Laboratory Data Sharing and Interoperability (LDSI)

Laboratory Electronic Data Interchange IV (LEDI IV)

VA Shield



LDSI/LEDI IV User Manual

Version 2.8 August 2013 (Revised June 2018)

Department of Veterans Affairs (VA) Office of Information and Technology (OIT) Product Development (PD)

Revision History

Date	Revision	Description	Authors
6/2018	2.8	 Changes for patch LA*5.2*95. This enhancement add a customizable parameter in VistA that allows Laboratory staff at each site to determine the default response when prompted to create a shipping manifest. Updated <u>Table 2. LEDI IV patch parameters</u> to include new parameter LR MANIFEST DEFLT CREATE. Added the new parameter to the list in Section <u>5.2.2.</u> Updated <u>Figure 19. Package Level</u> <u>Parameter Edit [LR7O PAR PKG].</u> 	REDACTED
1/2018	2.7	 Changes for patch LR*5.2*495. The change affects how the SNOMED CT update for files 61, 61.2, and 62 is sent to the receiving facilities. Updated the title page. Modified Section_4.1.2. Modified Section 5.3.20, Figure 41. Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT]. 	Mantech Mission, Solutions and Services REDACTED
8/15/13	2.6	Sr. VA Leadership decision was made on 8/8/13 to remove the AP Results from the LEDI IV Update Patch, due to regulatory concerns. Added a note to the Introduction section indicating that the AP Results would not be available in the LEDI IV Update Patch.	REDACTED
7/29/13	2.5	Added input from CLIN 4: • <u>Section 1.1.3:</u> Clarified the VA to DoD interface overview, • <u>Section 2.2.1, Step 5:</u> Added two notes on the HL7 interface, • <u>Section 2.2.2:</u> Modified steps 1-8 under LIM responsibilities, • <u>Section 4.1.2, point 1:</u> Clarified SNOMED set ups, • <u>Section 4.1.2, Note #3:</u> Provided more detail on the SNOMED CT process, • <u>Section 4.2.1, Reference B., Appendix B.</u> Added new reference "How Notifications	REDACTED

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		Work".	
		• Section 4.7.1, Figure 5:	
		Replaced "Enter/Edit Update Signature	
		Code with the "Person Class Edit Option"	
		screen,	
		• Section 4.7.1, Figure 9:	
		Added examples of the use of a bar code UID with an AP Host and Collection facility,	
		• <u>Section 4.7.2, Figure 17:</u>	
		Added note that the Techs may view an interim report verified using EA,	
		Section 5.2.1, Table 2:	
		Parameter Precedence Order: Modified logic for the method of assigning the AP Accession number,	
		<u>Section 5.3.2: Manage MI/AP Test</u> <u>Mappings</u>	
		Added example to the screen of when the mapping needs to be performed.	
		• <u>Section 5.4.13:</u>	
		Designation of Performing Laboratory –added that a site requiring a performing Laboratory other than the default local Institution Name, must have that performing lab listed in File # 4.	
		• <u>Section 5.4.21:</u>	
		On the Print Log Book, added example of selecting by UID and provided a more clear example of how the users can select by Accession number,	
		• <u>Glossary:</u>	
		Updated the definitions of SNOMED CT and VDL.	
5/24/13	2.4	Input from CLIN 4 personnel includes:	REDACTED
		Replacing the "MD" and "D.O." abbreviations with updated PERSON CLASS names for e-signatures in Section 4.7.1,	
		Updating Enter/Edit File Entry – Update Signature Code screen	
5/16/13	2.3	Made numerous revisions to make document more 508 compliant as follows:	REDACTED
		Added "Editor Notes" to allow the visually impaired to see special hints and tips on the screen captures.	
		Added screen tips at the web links identified as warning markers by the 508 Compliance Checker. These screen tips allow the reader to see where the hyperlink will take them.	

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		Ensured there were bookmarks at the left top corner of each table. Took minus symbols out of the table of contents.	
4/22/13	2.2	Revisions to the LEDI IV User Manual that now includes the LEDI IV Update patch. This version will be used by the field test sites for the LEDI IV Update patch (LR*5.2*427/LA*5.2*80).	REDACTED
		The Changes for the Update patch are listed below and are hyperlinked at the section numbers:	
		Section 1.1:	
		Added detail on the AP/MICRO Interface that now allows data interchange between VA, DoD and Commercial Reference Labs.	
		Section 2.2.1:	
		Added a step for the IRM to schedule the check of the SNOMED CT Mappings Against the Lexicon every two weeks.	
		Section 4.1.2:	
		Added in the LIM instructions for updating the SNOMED CT codes at a lab site. Also, Enable editing of the NAME (.01) fields in files 61, 61.2 and 62.	
		Last, added the message that displays to the Lab site when the SNOMED CT update sent by STS does not match the mappings done by the lab. The description of the code change is included.	
		Section 4.2.2:	
		Added method by which the LIMs can add 3 critical fields to a Stub Report on a MICRO organism result sent back by the Performing Site.	
		Section 4.4.1:	
		Modified AP reports to display the new acronym for Joint Pathology Center (JPC).	
		Section 4.4.2:	
		Listing of features added for the addition of Anatomic Pathology (AP) Orders and Results.	
		Section 4.7.1 and 4.7.2, Figures 5 - 19:	
		Enable AP/MICRO interface. Added signature update feature. Re-added functionality for AP/MICRO interface functionality that had been removed from the User Manual. The assumption that "LSRP" will be taking over AP/MICRO	

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		communications is no longer valid.	
		Section 5.2.1 and 5.2.2:	
		Added new Parameter "Method of Assigning AP Accession Number" to the Parameter lists as well as to Figure # 21.	
		Section 5.2.3:	
		Specified a setting of 132 on the Lab Parameters print report. This setting prevents line wrapping from occurring.	
		Section 5.3.24:	
		Added in new option to 'Check SNOMED CT Mappings Against the Lexicon'	
		Section 5.4.12:	
		Method of Assigning AP Accession Number parameter. Modified the way AP Accession Numbers are defaulted.	
		Section 5.5.9:	
		Move Pathologist signature on AP & MICRO e- reports. See revised AP/MICRO e-report.	
		Glossary Section:	
		Corrected the definition of eGFR. The option [LRUCHGDIV] used by LIMs to change divisions (to assist with troubleshooting, data entry, information lookup, etc.) was deactivated with patches LA*5.2*74/LR*5.2*350. It is noted in this User Manual update Table of Contents for the first time.	
09/17/12	2.1	Added a reference to the Install Guide for the manual running of File 63 Remediation,	REDACTED
		• Added descriptive text by the screens that have "dialogue bubbles" to ensure 508 compliance.	
09/14/12	2.0	• Added the words "Lab System" to the end of the page 1 Introduction sentence that describes the Future of Lab. Clerical fix only.	REDACTED
09/10/12	2.0	Added a reference to the LEDI IV FAQs	REDACTED
09/05/12	1.9	Added a hyperlink that takes the reader directly to the LEDI IV Install Guide.	REDACTED
09/04/12	1.8	 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. 	REDACTED
		Removed all references to LSRP and replaced it	

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		with "Lab System".	
		Replaced the LSRP on the screen shots with LEDI.	
		Input from 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 CLIN 4 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.	
07/23/12	1.7	 Updates from the LEDI IV, Implementation team and CLIN 4 users' review. 	REDACTED
		• 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 Remediation errors be cleaned up prior to the site converting to the LSRP COTS system.	
		• Input from Dev 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.	

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		 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	 Minor changes to section numbering to bring it up to date. No content changes. 	REDACTED
04/03/12	1.6	Updated per Feedback from CLIN 4:	REDACTED
		• 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	

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		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.	
03/22/12	1.5	 Minor updates: Added File #64 to two WKLD References. 	REDACTED
		 Removed the second (duplicate) screen shot under the LRAPLG Log-In Anatomy Pathology Log in Section. 	
03/20/12	1.5	Tech edit review:	REDACTED
		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.	
		Modified document for double-sided printing:	
		 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	

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		as needed. Made minor grammar, punctuation, and spelling updates as needed.	
03/16/12	1.4	Removed the Lexicon note under Section 4.12 – SNOMED CT. It was deemed irrelevant by the developers and STS. Input from 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	REDACTED
02/29/12	1.3	handled in the New LEDI IV Options section. 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 dictionary check. Clarified that the LEDI IV Install Guide covers the Installation and not the configuration, aka Setup of LEDI IV in Section 6.2 below.	REDACTED
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.	REDACTED
01/27/12	1.1	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.	REDACTED
01/11/12	1.0	Base line version for ORR, removed Draft.	REDACTED
01/09/12	0.16	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.)	REDACTED
12/22/11	0.15	Include VA to LSRP COTS set ups toward the end of the manual.	REDACTED
12/14/11	0.14	Additional input from DEV: both technical as well as form and style.	REDACTED

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12/13/11	0.13	Combined Impl. Guide with the User Manual due to overlapping instructions. Updated the CCRs with additional info from Development.	REDACTED
12/07/11	0.12	Updates from Dev Team Meeting.	REDACTED
11/16/11	0.11	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.	REDACTED
11/10/11	0.11	Removed References to LSRP as well as Micro/AP Electronic Ordering and Resulting for Use at the LEDI IV BETA Sites.	REDACTED
7/27/2011	0.10	Updated section 2.4.	REDACTED
6/1/11	0.9	Updated section 3.1.4.	REDACTED
5/18/11	0.8	Section 3.1.2 added step 4 Section 2.3 added 2 nd Bullet.	REDACTED
5/18/11	0.7	Added section 2.6	REDACTED
05/17/11	0.6	Updated document content.	REDACTED
05/06/11	0.5	Applied LSRP standard template to the guide.	REDACTED
05/05/11	0.4	Cleaned up rough tech edit.	REDACTED
05/04/11	0.3	Updated document content.	REDACTED
04/01/11	0.2	Updates.	REDACTED
03/01/11	0.1	Initial document:	REDACTED

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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.

There are two patches that provide an update to the LEDI IV functionality in this User Manual: LR*5.2*427 and LA*5.2*80. LR*5.2*427 and LA*5.2*80 consist of both maintenance fixes as well as an enhancement to allow AP/MICRO orders and results to be sent and received electronically. There is also a new set of manual procedures allowing a LIM to update the SNOMED CT codes at a Lab.

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.

LEDI IV Updates for LA*5.2*80/LR*5.2*427:

VISTA Laboratory Package patches LA*5.2*80/LR*5.2*427 contain changes to software controlled by VHA DIRECTIVE 2004-058, titled VISTA BLOOD BANK SOFTWARE. The changes involve four

files: LAB CODE MAPPING (#62.47), LA7 MESSAGE PARAMETER (#62.48), COLLECTION SAMPLE (#62) & LAB DATA (#63).

The changes also involve thirteen fields: SEQUENCE (#.001), CONCEPT (#.01), ALTERNATE CONCEPT (#.04), IDENTIFIER (#62.4701,.01), CODING SYSTEM (#62.4701,.02), NATIONAL STANDARD (#62.4701,.05), RELATED ENTRY (#62.4701,2.1), MESSAGE CONFIGURATION (#62.4701,2.2), SEQUENCE (#62.482,.001), VA FILE ENTRY (#62.482,.01), SNOMED CT ID (#62.482,.02), NAME (#.01) and FUNGUS/YEAST (#63.37,.01).

All of the above changes for LA*5.2*80/LR*5.2*427 have been 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.

LEDI IV Updates for LA*5.2*80/LR*5.2*427:

The changes made by patch LA*5.2*80/LR*5.2*427 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.

LEDI IV Updates for LA*5.2*80/LR*5.2*427:

Patches LA*5.2*80//LR*5.2*427 does 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.

LEDI IV Updates for LA*5.2*80/LR*5.2*427:

These patches contain changes to 0 routines and 2 files identified in Veterans Health Administration (VHA) Directive 2004-058, 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.

