]

The option Reprocess Lab HL7 Messages [LA7 REPROCESS HL7 MESSAGES] allows reprocessing of selected incoming Lab HL7 messages. This option is located on the Lab Universal Interface Menu [LA7 MAIN MENU], which is located on the 'Lab interface menu' [LA INTERFACE].

Messages should be of type (I)ncoming, have a status of (X)purgable, (E)rror, or (Q)ueued for processing and be related to a message configuration type:

- LAB UI
- LEDI

Messages for other configuration types should not be reprocessed at this time.

Figure 24. Reprocess Lab HL7 Messages [LA7 REPROCESS HL7 MESSAGES]

```
Select Laboratory DHCP Menu Option: 11 <Enter> Supervisor menu
Select Supervisor menu Option: LAB INTER <Enter> face menu
Select Lab interface menu Option: LAB UNIVERSAL INTERFACE MENU
Select Lab Universal Interface Menu Option: RLH <Enter> Reprocess Lab HL7 Messages
Display identifiers during message selection? YES// <Enter>
Select Message: LA7V HOST 981-I-L612790005
Entered D/T: Oct 06, 2011@12:46 Type: INCOMING Status: PURGEABLE
Instrument Name: LA7V HOST 981-I-L612790005
Configuration: LA7V HOST 981
Select another Message: <Enter>
Reprocess these messages? YES// <Enter>
Queued processing routine for configuration LA7V HOST 981
Select Lab Universal Interface Menu Option:
```

5.3.17 Display SCT Overrides [LA7S 62.48 PRINT SCT OVERRIDE]

The option Display SCT Overrides [LA7S 62.48 PRINT SCT OVERRIDE] displays the SCT Overrides on file for a MESSAGE PARAMETER (#62.48) file entry. It can also display all SCT Overrides on file for all MESSAGE PARAMETER (#62.48) entries. This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].

Figure 25. Display SCT Overrides [LA7S 62.48 PRINT SCT OVERRIDE]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu
Select Lab Shipping Management Menu Option: DSO <Enter> Display SCT Overrides
Select MESSAGE CONFIGURATION: ALL// LA7V HOST 0052
Select another MESSAGE CONFIGURATION: <Enter>
DEVICE: HOME// <Enter> UCX/TELNET Right Margin: 80// <Enter>

MESSAGE CONFIGURATION SCT OVERRIDES Printed Mar 14, 2012@13:41 Page 1
=====
Message Configuration: LA7V HOST 0052

Specimen [Topography file #61] VA SCT Non-VA SCT
SPUTUM [360] 45710003 416462003
URINE [71] 78014005 78014005

Sample [Collection Sample file #62] VA SCT Non-VA SCT
SPUTUM [18] 119334006 49957000
URINE [15] 78014005 78014005

SCT Code SCT Preferred Term
119334006 Sputum specimen
416462003 Wound
45710003 Sputum
49957000 Spermatic cord structure
78014005 Urine

Select Lab Shipping Management Menu Option:
```

5.3.18 Display a Shipping Configuration [LA7S 62.9 PRINT]

The option Display a Shipping Configuration [LA7S 62.9 PRINT] displays LAB SHIPPING CONFIGURATION file (#62.9) information for a Shipping Configuration (or a Message Parameter) file entry. This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].

Figure 26. Display a Shipping Configuration [LA7S 62.9 PRINT]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu
Select Lab Shipping Management Menu Option: DSC <Enter> Display a Shipping
Configuration
Select LA7 MESSAGE PARAMETER CONFIGURATION: LA7V HOST 170
...OK? Yes// <Enter> (Yes)
Only show SCT overrides? ? N// <Enter>
DEVICE: HOME// 0;80;999

SHIPPING CONFIGURATION DISPLAY Printed Mar 14, 2012@13:48 Page 1
=====
Shipping Configuration: LEDI HOST LAB
Test: GLUCOSE
Glucose Fasting (81352.0000)
Specimen: SERUM (67922002 Serum)

Test: LYLES
Electrolytes (81357.0000)

Test: CREATININE
Creatinine (82565.0000)

Select Lab Shipping Management Menu Option:
```

5.3.19 Code Usage [LA7S CODE USAGE]

The option Code Usage [LA7S CODE USAGE] searches the system for a particular code and code system pair and reports in which files this pair is used. This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].

Figure 27. Code Usage [LA7S CODE USAGE]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu

Select Lab Shipping Management Menu Option: CU <Enter> Code Usage
Enter IDENTIFIER: 673-4
Enter CODING SYSTEM: LN
DEVICE: HOME// <Enter> UCX/TELNET Right Margin: 80//

Invalid LOINC code

Checking TOPOGRAPHY file (#61)
  No matches

Checking ETIOLOGY FIELD (#61.2) file
  No matches

Checking COLLECTION SAMPLE (#62) file
  No matches

Checking ANTIMICROBIAL SUSCEPTIBILITY (#62.06) file
  No matches

Checking LAB CODE MAPPING (#62.47) file
  PARASITE (#62.47:8)
  #1: 673-4 (No Message Config)
  $$HL2LAH:8^MI^63.34^.01^9318

Checking LA7 MESSAGE PARAMETER (#62.48) file
  No matches

Checking LAB SHIPPING CONFIGURATION (#62.9) file
  No matches

Select Lab Shipping Management Menu Option:
```

5.3.20 Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT]

The option Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT] allows the user to load SNOMED CT (SCT) mappings and term disposition into the target file entry. This mapping is usually provided by STS after they have extracted and mapped the site's local terms to the appropriate SCT code. If no mapping is provided then a disposition is stored with the reason. A SCT mapping can also be provided as part of the mediation process that occurs when a new term is added either by the site or via an HL7 interface with the new term. This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].

The SCT mapping file is a text file that is usually provided via an FTP transfer. This option prompts the user to specify the location of the file, loads the contents of the file into a temporary holding LAB MAPPING TRANSPORT file (#95.4) and then allows the user to apply the mappings to the target entries.

Figure 28. Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu

Select Lab Shipping Management Menu Option: LSCT <Enter> Load SNOMED SCT Mapping

HOST FILE DIRECTORY: USER$:[TEMP]// <Enter>
Using filespec *.TXT
Select FILE: 1// ??

1 HUNTINGTON_SCT_12-14-10.TXT;2
2 HUNT_CORRECT_3-31-11.TXT;1
3 LEDI_LEDI_COTS_IP_PORT_CONFIGURATION.TXT;1
4 RELNOTES.TXT;3
5 WORKLOAD_TO_VISTA_201012.TXT;1
Select a file by number from the list

Select FILE: 1// 1
Directory: USER$:[TEMP]
File.....: HUNTINGTON_SCT_12-14-10.TXT;2
Loading file into TMP global
...SORRY, LET ME THINK ABOUT THAT A MOMENT...
Processing file data and storing in file #95.4
...SORRY, JUST A MOMENT PLEASE...

Records added: 13685

Select one of the following:

0          Quit - no action
1          Process SNOMED CT mappings directly
2          Task processing SNOMED CT mappings

Processing Action: 0// 1 <Enter> Process SNOMED CT mappings directly
Loading files with National SNOMED CT Codes

*****
Loading file #61 [TOPOGRAPHY FIELD]
*****.....
Lexicon SCT lookup error STS alert sent..
Lexicon SCT lookup error STS alert sent....
No such entry: File #61 IEN:8830 STS alert sent...
```

```

*****
Loading file #61.2 [ ETIOLOGY FIELD ]
*****
Lexicon SCT lookup error STS alert sent.
Names do not match: [CLOSTRIDIUM DIFFICILE TOXIN A/B POSITIVE < - > CLOSTRIDIUM
DIFFICILE TOXIN B DNA DETECTED] STS alert sent.
Lexicon SCT lookup error STS alert sent.
*****
Loading file #62 [ COLLECTION SAMPLE ]
*****
Lexicon SCT lookup error STS alert sent.
Lexicon SCT lookup error STS alert sent.

```

5.3.21 Map Non-VA SNOMED CT codes [LA7S MAP NON-VA SNOMED CODES]

Use the option Map Non-VA SNOMED CT codes [LA7S MAP NON-VA SNOMED CODES] to map, for a specific HL7 interface, SNOMED CT (SCT) codes required by an external system to legacy VistA Laboratory files. This is used in cases where a site is communicating with a non-VA system, and the external system maps the same term using a SCT code that is different than the code assigned by the VA to the term, then the site can override the SCT code for that specific interface. Currently, this option is used to map the following legacy VistA Laboratory files:

- TOPOGRAPHY (#61)
- COLLECTION SAMPLE (#62)

This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].

Figure 29. Map Non-VA SNOMED CT codes [LA7S MAP NON-VA SNOMED CODES]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu
Select Lab Shipping Management Menu Option: MSCT <Enter> Map Non-VA SNOMED CT codes
Select MESSAGE CONFIGURATION: LA7V HOST 981
Select VA FILE ENTRY: ?
    You may enter a new NON-VA ORDER SNOMED CODES, if you wish
    Select specimen or collection sample
    Enter one of the following:
        SP.EntryName to select a Specimen from TOPOGRAPHY file
        CS.EntryName to select a Sample from COLLECTION SAMPLE

    To see the entries in any particular file type <Prefix.??>
Select VA FILE ENTRY: SP.SPUTUM

    Searching for a Specimen from TOPOGRAPHY file, (pointed-to by VA FILE ENTRY)

    Searching for a Specimen from TOPOGRAPHY file
    SPUTUM
    ...OK? Yes// <Enter> (Yes)
    Are you adding 'SPUTUM [SP #61:360]' as
    a new NON-VA ORDER SNOMED CODES (the 1ST for this LA7 MESSAGE PARAMETER)? No//
Y <Enter> (Yes)
    NON-VA ORDER SNOMED CODES SEQUENCE: 1// <Enter>
    SNOMED CT ID: 416462003 <Enter> Wound (disorder)
Select VA FILE ENTRY: <Enter>

Select MESSAGE CONFIGURATION: <Enter>

Select Lab Shipping Management Menu Option:
```

5.3.22 Print MI/AP Test Mappings [LA7VPFL]

The option Print MI/AP Test Mappings [LA7VPFL] checks Lab Tests by subscript (MI, SP, or CY) for their mapped NLT and Electronic Codes. These codes are required for LEDI transmission of orders and reports. Provides Lists for correctly mapped tests or tests that are not mapped correctly. This option is located on the Lab Shipping Management Menu [LA7S MGR MENU], which is located on the Lab liaison menu [LRLIAISON].



NOTE: The option Print MI/AP Test Mappings [LA7VPFL] is released with LEDI IV but will not be used until a future date.

Figure 30. Print MI/AP Test Mappings [LA7VPFL]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu

Select Lab Shipping Management Menu Option: PTM <Enter> Print MI/AP Test Mappings

  Select one of the following:

      MI      Microbiology
      SP      Surgical Pathology
      CY      Cytopathology

Enter Lab Area Subscript: SP <Enter> Surgical Pathology

  Select one of the following:

      C      Correctly Mapped Tests
      E      Tests with Errors

Enter response: E <Enter> Tests with Errors
DEVICE: HOME// <Enter> UCX/TELNET   Right Margin: 80// <Enter>

Laboratory Tests for SP with mapping errors                               Mar 14, 2012@14:51:47
                                                                                               Page: 1
=====
[5059] AUTOPSY H & E
      is mapped to: Autopsy Exam NOS [88608.0000]
                                     Not Linked to File #64.061
[5060] AUTOPSY UNSTAINED SLIDE      Not Mapped to File #64
      < < < End of report > > >

  Select one of the following:

      MI      Microbiology
      SP      Surgical Pathology
      CY      Cytopathology

Enter Lab Area Subscript: <Enter>

Select Lab Shipping Management Menu Option:
```

5.3.23 Initialize DOD Codes [LA7V 62.47 ADD DOD]

The option Initialize DOD Codes [LA7V 62.47 ADD DOD] populates the Lab Code Mapping file with the standard DOD local codes for the message configuration selected by the user. This option is located on the Lab Code Mapping File menu [LA7V 62.47 MENU], which is located on the Lab Shipping Management Menu [LA7S MGR MENU].



NOTE: The LA7V 62.47 ADD DOD option is released with LEDI IV but will not be used until a future date.

Figure 31. Initialize DOD Codes [LA7V 62.47 ADD DOD]

```
Select Lab liaison menu Option: SMGR <Enter> Lab Shipping Management Menu
Select Lab Shipping Management Menu Option: LCM <Enter> Lab Code Mapping File
Select Lab Code Mapping File Option: DOD <Enter> Initialize DOD Codes
Select MESSAGE CONFIGURATION: LA7V HOST 0109
    ...OK? Yes// <Enter> (Yes)

Adding 0410.2 99LAB (okay)
Adding 0410.3 99LAB (okay)
Adding 0420.1 99LAB (okay)
Adding 0420.2 99LAB (okay)
Adding 0430.2 99LAB (okay)
Adding 0430.3 99LAB (okay)
Adding 0440.3 99LAB (okay)
Adding 0450.1 99LAB (okay)

Select Lab Code Mapping File Option:
```

5.4 Modified LEDI Options

5.4.1 Display Lab Universal Interface Message [LA7 PRINT LAB UI MESSAGE]

The option Display Lab Universal Interface Message [LA7 PRINT LAB UI MESSAGE] allows large HL7 component fields to display correctly and print errors and events logged using the Lab Universal Interface system.