LEDI IV Updates for LA*5.2*80/LR*5.2*427:

There are no validation requirements by option.

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:

Symbo I	Description
1	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.

Table ii. Documentation symbol/term descriptions

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

Some of these screen dialogue formats below have been modified from their original version. They have been formatted to fit this document.

"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** yellow typeface.
 (e.g., <<u>Enter</u>>).
- o Editor's comments are displayed in *italics* preceded by the phrase "Editor Note".



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 (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.

i

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 at the end of 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: <u>http://www.adobe.com/</u>

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

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.

REDACTED

The LEDI IV Update patch will be released to all lab sites simultaneously after the LEDI IV phased national rollout is complete.

1 Introduction

Laboratory Electronic Data Interchange (LEDI) IV update software introduces enhancements to the bidirectional interface that allows Department of Veterans Affairs (VA) laboratories to communicate with other VA facilities, Commercial Reference Laboratories and DoD. The LEDI IV update software has the capacity and features necessary for sharing secure, encrypted data between the VA and DoD facilities.



NOTE: The LEDI IV Update patch is enabling the micro interface for orders and results, as well as the AP orders interface. However, the sending of AP results from VA Host Labs to other VA Labs, DoD Labs and Commercial Reference Labs will still be disabled. The AP Host Labs will continue to use their existing processes to return the resulted sample to the Collecting Labs.

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).

The LEDI IV and LEDI IV update software are extensions of the LEDI III software. The software 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.

The LEDI IV update software patch allows AP/MICRO electronic ordering and resulting.

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 Update software enhances the general LEDI IV functionality. LEDI IV Update software enhances the current LEDI IV functionality.

It supports the sending and receiving of Microbiology and Anatomic Pathology (AP) orders and results between the associated Veterans Health Information Systems and Technology Architecture (VistA) Lab database and other VAs.

1.1.2 VA to Commercial Reference Laboratories

LEDI IV Update software enhances the general LEDI IV functionality. It adds the capability of transferring AP and Micro orders to commercial reference laboratories and the receipt of AP and Micro results from those laboratories

1.1.3 VA to Department of Defense (DoD)

LEDI IV Update software enhances LEDI IV functionality. It supports the sending and receiving of Microbiology and Anatomic Pathology (AP) orders and results between the associated Veterans Health Information Systems and Technology Architecture (VistA) Lab database and DoD labs.

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.
 - o Manually under the direction of a LAB SME. See Install Guide for details.
- 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), as well as the LEDI IV Update patches which include LR*5.2*427 and LA*5.2*80.
- 2. Establishing mail groups and menu assignments.
- 3. Loading the SNOMED CT mapping file, including updates sent by STS.
- 4. Scheduling the Check SNOMED CT Mappings Against the Lexicon [LA7TASK SCT MAPPINGS CHECK] option to run every two weeks.
- 5. If setting up VA to non-VA (DoD or commercial reference lab) then complete HL LOGICAL LINK file (#870) setup for LA7V xxx client logical link created by LEDI Setup option.

Note a: If this link has been created/setup for a previous existing interface then no action is required.

Note b: If VA to VA, then no action is required as the interface uses existing VAxxx logical links already established and configured.

- 6. If an electronic link (HL7 interface) is used for Micro and/or AP, edit the Lab Messaging Link field (#.07) to link the shipping configuration to the HL7 interface.
- 7. If an electronic link (HL7 interface) is used for Micro and/or AP, link, local Antimicrobial Susceptibility to the result codes used by the reference laboratory to report antibiotic susceptibilities.
- 8. Map the LEDI Micro and AP tests using option 'Manage MI/AP Test Mappings' [LRCAPFF] which 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.

2.2.2 LIMS staff is needed for any software configurations including:

- 1. Setting up the File #62 AP Collection Sample and File #60 Test(s).
- 2. Adding existing mycobacterium drugs to the Antimicrobial Susceptibility File #62.06.
- 3. Editing Package level Parameters if needed using the Package Level Parameter Edit [LR70 PAR PKG] option.
- 4. Setting up the Lab Shipping Files for Micro and AP using the options on the Lab Shipping Management Menu [LA7S MGR MENU].
- 5. If using the HL7 TCP/IP communication protocol for Micro and/or AP, complete the HL LOGICAL LINK file (#870) setup.
- 6. If an electronic link (HL7 interface) is used for Micro and/or AP, edit the Lab Messaging Link field (#.07) to link the shipping configuration to the HL7 interface.
- If an electronic link (HL7 interface) is used for Micro and/or AP, the LIM should use the CFE option by selecting Edit Shipping Configuration [LA7S EDIT 62.9] (CFE) and then LAB MESSAGING LINK.
- Map the LEDI Micro and AP tests using menu option National Laboratory File [LR70 60-64]. Then select National Laboratory File <NAME OF ACCOUNT> Option. Manage MI/AP Test Mappings' [LRCAPFF]. This 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.

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 for CH subscript tests:

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. The AP/MICRO interface configuration processes are described in the AP/MICRO Configuration document.



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.

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

Table 1. Precedence of parameters

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 5.2 for more details on the LEDI IV Parameters.

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 '...')



```
VA FileMan 22.0
Select OPTION: 8 <ENTER> DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES <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,O)= (#.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: <mark>? YES//</mark> <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 STATUS24 ACID FAST STAIN
  25 QUANTITY
  25.5 TB ENTERING PERSON
  26 MYCOBACTERIUM (Subfile 63.39)
    .001 ISOLATE NUMBER
    .01 MYCOBACTERIUM
    .1 ISOLATE ID
    1
        OUANTITY
    2
        COMMENT (Subfile 63.4)
     .01 COMMENT
    2.00170001 NEWBIOTIC
    2.00522001 TEST2
    2.00522002 TEST
        STR
    5
    10
       PAS
       INH
    15
    20 ETH
    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, <u>**do not**</u> 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:
                     Bacterial Antibiotic
           1
           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>
                                                                Editor Note: For Mycobacterium
Antibiotics, do not enter anything for this prompt.
NAME: STREPTOMYCIN 10.0// <ENTER>
AFB INTERNAL NAME: STREPTOMYCIN 10.0 <ENTER>
                                                    Editor Note: This is the Field Name or Number from File
#63 (Subfile #63.39).
NATIONAL VA LAB CODE: STREPTOMYCIN 10 UG/ML AFB SUSC <ENTER> 93690.0000 Editor Note: Map
the entry to an NLT Code.
Select Lab liaison menu Option:
```

Note 1: For the ANTIMICROBIAL SUSCEPTIBILITY INTERNAL NAME: prompt do not enter anything for Mycobacterium Antibiotics,

Note 2: For AFB INTERNAL NAME: STREPTOMYCIN 10.0 prompt, the Field Name or Number is from File #63 (Subfile #63.39),

Note 3: At the NATIONAL VA LAB CODE: prompt, map the entry to the most appropriate and specific NLT Code, including the drug concentration in the procedure name when available.

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 SuppleOutputDescriptionSuppleSupp 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 version 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 the option Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT] under section 5 below for more information.

4.1.2 Manual Process for LIMs to Update SNOMED CT Files

The manual processes for updating the SNOMED CT files by a LIM are in this section.

- STS will deploy SNOMED CT updates for files 61, 61.2, and 62 via the Lab's Server side MailMan function to the facilities.
- When the update file has been read in and saved in the LAB MAPPING TRANSPORT File (#95.4) a MailMan message will be sent to the facilities G.LMI group informing them that data has been saved on their system and is ready for processing.
- The LIM will process the mapping update during non-peak times. See detailed process below in the LEDI IV User Manual entitled Load SNOMED SCT Mapping [LA7S LOAD MAPPING SCT].
- 1. The LIM uses a FileMan inquiry to look at the entries in any of the three monitored files.
- 2. VA laboratory LIM creates a new entry to a monitored file. (See list of 3 files under i. below.)
 - a. Each new entry will automatically be assigned a unique NUMBER (IEN).
 - b. Each new entry will be given a NAME.
 - c. Each new entry must be given a SNOMED field.
 - i. Monitored Files that include a SNOMED CT field are the following:
 - File 61 Topography (required field).
 - File 61.2 Etiology (required field).
 - File 62 Collection Sample Note: Does not have a SNOMED field.

Once the new entry has been completed, a message will be sent to STS, which will contain all the necessary information to provide a SNOMED CT mapping, if applicable.

NOTE 1: 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.

NOTE 2: The NAME field (#.01) in the TOPOGRAPHY FIELD file (#61), COLLECTION SAMPLE file (#62), and ETIOLOGY FIELD file (#61.2) are once again editable with the LEDI IV Update patch.

NOTE 3: When a Systemized Nomenclature of Medicine Clinical Terms (SNOMED CT) mapping file is loaded, the system validates each SNOMED CT ID against the Lexicon. If there is an exception found (e.g., the code is inactive) the system sends an alert to Standards & Terminology Services (STS) so that STS can send an updated mapping for this entry.

4.1.3 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.
- When a local lab performs a SNOMED CT update and an Exception error occurs, the Vista Lab application will display a message to the Installer that reads: "Due to a recent Lexicon patch that updated the SNOMED CT (SCT) code set at your facility, some of your Lab entries in files XXXXXX are mapped to deprecated SCT codes. Standards & Terminology Services (STS) has received notification of these exceptions and will provide you with a new SCT mapping file within several weeks or less. The following SNOMED CT exceptions have been found at XXXXXX VAMC.". Where "X" represents either the File # or the name of the VA Medical Center.

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.
- o Abnormal lab results.
- o 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 **"APPENDIX B: HOW NOTIFICATIONS WORK - TECHNICAL OVERVIEW"** section in the CPRS Technical Manual in the VDL.

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.

4.2.2 Addition of Microbiology (MI) Orders and Results

- New codes are added to the LAB ELECTRONIC CODES file (#64.061) to support messaging via HL7 messaging.
- Additional information is added to the LABORATORY PENDING ORDER file (#69.6) for HL7 messaging.
- HL7 messaging is enhanced to process the following sections:
 - o Bacteriology.
 - Mycobacteriology.
 - o Mycology.
 - Virology.
 - Parasitology.
- The electronic messaging functionality of the LAB DATA file (#63) is enhanced to handle multiple isolates for any given culture.
- The LEDI software application is enhanced by triggering an event to notify and return results to the *collecting* facility laboratory, once an order is identified as LEDI associated and released. A new API was created to generate the new LEDI messages.

LEDI IV Update Patch:

Should the Host site, using the LEDI IV interface, send back a Micro result with an organism that the Collecting Site does not have configured in their file, the system automatically creates a new stub entry for that organism. This patch allows the LIM at the Collecting Site to make manual updates to a stub entry. It then sends an email to the LAB MAPPING mail group letting them know that a new term was added to the file.

Since the new stub entry for that organism is missing some important fields the LIM needs to manually add them. The Collecting Site LIM should fill in the **IDENTIFIER** field (so that the organism will display on the micro trend report), **ETIOLOGY WKLD CODE** (so that the site can get workload credit, and the **SUSCEPTIBILITY EDIT TEMPLATE** (if the site plans on entering susceptibility results locally for that organism). Editing of an entry is a relatively quick process for the LIM.

A sample of the LAB MAPPING mail group message Subject line is below:

SUBJ: T<u>ERM ADDED TO FILE</u> ETIOLOGY FIELD (#61.2:4978) [#178806] 04/10/12@17:24 14 <u>LINES</u> F<u>ROM</u>: LRLAB, HL I<u>N</u> 'IN' <u>BASKET</u>. P<u>AGE</u> 1 *N<u>EW</u>* N<u>EW TERM ADDED TO FILE</u> ETIOLOGY FIELD #61.2 (<u>ENTRY</u> #4978) N<u>EW TERM</u>: A<u>LICYCLOBACILLUS</u>

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/code sets 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/code set to an entry in one of the pointed-to files, which allows the system to determine how to translate a code/code set 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 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.