Figure 32. Display Lab Universal Interface Message [LA7 PRINT LAB UI MESSAGE]

```
Select Lab Universal Interface Menu Option: ?

1      Print Source of Specimen Table
2      Print Lab Universal Interface Log
      Display Lab Universal Interface Message
      Download to Universal Interface
      Start/Stop Auto Download Background Job
UIS    Lab Universal Interface Setup
PCS    Lab Point of Care Setup
FIC    Lab Messaging File Integrity Checker
PIC    Print Lab Messaging Integrity Check Report
RLH    Reprocess Lab HL7 Messages

Select Lab Universal Interface Menu Option: DISPLAY LAB UNIVERSAL INTERFACE MESSAGE

Display identifiers during message selection? YES// <Enter>
Select Message: 20
Entered D/T: Mar 01, 2011@14:37  Type: INCOMING  Status: PURGEABLE
Instrument Name: LA7V HOST 981-I-1311000001
Configuration: LA7V HOST 981
Select another Message: <Enter>
Parse message fields based on HL7 segments? YES// <Enter>
Suppress blank segments? YES// <Enter>
DEVICE: HOME// <Enter>  TELNET PORT

Use Browser to display message(s)? YES// <Enter>

[*****Message Statistics*****]

CONFIGURATION: LA7V COLLECTION 200LR1      DATE/TIME ENTERED: MAY 06, 2011@13:15:
DATE/TIME OF MESSAGE: MAY 06, 2011@13:15:25
INSTRUMENT NAME: LA7V REMOTE 200LR1-I-581-20110506-2
MESSAGE CONTROL ID: Q2791607T2918296_3017639
MESSAGE NUMBER: 15287455                    MESSAGE TYPE: ORM
PRIORITY: 3                                  PROCESSING ID: TRAINING
RECEIVING APPLICATION: LA7V HOST 596        RECEIVING FACILITY: 596
SENDING APPLICATION: LA7V REMOTE 200LR1     SENDING FACILITY: 200LR1
STATUS: ERROR                                TYPE: INCOMING
VERSION ID: 2.3
Error Message *****]

Date: May 06, 2011@13:15:38
Text: Msg #15287455 - Cannot identify an active entry in file SHIPPING CONFIGURA
Text of Message
```

MSH^~|\&^LA7V REMOTE 200LR1^200LR1^LA7V HOST 596^596^20110506131525-0400^^ORM~00

MSH-1 = ^
MSH-2 = ~|\&
MSH-3 = LA7V REMOTE 200LR1
MSH-4 = 200LR1
MSH-5 = LA7V HOST 596
MSH-6 = 596
MSH-7 = 20110506131525-0400
MSH-9 = ORM~001
MSH-9-1 = ORM
MSH-9-2 = 001
MSH-10 = Q2791607T2918296_3017639
MSH-11 = T
MSH-12 = 2.3
MSH-15 = AL
MSH-16 = AL

PID^1^^7220469~~~USVHA&&0363~PI~VA FACILITY ID&581&L|101102237~~~USSSA&&0363~SS~
00)000-0000^M^0^581:7220469:05052011^101102237^^^2186-5^^^0

PID-1 = 1
PID-3 = 7220469~~~USVHA&&0363~PI~VA FACILITY ID&581&L|111111111~~~USSSA&&0363~SS
PID-3.1-1 = 7220469
PID-3.1-4-1 = USVHA
PID-3.1-4-3 = 0363
PID-3.1-5 = PI
PID-3.1-6-1 = VA FACILITY ID
PID-3.1-6-2 = 581
PID-3.1-6-3 = L
PID-3.2-1 = 111111111
PID-3.2-4-1 = USSSA
PID-3.2-4-3 = 0363
PID-3.2-5 = SS
PID-3.2-6-1 = VA FACILITY ID
PID-3.2-6-2 = 581
PID-3.2-6-3 = L
PID-5 = LEDITEST,TEST
PID-5-1 = FLAB
PID-5-2 = BLUA
PID-5-3 = C
PID-6 = LEDITEST^LEDITEST^C^^^M
PID-7 = 19490422
PID-8 = M
PID-10 = 2106-3
PID-11 = ~~ZULU~HI~~~N|2645 ANYWHERE STREET~~FARM HILL~DE~12345~USA~P~~001
PID-11.1-3 = ZULU
PID-11.1-4 = HI
PID-11.1-7 = N
PID-11.2-1 = 2645 ANYWHERE STREET
PID-11.2-3 = FARM HILL
PID-11.2-4 = DE
PID-11.2-5 = 12345
PID-11.2-6 = USA
PID-11.2-7 = P
PID-11.2-9 = 001
PID-13 = (000)000-0000
PID-14 = (000)000-0000
PID-16 = M
PID-17 = 0
PID-18 = 581:7220469:05052011
PID-19 = 101102237

```

PID-22 = 2186-5
PID-25 = 0

PV1^1^O^1208^^^^^^^^^^^^^^^^O^^^^^^^^^^^^^^^^^^^^CD:638671^^^^^^20110505000000-04

PV1-1 = 1
PV1-2 = 0
PV1-3 = 1208
PV1-18 = 0
PV1-36 = CD:638671
PV1-44 = 20110505000000-0400
PV1-45 = 20110505235959-0400

ORC^NW^5811112600001^^581-20110506-2^SC^^^^20110506081400-0400^99761-VA581~USER

ORC-1 = NW
ORC-2 = 5811112600001
ORC-4 = 581-20110506-2
ORC-5 = SC
ORC-9 = 20110506081400-0400
ORC-10 = 99761-VA581~USER~USER
ORC-10-1 = 99761-VA581
ORC-10-2 = USER
ORC-10-3 = USER
ORC-12 = REF:581~~~E
ORC-12-1 = REF:581
ORC-12-4 = E
ORC-13 = 1208
ORC-15 = 20110506081602-0400
ORC-17 = 581
ORC-18 = I~ESI Default
ORC-18-1 = I
ORC-18-2 = ESI Default
ORC-19 = 99761-VA581~USER~USER
ORC-19-1 = 99761-VA581
ORC-19-2 = USER
ORC-19-3 = USER

OBR^1^5811112600001^^89111.0000~Mumps Ab IgG~99VA64^^20110506081400-0400^^~YOU
2011_005812011126000001-3017639^3017639^005812011126000001^20110506081602-0400^^

OBR-1 = 1
OBR-2 = 5811112600001
OBR-4 = 89111.0000~Mumps Ab IgG~99VA64
OBR-4-1 = 89111.0000
OBR-4-2 = Mumps Ab IgG
OBR-4-3 = 99VA64
OBR-7 = 20110506081400-0400
OBR-10 = ~USER~USER
OBR-10-2 = USER
OBR-10-3 = USER
OBR-11 = 0
OBR-14 = 20110506081400-0400
OBR-15-1 = 67922002
OBR-15-2 = Serum (substance)
OBR-15-3 = SCT
OBR-15-4 = 72
OBR-15-5 = Serum (substance)
OBR-15 = 67922002&Serum (substance)&SCT&72&Serum (substance)&99VA61~~~119297000&
OBR-15-6 = 99VA61
    LA7 UI Message Display Msg #15287455 - LA7V REMOTE 200LR1-I-581-20110506-2
OBR-15-4-1 = 119297000

```

OBR-15-4-2 = Blood
OBR-15-4-3 = SCT
OBR-15-4-4 = 20
OBR-15-4-5 = Blood
OBR-15-4-6 = 99VA62
OBR-16 = REF:581~~~E
OBR-16-1 = REF:581
OBR-16-4 = E
OBR-19 = 581:7220469:05052011_005812011126000001-3017639
OBR-20 = 3017639
OBR-21 = 005812011126000001
OBR-22 = 20110506081602-0400
OBR-24 = CH
OBR-27 = 1~~0~20110506081400-0400~~R|~~~~R
OBR-27.1-1 = 1
OBR-27.1-3 = 0
OBR-27.1-4 = 20110506081400-0400
OBR-27.1-6 = R
OBR-27.2-6 = R
OBR-36 = 20110506081400-0400

5.4.2 Edit Shipping Configuration [LA7S EDIT 62.9]

The option Edit Shipping Configuration [LA7S EDIT 62.9] adds fields to individual shipping configuration entries.

Figure 33. Edit Shipping Configuration [LA7S EDIT 62.9]

```
Select Lab Shipping Management Menu Option: EDIT SHIPPING CONFIGURATION
Select SHIPPING CONFIGURATION: MHC TO VRR

    Select one of the following:
        1      Collecting facility
        2      Host facility

Are you editing this entry as the: 1 <Enter> Collecting facility
NAME: MHC TO VRR// <Enter>
COLLECTING FACILITY: ZZ BONHAM// <Enter>
COLLECTING FACILITY'S SYSTEM: ZZ BONHAM// <Enter>
HOST FACILITY: REGION 7 ISC,TX (FS)// <Enter>
HOST FACILITY'S SYSTEM: REGION 7 ISC,TX (FS)// <Enter>
STATUS: ACTIVE// <Enter>
SHIPPING METHOD: COURIER// <Enter>
BARCODE MANIFEST: NO// <Enter>
MANIFEST RECEIPT: YES// INCLUDE UNCOLLECTED SPECIMENS: NO// <Enter>
Select ORDERING LOCATION: <Enter>
Select TEST/PROFILE: HEPATITIS B Ag// <Enter>
TEST/PROFILE: HEPATITIS B Ag// <Enter>
ACCESSION AREA: SEROLOGY// <Enter>
DIVISION: <Enter>
Select FEEDER SHIPPING CONFIGURATION: <Enter>
SPECIMEN: SERUM// <Enter>
URGENCY: <Enter>
SPECIMEN CONTAINER: RED TOP// <Enter>
SHIPPING CONDITION: REFRIGERATED// <Enter>
PACKAGING CONTAINER: <Enter>
REQUIRE PATIENT HEIGHT: YES// <Enter>
PATIENT HEIGHT UNITS: <Enter>
PATIENT HEIGHT CODE: <Enter>
REQUIRE PATIENT WEIGHT: YES// <Enter>
PATIENT WEIGHT UNITS: <Enter>
PATIENT WEIGHT CODE: <Enter>
REQUIRE COLLECTION VOLUME: YES
COLLECTION VOLUME UNITS: <Enter>
COLLECTION VOLUME CODE: <Enter>
REQUIRE COLLECTION WEIGHT: <Enter>
REQUIRE COLLECTION END D/T: <Enter>
Select TEST/PROFILE: <Enter>
Select Lab Shipping Management Menu Option:
```

Note: If you answer YES here, the system displays the next two prompts.

5.4.3 Print Shipping Manifest [LA7S MANIFEST PRINT]

The option Print Shipping Manifest [LA7S MANIFEST PRINT] prints additional information on the manifests:

- Requesting provider's office phone, voice/digital pager numbers, and specimen container are printed on working copies of the shipping manifest.
- Relevant clinical information is printed on manifests used for shipping documents.
- Refer to the option Edit Relevant Clinical Information [LA7S MANIFEST CLINICAL INFO].

Figure 34. Print Shipping Manifest [LA7S MANIFEST PRINT]

```
Select Lab Shipping Menu Option: ?
SMB   Build Shipping Manifest
SSM   Start a Shipping Manifest
SMS   Close/Ship a Shipping Manifest
ART   Add/Remove a Shipping Manifest Test
SMR   Edit Required Test Information
SMI   Edit Relevant Clinical Information
SMC   Cancel a Shipping Manifest
PSM   Print Shipping Manifest
STA   Order Status Report
RSM   Retransmit Shipping Manifest
RLR   Retransmit LEDI Lab Results
SMP   Print LEDI Pending Orders

Select Lab Shipping Menu Option: PRINT SHIPPING MANIFEST

Print Shipping Manifest
Select Shipping Configuration: LEDIB HOST
Select Shipping Manifest: 980-20110218-1

Print barcodes on manifest? YES// <Enter>
DEVICE: HOME// <Enter> TELNET PORT      Right Margin: 80// <Enter>

Shipping Manifest: 980-20110218-1          Page: 1
                to Site: LEDIB              Printed: Apr 07, 2011@16:59
                from Site: LEDIA            E-Order: YES
                Date Shipped: Feb 18, 2011@16:30  Ship via: FEDEX
Shipping Condition: ROOM TEMPERATURE      Container: STYROFOAM BOX

Item      Patient Name      Patient ID      Accession
          Date of Birth   Patient ICN     Specimen UID
          Requested By    Sex             Collect Date/Time
-----
1-1      BCMA,ONE-PATIENT      666-33-0001    SOIM* 11 1
          Apr 07, 1935        Male           8811000001
          PROVIDER,ONE
          -----
          VIRAL LOAD      BLOOD
          VA NLT Code [Name]: 89498.0000 [HIV Viral Load]
          -----

End of Shipping Manifest
```

5.4.4 Print LEDI Pending Orders [LA7S PENDING PRINT LEDI]

The option Print LEDI Pending Orders [LA7S PENDING PRINT LEDI] prints ordering provider and current test status.

Figure 35. Print LEDI Pending Orders [LA7S PENDING PRINT LEDI]

```

Select Lab Shipping Menu Option: ?

SMB   Build Shipping Manifest
SSM   Start a Shipping Manifest
SMS   Close/Ship a Shipping Manifest
ART   Add/Remove a Shipping Manifest Test
SMR   Edit Required Test Information
SMI   Edit Relevant Clinical Information
SMC   Cancel a Shipping Manifest
PSM   Print Shipping Manifest
STA   Order Status Report
RSM   Retransmit Shipping Manifest
RLR   Retransmit LEDI Lab Results
SMP   Print LEDI Pending Orders

Select Lab Shipping Menu Option: PRINT LEDI PENDING ORDERS
Select Shipping Manifest: 7 <Enter> GOMERTOSE,HE BE
Pat ID: 000000000  DOB: Mar 02, 1955  Sex: MALE
Spec ID: 1409000002  Manifest: 522-20090721-1  Site: ZZ BONHAM
Collected D/T: Feb 27, 2009@15:13  Specimen: SERUM  Spec. Status: In-Transit
...OK? Yes// <Enter> (Yes)

DEVICE: HOME// <Enter> TELNET PORT  Right Margin: 80// <Enter>

*** DO NOT USE FOR SHIPPING DOCUMENT - WORK COPY ONLY ***
Shipping Manifest: 522-20090721-1  Page: 1
to Site: DALLAS OI  Printed: Apr 07, 2011@17:06
from Site: ZZ BONHAM  E-Order: YES
Status: Electronic Manifest  Ship via: Electronic manifest
Shipping Condition: None Specified  Container: None Specified

Item      Patient Name      Patient ID      Accession
         Date of Birth    Patient ICN     Specimen UID
         Requested By    Sex             Collect Date/Time
-----
1-1      LEDITEST,TEST    000000000     SER 09 2
         Mar 02, 1955
         LRUSER,TWO      Male           1409000002
                                         Feb 27, 2009@15:13

COMMENTS: HEPATITIS B Ag
Specimen source: Serum (substance) [67922002:SCT] ; Serum
[SER:HL70070]
Collection sample: Blood specimen (specimen) [119297000:SCT] ;
BLOOD [20:99VA62]

Host test status: In-Transit
-----
HEPATITIS B Ag  SERUM
  
```

5.4.5 Enter/verify/modify data (manual) [LRENTER]

The option Enter/verify/modify data (manual) [LRENTER] supports the editing of microbiology results by using either the Unique Identifier (UID) or the Accession Number.

Figure 36. Enter/verify/modify data (manual) [LRENTER]

```
Enter/verify/modify data (manual)

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

Select one of the following:

1      Accession Number
2      Unique Identifier (UID)

Verify by: 1// 2 <Enter> Unique Identifier (UID)

Unique Identifier: 1411000010 <Enter> (MICRO 11 10)
```

5.4.6 Referral Patient Multi-purpose Accession [LRLEDI]

The option Referral Patient Multi-purpose Accession [LRLEDI] includes three modifications to allow receipt of inter-divisional LEDI manifests from a facility within an existing VistA system.

Figure 37. Referral Patient Multi-purpose Accession [LRLEDI]

```
Select OPTION NAME: REFERRAL PATIENT MULTI-PURPOSE <Enter> LRLEDI Referral
Patient Multi-purpose Accession

Are you using a barcode reader? YES// NO
Select Shipping Configuration: CBOC TO MAIN
Select Shipping Manifest: 170-20080206-4 <Enter> CBOC TO MAIN Status: RECEIVED as
of Feb 06, 2008@18:10

Select one of the following:

0      Abort Manifest Acceptance
1      Accept Manifest
2      Accept Manifest with Exceptions
3      Accept Selected Accessions
4      Reject Manifest

Manifest Acceptance Action: 1 <Enter> Accept Manifest
Manifest 170-20080206-4 status set to 'Manifest received by host facility'.
Test(s) on manifest 170-20080206-4 set to 'Test received' status.
```

5.4.7 Fast Bypass Data Entry/Verify [LRFASSTs]

The option Fast Bypass Data Entry/Verify [LRFASSTs] allows the selection of a performing laboratory for specific sections or the entire report.

Figure 38. Fast Bypass Data Entry/Verify [LRFASSTs]

```
Select OPTION NAME: FAST BYPASS DATA ENTRY/VERIFY <Enter> LRFASSTs      Fast Bypass
Data Entry/Verify

Do you want to review the data before and after you edit? YES// <Enter>
Select Performing Laboratory: ZZ BONHAM// <Enter>      TX VAMC 522 INACTIVE Jan 01,
1997

WANT TO ENTER COLLECTION TIMES? Y// <Enter>
Select ACCESSION TEST GROUP: MICROBIOLOGY

Select Patient Name: HXX,PXXXXXX <Enter>      HXX,PXXXXXX      1-1-60
XXXXXXXXXX      NO      NSC VETERAN
Enrollment Priority:      Category: IN PROCESS      End Date:

      *** Patient Requires a Means Test ***

      Primary Means Test Required from NOV 17,2009

Enter <RETURN> to continue. <Enter>

      Select one of the following:

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

Specimen collected how ? : SP// IMMED <Enter> COLLECT
PATIENT LOCATION: 2E// <Enter>      2 EAST
PROVIDER: LRUSER,ONE// <Enter>
LAB Order number: 145
Is there one sample for this patient's order? Yes// <Enter> (Yes)
Select COLLECTION SAMPLE NAME: URINE <Enter>      URINE
Enter Order Comment:
Choose one (or more, separated by commas) ('*' AFTER NUMBER TO CHANGE URGENCY)
1  CULTURE & SENSITIVITY      6  AFB SMEAR
2  ANAEROBIC CULTURE      7  MYCOLOGY CULTURE
3  GRAM STAIN      8  PARASITE EXAM
4  BLOOD CULTURE      9  FECAL LEUKOCYTES
5  AFB CULTURE & SMEAR      10 STERILITY TEST
TEST number(s): 1
For CULTURE & SENSITIVITY
Other tests? N// <Enter>
Nature of Order/Change: WRITTEN <Enter>      W

You have just selected the following tests for HXX,PXXXXXX XXX-XX-XXXX
entry no. Test      Sample
1  CULTURE & SUSCEPTIBILITY      URINE

All satisfactory? Yes// <Enter> (Yes)

LAB Order number: 145
```

```

Collection Date@Time: NOW// <Enter> (APR 14, 2011@15:16:57)
Print labels on: LABLABEL// NULL <Enter> Bit Bucket

Do you wish to test the label printer: NO// <Enter>
~For Test: CULTURE & SUSCEPTIBILITY URINE
Enter Order Comment: <Enter>

ACCESSION: MICRO 11 11 <1411000011>
CULTURE & SUSCEPTIBILITY URINE
COMMENT ON SPECIMEN:

Work Load Area: MICROBIOLOGY

      HXX,PXXXXXX  SSN: XXX-XX-XXXX  LOC: 2E

Pat Info:                               Sex: MALE      Age: 51yr as of Apr 14, 2011
Edit this accession? YES// <Enter>

      1  CULTURE & SUSCEPTIBILITY

CULTURE & SUSCEPTIBILITY completed: T <Enter> (APR 14, 2011)
COLLECTION SAMPLE: URINE// <Enter>
SITE/SPECIMEN: URINE// <Enter>
COMMENT ON SPECIMEN: <Enter>
Select GRAM STAIN: A
      (NO)
Select GRAM STAIN: <Enter>
BACT RPT STATUS: F <Enter> FINAL REPORT
URINE SCREEN: N NEGATIVE

Select ORGANISM: ESCHERICHIA COLI <Enter>      1571      112283007      SCT Organism
      ORGANISM ISOLATE NUMBER: 1// <Enter>
ORGANISM: ESCHERICHIA COLI// <Enter>
QUANTITY: <10000
      (<10000)
Select COMMENT: <Enter>
COLISTIN: <Enter>
GENTAMICIN: R <Enter> (R)
CHLORAMPHENICOL: I <Enter> (I)
TETRACYCLINE: S <Enter> (SUS)
AMPICILLIN: R <Enter> (RESIS)
CARBENICILLIN: I <Enter> (I)
TOBRAMYCIN: S <Enter> (SUS)
TRIMETHAPRIM/SULFAMETHOXAZOLE: R <Enter> (RESIS)
AMIKACIN: I<Enter> (I)
CEFAMANDOLE: S <Enter> (SUS)
CEFOXITIN: R <Enter> (RESIS)
NITROFURANTOIN: I <Enter> (I)
CEPHALOTHIN: S <Enter> (SUS)

      1  ESCHERICHIA COLI
Select ORGANISM: <Enter>
Select BACT RPT REMARK: <Enter>
BACT RPT DATE APPROVED: NOW <Enter> (APR 14, 2011@15:21)
Current performing lab assignments: None Listed

      Select one of the following:

          1      Entire report
          2      Specific sections of report

Designate performing laboratory for: 1// <Enter> Entire report

```

Select Performing Laboratory: ZZ BONHAM// <Enter> TX VAMC 522 INACTIVE Jan 01, 1997

Sure you want to add this record? NO// YES
... assignment created.

Current performing lab assignments:

Bacteriology Report Performed By:
ZZ BONHAM [CLIA# 987654321]

Select one of the following:

- 1 Entire report
- 2 Specific sections of report
- 3 Delete performing laboratory

Designate performing laboratory for:
CULTURE & SUSCEPTIBILITY completed: 04/14/2011 // <Enter>

(D)isplay (A)dd Work Load D

CULTURE & SUSCEPTIBILITY

WKLD CODE: Micro Mycobacterium Culture TEST MULTIPLY FACTOR: 1
COMPLETION TIME: APR 14, 2011@15:16:57
USER: POSTMASTER INSTITUTION: ZZ BONHAM
MAJOR SECTION: MICROBIOLOGY LAB SUBSECTION: MICROBIOLOGY

(D)isplay (A)dd Work Load

Accession #:

Select Patient Name:

5.4.8 Bypass normal data entry [LRFASST]

The option Bypass normal data entry [LRFASST] allows the selection of a performing laboratory for specific sections or the entire report.