Added the option AP LEDI Data Entry [LRAP VR]. This option allows data for Anatomic Pathology (LEDI results) to be reviewed and approved individually by accession or by UID. . Once approved, the data is not available for viewing with this option.

The AP reports have been modified to replace "AFIP" or Armed Forces Institute of Pathology with "JPC" or Joint Pathology Center.

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

4.4.2 Addition of Anatomic Pathology (AP) Orders and Results

The VistA Laboratory is enhanced to handle AP data by storing incoming HL7 result (ORU) messages in the intermediate LAH global if the site is a Host VA that is receiving incoming orders for the three AP sections listed below.

- Cytology CY.
- Electron Microscopy EM.
- Surgical Pathology SP.
- The AP verification process is modified to accept incoming results processed by personnel outside the VA from another VA, a commercial reference lab, or the DoD.
 - Incoming results are accepted or rejected by staff via the 'AP LEDI Data Entry [LRAP VR]' option.
 - This option moves the data from the LAH global for storage in LAB DATA file (#63).

• <u>The LEDI IV Update patch provides new features outlined below.</u>

Upon verification of an AP report at the Host site, an outgoing HL7 result message to the Collection site is triggered via the 'Verify/release reports, anat path [LRAPRS]' option.

Note: Because the outgoing HL7 result messages are for referral patients, these AP reports are not stored in TIU.

- The patches support the acceptance and processing of AP electronic orders and results via LEDI HL7 messaging.
- Determine the test order number, type of specimen and collection sample code for an outgoing order message.
- Generate HL7 messaging exceptions for incomplete LEDI orders located in LABORATORY PENDING ORDER file (#69.6).
- Generate HL7 messaging exceptions for LEDI results that cannot be processed.
- Process incoming HL7 order (ORM) messages from DoD facilities.
- Process messages and store the orders in the LABORATORY PENDING ORDER file (#69.6).

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 predetermined 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 the **"APPENDIX B: HOW NOTIFICATIONS WORK - TECHNICAL OVERVIEW"** section in the CPRS Technical Manual in the VDL.

4.7 LEDI IV AP/MICRO INTERFACE

4.7.1 Orders and Results for Anatomic Pathology (AP) – Update Patch

To complete the verification process, a PROVIDER key, a provider class of PHYSICIAN, a person class of Pathology Allopathic or Osteopathic Physicians and a valid electronic signature code are needed. Below, are the instructions on how to add those (if not already entered) via VA FileMan edits. Make these edits for both the collection site and the host facility. The updated VHA PERSON CLASS code list of positions which can release AP reports is below:

Specialization:

Pathology, Anatomic & Clinical

Pathology, Anatomic

Pathology, Anatomic & Laboratory Medicine

Pathology, Chemical

Pathology, Clinical

Dermatopathology

Hematology: Pathology

Neuropathology

Oral and Maxillofacial Pathology

Cytotechnology

Note: Cytotechnologists can release Negative Gynecological results as long as they are a Provider Class of CYTOTECHNOLOGIST, a PERSON CLASS # of 430 Cytotechnology and have a LRVERIFY security key.

Figure 5. Person Class Edit Option [XU-PERSON CLASS EDIT]

Select User Management <TEST ACCOUNT> Option: PERSON CLASS Edit Select NEW PERSON NAME: LRPROVIDER 1 LRPROVIDER,ONE JR WGA 2 LRPROVIDER,TWO CKA CHOOSE 1-2: 2 LRPROVIDER, TWO CKA Edit of Person Class NAME: LRPROVIDER, TWO Person Class Effective Expired Allopathic and Osteopathic Physicians (M.D. and D.O.) JUN 27, 2013 Exit Save Refresh Enter a command or '^' followed by a caption to jump to a specific field. COMMAND: EXIT Press <PF1>H for help Insert You've got PRIORITY mail!

1. On the collection site, log in an AP accession and transmit the order to the host facility:

Figure 6. Log-in Anatomic Pathology Accession [LRAPLG]

Select Anatomic pathology <TEST ACCOUNT> Option: 1 Log-in menu, anat path Select Log-in menu, anat path <TEST ACCOUNT> Option: li Log-in, anat path Select ANATOMIC PATHOLOGY SECTION: SURGICAL PATHOLOGY Log-In for 2012 ? // <ENTER> (YES) Select Patient Name: hxx,pxxx,PXXXXXX HXX,PXXXXXX 1-1-60 XXXXXXXX NSC VETERAN NO Enrollment Priority: Category: IN PROCESS End Date: *** Patient Requires a Means Test *** Primary Means Test Required from NOV 17,2009 Enter <RETURN> to continue. HXX, PXXXXXX ID: XXX-XX-XXXX Physician: LRUSER, ONE AGE: 52 DATE OF BIRTH: JAN 1,1960 PATIENT LOCATION: UNK// 2E 2 EAST Accession number assigned for Nov 20, 2012 is: NSP 12 22 Checking surgical record for this patient... No operations on record in the past 7 days for this patient. Assign SURGICAL PATHOLOGY (NSP) accession #: 23? YES// <ENTER> (YES) Date/time Specimen taken: NOW// (NOV 20, 2012@17:40) SURGEON/PHYSICIAN: **lrprovider,ONE JR** LRPROVIDER,ONE JR WGA SPECIMEN SUBMITTED BY: lrprovider, one Select SPECIMEN: skin SPECIMEN TOPOGRAPHY: skin 1 SKIN 01000 2 SKIN APPENDAGE 01300 SKIN BETWEEN FOURTH AND FIFTH TOES 02915 3 SKIN BETWEEN GREAT TOE AND SECOND TOE 02885 4 02905 SKIN BETWEEN THIRD AND FOURTH TOES 5 Press <RETURN> to see more, '^' to exit this list, OR CHOOSE 1-5: 1 SKIN 01000 COLLECTION SAMPLE: skin Select SPECIMEN: DATE/TIME SPECIMEN RECEIVED: NOW// (NOV 20, 2012@17:41) PATHOLOGIST: lrprovider, ONE JR LRPROVIDER, ONE JR WGA Select COMMENT: Select LABORATORY TEST: // TISSUE EXAM SP Select Patient Name: Select Log-in menu, anat path <TEST ACCOUNT> Option: Select Anatomic pathology <TEST ACCOUNT> Option:

Figure 7. Collection Site Builds AP Shipping Manifest [LA7S MANIFEST BUILD]

Select Laboratory DHCP Menu <TEST ACCOUNT> Option: **1sm** Lab Shipping Menu Select Lab Shipping Menu <TEST ACCOUNT> Option: **smb** Build Shipping Manifest Select Shipping Configuration: mhc TO VRR There's no open shipping manifest for MHC TO VRR Do you want to start one? NO// y YES Use default accession dates? YES// Exclude previously removed tests from building? YES// Using shipping manifest# 522-20121120-2 Searching accession area: CHEMISTRY Searching accession area: MICROBIOLOGY Searching accession area: SURGICAL PATHOLOGY Searching accession area: EM Searching accession area: CYTOPATHOLOGY There were 2 specimens added Print Shipping Manifest? NO// y YES DEVICE: HOME// 0;80;9999 VIRTUAL TELNET *** DO NOT USE FOR SHIPPING DOCUMENT - WORK COPY ONLY *** Shipping Manifest: 522-20121120-2 Page: 1 to Site: REGION 7 ISC,TX (FS) Printed: Nov 20, 2012@17:42 from Site: ZZ BONHAM E-Order: YES Status: OPEN Ship via: COURIER Shipping Condition: ROOM TEMPERATURE Container: BOX Patient ID Accession Patient ICN Specimen UID Item Patient Name Date of Birth Sex Collect Date/Time Requested By _____ 1-1 HXX, PXXXXXX XXX-XX-XXXX NSP 12 23 Jan 01, 1960 2212000023 LRPROVIDER, ONE JR Nov 20, 2012@17:40 Male Specimen Container: PLASTIC TUBE _____ SURGICAL PATHOLOGY LOG-IN SKIN VA NLT Code [Name]: 93940.0000 [Surgical Pathology Tissue Exam] _____ TISSUE EXAM SKIN VA NLT Code [Name]: 93940.0000 [Surgical Pathology Tissue Exam] _____

End of Shipping Manifest

Figure 8. Close/Ship an AP Shipping Manifest [LA7S MANIFEST CLOSE/SHIP]

```
Select Lab Shipping Menu <TEST ACCOUNT> Option: sms Close/Ship a Shipping Manifest
Select Shipping Configuration: mhc TO VRR
Select Shipping Manifest: 522-20121120-2 MHC TO VRR Status: OPEN as of Nov 20,
2012@17:42
Select one of the following:
1 Close manifest
2 Ship manifest
Select action to perform: 1// 2 Ship manifest
Enter Manifest Shipping Date: NOW// (NOV 20, 2012@18:11)
Electronic Transmission of Shipping Manifest queued as task# 1465284
Print Shipping Manifest? NO//<ENTER>
Select Lab Shipping Menu <TEST ACCOUNT> Option:
```

2. On the host facility, accession the order via the 'Referral Patient Multi-purpose Accession' option and enter results. Note: There are two examples of the same screen shown below. The first example shows the Host using their own bar code UID. The second example shows how the screen looks when the lab uses the collection site UID.

Figure 9. Host Accessions AP Order Using Referral Patient Multi-purpose Accession Option [LRLEDI]

Editor's Note: First example when the lab uses their own bar code UID.				
Select Accessioning Menu Option: Referral Patient Multi-purpose Accession				
Are you using a barcode reader? YES// Scan Remote Site Barcode (SM): STX^SITE^500^3130620.1127^500-20130620-7^ETX110				
Select ACCESSION TEST GROUP: SEND OUTS				
Scan Patient/Accession Barcode (PD): STX^PD^000008888^500^1031710025^M^3130620.0 81517^ETX110				
NAME: LABPATIENT, TEST SEX: MALE DOB: 07/07/1920 RACE: UNKNOWN IDENTIFIER: 000008888				
LAB Order number: 272603				
You have just selected the following tests for LABPATIENT, TEST 000-00-8888 entry no. Test Sample 1 CULTURE, SPUTUM SPUTUM				
All satisfactory? Yes// (Yes)				
LAB Order number: 272603				
Print labels on: LABLABEL// SEND				

```
~For Test: CULTURE, SPUTUM SPUTUM
Enter Comment (DO NOT ORDER TESTS HERE!):
ACCESSION: MICRO 13 99 <7313000099>
CULTURE, SPUTUM SPUTUM
Scan Patient/Accession Barcode (PD): ^
Editor's Note: Second example in which the lab uses the Collection site UID.
Select Accessioning Menu Option: Referral Patient Multi-purpose Accession
Are you using a barcode reader? YES//
Scan Remote Site Barcode (SM): STX^SITE^500^3130620.1127^500-20130620-7^ETX110
Select ACCESSION TEST GROUP: SEND OUTS
Scan Patient/Accession Barcode (PD): STX^PD^000008888^500^1031710025^M^3130620.0
81517^ETX110
NAME: LABPATIENT, TEST
DOB: 07/07/1920
                                      SEX: MALE
 DOB: 07/07/1920
                                     RACE: UNKNOWN
 IDENTIFIER: 000008888
LAB Order number: 272603
You have just selected the following tests for LABPATIENT, TEST 000-00-8888
    entry no. Test
                                          Sample
              rest
Culture, Sputum
                                      SPUTUM
     1
All satisfactory? Yes// (Yes)
LAB Order number: 272603
Print labels on: LABLABEL// SEND
~For Test: CULTURE, SPUTUM SPUTUM
Enter Comment (DO NOT ORDER TESTS HERE!):
ACCESSION: MICRO 13 99 <1031710025>
CULTURE, SPUTUM
                             SPUTUM
Scan Patient/Accession Barcode (PD): ^
```

Figure 10. Host Site Enters A/P Results

ANATOMIC PATHOLOGY MENU D Data entry, anat path ... Ε Edit/modify data, anat path ... Inquiries, anat path ... Ι Log-in menu, anat path ... L Ρ Print, anat path ... SNOMED field references ... R S Supervisor, anat path ... Verify/release menu, anat path ... V Clinician options, anat path ... С Workload, anat path ... W Select Anatomic pathology Option: d Data entry, anat path AU Data entry for autopsies ... Blocks, Stains, Procedures, anat path BS CO Coding, anat path ... GD Clinical Hx/Gross Description/FS FS/Gross/Micro/Dx GM FS/Gross/Micro/Dx/SNOMED Coding GS GI FS/Gross/Micro/Dx/ICD9CM Coding Enter old anat path records OR Supplementary Report, Anat Path SR Spec Studies-EM; Immuno; Consult; Pic, Anat Path SS LEDI AP LEDI Data Entry Select Data entry, anat path Option: gm FS/Gross/Micro/Dx Select ANATOMIC PATHOLOGY SECTION: SURGICAL PATHOLOGY SURGICAL PATHOLOGY (NSP) Data entry for 2012 ? YES// (YES) Select one of the following: 1 Accession number 2 Unique Identifier (UID) 3 Patient Name Select one: 1// Accession number Enter Accession Number: NSP 12 8 Enter the year 2012 SURGICAL PATHOLOGY accession number to be updated. Enter Accession Number: [2212000023] for 2012 DOB: Jan 01, 1960 HXX, PXXXXXX XXX-XX-XXXX Collection Date: Nov 20, 2012@17:40 Acc #: NSP 12 8 [2212000023] Tissue Specimen(s): Skin structure (body structure) Skin structure (body structure) Test(s): SURGICAL PATHOLOGY LOG-IN FROZEN SECTION: No existing text Edit? NO//<ENTER> GROSS DESCRIPTION: No existing text Edit? NO//<ENTER>

```
MICROSCOPIC DESCRIPTION:
  No existing text
  Edit? NO// <ENTER>
SURGICAL PATH DIAGNOSIS:
 No existing text
 Edit? NO// y YES
PATHOLOGIST: lrprovider, o
                            MRY
        LRPROVIDER, ONE
                                         COMPUTER SPECIALIST
    1
                             OLP
     2
        LRPROVIDER, ONE MD
                                        IRM
CHOOSE 1-2: 1 LRPROVIDER, ONE
                                MRY
                                              COMPUTER SPECIALIST
DATE REPORT COMPLETED: T (NOV 20, 2012)
Current performing lab assignments: None Listed
     Select one of the following:
          1
                   Entire report
                   Specific sections of report
          2
Designate performing laboratory for: 1// Entire report
Select Performing Laboratory: ZZ BONHAM// TX VAMC 522
Sure you want to add this record? NO// y <ENTER> YES
... assignment created.
Current performing lab assignments:
Surgical Pathology Report Performed By: ZZ BONHAM <ENTER>
     Select one of the following:
         1
                   Entire report
          2
                   Specific sections of report
          3
                   Delete performing laboratory
Designate performing laboratory for: 
Enter CPT coding? NO//<ENTER>
     Select one of the following:
          1
                   Accession number
          2
                   Unique Identifier (UID)
          З
                  Patient Name
Select one: 1// <mark>^</mark>
        Data entry for autopsies ...
   AU
        Blocks, Stains, Procedures, anat path
   BS
   CO
      Coding, anat path ...
        Clinical Hx/Gross Description/FS
   GD
        FS/Gross/Micro/Dx
   GM
         FS/Gross/Micro/Dx/SNOMED Coding
   GS
   GI
         FS/Gross/Micro/Dx/ICD9CM Coding
   OR
         Enter old anat path records
         Supplementary Report, Anat Path
   SR
        Spec Studies-EM; Immuno; Consult; Pic, Anat Path
   SS
   LEDI AP LEDI Data Entry
Select Data entry, anat path Option:
```

3. Next, verify and release the report. A message should appear indicating that results will be sent back to the collection site:

Figure 11. Host Site Verifies and Releases Report [LRAPVR]

Select Anatomic pathology Option: **v** Verify/release menu, anat path RR Verify/release reports, anat path RS Supplementary report release, anat path List of unverified pathology reports LU CPT LAB CPT BILLING SA Send an AP Alert Select Verify/release menu, anat path Option [LRAPR]: **rr** Verify/release reports, anat path Release/Electronically Sign Pathology Reports Select one of the following: С CPT Coding Electronically Sign Reports E V View SNOMED Codes Selection: e Electronically Sign Reports Select ANATOMIC PATHOLOGY SECTION: SURGICAL PATHOLOGY SURGICAL PATHOLOGY (NSP) Data entry for 2012 ? YES//<ENTER> (YES) Select one of the following: 1 Accession number Unique Identifier (UID) 2 3 Patient Name Select one: 1// <ENTER> Accession number Enter Accession Number: 8 for 2012 HXX, PXXXXXX DOB: Jan 01, 1960 XXX-XX-XXXX Collection Date: Nov 20, 2012@17:40 Acc #: NSP 12 8 [2212000023] Tissue Specimen(s): Skin structure (body structure) Skin structure (body structure) Test(s): SURGICAL PATHOLOGY LOG-IN View the report before signing? YES// n XES/ NO Enter your Current Signature Code: SIGNATURE VERIFIED *** Report is being processed. One moment please. *** *** NOTE: This REFERRAL PATIENT report will not be stored in TIU and therefore does not have an electronic signature. A hardcopy signature will be required for this report. *** Report released. ***

```
Sending report to LEDI collecting site
    Select one of the following:
         1
                   Accession number
         2
                   Unique Identifier (UID)
                   Patient Name
         З
Select one: 1// ^
    Select one of the following:
         С
                  CPT Coding
         Ε
                  Electronically Sign Reports
         77
                  View SNOMED Codes
Selection:
        Verify/release reports, anat path
  RR
  RS
         Supplementary report release, anat path
        List of unverified pathology reports
  LU
  CPT LAB CPT BILLING
        Send an AP Alert
  SA
Select Verify/release menu, anat path Option:
```

4. On the collection site end, accept the results from the host using the 'AP LEDI Data Entry' option:

Figure 12. Collection Site approves results using the AP LEDI Data Entry option [LRAPD]

```
Select Anatomic pathology <TEST ACCOUNT> Option: {f d} Data entry, anat path
Select Data entry, anat path <TEST ACCOUNT> Option: ?
  AU
        Data entry for autopsies ...
        Blocks, Stains, Procedures, anat path
  BS
       Coding, anat path ...
  CO
  GD Clinical Hx/Gross Description/FS
  GM FS/Gross/Micro/Dx
  GS FS/Gross/Micro/Dx/SNOMED Coding
  GI
       FS/Gross/Micro/Dx/ICD9CM Coding
  OR Enter old anat path records
  SR Supplementary Report, Anat Path
  SS
         Spec Studies-EM; Immuno; Consult; Pic, Anat Path
  LEDI AP LEDI Data Entry
Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.
Select Data entry, anat path <TEST ACCOUNT> Option: ledi AP LEDI Data Entry
Select LOAD/WORK LIST NAME: ?? Editor note: See AP/MICRO Config Guide for details
  Choose from:
  AFB
  ANCILLARY TESTING
  ANTI-DS DNA AB
  APO A
```

BLOOD CULTURE BLOOD GAS CHEM 7 COAG COBAS CYTOPATHOLOGY DIFF DRUGS ΕM HEMATOLOGY HEPATITIS KODAK LAB POC LDSI MANUAL BENCH MICROBIOLOGY MYCOLOGY RIA SMAC SURGICAL PATHOLOGY UA VDRL VITEK WK-BB WK-CYTOLOGY WK-LITHIUM Select LOAD/WORK LIST NAME: 1dsi Select PROFILE: ?? Choose from: CHEMISTRY CHEMISTRY CYTOPATHOLOGY CYTOPATHOLOGY EM PATHOLOGY EM MICROBIOLOGY MICROBIOLOGY SURGICAL PATHOLOGY SURGICAL PATHOLOGY Select PROFILE: SURGICAL PATHOLOGY SURGICAL PATHOLOGY Select Performing Laboratory: **REGION 7 ISC,TX (FS)**// TX 170 Work Load Area: LDSI//<ENTER> Select one of the following: Accession Number 1 2 Unique Identifier (UID) Verify by: 1// 2 Unique Identifier (UID) Unique Identifier: 2212000023 HXX, PXXXXXX X XXX-XX-XXXX Age: 52yr ORDER #: 399 NSP 12 23 [2212000023] Seq #: 69 Accession: NSP 12 23 Results received: Nov 20, 2012@23:22 UID: 2212000023 Last updated: Nov 20, 2012@23:22 Enter RETURN to continue or '^' to exit: DEVICE: HOME// 0;80;9999 VIRTUAL TELNET Accession #: NSP 12 23 UID: 2212000023 Name: HXX, PXXXXXX SSN: XXX-XX-XXXX DOB: Jan 01, 1960 Age: 52yr PAGE: 1 Collection Date: Nov 20, 2012@17:40 _____ Surgical Pathology Diagnosis Surgical Pathology diagnosis text for CCR testing.

Do you want to ACCEPT these results? NO// y <code color </pre> Current performing lab assignments: None Listed Select one of the following: Entire report 1 2 Specific sections of report Designate performing laboratory for: 1// <ENTER> Entire report Select Performing Laboratory: ZZ BONHAM// TX VAMC 522 INACTIVE Jan 01, 1997 ... 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: Unique Identifier: Select Data entry, anat path <TEST ACCOUNT> Option:

4.7.2 Orders and Results for Microbiology (MI) – Update Patch

1. On the collection site, accession a microbiology order and transmit the accessioned microbiology order to the host facility:

Figure 13. Collecting Site Builds MICRO Shipping Manifest [LA7S MANIFEST BUILD]

```
Select Accessioning menu Option:
   1
         Phlebotomy menu ...
        Accessioning menu ...
   2
   3
        Process data in lab menu ...
        Quality control menu ...
   4
   5
        Results menu ...
   6
       Information-help menu ...
  7
        Ward lab menu ...
      Anatomic pathology ...
Blood bank ...
Microbiology menu ...
   8
   9
  10
   11
         Supervisor menu ...
  LSM Lab Shipping Menu ...
Select Laboratory DHCP Menu Option: 1sm Lab Shipping Menu
  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
SMP
         Retransmit LEDI Lab Results
         Print LEDI Pending Orders
Select Lab Shipping Menu Option: smb Build Shipping Manifest
Select Shipping Configuration: BONHAM HOST
There's no open shipping manifest for BONHAM HOST
Do you want to start one? NO// y YES
Use default accession dates? YES//
Exclude previously removed tests from building? YES// <ENTER>
    Using shipping manifest# 170-20121022-1
    Searching accession area: CHEMISTRY
    Searching accession area: MICROBIOLOGY
    Searching accession area: SURGICAL PATHOLOGY
    Searching accession area: CYTOPATHOLOGY
    Searching accession area: TOXICOLOGY
    There were 1 specimens added
Print Shipping Manifest? NO// y YES
DEVICE: HOME// 0;80;9999 VIRTUAL TELNET
      *** DO NOT USE FOR SHIPPING DOCUMENT - WORK COPY ONLY ***
Shipping Manifest: 170-20121022-1
                                             Page: 1
        to Site: ZZ BONHAM
from Site: DALLAS OI
                                           Printed: Oct 22, 2012@10:12
                                           E-Order: YES
           Status: OPEN
                                          Ship via: COURIER
Shipping Condition: ROOM TEMPERATURE Container: STYROFOAM BOX
                              Patient ID Accession
     Patient Name
Item
```

	Date of Birth Requested By	Patient ICN Sex	Specimen UID Collect Date/Time
1-1	XXX,PXXXXXX Jan 01, 1960 LRPROVIDER,ONE Specimen Container: CULTURE Collection sample: URINE	XXX-XX-XXXX 5000000423V938388 Male	MICRO 12 27 1412000027 Oct 22, 2012@10:09
	URINE CULTURE URINE VA NLT Code [Name]: 87553.0000 [Urine Culture]		
End of	Shipping Manifest		