Figure 39. Bypass normal data entry [LRFASST]

```
Select OPTION NAME: BYPASS NORMAL DATA ENTRY <Enter> LRFASST      Bypass normal data
entry

Select Performing Laboratory: ZZ BONHAM// <Enter>    TX  VAMC  522  INACTIVE Jan 01,
1997
Do you want to enter draw times? No// <Enter>    (No)
Select Patient Name: HXX,PXXXXXX <Enter>          1-1-60    XXXXXXXXXX    NO    NSC
VETERAN

Enrollment Priority:                Category: IN PROCESS      End Date:

      *** Patient Requires a Means Test ***

      Primary Means Test Required from NOV 17,2009

Enter <RETURN> to continue. <Enter>
PATIENT LOCATION: 2E// <Enter>  2 EAST

      Select one of the following:

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

Specimen collected how ? : SP// IMMED <Enter> COLLECT
PROVIDER: LRUSER,ONE// <Enter>
Select URGENCY: ROUTINE// <Enter>
Select LABORATORY TEST NAME: CULTURE & SUSCEPTIBILITY <Enter>      C & S
For CULTURE & SUSCEPTIBILITY
Select COLLECTION SAMPLE NAME: URINE <Enter>          URINE
~For Test: CULTURE & SUSCEPTIBILITY  URINE
Enter Order Comment: <Enter>
Nature of Order/Change: WRITTEN <Enter>          W
LAB Order number: 144

ACCESSION: MICRO 11 10 <1411000010>
CULTURE & SUSCEPTIBILITY  URINE
COMMENT ON SPECIMEN: <Enter>
Description OK? Y// <Enter>

Work Load Area: MICROBIOLOGY

      HXX,PXXXXXX    SSN: XXX-XX-XXXX    LOC: 2E

Pat Info:                Sex: MALE      Age: 51yr as of Apr 14, 2011
Edit this accession? YES// <Enter>

      1    CULTURE & SUSCEPTIBILITY

CULTURE & SUSCEPTIBILITY completed: T <Enter>    (APR 14, 2011)
COLLECTION SAMPLE: URINE// <Enter>
SITE/SPECIMEN: URINE// <Enter>
```

COMMENT ON SPECIMEN: <Enter>
 Select GRAM STAIN: **MODE**
 (MODE)
 Select GRAM STAIN: <Enter>
 BACT RPT STATUS: **F** <Enter> FINAL REPORT
 URINE SCREEN: **N** <Enter> NEGATIVE

Select ORGANISM: **ESCHERICHIA COLI** <Enter> 1571 112283007 SCT Organism
 ORGANISM ISOLATE NUMBER: 1// <Enter>
 ORGANISM: ESCHERICHIA COLI// <Enter>
 QUANTITY: **<10000**
 (<10000)
 Select COMMENT: <Enter>

CHOOSE FROM:
 COLISTIN:
 GENTAMICIN: R (R)
 CHLORAMPHENICOL: I (I)
 TETRACYCLINE: S (SUS)
 AMPICILLIN: R (RESIS)
 CARBENICILLIN: I (I)
 TOBRAMYCIN: S (SUS)
 TRIMETHAPRIM/SULFAMETHOXAZOLE: R (RESIS)
 AMIKACIN: I (I)
 CEFAMANDOLE: S (SUS)
 CEFIXITIN: R (RESIS)
 NITROFURANTOIN: I (I)
 CEPHALOTHIN: S (SUS)

1 ESCHERICHIA COLI
 Select ORGANISM: <Enter>
 Select BACT RPT REMARK: <Enter>
 BACT RPT DATE APPROVED: **NOW** <Enter> (APR 14, 2011@14:37)
 Current performing lab assignments: None Listed

Select one of the following:

- 1 Entire report
- 2 Specific sections of report

Designate performing laboratory for: 1// <Enter> Entire report
 Select Performing Laboratory: ZZ BONHAM// **TX** <Enter> VAMC 522 INACTIVE Jan 01, 1997

Sure you want to add this record? NO// **YES**
 ... assignment created.

Current performing lab assignments:

Bacteriology Report Performed By:
 ZZ BONHAM [CLIA# 987654321]

Select one of the following:

- 1 Entire report
- 2 Specific sections of report
- 3 Delete performing laboratory

Designate performing laboratory for: <Enter>
 CULTURE & SUSCEPTIBILITY completed: 04/14/2011 //

5.4.9 Results entry (batch) [LRMISTUF]

The option Results entry (batch) [LRMISTUF] allows the selection of a performing lab for entire report or specific sections.

Figure 40. Results entry (batch) [LRMISTUF]

```
Select OPTION NAME: LRMISTUF <Enter>           Results entry (batch)
Results entry (batch)

Select ACCESSION AREA: MICRO <Enter> MICROBIOLOGY CDD

Work Load Area: M
  1  MICROBIOLOGY
  2  MISC HEMATOLOGY TESTS
  3  MISC URINALYSIS TESTS
  4  MYCOLOGY
CHOOSE 1-4: 1 <Enter> MICROBIOLOGY
Micro Accession Year: (11)// <Enter>
Select MICROBIOLOGY TEST: CULT
  1  CULTURE & SUSCEPTIBILITY
  2  CULTURE - AFB NON-RESPIRATORY  AFB NON-RESPIRATORY CULT & SMEAR
  3  CULTURE - AFB RESPIRATORY  AFB RESPIRATORY CULT & SMEAR
  4  CULTURE - BLOOD  BLOOD CULTURE
  5  CULTURE - FUNGUS  MYCOLOGY CULTURE
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 <Enter> CULTURE & SUSCEPTIBILITY
Preliminary or Final: F
Enter the field to edit: ?
Answer with MICROBIOLOGY SUB-FIELD NUMBER, or LABEL
Do you want the entire MICROBIOLOGY SUB-FIELD List? Y <Enter> (Yes)
  Choose from:
  11.57          URINE SCREEN
  11.58          SPUTUM SCREEN
  11.6           GRAM STAIN
  13            BACT RPT REMARK

Enter the field to edit: 13 <Enter> BACT RPT REMARK
  1  Automatically enter your entry.
  2  Prompt with your entry.
  3  Just Prompt.
Choice: 1
What do you want entered?: NO GROWTH 2 DAYS <Enter> (NO GROWTH 2 DAYS)
I will automatically stuff BACT RPT REMARK
with NO GROWTH 2 DAYS
...OK? Yes// <Enter> (Yes)
Verify all work automatically? Yes// <Enter> YES
Designate the individual test as complete? No// YES
Select Performing Laboratory: LEXINGTON-CDD VAMC// <Enter> KY VAMC 596A4

  Select one of the following:

      1          Entire report
      2          BACT RPT REMARK section of report

Designate performing laboratory for:
```

5.4.10 Microbiology Results Entry [LRMIEDZ]

The option Microbiology Results Entry [LRMIEDZ] can display the ISOLATE ID as determined by the Execute code setup in the EDIT CODE field in LABORATORY TEST file (#60).

Figure 41. Microbiology Results Entry [LRMIEDZ]

```
Select Laboratory DHCP Menu <TEST ACCOUNT> Option: MICROBIOLOGY MENU
Select Microbiology menu <TEST ACCOUNT> Option: RE <Enter> Results entry
Select MICROBIOLOGY Accession or UID: MYCOLOGY
Accession Date: TODAY// <Enter> (JUN 01, 2011)
Number part of Accession: (1-999999): 2

Work Load Area: MYCOLOGY
Select TEST/PROCEDURE:
None Preselected
Accession # 2
XXXXXXXXXX SSN: XXX-XX-XXXXLOC: CBOC
Pat Info: Sex: MALE Age: 75yr as of Jun 01, 2011
Edit this accession? YES// <Enter>

1 MYCOLOGY CULTURE

MYCOLOGY CULTURE completed: <Enter>
SITE/SPECIMEN: SPUTUM// <Enter>
COMMENT ON SPECIMEN: <Enter>
MYCOLOGY RPT STATUS: P <Enter> PRELIMINARY REPORT
Select FUNGUS/YEAST: CANDIDA GLABRATA
FUNGUS/YEAST ISOLATE NUMBER: 1// <Enter>
ISOLATE ID: 99VA4:581:9-1// <Enter> (No Editing)
QUANTITY: <Enter>
Select COMMENT: <Enter>
Select FUNGUS/YEAST: <Enter>
Select MYCOLOGY RPT REMARK: <Enter>
MYCOLOGY RPT DATE APPROVED: <Enter>
Current performing lab assignments: None Listed

Select one of the following:

1 Entire report
2 Specific sections of report

Designate performing laboratory for: 1// <Enter> Entire report
Select Performing Laboratory: HUNTINGTON VAMC// <Enter> WV VAMC 581

Sure you want to add this record? NO// YES
... assignment created.

Current performing lab assignments:

Mycology Report Performed By:
HUNTINGTON VAMC [CLIA# 51D0987909]

Select one of the following:

1 Entire report
2 Specific sections of report
3 Delete performing laboratory
```

Designate performing laboratory for:
MYCOLOGY CULTURE completed:

5.4.11 Enter/verify data (auto instrument) [LRVR]

The option Enter/verify data (auto instrument) [LRVR] prompts the user to view results associated to each sequence display when verifying by accession number, where there are multiple results available for the accession number.

Figure 42. Enter/verify data (auto instrument) [LRVR]

```
Select Process data in lab menu <TEST ACCOUNT> Option: EA <Enter> Enter/verify
data (auto instrument)
  Select LOAD/WORK LIST NAME: VITROS
Select Performing Laboratory: HUNTINGTON VAMC// <Enter> WV VAMC 581
Work Load Area: VITROS// <Enter>
Would you like to see the test list? No// <Enter> NO
Do you wish to modify the test list? NO// <Enter>
You have selected 128 tests to work with.
Do you want to review the data before and after you edit? YES// <Enter>

      Select one of the following:
      1      Accession Number
      2      Unique Identifier (UID)

Verify by: 1// <Enter> Accession Number
      Accession Date: TODAY// <Enter> (MAY 19, 2011)
      Accession NUMBER: 488// 487
ORDER #: 100278
Seq #: 78740 Accession: CH 0517 487
Seq #: 78740 Accession: CH 0517 487      Results received: May 14, 2011@11:27
      UID: UNKNOWN                        Last updated: May 14, 2011@11:27

Seq #: 78743 Accession: CH 0517 487      Results received: May 14, 2011@11:35
      UID: UNKNOWN                        Last updated: May 14, 2011@11:35

Seq #: 80124 Accession: CH 0517 487      Results received: May 17, 2011@20:20
      UID: 4111370487                    Last updated: May 17, 2011@20:20
Select one of the following:
      0      Skip Display
      78740  Seq # 78740
      78743  Seq # 78743
      80124  Seq # 80124
Display results associated with sequence #: Skip Display//
```

5.4.12 Log-in, anat path [LRAPLG]

The option Log-in, anat path [LRAPLG] requires the input for three new prompts:

- Specimen Topography
- Collection Sample
- Laboratory Test

Figure 43. Log-in, anat path [LRAPLG]

```
Select Anatomic pathology Option: L <Enter> Log-in menu, anat path

Select Log-in menu, anat path Option: ?

LI      Log-in, anat path
DA      Delete accession #, anat path
PB      Print log book
HW      Histopathology Worksheet

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Log-in menu, anat path Option: LI <Enter> Log-in, anat path
Select ANATOMIC PATHOLOGY SECTION: SUR <Enter> GICAL PATHOLOGY

Log-In for 2008 ? YES// <Enter> (YES)

Select Patient Name: LDSI
  1  LDSIAP,ONE      X-X-55      XXXXXXXXXX      NO      EMPLOYEE
  2  LDSIAP,PATIENT X-X-7XXXXXXX      YES      MILITARY RETIREE

  3  LDSIAP,SALLY   X-X-54      XXXXXXXXX7      NO      EMPLOYEE
CHOOSE 1-3: 1 <Enter> LDSIAP,ONE      X-X-55 XXXXXXXXX      NO      EMPLOYEE
LDSIAP,ONE ID: XXXXXXXX
AGE: 53  DATE OF BIRTH: MAY 5,1955
PATIENT LOCATION: 3E// <Enter> 3 EAST

Checking surgical record for this patient...

No operations on record in the past 7 days for this patient.

Assign SURGICAL PATHOLOGY (NSP) accession #: 13? YES// <Enter> (YES)
Date/time Specimen taken: NOW// <Enter> (SEP 15, 2008@15:17)
SURGEON/PHYSICIAN: LRPROVIDER,ONE JR <Enter> LRPROVIDER,ONE JR      WGA
SPECIMEN SUBMITTED BY: LRPROVIDER,ONE
Select SPECIMEN: TISSUE
SPECIMEN TOPOGRAPHY: TISSUE
  1  TISSUE      00001A
  2  TISSUE EOSINOPHIL      05145
  3  TISSUE NEUTROPHIL      05147
  4  TISSUE, SUBCUTANEOUS SUBCUTANEOUS TISSUE      03000
CHOOSE 1-4: 1 <Enter> TISSUE      00001A
COLLECTION SAMPLE: TISSUE <Enter> TISSUE
Select SPECIMEN: <Enter>
DATE/TIME SPECIMEN RECEIVED: NOW// <Enter> (SEP 15, 2008@15:18)
PATHOLOGIST: LRPROVIDER,ONE <Enter> JR LRPROVIDER,ONE JR      WGA
Select COMMENT: <Enter>
FROZEN SECTION: <Enter>
  1>
Select LABORATORY TEST: TISSUE EXAM <Enter> SP
```

```

Select Patient Name: <Enter>
Select Log-in menu, anat path Option: <Enter>
Select Anatomic pathology Option: <Enter>
Select Laboratory DHCP Menu

```

Figure 44. Sample of the AP Log Book where the display of related surgical information is enabled

```

Select OPTION NAME: LRAPBK <Enter>          Print log book
Print log book

Select ANATOMIC PATHOLOGY SECTION: SURGICAL PATHOLOGY

                SURGICAL PATHOLOGY LOG BOOK

Select one of the following:

0             No
1             Yes
2             Only Topography and Morphology Codes

Print SNOMED codes: No// <Enter>
Print Single Accession? NO// Y <Enter> YES
Select SURGICAL PATHOLOGY Accession or UID: NSP 08 20
SURGICAL PATHOLOGY (2008) 20
DEVICE: HOME// ;9999 <Enter> UCX/TELNET

Mar 14, 2012 18:00      ZZ BONHAM                      Pg: 1
LOG BOOK entry for accession NSP 08 20
# =Demographic data in file other than PATIENT file
Date      Num      Patient              ID      LOC      PHYSICIAN              PATHOLOGIST
-----
Oct/07    20      LRPATIENT,ONE JR      1111    1T      LRUSER,ONE              LRUSER,ONE
      Patient ID: 000-00-1111
      InPatient              Accession [UID]: NSP 08 20 [0000000000]
Date specimen taken: Oct 07, 2008@09:43 Entered by: LRUSER,ONE
      FIFTH BIG TOE
      OTHER BIG TOE
      Related Surgery Case #35
BRIEF CLINICAL HISTORY: Information automatically documented from SURGERY packag
e case #35 Field (#60) BRIEF CLIN HISTORY
PREOPERATIVE DIAGNOSIS: Information automatically documented from SURGERY packag
e case #35 Field (#32) PRINCIPAL PRE-OP DIAGNOSIS,
      (#.72) OTHER PREOP DIAGNOSIS
POSTOPERATIVE DIAGNOSIS: Information automatically documented from SURGERY packa
ge case #35 Field (#34) PRINCIPAL POST-OP DIAG,
      (#.74) OTHER POSTOP DIAGS
-----

Select SURGICAL PATHOLOGY Accession or UID:

```

5.4.13 Anatomic Pathology Performing Laboratory

Within the Anatomic Pathology data entry options, the user can designate the performing laboratory for the entire report or for specific sections of the report. If choosing to enter the performing laboratory for specific sections, only the sections that have data entered will appear.

Figure 45. Sample AP Designation of Performing Laboratory for Report

```
Designate performing laboratory for: 1// <Enter> Entire report
Select Performing Laboratory:
Sure you want to add this record? NO// YES
...assignment created.
Current performing lab assignments:
Surgical Pathology Report Performed By:
(#1 Institution Name)

    Select one of the following:
1 Entire report
2 Specific sections of report

Designate performing laboratory for: 1// 2 <Enter> Specific sections of report
    1 - Brief Clinical History
    2 - Preoperative Diagnosis
    3 - Post-Operative Diagnosis
    4 - Gross Description
    5 - Frozen Section
Select the section to designate (1-5): 1
Select Performing Laboratory:
Sure you want to add this record? NO// YES
... assignment created.
Current performing lab assignments:
Brief Clinical History Performed By:
(#2 Institution Name)

    Select one of the following:
    1 Entire report
    2 Specific sections of report
    3 Delete performing laboratory

Designate performing laboratory for: 2 <Enter> Specific sections of report
```

Enter the performing Institution Name here.

Enter the designate Institution Name here.

5.4.14 Add tests to a given accession [LRADD TO ACC]

The option Add tests to a given accession [LRADD TO ACC] was modified to allow the selection of the type of test order added.

Figure 46. Add tests to a given accession [LRADD TO ACC]

```
Select Accessioning menu <TEST ACCOUNT> Option: ADD TESTS TO A GIVEN ACCESSION
Select Accession or UID: CHEMISTRY
CHEMISTRY
  Accession Date: TODAY// <Enter> (MAY 17, 2011)
  Number part of Accession: (1-999999): 1
LEDITEST,PATIENTONE          000-00-1111
Nature of Order/Change: POLICY// <Enter> I
TESTS ALREADY ON THE ACCESSION:
  CREATININE
  UREA NITROGEN
  GLUCOSE
  SODIUM
  POTASSIUM
  CHLORIDE
  CO2
  CALCIUM
  ANION GAP
  ELECTROLYTE 7

Select Original Ordered Test: ELECTROLYTE 7

Add LABORATORY TEST: TSH <Enter> TSH (LAB)
...OK? Yes// <Enter> (Yes)

  Select one of the following:

      1      Add On
      2      Reflex

Type of test order being added: 1 <Enter> Add On

TSH (LAB) ADDED
```

5.4.15 Add a New Internal Name for an Antibiotic [LRWU7]

This existing option was expanded to allow editing of mycobacterium antibiotics.

Figure 47. Add a new internal name for an antibiotic [LRWU7]

```
Select Lab liaison menu Option: ?

ANT      Add a new internal name for an antibiotic
ANTE     Edit 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
LNC      LOINC Main Menu ...
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
         Edit Inactive Date - COLLECTION SAMPLE
         Edit Inactive Date - TOPOGRAPHY FIELD
         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
         Print AMA CPT Panel Pending List
         Re-index Antimicrobial Suscept File (62.06)
         Restart processing of instrument data
         Turn on site workload statistics
         Turn on workload stats for accession area
         User selected lab test/patient list edits

Select Lab liaison menu Option:  Add a new internal name for an antibiotic

Select one of the following:
    1          Bacterial Antibiotic
    2          Mycobacterium Antibiotic
Select Antibiotic Type to Add: 1//  Bacterial Antibiotic
Enter the name of the new antibiotic you wish to create: NEW ANTIOTBIOTIC

Checking if field exists...OK
(DRUG NODE will be 2.00581067)
Are you sure you wish to create NEW ANTIOTBIOTIC? NO// YES

TEST ANTIOTBIOTIC has now been created.
You must now add a new antibiotic in the ANTIMICROBIAL SUSCEPTIBILITY file
and use TEST ANTIOTBIOTIC as the entry for the INTERNAL NAME field.
Do you want to setup NEW ANTIOTBIOTIC as a new Bacterial Antibiotic? NO// YES
NAME: NEW ANTIOTBIOTIC//
INTERNAL NAME: 2.00581067//  NEW ANTIOTBIOTIC
DISPLAY COMMENT:
```

```

ABBREVIATION:
DEFAULT SCREEN: ALWAYS DISPLAY
PRINT ORDER: 25
Select SUSCEPTIBILITY RESULT:
NATIONAL VA LAB CODE: NEW ANTIBIOTIC

```

5.4.16 Delete entire order or individual tests [LRCENDEL]

The option Delete entire order or individual tests [LRCENDEL] was modified to prevent a user from "Not Performing" (NP) any tests that have results. This applies even if the results have not yet been verified. Note: Shortened the actual length of the screen to remove excess space and cut down on paper.

Figure 48. Delete entire order or individual tests [LRCENDEL]

```

Select Accessioning menu Option: DELETE ENTIRE order or individual tests

ENTER ORDER NUMBER: : (1-9999999999): 361

Order Test Urgency Status Accession
-Lab Order # 361 Provider: LRUSER,TWO
BLOOD
CBC ROUTINE Collected 07/17/2012@12:08 HE 0717 1
LRPATIENT,TWO 000-00-9934

Test result(s) already entered for this order; cannot change order.
You must select individual test using the 'Delete test from accession'
option.

Can't change status of test(s) on this order.

ENTER ORDER NUMBER: : (1-9999999999):

```

5.4.17 Microbiology Performing Laboratory

LEDI IV adds the capability to designate the performing laboratory for the entire AP or Micro report or for specific sections of the report. For sites that do all their AP or Micro tests in house (and do not send them out), it can be cumbersome to assign a performing lab each time they enter an AP or Micro result.

Two new parameters were created that allow the site to skip the prompt for performing laboratory: 'Ask Performing Lab AP' and 'Ask Performing Lab Micro'. They can set the value to either 'Yes' or 'No'. If they set the parameter to 'No', the system will not prompt the user to designate a performing lab, and the system will automatically assign a performing lab (based on the algorithm explained below). Sites that send AP and Micro tests to another lab (some or all of the report; all the time, or only in certain scenarios) should maintain the ability to designate the performing lab when they verify the report, and should not choose to set the parameter to not ask for a performing lab.

If the user sets the parameter to not ask for a performing lab, the system automatically assigns a performing lab to the entire report based off these conditions:

- If the user entering results has their 'Default Performing Laboratory' parameter set to a default Institution, that Institution will be used as the performing lab.
- If that parameter is not set for the user, the system will use the DUZ(2) (the user's Institution) as the performing lab.

Within Microbiology result entry options, the user can designate the performing laboratory for the entire report or for specific sections of the report. If choosing to enter the performing laboratory for specific sections, only the sections that have data entered will appear for selection.

Figure 49. Microbiology Assigning Performing Laboratory for Entire Report

```
CULTURE & SUSCEPTIBILITY completed: N <Enter> (JUL 17, 2012@12:54)
COLLECTION SAMPLE: BLOOD// <Enter>
SITE/SPECIMEN: SERUM// <Enter>
COMMENT ON SPECIMEN: <Enter>
Select GRAM STAIN: NEGATIVE <Enter>
(NEGATIVE)
Select GRAM STAIN: <Enter>
BACT RPT STATUS: F <Enter> FINAL REPORT

Select ORGANISM: <Enter>
Select BACT RPT REMARK: <Enter>
BACT RPT DATE APPROVED: N <Enter> (JUL 17, 2012@12:54)
Current performing lab assignments: None Listed

      Select one of the following:

          1      Entire report
          2      Specific sections of report

Designate performing laboratory for: 1// <Enter> Entire report
Select Performing Laboratory: ZZ BONHAM// <Enter> TX VAMC 522 INACTIVE
Jan 01, 19
97

Sure you want to add this record? NO// YES <Enter>
... assignment created.

Current performing lab assignments:

Bacteriology Report Performed By:
ZZ BONHAM [CLIA# 987654321]

      Select one of the following:

          1      Entire report
          2      Specific sections of report
          3      Delete performing laboratory

Designate performing laboratory for: <Enter>
CULTURE & SUSCEPTIBILITY completed: 07/17/2012 12:54 // <Enter>
Send a CPRS Alert/Notification? YES// NO <Enter>

      (D)isplay (A)dd Work Load <Enter>

Accession #: <Enter>
```

Figure 50. Microbiology Assigning Performing Laboratory for Specific Sections of Report

```
CULTURE & SUSCEPTIBILITY completed: N <Enter> (JUL 17, 2012@12:21)
COLLECTION SAMPLE: BLOOD// <Enter>
SITE/SPECIMEN: SERUM// <Enter>
COMMENT ON SPECIMEN: <Enter>
Select GRAM STAIN: NEGATIVE <Enter>
(NEGATIVE)
Select GRAM STAIN: <Enter>
BACT RPT STATUS: F <Enter> FINAL REPORT

Select ORGANISM: STAPHYLOCOCCUS AUREUS <Enter>      2441  3092008  SCT Organism
ORGANISM ISOLATE NUMBER: 1// <Enter>
This entry is mapped in File #62.47
ORGANISM: STAPHYLOCOCCUS AUREUS// <Enter>
QUANTITY: <Enter>
Select COMMENT: <Enter>
PENICILLIN: <Enter>
CLINDAMYCIN: S <Enter> (SUS)
VANCOMYCIN: S <Enter> (6)
GENTAMICIN: S <Enter> (S)
CHLORAMPHENICOL: <Enter>
TETRACYCLINE: <Enter>
AMPICILLIN: <Enter>
NITROFURANTOIN: <Enter>
ERYTHROMYCIN: <Enter>
OXACILLIN: R <Enter> (RESIS)
CEPHALOTHIN: <Enter>

1 STAPHYLOCOCCUS AUREUS
Select ORGANISM: <Enter>
Select BACT RPT REMARK: <Enter>
BACT RPT DATE APPROVED: N <Enter> (JUL 17, 2012@12:23)
Current performing lab assignments: None Listed

Select one of the following:

1      Entire report
2      Specific sections of report

Designate performing laboratory for: 1// 2 <Enter> Specific sections of
report

1 - Bacteriology Report
2 - Gram Stain
3 - Organism Identification
4 - Comment On Specimen
Select the section to designate (1-4): 3 <Enter>

1 - STAPHYLOCOCCUS AUREUS including All Susceptibilities
1.1 - STAPHYLOCOCCUS AUREUS Specific Susceptibilities
2 - ALL items
Select the item to designate (1-2): 1.1 <Enter>

1 - Clindam
2 - Vancmcn
3 - Gentmcn
4 - Oxacillin
Select the item to designate (1-4): 4 <Enter>
Select Performing Laboratory: ZZ BONHAM// REGION 7 ISC, TX (FS) <Enter> TX
170
```

```
Sure you want to add this record? NO// Y <Enter> YES
... assignment created.

Current performing lab assignments:

Staphylococcus Aureus Oxacillin Susceptibility Performed By:
Dallas Office of Information Field Office - Lab Development [CLIA#
123445689]

    Select one of the following:

        1      Entire report
        2      Specific sections of report
        3      Delete performing laboratory

Designate performing laboratory for: <Enter>
CULTURE & SUSCEPTIBILITY completed: 07/17/2012 12:21 // <Enter>
Send a CPRS Alert/Notification? YES// NO <Enter>

        (D)isplay (A)dd Work Load

Accession #: <Enter>
```

5.4.18 Microbiology Sending an Alert

Within Microbiology result entry options, the user can opt to send one of three alert types to the ordering provider and additional recipients and/or mail groups. Depending on how the ‘Prompt CPRS Alert in Micro Result Entry’ parameter is set, will determine whether the user is prompted to send an alert. The three alert types are:

- Lab results available
- Abnormal lab results
- Critical lab results

NOTE: The type of alert generated either depends on whether the clinician has set the parameter for personal alerts in CPRS, or if the alert is mandatory at the system level.