Figure 14. Close/Ship a MICRO Shipping Manifest [LA7S MANIFEST CLOSE/SHIP]

```
Select Shipping Configuration: BONHAM HOST
Select Shipping Manifest: 170-20121022-1 BONHAM HOST Status: OPEN as of Oct 22,
2012@10:12
    Select one of the following:
                   Close manifest
         1
         2
                   Ship manifest
Select action to perform: 1// 2 Ship manifest
Enter Manifest Shipping Date: NOW// (OCT 22, 2012@10:13)
Electronic Transmission of Shipping Manifest queued as task# 3794701
Print Shipping Manifest? NO//
  SMB
       Build Shipping Manifest
       Start a Shipping Manifest
   SSM
  SMS
         Close/Ship a Shipping Manifest
  ART
         Add/Remove a Shipping Manifest Test
       Edit Required Test Information
  SMR
        Edit Relevant Clinical Information
  SMI
       Cancel a Shipping Manifest
  SMC
  PSM Print Shipping Manifest
  STA Order Status Report
  RSM Retransmit Shipping Manifest
  RLR Retransmit LEDI Lab Results
  SMP Print LEDI Pending Orders
```

2. On the host facility, accession the order via the 'Referral Patient Multi-purpose Accession' option and enter results. A message indicating that results will be sent back to the collection site should appear:

Figure 15. Host Accessions MICRO Order on Referral Multi-purpose Accession Option [LRLEDI]

```
Select Accessioning menu <TEST ACCOUNT> Option: referral Patient Multi-purpose
Accession
Are you using a barcode reader? YES// n NO
Select Shipping Configuration: ??
   Choose from:
  CBOC TO MAIN
  DOD-SAIC (COLLECTING SITE)
  MILW
  VRR COLLECTION
Select Shipping Configuration: vrr COLLECTION
SHIPPING MANIFEST: 170-20121022-1
Lookup orders using this manifest? YES//
Select ACCESSION TEST GROUP:
Select one or more tests from which you will be generating your entries.
Select LABORATORY TEST NAME: urine CULTURE
                                                URN CUL
Is URINE the correct sample to collect? \rm Y//
Same specimen/source for the rest of the order? No// (No)
Select LABORATORY TEST NAME:
Enter UID of specimen: ??
  Choose from: 1412000027
                                   HXX, PXXXXXX
Pat ID: XXXXXXXX DOB: Jan 01, 1960 Sex: MALE
Spec ID: 1412000027 Manifest: 170-20121022-1 Site: REGION 7 ISC, TX (FS)
Collected D/T: Oct 22, 2012@11:09 Specimen: URINE Spec. Status: In-Transit
Enter UID of specimen: 1412000027 HXX, PXXXXXX
Pat ID: XXXXXXXX DOB: Jan 01, 1960 Sex: MALE
Spec ID: 1412000027 Manifest: 170-20121022-1 Site: REGION 7 ISC,TX (FS)
Collected D/T: Oct 22, 2012@11:09 Specimen: URINE Spec. Status: In-Transit
         ...OK? // <ENTER> (Yes)
LAB Order number: 375
Collecting site order comments:
For test URINE CULTURE
Specimen source: Urine (substance) [78014005:SCT] ; Urine [UR:HL70070]
Collection sample: Urine specimen (specimen) [122575003:SCT] ;URINE [15:99VA62]
You have just selected the following tests for HXX, PXXXXXX XXX-XX-XXXX
entry no. Test Sample 1 URINE CULTURE
                                       URINE SPECIMEN URINE
All satisfactory? Yes// <ENTER> (Yes)
LAB Order number: 375
Print labels on: LABLABEL// null Bit Bucket
Do you wish to test the label printer: NO// <ENTER>
ACCESSION: MICRO 12 30 <1412000030>
URINE CULTURE URINE SPECIMEN URINE
COMMENT ON SPECIMEN: Test for CCR 8693 (sending results back).
 (Test for CCR 8693 (sending results back).)
Description OK? Y//
```

Figure 16. Host Site Enters MICRO Results [LRMIEDZ]

Select Laboratory DHCP Menu <TEST ACCOUNT> Option: 10 <ENTER> Microbiology menu Select Microbiology menu <TEST ACCOUNT> Option: re <ENTER> Results entry Select MICROBIOLOGY Accession or UID: MICRO 12 30 MICROBIOLOGY (2012) 30 Work Load Area: MICROBIOLOGY Select TEST/PROCEDURE: URINE CULTURE URN CUL HXX, PXXXXXX SSN: XXX-XX-XXXX Pat Info: Age: 52yr as of Oct 22, 2012 Sex: MALE Edit this accession? YES// <ENTER> WARD COMMENTS ON SPECIMEN: For test URINE CULTURE Specimen source: Urine (substance) [78014005:SCT] ; Urine [UR:HL70070] Collection sample: Urine specimen (specimen) [122575003:SCT] ; URINE [15:99VA62] URINE CULTURE completed: t (OCT 23, 2012) COLLECTION SAMPLE: URINE SPECIMEN// SITE/SPECIMEN: URINE// COMMENT ON SPECIMEN: Test for CCR 8693 (sending results back). Replace Select GRAM STAIN: NR (GRAM NEGATIVE RODS) Select GRAM STAIN: NP (NP) Select GRAM STAIN: BACT RPT STATUS: **f** FINAL REPORT URINE SCREEN: Select ORGANISM: ESCHERICHIA COLI 1571 112283007 SCT Organism ORGANISM ISOLATE NUMBER: 1// ORGANISM: ESCHERICHIA COLI// QUANTITY: 2+ (2+)Select COMMENT: COLISTIN: GENTAMICIN: I (I) CHLORAMPHENICOL: R (RESIS) TETRACYCLINE: S (SUS) AMPICILLIN: 32 (S) CARBENICILLIN: I (I) TOBRAMYCIN: R (RES) TRIMETHAPRIM/SULFAMETHOXAZOLE: S (SUS) AMIKACIN: >256 (>256) CEFAMANDOLE: I (I) CEFOXITIN: R (RESIS) NITROFURANTOIN: S (SUS) CEPHALOTHIN: I (I) 1 ESCHERICHIA COLI Select ORGANISM: Select BACT RPT REMARK: BACT RPT DATE APPROVED: n (OCT 23, 2012@17:21) Current performing lab assignments: None Listed Select one of the following: 1 Entire report 2 Specific sections of report

```
Designate performing laboratory for: 1// <code content</pre>
Select Performing Laboratory: ZZ BONHAM// TX VAMC 522
Sure you want to add this record? NO// y YES
... assignment created.
Current performing lab assignments:
Bacteriology Report Performed By:
ZZ BONHAM [CLIA# 987654321]
     Select one of the following:
                   Entire report
          1
          2
                   Specific sections of report
          3
                   Delete performing laboratory
Designate performing laboratory for:
URINE CULTURE completed: 10/23/2012 //
Sending report to LEDI collecting site
```

3. On the collection site, a message will appear indicating that new Micro results were received from the host. Process the results via the 'Enter/verify data (auto instrument)' option:

Figure 17. Collection Site Processes MICRO Results on 'Enter/verify data (auto Instrument)' [LRVR]

```
Select OPTION NAME: lrmenu
                                Laboratory DHCP Menu
   1
         Phlebotomy menu ...
   2
         Accessioning menu ...
   3
        Process data in lab menu ...
   4
         Quality control menu ...
   5
         Results menu ...
         Information-help menu ...
   6
   7
         Ward lab menu ...
         Anatomic pathology ...
   8
   9
         Blood bank ...
  10
         Microbiology menu ...
  11
         Supervisor menu ...
  LSM Lab Shipping Menu ...
Lab Msg - New Microbiology results received for LA7V HOST 522
         Enter "VA to jump to VIEW ALERTS option
Select Laboratory DHCP Menu Option: 3 Process data in lab menu
  ΕA
         Enter/verify data (auto instrument)
        Enter/verify data (Load list)
  EL.
        Enter/verify/modify data (manual)
  ΕM
         Enter/verify data (Work list)
  ΕW
  GΑ
         Group verify (EA, EL, EW)
         Misc. Processing Menu ...
  MP
         Accession order then immediately enter data
          Batch data entry (chem, hem, tox, etc.)
         Build a load/work list
          Bypass normal data entry
          Fast Bypass Data Entry/Verify
```

Lookup accession Order/test status Print a load/work list Std/QC/Reps Manual Workload count Unload Load/Work List Select Process data in lab menu Option: ea Enter/verify data (auto instrument) Select LOAD/WORK LIST NAME: ?? Editor note: See AP/MICRO Config Guide for details Choose from: ABBOTT ACA IV AFB ANTI-DS DNA AB APO A BLOOD CULTURE BLOOD GAS CHEM 7 CHEMISTRY COAG DIFF DOD SAIC DRUGS FRANK TEST HEMATOLOGY HEPATITIS KODAK LA7V HOST ACH LA7V REMOTE 170 LAB CORP LAH38 MANUAL BENCH MICROBIOLOGY MYCOLOGY POC POC-NEW RALSG RIA SMAC IJΑ VDRL VITEK WK-BB WK-CYTOLOGY WK-LITHIUM Select LOAD/WORK LIST NAME: LA7V REMOTE 170 Select PROFILE: ?? Choose from: VA AP/DALLAS OI-HOST SURGICAL PATHOLOGY VA CH/DALLAS OI-HOST CHEMISTRY VA MICRO/DALLAS OI-HOST MICROBIOLOGY Select PROFILE: va MICRO/DALLAS OI-HOST MICROBIOLOGY Select Performing Laboratory: DALLAS OI// TX 170 Work Load Area: LA7V REMOTE 170// Select one of the following: 1 Accession Number

2 Unique Identifier (UID) Verify by: 1// Accession Number Accession Date: TODAY//10-23-2012 (OCT 23, 2012) Enter Accession number part: 1// 27 Seq #: 24 Accession: MICRO 12 27 Results received: Oct 23, 2012@17:22 UID: 1412000027 Last updated: Oct 23, 2012@17:22 XXX-XX-XXXX Age: 52yr HXX, PXXXXXX ORDER #: 682 MICRO 12 27 [1412000027] Enter RETURN to continue or '^' to exit: HXX, PXXXXXX XXX-XX-XXXX AGE: 52 Nov 20, 2012@16:21 ----MICROBIOLOGY---page 1 Accession [UID]: MICRO 12 27 [1412000027] Received: Oct 22, 2012@10:09 Collection sample: URINE Collection date: Oct 22, 2012 10:09 Provider: LRPROVIDER, ONE Comment on specimen: Test for CCR 8693 (sending results back). Test(s) ordered: URINE CULTURE * BACTERIOLOGY FINAL REPORT => Nov 20, 2012 16:21 TECH CODE: 123456813 GRAM STAIN: GRAM NEGATIVE RODS NP CULTURE RESULTS: ESCHERICHIA COLI - Quantity: 2+ Comment: For AMPICLN: DISPLAY COMMENT For NITROFURANTOIN REAL LONG NAME: DISPLAY COMMENT ANTIBIOTIC SUSCEPTIBILITY TEST RESULTS: ESCHERICHIA COLI SUSC INTP AMIKACN..... >256 TESTING DISPLAY COMMENT HXX, PXXXXXX XXX-XX-XXXX ROUTING: MICU XXX-XX-XXXX AGE: 52 HXX, PXXXXXX Nov 20, 2012016:21 >> CONTINUATION OF MICRO 12 27 << page 2 Collection sample: URINE Collection date: Oct 22, 2012 10:09 ESCHERICHIA COLI : SUSC INTP CARBCLN.IICARBCLN.IICEFMAND.IICEFOXITIN.RRCHLORAM.RRNITROFURANTOIN REAL LONG NAME.S TESTING DISPLAY COMMENT MAX LENGTH DISPL TETRCLN....SSTESTING DISPLAY COMMENTTOBRMCN....RRTESTING DISPLAY COMMENTTRMSULF....SSTESTING DISPLAY COMMENT GENTMCN..... I I CEPHALOTHIN.... I I TESTING DISPLAY COMMENT TESTING DISPLAY COMMENT HXX, PXXXXXX XXX-XX-XXXX ROUTING: MICU

'^' TO STOP Do you want to APPROVE these results? NO// y YES Current performing lab assignments: Bacteriology Report Performed By: ZZ BONHAM Select one of the following: 1 Entire report Specific sections of report 2 3 Delete performing laboratory Designate performing laboratory for: 1 Entire report Select Performing Laboratory: ZZ BONHAM// TX VAMC 522 INACTIVE Jan 01, 1997 Sure you want to update this record? NO// ${\bf y}$ YES ... assignment updated. Current performing lab assignments: Bacteriology Report Performed By: ZZ BONHAM Select one of the following: 1 Entire report 2 Specific sections of report 3 Delete performing laboratory Designate performing laboratory for: Enter Accession number part: 29// ^ ΕA Enter/verify data (auto instrument) Enter/verify data (Load list) EL. ΕM Enter/verify/modify data (manual) Enter/verify data (Work list) ΕW Group verify (EA, EL, EW) GΑ MP Misc. Processing Menu ... Accession order then immediately enter data Batch data entry (chem, hem, tox, etc.) Build a load/work list Bypass normal data entry Fast Bypass Data Entry/Verify Lookup accession Order/test status Print a load/work list Std/QC/Reps Manual Workload count Unload Load/Work List Select Process data in lab menu Option:

Note: Lab Techs. May view an interim report when the interim report is verified using EA. The results are then viewable via lab interim reports and CPRS.

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

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 18. 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 Code/Set Mismatches CSM DOD Initialize DOD Codes ECH Error Code Help Edit Susceptibility ES Find Identifier FΙ MAS Map All Susceptibilities PL Print Local Codes Print by Message Configuration PMC 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 [LR7O 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.

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.	 User Division Package
		The available values that can be selected are: Accession number, UID (Unique Identifier) and only UID.	
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.	1. User 2. Package
		Parameter can be set at the package or user 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:	 User Division Package
		Provider Name	

 Table 2. LEDI IV patch parameters

Display Text	Name	Description	Precedence Order	
		Voice PagerOffice PhoneDigital Pager		
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: 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'.	 User Division 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.	 Division 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	 Division 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.	 Division 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'.	 User Division Package 	
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.	 User Division Package 	
Ask Performing Lab AP	LR ASK PERFORMING LAB AP	Enter YES to be prompted for Performing Lab. Enter NO to <i>not</i> be prompted for Performing Lab. 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'.	 User Division Package 	
Ask Performing	LR ASK	Enter YES to be prompted for Performing Lab.	1. User	

Display Text	splay Text Name Description		Precedence Order	
Lab Micro	PERFORMING LAB MICRO	Enter NO to <i>not</i> be prompted for Performing Lab. 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'.	 Division 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'.	 Division 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'.	 Division 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.	 User Division 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.	 User Division Package 	
AP GUI Report Right Margin	LR AP GUI REPORT RIGHT MARGIN	This is the value to use for the right margin (column) when formatting anatomic pathology type laboratory reports within a GUI display/client.	 User Division Package 	
Method of Assigning AP Accession Number	LR AP DEFAULT ACCESSION NUMBER	When an Anatomic Pathology (AP) case is accessioned, this parameter will control how the system should assign a default accession number to the case being logged in. (Note: The user will still be able to override the default, and select a different accession number, if they so choose). The user can select to keep the Accession default as it is. Or, they can set system to search from the beginning (#1). The first available accession number found in that accession area will be used as the default accession number for the new case being logged in.	1. 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.	 User Division Package 	

Display Text Name D		Description	Precedence Order	
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.	 User Division 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.	 User Division 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	
Default to create new manifest	LR MANIFEST DEFLT CREATE	Allows package or user to determine the default response when prompted to create a shipping manifest at the "There is not an open shipping manifest for [shipping configuration] Do you want to start one?" prompt.	1. User 2. Package	
Print Reporting/Printing Facility	LR REPORTS FACILITY PRINT	Determines if the name and address of the: 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.	 Division 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.	 User Package System 	
Lab STS Default Mapping Filespec	LR MAPPING DEFAULT FILESPEC	This parameter holds the file specification used to screen which files is 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. The default Package level setting is '*.TXT'.	 User Package System 	

Display Text	Name	Description	Precedence Order	
Default lab label printer	LR LABEL PRINTER DEFAULT	Allows selection of default lab label printer 1. U presented to the user when selecting the label device to use to print accession and order labels. User can specify default printer by division.		
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	1. User 2. System	
		and use that as their default.		
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].	1. User 2. System	
		"LAST" means the User wants the system to keep track of their last response to this prompt and use that as their default.		
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].	 User 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.	 User Division Package 	
		The user can indicate:		
		\circ 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. 		

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 [LR7O 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 [LR7O 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. Method of Assigning AP Accession Number. Default Accessioning Specimen. Default Accessioning Collection Sample. Default Accessioning Lab Test. Exclude removed tests from building. Use default accession dates. Default to create new manifest. Print Reporting/Printing Facility.

Lab STS Default Mapping Files Directory.

Lab STS Default Mapping Filespec.

Figure 19. 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 Update CPRS with all Lab test parameters UP DO Domain Level Parameter Edit LO Location Level Parameter Edit Package Level Parameter Edit ΡP Display Lab User Parameters UL 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 Method of Assigning AP Accession Number Default Accessioning Specimen Default Accessioning Collection Sample Default Accessioning Lab Test Exclude removed tests from building Use default accession dates Default to create new manifest 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: For Default load/work list verify method -Select Accession Area: <ENTER> Display Provider in Micro Result Entry: <code content</pre> Send CPRS Alert in Micro Result Entry: Don't Ask// <ENTER> Send CPRS Alert in CH Result Entry: <ENTER> Creatinine IDMS-traceable Method: Suppress EGFR When Patient's Age: < ENTER> Report EGFR as >60: **<ENTER>** Send alert for released AP: 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: Microbiology GUI Report Right Margin: 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: For Exclude removed tests from building -Select Shipping Configuration: <code configuration</pre> For Use default accession dates -Select Shipping Configuration: <code configuration</pre> For Default to create new manifest -Select Shipping Configuration: Print Reporting/Printing Facility: None// <ENTER> Default Directory: ? The directory that contains the STS mapping files. Default Directory: CENTER> 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 20. General Lab User Parameters [LR USER PARAM]

Select OPTION NAME: **LRMENU <ENTER>** Laboratory DHCP Menu Select Laboratory DHCP Menu Option: ? 1 Phlebotomy menu ... Accessioning menu ... 2 Process data in lab menu ... 3 Quality control menu ... 4 5 Results menu ... 6 Information-help menu ... 7 Ward lab menu ... Anatomic pathology ... 8 9 Blood bank ... Microbiology menu ...
 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: ... Editor Note: 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.GTT25 OH VITAMIN D25 OH V 2HR LTT 2HR LTT 2Hr.GTT 2Hr.GTT 2Hr.GTT (URINE) 2Hr.GTT 3HR LTT3HR LTT3Hr.GTT3Hr.GTT 3Hr.GTT (URINE) 3Hr.GTT 4Hr.GTT 4Hr.GTT 4Hr.GTT (URINE)4Hr.GTT5' NUCLEOTIDASE5' N 5Hr.GTT 5Hr.GTT ^ Select Laboratory Test: 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 MILWAUKEE VAMC WI VAM 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: 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: <code content</pre> 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 Ask - Default YES 2 Send CPRS Alert in CH Result Entry: <code color:</pre> 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 Ask - Default NO 1 Ask - Default YES 2 Send CPRS Alert in Micro Result Entry: <code content</pre> 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) З Patient Name AP Report Selection Default: Send alert for released AP: ? Enter either 'Y' or 'N'. Send alert for released AP: 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 ЕM 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
   ΕM
   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
   ΕM
   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: 
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: <code configuration</pre>
Lab Messaging - Parse HL7 Messages: ?
Enter a code from the list.
     Select one of the following:
           Y
                     YES
          Ν
                    NO
           L
                    LAST
Lab Messaging - Parse HL7 Messages: <mark><enter></mark>
```

Lab Messaging - Use Browser to display: ? Enter a code from the list. Select one of the following: YES Υ Ν 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: Υ YES Ν NO L LAST Lab Messaging - Show Identifiers: <code color:</pre> Chemistry GUI Report Right Margin: ? Enter the value to be used (132) for the right margin when formatting lab reports. Chemistry GUI Report Right Margin: Microbiology GUI Report Right Margin: ? Enter the value to be used (132) for the right margin when formatting lab reports. Microbiology GUI Report Right Margin: AP GUI Report Right Margin: ? Enter the value to be used (132) for the right margin when formatting lab reports. AP GUI Report Right Margin: Default Directory: USER\$:[LRUSERT]// ? The directory that contains the STS mapping files. 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 [LR7O 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 [LR7O 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 21. 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 Package Level Parameter Edit ΡP Display Lab User Parameters UT. 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: <mark>ZZ BONHAM <ENTER></mark> 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: 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: Send CPRS Alert in Micro Result Entry: < Send CPRS Alert in CH Result Entry: <code content</pre> Chemistry GUI Report Right Margin: Microbiology GUI Report Right Margin: <code color:</pre> Print Reporting/Printing Facility: 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.

```
Select Lab liaison menu Option: ?
  ANT
         Add a new internal name for an antibiotic
  ANTE Edit an Antibiotic
        Lab Bar Code Label Formatter
  BCF
  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>
DISPLAY COMMENT: <a><br/>
</a>
ABBREVIATION: PEN// <ENTER>
PRINT ORDER: 23// <ENTER>
Select SUSCEPTIBILITY RESULT: 
NATIONAL VA LAB CODE: Penicillin//
```

Figure 22. Edit an Antibiotic [LRWU7 EDIT]

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 23. Manage MI/AP Test Mappings [LRCAPFF]

```
Select LIM workload menu Option: NATIONAL LABORATORY FILE
Select National Laboratory File Option: ?
          Semi-automatic Linking of file 60 to 64
  1
         Manual Linking of file 60 to 64
   2
   3
         Result NLT Auto Linker
         Link Result NLT Manual
   4
   5
         Manage MI/AP Test Mappings
Select National Laboratory File Option: 5 <ENTER> Manage MI/AP Test Mappings
     Select one of the following:
                    Microbiology
          ΜI
          SP
                    Surgical Pathology
          СҮ
                    Cytopathology
          ЕM
                    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// 
60 = GRAM STAIN [362]
64 = Gram Stain (87754.0000) [2851]
    Link the two entries? No// Y <ENTER> (Yes)
          No Database Code on file for this NLT code
Select an MI Database Code: ?
 Answer with LAB ELECTRONIC CODES SEQUENCE, or NAME, or LOINC ABBR, or
     HL7 ABBR, or LAB ABBR, or TYPE
  Do you want the entire LAB ELECTRONIC CODES List? Y (Yes)
   Choose from:
                                                    BACTERIA RPT DATABASE
    9193
              MI Bacteria Rpt Date
                                        GENERAL
   9194MI Gram Stain Rpt DateGENERAL9197MI Parasitology Complete Rpt Date
                                         GENERAL
                                                     GRAM STAIN DATANAME
                                                     GENERAL
                                                                  PARASITOLOGY R
PT DATE DATANAME
    9201 MI Mycology Rpt Date GENERAL MYCOLOGY RPT DATE DATANAME
           MI TB Rpt Date GENERAL TB RPT DATE DATANAME
MI Virology Rpt Date GENERAL VIROLOGY RPT DATE DATANAME
    9205
    9209
Select an MI Database Code: 9194 MI Gram Stain Rpt Date
                                                             GENERAL
                                                                         GRAM ST
AIN DATANAME
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 24. 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 25. 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 26. 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:ORDON: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 27.	Find Identifier	[LA7V 62.47	FIND	IDENTIFIER1
I Iguio Er.				