REF: For additional details on these alerts, see the "Enabling Notification" section in the CPRS *Consult/Request Tracking User Manual* in the VDL:
<http://www.va.gov/vdl/application.asp?appid=62>.

Figure 51. Sending an Alert - Microbiology

```
CULTURE & SUSCEPTIBILITY completed: N <Enter> (MAY 05, 2011@17:45)
COLLECTION SAMPLE: URINE// <Enter>
SITE/SPECIMEN: URINE// <Enter>
COMMENT ON SPECIMEN: <Enter>
Select GRAM STAIN: NEGATIVE
BACT RPT STATUS: F <Enter> FINAL REPORT
URINE SCREEN: NEGATIVE <Enter> NEGATIVE
Select ORGANISM: <Enter>
Select BACT RPT REMARK: <Enter>
BACT RPT DATE APPROVED: N <Enter> (MAY 05, 2011@17:45)

Current performing lab assignments: None Listed

Select one of the following:

1 Entire report
2 Specific sections of report

Designate performing laboratory for: 1// <Enter> Entire report
Select Performing Laboratory: LEXINGTON-LD VAMC// <Enter> KY VAMC 596

Sure you want to add this record? NO// YES
... assignment created.

Current performing lab assignments:

Bacteriology Report Performed By:
LEXINGTON VA MEDICAL CENTER [CLIA# 18D1086610]

Select one of the following:

1 Entire report
2 Specific sections of report
3 Delete performing laboratory

Designate performing laboratory for: <Enter>
CULTURE & SUSCEPTIBILITY completed: 05/05/2011 17:45 //
Send a CPRS Alert/Notification? NO// YES <Enter>
Select TEST: CULTURE & SUSCEPTIBILITY <Enter>

Select one of the following:

1 Lab results available
2 Abnormal lab results
3 Critical lab results

Enter response: 1 <Enter> Lab results available

The current recipients will be:
LEDIIVPROVIDER.ONE [Outpatient Primary Care Provider]
LEDIIVPROVIDEER.TWO [Ordering Provider]

Send the alert to additional recipients and/or mail groups? NO// <Enter>

The current recipients will be:
LEDIIVPROVIDER.ONE [Outpatient Primary Care Provider]
LEDIIVPROVIDEER.TWO [Ordering Provider]
Send Alert? YES// <Enter> ...Alert Sent

(D)isplay (A)dd Work Load
```

Accession #:

5.4.19 The Add/Remove a Shipping Manifest Test' [LA7S MANIFEST TEST ADD/REMOVE]

This option was modified to restrict adding/removing tests from a cancelled shipping manifest. The option will only allow a test to be added or removed from an “Open” or “Closed” shipping manifest.

5.4.20 Enter/verify/modify data (manual) [LRENTER]

The option Enter/verify/modify data (manual) [LRENTER] was modified to allow holders of the LRDATA Security Key to change the Units and Reference Ranges for a result by entering a tilde (~) at the lab result prompt.

See below for an example of this new feature.

Figure 52. Enter/verify/modify data (manual) [LRENTER]

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

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

Select one of the following:

1      Accession Number
2      Unique Identifier (UID)

Verify by: 1// 2 <Enter> Unique Identifier (UID)

Unique Identifier: L621350001 <Enter> (CH 0514 1)
Select Performing Laboratory: LEDIA// <Enter> 980
BCMA,SEVEN-PATIENT 111-11-1111 LOC:BCMA

Sample: BLOOD
These results have been approved by LRUSER,ONE
on May 14, 2012@09:22:40
Specimen: SERUM
1 GLUCOSE verified

BCMA,SEVEN-PATIENT SSN: 111-11-1111 LOC: BCMA
Pat Info: Sex: MALE Age: 77yr as of May 14, 2012
Provider: LRUSER,ONE Voice pager:
Phone: 6655544 Digital pager:

ACCESSION: CH 0321 2 CH 0514 1 [L621350001]
3/21 14:01d 5/14 09:22d
GLUCOSE 90 120 H mg/dL
COMMENTS: TEST EDITTING RANGES

If you need to change something, enter your initials: LU <Enter>

SELECT ('E' to Edit, 'C' for Comments, 'W' Workload): Edit <Enter>
GLUCOSE 120//~

Current Laboratory Test File Values
Current Ref Range: 60-110 Units: mg/dL
Critical Low: 50 Critical High: 300
Use these values? NO// <Enter>

For test GLUCOSE
UNITS: mg/dL// <Enter>mg/dL
REFERENCE LOW: 60// 70 <Enter>
REFERENCE HIGH: 110// 120 <Enter>
CRITICAL LOW: 50// <Enter> 50
CRITICAL HIGH: 300// <Enter> 300
Result's Abnormality: Abnormal High// ? <Enter>

Select the abnormality if it cannot be calculated from reference values.

Select one of the following:

0 Calculate from entered values
1 Abnormal Low
2 Critical Low
3 Abnormal High
```

```

4          Critical High

Result's Abnormality: Abnormal High// 0 <Enter> Calculate from entered values
GLUCOSE      120// <Enter>
Select COMMENT: EDITTING REF RANGES // <Enter>
COMMENT: EDITTING REF RANGES  Replace <Enter>
Select COMMENT: <Enter>

BCMA,SEVEN-PATIENT  SSN: 111-11-1111      LOC: BCMA
Pat Info:           Sex: MALE      Age: 77yr as of May 14, 2012
Provider: LRUSER,ONE      Voice pager:
Phone: 6655544           Digital pager:

ACCESSION:           CH 0321 2      CH 0514 1 [L621350001]
                    3/21 14:01d    5/14 09:22d
GLUCOSE              90             120      mg/dL
COMMENTS: EDITTING REF RANGES

If you need to change something, enter your initials: <Enter>

Approve update of data by entering your initials: LU <Enter>

GLUCOSE flagged incorrectly as H by [18-VA980].
Changed to normal on May 14, 2012@09:25 by [18-VA980].
GLUCOSE reference low reported incorrectly as 60 by [18-VA980].
Changed to 70 on May 14, 2012@09:25 by [18-VA980].
GLUCOSE reference high reported incorrectly as 110 by [18-VA980].
Changed to 120 on May 14, 2012@09:25 by [18-VA980].

Unique Identifier: <Enter>

```

5.4.21 Print log book [LRAPBK]

The accession number can be entered by using the <ACCESSION AREA> <DATE> <NUMBER> format or UID in the 10-15 character formats. The AP Log Book now displays the UID for all entries.

Figure 53. Print log book [LRAPBK]

```

Data entry for 2008 ? YES// <Enter> (YES)

Select one of the following:

1      Accession number
2      Unique Identifier (UID)
3      Patient Name

Select one: 1//

```

5.4.22 Change How Non-Performing ("NP") Tests Work in LEDI IV

LEDI IV is made "NP aware" so that it will send a message back to the LEDI collecting site when the Host site NP's a test. When the Host site NP's a test, an HL7 message will be sent back to the Collecting site. At the Collecting site, a LA7 ORDER STATUS CHANGED bulletin and an alert will be sent out to the mail group specified in the Message Configuration to receive "New Results" alerts.

If the Host site NP'ed the entire ordered test (from a non-exploded panel), the HL7 message being sent back will not contain a result (in the OBX), but will just contain the Test result comments. The Collecting site will need to:

1. Delete test from an accession [LRTSTOUT], or Delete Entire Order of Individual Test [LRCENDEL] if there are no results already verified on the order.
2. Enter/verify/modify data (manual) [LRENTNER].

However, if the Host site NP'ed individual tests from an exploded panel, then a result of "canc" will be sent back to the Collecting site for the individual tests from the panel that were Not Performed.

Figure 54. Sample LA7 ORDER STATUS CHANGED

```
Subj: LAB ORDER STATUS CHANGED [#62133] 10/03/11@12:44 24 lines
From: LAB PACKAGE In 'IN' basket. Page 1
-----
An order status change has been received for a patient via a HL7 interface
that indicates the order has been changed. Please use the appropriate
laboratory option to update this order on this system.

Action: No results available; Order canceled.
  Interface: LA7V HOST 123
  File #62.49: 142
  Patient Name: LRPATIENT,ONE
  Patient ID: 000001234
  Specimen ID: L612760003
Collection D/T: Oct 03, 2011@12:42
  Test/analyte: Lipid Panel [81132.0000]
  Producer's ID: LRPRODUCER1
  Manifest: 123-20111003-3
Comments:
*LIPID PROFILE Not Performed: Oct 03, 2011@12:43 by 123456
*NP Reason: CONTAMINATED SAMPLE
Enter message action (in IN basket): Ignore//
```

5.4.23 Cumulative Report Modifications

The Cumulative Report was modified so that when the 'Date/Time Obtained Inexact' field is set to 'Yes' for an Accession, the Cumulative Report will just display the Collection Date (without the time) for that accession.

Figure 55. Cumulative Report

---- CHEM II Profile ----			
PLASMA		FBS	
Ref range low		60	
Ref range high		123	
		mg/dL	

[a]	Jul 09, 2012	120	
[c]	Jun 26, 2012 10:20	145	H
[d]	Jun 26, 2012 10:13	110	
[g]	May 31, 2012 16:06	130	H
[i]	Feb 08, 2012 09:48	110	

5.5 Modified Report Options

The following report options are modified to display the facilities at which the laboratories are performed and reported, and the name/address of the facility at which the report is printed to comply with Federal CLIA regulations.

Figure 56. Interim report [LRRP2]

```
Select Results menu Option: INTERIM
 1 Interim report
 2 Interim report by provider
 3 Interim report for an accession
 4 Interim report for chosen tests
 5 Interim report for selected tests as ordered
 6 Interim reports by location (manual queue)
 7 Interim reports for 1 location (manual queue)
 8 Interim reports for 1 provider (manual queue)
CHOOSE 1-8: 1 <Enter> Interim report

Select Patient Name: LEDIPATIENT,ONE JR <Enter> LRPATIENT,ONE JR X-XX-20
000001111 NO NSC VETERAN
Date to START with: TODAY// <Enter> (SEP 05, 2008)
Date to END with: T-7// <Enter> (AUG 29, 2008)
Print address page? NO// Y <Enter> YES
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET

Printed at: page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR Report date: Sep 05, 2008@11:23
Pat ID: 000-00-1111 SEX: M DOB: Feb 12, 1920 LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [0482490012]
Report Released: Sep 05, 2008@11:19
Specimen Collection Date: Sep 05, 2008@11:18
Test name Result units Ref. range Site Code
GLUCOSE 120 mg/dL 60 to 123 [522]
Eval: 70-99 mg/dL NORMAL
Eval: 100-125 mg/dL Impaired Fasting Glucose
Eval: >/= 126 mg/dL Provisional Diagnosis of Diabetes
Eval:
Eval: **5/17/04 Reference Range Changed, OLD RANGE 70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*" =Critical value

LEDIPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:23 PRESS '^' TO STOP
page 2
LEDIPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:24

Performing Lab Sites:
[522] Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999
```

Select Patient Name:

5.5.1 Interim report by provider [LRRD]

Figure 57. Interim report by provider [LRRD]

```
Select Results menu Option: INTERIM REPORT BY PROVIDER

Date to START with: TODAY// <Enter> (SEP 05, 2008)
Date to END with: AUG 6,2008// <Enter> (AUG 06, 2008)
Print address page? NO// Y <Enter> YES
Do you want (A)ll providers, a (R)ange of providers,
or (S)elected providers? S// <Enter>
Select PROVIDER NAME: LRPROVIDER,ONE JR <Enter> WGA
Select PROVIDER NAME: <Enter>
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>

Printed at: page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 Vista City, TX 99999

LEDIPATIENT,ONE JR Report date: Sep 05, 2008@11:29
Pat ID: 000-00-1111 SEX: M DOB: Feb 12, 1920 LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Vista City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [0482490012]
Report Released: Sep 05, 2008@11:19

Specimen Collection Date: Sep 05, 2008@11:18
Test name Result units Ref. range Site Code
GLUCOSE 120 mg/dL 60 to 123 [522]
Eval: 70-99 mg/dL NORMAL
Eval: 100-125 mg/dL Impaired Fasting Glucose
Eval: >= 126 mg/dL Provisional Diagnosis of Diabetes
Eval:
Eval: **5/17/04 Reference Range Changed, OLD RANGE 70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value

LEDIPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:29 PRESS '^' TO STOP

LEDIPATIENT,ONE JR 000-00-1111 AGE: 88 LOC: 1 TEST (NORTH)Sep 05,
2008@11:30
-----MICROBIOLOGY----- page 1

Printed at:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 Vista City, TX 99999

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Vista City, TX 99999
```

Accession [UID]: MICRO 08 11 [1408000011]
Collection sample: THROAT SWAB Collection date: Aug 21, 2008 11:58
Provider: LRPROVIDER,ONE JR
=====

* BACTERIOLOGY PRELIMINARY REPORT => Aug 21, 2008 13:21 TECH CODE: 235

GRAM STAIN: TESTING STUFFING PL DURING LRMISTF
Bacteriology Remark(s):
TESTING PL ENTRY
=====

Performing Laboratory:

Gram Stain Performed By:
TRIPLER ARMY MEDICAL CENTER
1 JARRETT WHITE ROAD HONOLULU, HI 96859-5000

Bact Report Remark Performed By:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 Vista City, TX 99999

+ + + End of Report + + + End of Report + + + End of Report + + +

LEDIPATIENT,ONE JR 000-00-1111 ROUTING: 1T '^' TO STOP

LEDIPATIENT,ONE JR 000-00-1111 AGE: 88 LOC: 1 TEST (NORTH) Sep 05,
2008@11:30

----MICROBIOLOGY----

page 1

Printed at:

Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 Vista City, TX 99999

Reporting Lab:

Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Vista City, TX 99999

Accession [UID]: MICRO 08 10 [1408000010]
Collection sample: THROAT SWAB Collection date: Aug 20, 2008 17:25
Provider: LRPROVIDER,ONE JR
=====

Test(s) ordered: GRAM STAIN completed: Aug 20, 2008 17:26

* BACTERIOLOGY PRELIMINARY REPORT => Aug 20, 2008 17:26 TECH CODE: 235

GRAM STAIN: TESTING GRAM STAIN BATCH ENTRY AND PL SAVING
=====

Performing Laboratory:

Gram Stain Performed By:
TRIPLER ARMY MEDICAL CENTER
1 JARRETT WHITE ROAD HONOLULU, HI 96859-5000

+ + + End of Report + + + End of Report + + + End of Report + + +

LEDIPATIENT,ONE JR 000-00-1111 ROUTING: 1T '^' TO STOP

LEDIPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:30 PRESS '^' TO STOP

page 2

LRPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:30

Performing Lab Sites:

[522] Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

page 3

LEDIPATIENT,ONE JR 000-00-1111 Sep 05, 2008@11:30

Performing Lab Sites:

[522] Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

Select Results menu Option:

5.5.2 Interim report for chosen tests [LRRP3]

Figure 58. Interim report for chosen tests [LRRP3]

```
Select Results menu Option: INT
  1  Interim report
  2  Interim report by provider
  3  Interim report for an accession
  4  Interim report for chosen tests
  5  Interim report for selected tests as ordered
  6  Interim reports by location (manual queue)
  7  Interim reports for 1 location (manual queue)
  8  Interim reports for 1 provider (manual queue)
CHOOSE 1-8: 4 <Enter> Interim report for chosen tests

                GENERAL LAB DATA DISPLAY
Select Patient Name: LEDIPATIENT,ONE JR      2-12-20      000001111      NO
NSC VETERAN
Select LABORATORY TEST NAME: GLUCOSE <Enter>      FBS
Select LABORATORY TEST NAME: <Enter>
Date to START with: TODAY// <Enter> (SEP 05, 2008)
Date to END with: T-7// <Enter> (AUG 29, 2008)
Print address page? NO// Y <Enter> YES
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET

Printed at:                                     page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR                               Report date: Sep 05, 2008@11:41
Pat ID: 000-00-1111   SEX: M   DOB: Feb 12, 1920   LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [00000000000]
Report Released: Sep 05, 2008@11:19
```

```

                                Specimen Collection Date: Sep 05, 2008@11:18
Test name                        Result  units  Ref.  range  Site Code
GLUCOSE                          120   mg/dL   60 to 123   [522]
  Eval:                          70-99 mg/dL NORMAL
  Eval:                          100-125 mg/dL Impaired Fasting Glucose
  Eval:                          >/= 126 mg/dL Provisional Diagnosis of Diabetes
  Eval:                          **5/17/04 Reference Range Changed, OLD RANGE 70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value

LEDIPATIENT,ONE JR              000-00-1111 Sep 05, 2008@11:41 PRESS '^' TO STOP
                                page 2
LEDIPATIENT,ONE JR              000-00-1111 Sep 05, 2008@11:41

Performing Lab Sites:

[522] Dallas Office of Information Field Office [CLIA# 987654321]
      1234 Anyplace Avenue VistA City, TX 99999

```

5.5.3 Interim report for selected tests as ordered [LRRSP]

Figure 59. Interim report for selected tests as ordered [LRRSP]

```

Select Results menu Option: INTERIM REPORT FOR SELECTED TESTS AS ORDERED
Select Patient Name: LEDIPATIENT,ONE JR <Enter>          2-12-20  000001111
NO NSC VETERAN
WARNING : You may have selected a test patient.
Select ORDERED TEST: ANY// GLUCOSE <Enter>              FBS
Date to START with: TODAY// <Enter> (SEP 12, 2008)
Date to END with: T-7// <Enter> (SEP 05, 2008)
Print address page? NO// Y <Enter> YES
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET   Right Margin: 80// <Enter>

Printed at:                                           page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR              Report date: Sep 12, 2008@11:48
Pat ID: 000-00-1111  SEX: M    DOB: Feb 12, 1920  LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
      1234 Anyplace Avenue VistA City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [0000000000]
Report Released: Sep 05, 2008@11:19

                                Specimen Collection Date: Sep 05, 2008@11:18
Test name                        Result  units  Ref.  range  Site Code
GLUCOSE                          120   mg/dL   60 to 123   [522]
  Eval:                          70-99 mg/dL NORMAL
  Eval:                          100-125 mg/dL Impaired Fasting Glucose
  Eval:                          >/= 126 mg/dL Provisional Diagnosis of Diabetes
  Eval:

```

```

Eval:    **5/17/04 Reference Range Changed, OLD RANGE    70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value

LEDIPATIENT,ONE JR          000-00-1111 Sep 12, 2008@11:48 PRESS '^' TO STOP
                                  page 2
LEDIPATIENT,ONE JR          000-00-1111 Sep 12, 2008@11:48

Performing Lab Sites:

[522] Dallas Office of Information Field Office [CLIA# 987654321]
      1234 Anyplace Avenue VistA City, TX 99999

Select Patient Name: <Enter>

Select Results menu Option:

```

5.5.4 Interim reports by location (manual queue) [LRRS]

Figure 60. Interim reports by location (manual queue) [LRRS]

```

Select Results menu Option: INTERIM REPORTS BY LOCATION (MANUAL QUEUE)
Print address page? NO// Y <Enter> YES
Date to START with: TODAY// <Enter> (SEP 18, 2008)
Date to END with: T-7// T-18 <Enter> (AUG 31, 2008)

Select one of the following:

S          Selected Locations
R          A Range of locations
A          All locations

Please select one of the following: A <Enter> All locations
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>

Printed at:                                     page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR          Report date: Sep 18, 2008@12:16
Pat ID: 000-00-1111 SEX: M DOB: Feb 12, 1920 LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
      1234 Anyplace Avenue VistA City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [0000000000]
Report Released: Sep 05, 2008@11:19

Specimen Collection Date: Sep 05, 2008@11:18

Test name      Result units      Ref. range      Site Code
GLUCOSE        120 mg/dL        60 to 123      [522]
Eval:          70-99 mg/dL NORMAL
Eval:          100-125 mg/dL Impaired Fasting Glucose
Eval:          >/= 126 mg/dL Provisional Diagnosis of Diabetes
Eval:

```

```

Eval:    **5/17/04 Reference Range Changed, OLD RANGE    70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value

LEDIPATIENT,ONE JR          000-00-1111  Sep 18, 2008@12:16  PRESS '^' TO STOP

LRPATIENT,ONE JR          000-00-1111          Sep 18, 2008@12:16
page 2

Performing Lab Sites:

[522]  Dallas Office of Information Field Office [CLIA# 987654321]
       1234 Anyplace Avenue VistA City, TX 99999

Select Results menu Option:

```

5.5.5 Interim reports for 1 location (manual queue) [LRRS BY LOC]

Figure 61. Interim reports for 1 location (manual queue) [LRRS BY LOC]

```

Select Results menu Option: INTER
 1  Interim report
 2  Interim report by provider
 3  Interim report for an accession
 4  Interim report for chosen tests
 5  Interim report for selected tests as ordered
 6  Interim reports by location (manual queue)
 7  Interim reports for 1 location (manual queue)
 8  Interim reports for 1 provider (manual queue)
CHOOSE 1-8: 7 <Enter> Interim reports for 1 location (manual queue)
DAILY REPORT FOR DAY: TODAY// 9/5/08 <Enter> (SEP 05, 2008)
Print address page? NO// Y <Enter> YES

Select Report Location: 2 <Enter> 1 TEST (NORTH)
...OK? Yes// <Enter> (Yes)

Select Report Location:
DEVICE: HOME// ;;100 <Enter> UCX/TELNET Right Margin: 80// <Enter>

Printed at: page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR          Report date: Sep 18, 2008@12:10
Pat ID: 000-00-1111  SEX: M  DOB: Feb 12, 1920  LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

Provider: LRPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [00000000000]
Report Released: Sep 05, 2008@11:19

Test name          Specimen Collection Date: Sep 05, 2008@11:18
Result  units  Ref.  range  Site Code

```

```

GLUCOSE                120      mg/dL      60 to 123      [522]
  Eval:                70-99 mg/dL NORMAL
  Eval:                100-125 mg/dL Impaired Fasting Glucose
  Eval:                >/= 126 mg/dL Provisional Diagnosis of Diabetes
  Eval:
  Eval:                **5/17/04 Reference Range Changed, OLD RANGE      70-110**
=====
KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value

LEDIPATIENT,ONE JR      000-00-1111  Sep 18, 2008@12:10  PRESS '^' TO STOP
                                  page 2
LEDIPATIENT,ONE JR      000-00-1111      Sep 18, 2008@12:10

Performing Lab Sites:

[522]  Dallas Office of Information Field Office [CLIA# 987654321]
       1234 Anyplace Avenue VistA City, TX 99999

Select Results menu Option:

```

5.5.6 Interim reports for 1 provider (manual queue) [LRRD BY MD]

Figure 62. Interim reports for 1 provider (manual queue) [LRRD BY MD]

```

Select Results menu Option: interim
  1  Interim report
  2  Interim report by provider
  3  Interim report for an accession
  4  Interim report for chosen tests
  5  Interim report for selected tests as ordered
  6  Interim reports by location (manual queue)
  7  Interim reports for 1 location (manual queue)
  8  Interim reports for 1 provider (manual queue)
CHOOSE 1-8: 8  Interim reports for 1 provider (manual queue)

Date to START with: TODAY// <Enter> (SEP 18, 2008)
Date to END with: AUG 19,2008// <Enter> (AUG 19, 2008)
Print address page? NO// Y <Enter> YES
Select PROVIDER NAME: LRPROVIDER,ONE JR <Enter> WGA
DEVICE: HOME// ;;1000 <Enter> UCX/TELNET Right Margin: 80// <Enter>

Printed at:                                     page 1
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue Building 456 VistA City, TX 99999

LEDIPATIENT,ONE JR      Report date: Sep 18, 2008@12:25
Pat ID: 000-00-1111    SEX: M    DOB: Feb 12, 1920    LOC: 1T

Reporting Lab:
Dallas Office of Information Field Office [CLIA# 987654321]
1234 Anyplace Avenue VistA City, TX 99999

Provider: LEDIPROVIDER,ONE JR
Specimen: SERUM
Accession [UID]: CH 0905 12 [0000000000]
Report Released: Sep 05, 2008@11:19

```


5.5.7 File 63 Remediation Results MailMan Message for 'CH'

Figure 63. File 63 'CH' Remediation Results MailMan

```
Subj: DATA DICTIONARY ^DD(63.04 CHECK REPORT Jun 18, 2012@09:57:14 [#179854]
06/18/12@09:57 124 lines
From: LRPROVIDER,TWO In 'IN' basket. Page 1
-----
ZZ BONHAM (MHCVSS.FO-ALBANY.MED.VA.GOV) Jun 18, 2012

Contact the National Service Desk to request assistance from the Clin 4
Product Support team in resolving the following errors identified in the
Vista Laboratory package:

*WARNING* THE DATA NAME 'POTASSIUM' (#6) IS LINKED TO MORE THAN ONE LAB TEST:
  1. POTASSIUM (#177)
  2. POTASSIUM,STAT (#1245)

*WARNING* THE DATA NAME 'MYELIN BASIC PROTEIN' (#61) IS LINKED TO MORE THAN ONE
LAB TEST:
  1. MYELIN BASIC (#947)
  2. MYELIN BASIC PROTEIN (#1124)