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></enter></enter></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.

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

Figure 28. Print by Msg Config [LA7V 62.47 PRINT BY MSG CONFIG]

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

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 30. Print Local Codes [LA7V 62.47 PRINT LOCAL]

Select Lab Code Mapping File Option: **PL <ENTER>** Print Local Codes Right Margin: 80// <mark><ENTER></mark> DEVICE: HOME// ;;1000 <ENTER> UCX/TELNET LAB CODE MAPPING -- LOCAL CODES Sep 02, 2008@16:03:57 Page: 1 SEO 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 NO 27 486 99VA61.2 ANSWER Related Entry: [#61.2:486] PABESIA, NOS Msg Config: LA7V HOST 9999 486 99VA61.2 ANSWER 28 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) TEST L 1000001 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.

```
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
         ID SYSTEM PURPOSE NATL
   SEO
_____
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
             101-6 LN
                         RESULT YES
    101
LOINC: Cefoperazone:Susc:Pt:Isolate:OrdQn:Agar diffusion
            102-4 LN
    102
                         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
          10653-4 LN
    636
                        RESULT
                                  YES
LOINC: Clotrimazole:Susc:Pt:Isolate:OrdQn:MIC
           10654-2 LN
    637
                        RESULT
                                  YES
LOINC: Clotrimazole:Susc:Pt:Isolate:Qn:MLC
    638
           10697-1 LN
                        RESULT
                                 YES
LOINC: Nystatin:Susc:Pt:Isolate:OrdQn:MIC
          10698-9 LN
    639
                         RESULT
                                  YES
LOINC: Nystatin:Susc:Pt:Isolate:Qn:MLC
            107-3 LN
    107
                         RESULT YES
LOINC: Cefotaxime:Susc:Pt:Isolate:Qn:MLC
```

Figure 31. Print Susceptibilities [LA7V 62.47 PRINT SUSC]

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 32. 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 33. 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	34	Interim	report	for an	accession	[I RRP1]
inguic	. .	miterini	report		4000331011	

Select Laboratory DHCP Menu Option: <mark>5 <ENTER></mark> 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] 200 H* mg/dL 9 - 11 CALCIUM [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 2 000-00-1234 Mar 14, 2012@13:23 LRPATIENT, TWO Performing Lab Sites: [522] ZZ BONHAM [CLIA# 987654321] BONHAM, TX Select Accession or UID: 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 35. 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
  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...
RIA NEW
 RIA-(SERUM).....
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
RIA NEW
  RIA-(SERUM)
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 36. 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>
                                                          TΧ
                                                                  170
Work Load Area: LDSI// <ENTER>
    Select one of the following:
                  Accession Number
         1
         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: 
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: <code color:</pre> Unique Identifier: 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 37. 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 38. 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: < 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 VA SCT Non-VA SCT 416462003 Specimen [Topography file #61] 45710003 78014005 SPUTUM [360] URINE [71] 78014005 Sample [Collection Sample file #62] VA SCT Non-VA SCT 119334006 78014005 49957000 SPUTUM [18] URINE [15] 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 39. 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: LYTES
 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 40. 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 sent by STS to the Facilities via Lab Server side MailMan function. This option prompts the user to specify whether to proceed to the processing of the loaded data and then allows the user to apply the mappings to the target entries.

Figure 41. 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 Select one of the following: 0 Quit - no action 2 Process previous loaded file ENTER RESPONSE: 2// 2 PROCESS PREVIOUS LOADED FILE Select one of the following: 0 Quit - no action Process SNOMED CT mappings directly 1 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 42. 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: <
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 43. Print MI/AP Test Mappings [LA7VPFL]

Select Lab liaison menu Option: <mark>SMGR <enter></enter></mark> Lab Shipping Management Menu							
Select Lab Shipping Management Menu Option: PTM <enter></enter> Print MI/AP Test Mappings							
Select one of the following:							
MI Microbiology SP Surgical Pathology CY Cytopathology							
Enter Lab Area Subscript: <mark>SP <enter></enter></mark> Surgical Pathology							
Select one of the following:							
C Correctly Mapped Tests E Tests with Errors							
Enter response: E <enter></enter> Tests with Errors DEVICE: HOME// <mark><enter></enter></mark> UCX/TELNET Right Margin: 80// <mark><enter></enter></mark>							
Laboratory Tests for SP with mapping errors Mar 14, 2012@14:51:47 Page: 1							
======================================							
is mapped to: Autopsy Exam NOS [88608.0000]							
[5060] AUTOPSY UNSTAINED SLIDE Not Mapped to File #64.061							
Select one of the following:							
MI Microbiology SP Surgical Pathology CY Cytopathology							
Enter Lab Area Subscript: <mark><enter></enter></mark> 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 44. 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:

5.3.24 Check SNOMED CT Mappings Against the Lexicon [LA7TASK SCT MAPPINGS CHECK]

This option checks and validates each SNOMED CT ID mapping against the Lexicon when a SNOMED CT - (SCT Mapping) file is loaded. Schedule this option to run on a recurring basis. If an exception is found (e.g., the code is inactive) the system sends an alert to Standards & Terminology Services (STS) so that STS can send an updated mapping for this entry. Note: It is possible for a code to be active at the time of the load, but be deprecated when a Lexicon patch is installed that updates the SNOMED CT code set.

If this option finds any exceptions:

a. The SCT CODE STATUS field (#21) of files #61, #61.2 and #62 for the entry will be updated to 'Error',

b. An HDI exception alert will be sent to STS,

c. A MailMan message will be sent to the G.LMI and G.LAB MESSAGING Mail Groups with a list of the exceptions found.

STS will review the exception alerts they receive, and if needed, will send an updated SCT mapping file to the site to load. The site does not need to do anything until STS notify the site that there is an updated mapping file to load.

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

```
Select Lab Universal Interface Menu Option: ?
        Print Source of Specimen Table
   1
   2
         Print Lab Universal Interface Log
         Display Lab Universal Interface Message
         Download to Universal Interface
         Start/Stop Auto Download Background Job
  UTS
         Lab Universal Interface Setup
  PCS
         Lab Point of Care Setup
        Lab Messaging File Integrity Checker
  FIC
  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, 2011014:37 Type: INCOMING Status: PURGEABLE
Instrument Name: LA7V HOST 981-I-1311000001
Configuration: LA7V HOST 981
Select another Message: 
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>
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
SENDING APPLICATION: LA/V HOST 596
SENDING APPLICATION: LA/V REMOTE 200LR1
STATUS: ERROR
                                        SENDING FACILITY: 200LR1
VERSION ID: 2.3
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 = \sim | \setminus \&
MSH-3 = LA7V REMOTE 200LR1
```

MSH-4 = 200LR1MSH-5 = LA7V HOST 596MSH-6 = 596MSH-7 = 20110506131525-0400MSH-9 = ORM~001MSH-9-1 = ORMMSH-9-2 = 001MSH-10 = Q2791607T2918296 3017639 MSH-11 = TMSH-12 = 2.3MSH-15 = ALMSH-16 = ALPID^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 = 1PID-3 = 7220469~~~USVHA&&0363~PI~VA FACILITY ID&581&L|1111111111~~~USSSA&&0363~SS PID-3.1-1 = 7220469PID-3.1-4-1 = USVHAPID-3.1-4-3 = 0363PID-3.1-5 = PIPID-3.1-6-1 = VA FACILITY ID PID-3.1-6-2 = 581PID-3.1-6-3 = LPID-3.2-1 = 111111111PID-3.2-4-1 = USSSAPID-3.2-4-3 = 0.363PID-3.2-5 = SSPID-3.2-6-1 = VA FACILITY ID PID-3.2-6-2 = 581PID-3.2-6-3 = LPID-5 = LEDITEST, TESTPID-5-1 = FLABPID-5-2 = BLUAPID-5-3 = CPID-6 = LEDITEST^LEDITEST^C^^^M PID-7 = 19490422PID-8 = MPID-10 = 2106-3PID-11 = ~~ZULU~HI~~~N|2645 ANYWHERE STREET~~FARM HILL~DE~12345~USA~P~~001 PID-11.1-3 = ZULUPID-11.1-4 = HIPID-11.1-7 = NPID-11.2-1 = 2645 ANYWHERE STREET PID-11.2-3 = FARM HILLPID-11.2-4 = DEPID-11.2-5 = 12345PID-11.2-6 = USAPID-11.2-7 = PPID-11.2-9 = 001PID-13 = (000)000-0000PID-14 = (000)000-0000PID-16 = MPID-17 = 0PID-18 = 581:7220469:05052011 PID-19 = 101102237PID-22 = 2186-5PID-25 = 0PV1-1 = 1