*WARNING* THE DATA NAME 'CATECHOLAMINES' (#88) IS LINKED TO MORE THAN ONE LAB T
EST:
  1. CATECHOLAMINES (#253)
  2. CATECHOLAMINES, TOTAL (#494)

*WARNING* THE DATA NAME 'FRUCTOSE' (#254) IS LINKED TO MORE THAN ONE LAB TEST:
  1. FRUCTOSE (#827)
  2. YEAST (#1096)

*WARNING* THE DATA NAME '%METHB' (#448) IS LINKED TO MORE THAN ONE LAB TEST:
  1. METHB% (#50)
  2. METHEMOGLOBIN (#929)

*WARNING* THE DATA NAME 'NEUTROPHIL' (#468) IS LINKED TO MORE THAN ONE LAB TEST
:
  1. PMN (#285)
  2. NEUTROPHIL % (#359)

*WARNING* THE DATA NAME 'UR BLOOD' (#687) IS LINKED TO MORE THAN ONE LAB TEST:
  1. OCCULT BLOOD (#145)
  2. URINE BLOOD (#1158)

*WARNING* THE DATA NAME 'PORPHOBILINOGEN' (#709) IS LINKED TO MORE THAN ONE LAB
TEST:
  1. URINE PORPHOBILINOGEN (#164)
  2. PORPHOBILINOGEN (#273)

*WARNING* THE DATA NAME 'CYCLIC AMP' (#759) IS LINKED TO MORE THAN ONE LAB TEST
:
  1. ANTI MITOCHONDRIAL (#232)
  2. CYCLIC AMP (#338)

Results in Data Name NEUTROPHIL MATURITY, MEAN^NXJ3, without a test in file 60
at:
  ^LR(4,"CH",6939886.847758,478)
  ^LR(4,"CH",6948776.855053,478)
  ^LR(4,"CH",6948776.855341,478)
  ^LR(4,"CH",6948776.867499,478)
```

^LR(4,"CH",6948776.874264,478)
^LR(4,"CH",6948776.898199,478)
^LR(4,"CH",6948776.898963,478)
^LR(4,"CH",6948777.828758,478)
^LR(4,"CH",6948777.837167,478)
^LR(4,"CH",6948777.879579,478)
^LR(4,"CH",6948778.826191,478)
^LR(4,"CH",6948783.824546,478)
^LR(4,"CH",6948785.855445,478)
^LR(4,"CH",6948797.82579,478)
^LR(4,"CH",6948797.834446,478)
^LR(4,"CH",6948797.834552,478)
^LR(4,"CH",6948869.867963,478)
^LR(4,"CH",6948883.81608,478)
^LR(4,"CH",6948883.897299,478)
^LR(36,"CH",6939887.845793,478)
^LR(36,"CH",6939889.858144,478)
^LR(36,"CH",6939889.85915,478)
^LR(36,"CH",6939889.868949,478)
^LR(36,"CH",6939893.857267,478)
^LR(36,"CH",6939893.864653,478)
^LR(36,"CH",6939894.836083,478)
^LR(36,"CH",6939896.807283,478)
^LR(36,"CH",6939896.824992,478)
^LR(36,"CH",6939896.826294,478)
^LR(36,"CH",6948776.836472,478)
^LR(36,"CH",6948776.896077,478)
^LR(36,"CH",6948778.826089,478)
^LR(36,"CH",6948783.81525,478)
^LR(36,"CH",6948783.825054,478)
^LR(36,"CH",6948783.859268,478)
^LR(36,"CH",6948785.855585,478)
^LR(36,"CH",6948796.849575,478)
^LR(36,"CH",6948796.84985,478)
^LR(36,"CH",6948797.834646,478)
^LR(36,"CH",6948797.83479,478)
^LR(36,"CH",6948869.867448,478)
^LR(36,"CH",6948869.867875,478)
^LR(36,"CH",6948869.868061,478)
^LR(36,"CH",6948869.86839,478)
^LR(36,"CH",6948883.816168,478)
^LR(36,"CH",6948883.897492,478)
^LR(36,"CH",6948884.875662,478)
^LR(36,"CH",6948970.88607,478)
^LR(36,"CH",6948970.8962,478)
^LR(49,"CH",6939878.905758,478)
^LR(69,"CH",6948779.864789,478)
^LR(69,"CH",6948783.809956,478)
^LR(77,"CH",6948783.814046,478)
^LR(77,"CH",6948967.857279,478)
^LR(77,"CH",6948967.886849,478)
^LR(180,"CH",6939886.845649,478)
^LR(180,"CH",6939886.845786,478)
^LR(180,"CH",6939887.897374,478)
^LR(180,"CH",6939888.825054,478)
^LR(180,"CH",6939888.84596,478)
^LR(180,"CH",6939888.847075,478)
^LR(180,"CH",6939889.878051,478)
^LR(180,"CH",6939894.844685,478)
^LR(180,"CH",6939894.849984,478)
^LR(180,"CH",6939894.86407,478)
^LR(180,"CH",6939894.869481,478)

```

^LR(180,"CH",6939894.869951,478)
^LR(180,"CH",6939896.824143,478)
^LR(180,"CH",6939896.82845,478)
^LR(180,"CH",6948775.894965,478)
^LR(180,"CH",6948776.838141,478)
^LR(180,"CH",6948783.80986,478)
^LR(180,"CH",6948783.824451,478)
^LR(180,"CH",6948783.894368,478)
^LR(180,"CH",6948785.855486,478)
^LR(180,"CH",6948796.849486,478)
^LR(180,"CH",6948797.8257,478)
^LR(191,"CH",6948776.844296,478)
^LR(191,"CH",6948779.86469,478)
^LR(191,"CH",6948967.856876,478)
^LR(359,"CH",6939879.858091,478)

```

Enter message action (in IN basket): Ignore//

5.5.8 File 63 Remediation Results MailMan Message for 'Micro'

Figure 64. File 63 'Micro' Remediation Results MailMan

```

Subj: LAB DATA file (#63) Microbiology Antibiotic Fields Cleanup [#179978]
07/01/12 85 lines
From: LRPROVIDER,TWO In 'IN' basket. Page 1
-----
Contact the National Service Desk to request assistance from the Clin 4
Product Support team in resolving the following errors identified in the
Vista Laboratory package:

The LAB DATA file (#63) cleanup process has completed.

Tool run in ANALYZE MODE for: ZZ BONHAM (MHCVSS.FO-ALBANY.MED.VA.GOV).

This process checked the Organism Sub-field (#63.3) of the LAB DATA file (#63)
to locate potential Data Dictionary discrepancies related to the definition and
setup of fields for reporting antibiotic sensitivities.

The following report lists any discrepancies found:
-----
ANALYZE - INCORRECT INPUT TRANSFORMS (IT)
-----
ANTIBIOTIC NAME                CURRENT INPUT                PROPOSED INPUT
(FIELD NUMBER)                TRANSFORM                   TRANSFORM
-----
AMPICILLIN B                   D ^XYZDEF                   D ^LRMISR
(2.00522799)
-----
TOTAL: 1

ANALYZE - INCORRECT HELP TEXT
-----
ANTIBIOTIC NAME                CURRENT                      PROPOSED

```

```

(FIELD NUMBER)                HELP                HELP
-----
AMPICILLIN B                  D ZEN^ZLRMISR          D EN^LRMISR
(2.00522799)
-----
TOTAL: 1

ANALYZE - INCORRECT SET OF CODES
-----
ANTIBIOTIC NAME              CURRENT              PROPOSED
(FIELD NUMBER)              SET OF CODES        SET OF CODES
-----
AMPICILLIN X SCREEN          M:MAYBE;N:NEVER;    A:ALWAYS DISPLAY;N:NEVER
(2.00602)                   M:MAYBE;N:NEVER;    DISPLAY;R:RESTRICT
                                           DISPLAY;
-----
TOTAL: 1

ANALYZE - MISSING INTERP and/or SCREEN
-----
ANTIBIOTIC NAME              INTERP FIELD        SCREEN FIELD
(FIELD NUMBER)              NEEDED              NEEDED
-----
AMPICILLIN C                  2.005225991        2.005225992
(2.00522599)
-----
TOTAL: 1

ANALYZE - BAD FIELD NUMBER and DEFINITION, LAB DATA NOT UPDATED
-----
ANTIBIOTIC NAME              NEW FIELD #         NEW INTERP          NEW SCREEN          OCCURRENCES
(FIELD NUMBER)              NEW FIELD #         NEW INTERP          NEW SCREEN          FOUND
-----
CEFPODOXIME                  TBD                 TBD                 TBD                 0
(2.0046)
TRIMETH/SULF2                TBD                 TBD                 TBD                 1
(199)
-----
TOTAL: 2

*****
*** END OF REPORT ***

Enter message action (in IN basket): Ignore//

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Glossary

Term	Definition
AP	Anatomic Pathology.
API	Application Program Interface.
CAP	College of American Pathologists.
Collecting Facility	The Collecting facility is the laboratory that collects the patient's specimen. To use LEDI after the specimen is collected, the Collecting facility must: <ul style="list-style-type: none"> • Create an electronic Shipping Manifest, specifying the lab tests to be performed by the Host facility laboratory). • Transmit the Shipping Manifest List to the Host facility laboratory. • Transport the specimen by carrier to the Host facility laboratory.
Creatinine	Blood and urine tests, used to determine kidney function and for monitoring treatment for kidney disease.
CY	Cytology
Data Fields	The information base associated with a segment.
Data Type (DT)	Restrictions on the contents of the data field as defined by the HL7 Standard.
DoD	Department of Defense.
eGFR	Epidermal Growth Factor Receptor (eGFR) test, used to help guide treatment and determine prognosis for certain types of cancer.
Electronic Catalog	The electronic catalog contains laboratory tests available for the Collecting facility to order.
Element Name	Globally unique descriptive name for the field.
EM	Electron Microscopy.
Feeder Configuration	A shipping configuration that allows the site to indicate certain tests are eligible for a manifest related to the shipping configuration, when the specimen/test is received via the designated feeder shipping configuration used to receive the specimen.
HDI	Health Data Informatics.
HDR	Health Data Repository.
HL7	Health Level Seven. Standard for electronic data exchange/messaging protocol.
Host facility	The Host facility is the laboratory that receives the patient's specimen and performs the requested testing and analysis on the specimen.
IEN	Internal Entry Number.
IP	Internet Protocol.
IRM	Information Resource Management.
KIDS	Kernel Installation and Distribution System.

Term	Definition
LDSI	Laboratory Data Sharing and Interoperability.
LEDI	Laboratory Electronic Data Interchange.
LEN (length)	Length is the maximum number of characters that one occurrence of the data field may occupy.
LIM	Laboratory Information Manager.
MI	Microbiology.
NLT	National Laboratory Test.
NLTS	VA National Laboratory Test File.
OIFO	Office of Information Field Office.
P&LMS	Pathology and Laboratory Medicine Service.
PID	Patient Identifier.
R/O/C (optional)	R/O/C indicates whether the data field is required, optional, or conditional in a segment: <ul style="list-style-type: none"> • R—required • O (null) —optional • C—conditional on the trigger event
RP/# (repetition)	Repetition indicates the number of times you can repeat a field: <ul style="list-style-type: none"> • N (null)—No repetition allowed. • Y—Field may repeat an indefinite or site-determined number of times. • (Integer)—You can repeat the field the number of times specified by the integer.
Segment	A logical grouping of data fields.
SEQ (sequence number)	Sequence Number is the ordinal position of a data field within a segment. This number refers to the data field in the comments text that follows the segment definition table.
Shipping Configuration	Shipping configuration is an entry in the LAB SHIPPING CONFIGURATION file (#62.9) that defines and describes a relationship between two facilities—a Collecting facility and a Host facility. It is for the collecting, processing, receipting, and reporting of the laboratory testing of clinical specimens. It controls the building of shipping manifests, which are used as shipping documents for the transport of clinical specimens between the facilities and make up the configuration. It controls how the specimens are processed at both facilities, as well as, the means and methods used to communicate test orders and results for the two entities.
Shipping Manifest	The shipping manifest is a document that lists the lab specimens sent outside the facility to a reference lab for processing.
SNOMED CT	Systemized Nomenclature of Medicine Clinical Terminology.
SP	Surgical Pathology.

Term	Definition
SSN	Social Security Number.
TBL# (table)	Table attribute of the data field defined by the HL7 standard (for a set of coded values) or negotiated between the VistA Laboratory application and the vendor system. Local tables used by the VA begin with the prefix 99VA.
UI	Universal Interface.
UID	Unique identifier assigned to each laboratory accession.
VA	Veterans Affairs.
VAMC	Veterans Affairs Medical Center.
VDL	VistA Documentation Library.
VHA	Veterans Health Administration.
VIE	Vitria Interface Engine.
VISN	Veterans Integrated Service Network.
VistA	Veterans Information System and Technology Architecture.