PV1-2 = 0PV1-3 = 1208PV1 - 18 = 0PV1-36 = CD:638671PV1-44 = 2011050500000-0400PV1-45 = 20110505235959-0400 ORC^NW^5811112600001^^581-20110506-2^SC^^^20110506081400-0400^99761-VA581~USER ORC-1 = NWORC-2 = 5811112600001ORC-4 = 581-20110506-2ORC-5 = SCORC-9 = 20110506081400-0400ORC-10 = 99761-VA581~USER~USER ORC-10-1 = 99761-VA581 ORC-10-2 = USERORC-10-3 = USER $ORC-12 = REF:581 \sim \sim \sim E$ ORC - 12 - 1 = REF: 581ORC-12-4 = EORC - 13 = 1208ORC-15 = 20110506081602-0400 ORC - 17 = 581ORC-18 = I~ESI Default ORC - 18 - 1 = IORC-18-2 = ESI Default $ORC-19 = 99761-VA581 \sim USER \sim USER$ ORC-19-1 = 99761-VA581 ORC-19-2 = USERORC-19-3 = USEROBR^1^5811112600001^^89111.0000~Mumps Ab IqG~99VA64^^20110506081400-0400^^^~YOU 2011 005812011126000001-3017639^3017639^005812011126000001^20110506081602-0400^^ OBR-1 = 1OBR-2 = 5811112600001OBR-4 = 89111.0000~Mumps Ab IgG~99VA64 OBR-4-1 = 89111.0000OBR-4-2 = Mumps Ab IgG OBR - 4 - 3 = 99VA64OBR-7 = 20110506081400-0400 OBR-10 = ~USER~USEROBR-10-2 = USEROBR-10-3 = USEROBR-11 = 0OBR-14 = 20110506081400-0400 OBR-15-1 = 67922002OBR-15-2 = Serum (substance) OBR-15-3 = SCTOBR - 15 - 4 = 72OBR-15-5 = Serum (substance) OBR-15 = 67922002&Serum (substance)&SCT&72&Serum (substance)&99VA61~~~119297000& OBR-15-6 = 99VA61LA7 UI Message Display Msg #15287455 - LA7V REMOTE 200LR1-I-581-20110506-2 OBR-15-4-1 = 119297000OBR-15-4-2 = BloodOBR-15-4-3 = SCTOBR - 15 - 4 - 4 = 20OBR-15-4-5 = BloodOBR-15-4-6 = 99VA62 $OBR-16 = REF:581 \sim \sim \sim E$ 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 46. 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:
                 Collecting facility
         1
         2
                  Host facility
Are you editing this entry as the: 1 <ENTER> Collecting facility
NAME: MHC TO VRR// <ENTER>
COLLECTING FACILITY: 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: <
Select TEST/PROFILE: HEPATITIS B Ag// <ENTER>
 TEST/PROFILE: HEPATITIS B Ag// <ENTER>
 ACCESSION AREA: SEROLOGY// <ENTER>
  DIVISION: <a href="https://www.enablighten.com">CENTER></a>
  Select FEEDER SHIPPING CONFIGURATION: <
  SPECIMEN: SERUM// <ENTER>
  URGENCY: 
  SPECIMEN CONTAINER: RED TOP// <ENTER>
  SHIPPING CONDITION: REFRIGERATED// <ENTER>
 PACKAGING CONTAINER: <
 REQUIRE PATIENT HEIGHT: YES//
                              <ENTER>
 PATIENT HEIGHT UNITS: <
 PATIENT HEIGHT CODE: <
 REQUIRE PATIENT WEIGHT: YES//
                              <ENTER>
 PATIENT WEIGHT UNITS: < < ENTER>
 PATIENT WEIGHT CODE: <a><br/>
</a>
 REQUIRE COLLECTION VOLUME: YES
                                Editor Note: If you answer YES here, the system displays the next two
prompts.
  REQUIRE COLLECTION WEIGHT: <a><br/>
</a>
 REQUIRE COLLECTION END D/T: <
Select Lab Shipping Management Menu Option:
```

Note: If the user answers YES to REQUIRE COLLECTION VOLUME, the following two prompts display: COLLECTION VOLUME UNITS, COLLECTION VOLUME CODE.

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 47. Print Shipping Manifest [LA7S MANIFEST PRINT]

Select Lab Shipping Menu Option: ? Build Shipping Manifest SMB 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 Patient IDAccessionPatient ICNSpecimen UIDSexCollect Date/Time Item Patient Name Date of Birth Requested By _____ 1-1 BCMA, ONE-PATIENT 000-00-0001 SOIM* 11 1 Apr 07, 1935 8811000001 PROVIDER, ONE Male Feb 18, 2011@16:13 _____ 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.

Select Lab Ship	oping Menu Option: <mark>?</mark>					
SSM Start SMS Close ART Add/H SMR Edit SMI Edit SMC Cance PSM Print	d Shipping Manifest t a Shipping Manifest e/Ship a Shipping Manifest Remove a Shipping Manifest Required Test Information Relevant Clinical Informat el a Shipping Manifest t Shipping Manifest r Status Report ansmit Shipping Manifest ansmit LEDI Lab Results t LEDI Pending Orders					
Select Shipping Pat ID: 000000 Spec ID: 140900 Collected D/T:	oping Menu Option: PRINT LA g Manifest: <mark>7 <enter></enter></mark> GOM 000 DOB: Mar 02, 1955 Se 00002 Manifest: 522-20090 ⁻⁷ Feb 27, 2009@15:13 Specir ? Yes// <mark><enter></enter></mark> (Yes)	ERTOSE,HE BE x: MALE 721-1 Site: ZZ BON:				
DEVICE: HOME//	<pre><enter> Telnet port</enter></pre>	ight Margin: 80// <	ENTER>			
Shipping Manit to S from S	OT USE FOR SHIPPING DOCUMEN fest: 522-20090721-1 Site: DALLAS OI Site: ZZ BONHAM atus: Electronic Manifest tion: None Specified	Page: 1 Printed: Apr E-Order: YES	07, 2011@17:06			
Item Pat: Date Requ	ient Name e of Birth uested By	Patient ID Patient ICN Sex				
1-1 LED: Mar	ITEST,TEST 0000 02, 1955	000000 SER				
Spe [SEI Col	COMMENTS: HEPATITIS B Ag Specimen source: Serum (substance) [67922002:SCT] ; Serum [SER:HL70070] Collection sample: Blood specimen (specimen) [119297000:SCT] ; BLOOD [20:99VA62]					
Host	t test status: In-Transit					
	HEPATITIS B Ag	SERUM				

Figure 48. Print LEDI Pending Orders [LA7S PENDING PRINT LEDI]

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 49. 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 50. Referral Patient Multi-purpose Accession [LRLEDI]

```
Select OPTION NAME: REFERRAL PATIENT MULTI-PURPOSE <ENTER>
                                                                      Referral
                                                            LRLEDI
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
                  Reject Manifest
          4
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 [LRFASTS]

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

Figure	51	Fast	Bypass	Data	Entry	/Vorify	, r	AST	S 1
IIYUIE	51.	I ast	uypass.	Dala	LIIU	/ V CIII	V L	-01	J

```
Select OPTION NAME: FAST BYPASS DATA ENTRY/VERIFY <ENTER> LRFASTS
                                                                    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:
                   LAB COLLECT (INPATIENTS-MORN. DRAW)
         LC
         SP
                   SEND PATIENT
         WC
                   WARD COLLECT
                   Immed COLLECT
         Т
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)
  CULTURE & SENSITIVITY 6
                                          AFB SMEAR
1
                                          MYCOLOGY CULTURE
2
   ANAEROBIC CULTURE
                                       7
3
   GRAM STAIN
                                       8
                                          PARASITE EXAM
                                           FECAL LEUKOCYTES
4
   BLOOD CULTURE
                                       9
                                      10 STERILITY TEST
5
   AFB CULTURE & SMEAR
TEST number(s): 1
For CULTURE & SENSITIVITY
Other tests? N// <ENTER>
Nature of Order/Change: WRITTEN <ENTER>
                                             Ŵ
You have just selected the following tests for HXX, PXXXXXX XXX-XX-XXXX
     entry no. Test
                                            Sample
              CULTURE & SUSCEPTIBILITY
                                            URINE
     1
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: <code comment</pre> 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) SITE/SPECIMEN: URINE// <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> QUANTITY: <a>

 (<10000) Select COMMENT: COLISTIN: <a>

 GENTAMICIN: R <ENTER> (R) CHLORAMPHENICOL: I <ENTER> (I) TETRACYCLINE: <mark>S <ENTER></mark> (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 Specific sections of report 2 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 [LRFAST]

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

Figure 52. Bypass normal data entry [LRFAST]

```
Select OPTION NAME: BYPASS NORMAL DATA ENTRY <ENTER> LRFAST
                                                              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:
                   LAB COLLECT (INPATIENTS-MORN. DRAW)
          LC
                   SEND PATIENT
          SP
          WC
                   WARD COLLECT
                   Immed COLLECT
          Τ
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: <code comment</pre>
Nature of Order/Change: WRITTEN <ENTER>
                                              M
LAB Order number: 144
ACCESSION: MICRO 11 10 <1411000010>
CULTURE & SUSCEPTIBILITY
                              URINE
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>
       CULTURE & SUSCEPTIBILITY
   1
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: 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// < QUANTITY: <a>

 (<10000) Select COMMENT: 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) CEFOXITIN: R (RESIS) NITROFURANTOIN: I (I) CEPHALOTHIN: S (SUS) 1 ESCHERICHIA COLI 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 З Delete performing laboratory Designate performing laboratory for: <code color:</pre> 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 53. 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:
         URINE SCREEN
   11.57
              SPUTUM SCREEN
  11.58
  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 54. 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
    XXXXXXXXX SSN: XXX-XX-XXXXLOC: CBOC
                                                                                  Sex: MALE Age: 75yr as of Jun 01, 2011
 Pat Info:
Edit this accession? YES// <ENTER>
                 MYCOLOGY CULTURE
      1
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: <code color="block"><code color="block"><code color="block"><code color="block"><code color="block"><code color="block"><code color="block"><code color="block"><code color="block"></code color="color="block"></code color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="color="col
     Select COMMENT: <ENTER>
Select FUNGUS/YEAST: 
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 55. 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:
              Accession Number
         1
         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
  Seg #: 78740 Accession: CH 0517 487
                                      Results received: May 14, 2011@11:27
                   UID: UNKNOWN
                                          Last updated: May 14, 2011@11:27
  Seg #: 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
                   Seq # 78743
         78743
                   Seq # 80124
         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.

LEDI IV Update:

The option 'Log-in, anat path' [LRAPLG] was modified to change the way the system assigns a default accession number when an AP case is accessioned. Previously, the system defaulted to the next available number that followed the last accession number that was used. This option was modified so that every time an AP accession is logged in, the system starts searching from the beginning (#1). The first available accession number that is found in that accession area will be used as the default accession number for the new case being logged in (note: the user will still be able to override the default, and select a different accession number, if they so choose).

For sites that wish to keep the original method of assigning a default AP accession number, a new Parameter is being introduced that will let the site configure which method the system should use. This new parameter, 'Method of Assigning AP Accession Number', can be edited via the option 'Package Level Parameter Edit' [LR7O PAR PKG] on the 'Update CPRS Parameters' [LR7O PARAM MENU] menu. See Table 2 LEDI IV Patch Parameters for the values of the settings.

Figure 56. Log-in, anat path [LRAPLG]

Select Anatomic pathology Option: <mark>L <ENTER></mark> Log-in menu, anat path Select Log-in menu, anat path Option: ? T.T Log-in, anat path DA Delete accession #, anat path PB Print log book Histopathology Worksheet ΗW 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-7xxxxxxxxx YES MILITARY RETIREE XXXXXXXX7 3 LDSIAP, SALLY X-X-54 NO EMPLOYEE CHOOSE 1-3: 1 <ENTER> LDSIAP, ONE x-x-55 xxxxxxxx EMPLOYEE NO 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 TISSUE EOSINOPHIL 05145 2 3 TISSUE NEUTROPHIL 05147 TISSUE, SUBCUTANEOUS SUBCUTANEOUS TISSUE 03000 4 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: <a>

 1> Select LABORATORY TEST: TISSUE EXAM <ENTER> SP Select Log-in menu, anat path Option: <code color:</pre> Select Anatomic pathology Option: Select Laboratory DHCP Menu

Figure 57. Sample of the AP Log Book where the display of related surgical information is enabled

```
Select OPTION NAME: <mark>LRAPBK <ENTER></mark>
                                    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
                          Accession [UID]: NSP 08 20 [000000000]
    InPatient
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 package
case #35 Field (#60) BRIEF CLIN HISTORY
PREOPERATIVE DIAGNOSIS: Information automatically documented from SURGERY package
case #35 Field (#32) PRINCIPAL PRE-OP DIAGNOSIS,
                      (#.72) OTHER PREOP DIAGNOSIS
POSTOPERATIVE DIAGNOSIS: Information automatically documented from SURGERY package
```

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. If the site requires a Performing Laboratory other than the default local Institution Name, then the Institution must be in File 4 as either a National or Local entry and the LIM must set up a Lab Shipping Configuration for the performing laboratory. See section 5.4.2 Edit Shipping Configuration [LA7S EDIT 62.9].

```
Figure 58. Sample AP Designation of Performing Laboratory for Report
```

```
Designate performing laboratory for: 1// <ENTER> Entire report
Select Performing Laboratory:
                                     Editor Note: Enter the performing Institution Name here.
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
                                    Editor Note: Enter the designate Institution Name here.
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: <mark>2 <ENTER></mark> Specific sections of report
```

Note 1: Next to Select Performing Laboratory on line 2 of the view, Enter the performing Institution Name,

Note 2: Next to Select Performing Laboratory on line 20 of the view, Enter the designate Institution Name.

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.

```
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
    C02
    CALCIUM
    ANION GAP
    ELECTROLYTE 7
Select Original Ordered Test: ELECTROLYTE 7
Add LABORATORY TEST: TSH <ENTER> TSH (LAB)
 ...OK? Yes// <mark><ENTER></mark> (Yes)
     Select one of the following:
                   Add On
         1
          2
                   Reflex
Type of test order being added: 1 <ENTER> Add On
TSH (LAB) ADDED
```

Figure 59. Add tests to a given accession [LRADD TO ACC]

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

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

Figure 60. Add a new internal name for an antibiotic [LRWU7]

```
Select Lab liaison menu Option: ?
          Add a new internal name for an antibiotic
   ANT
   ANTE Edit an Antibiotic
        Lab Bar Code Label Formatter
   BCF
   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// Select Antibiotic Type to Add: 1//
Enter the name of the new antibiotic you wish to create: NEW ANTIOBIOTIC
Checking if field exists...OK
 (DRUG NODE will be 2.00581067)
Are you sure you wish to create NEW ANTIOBIOTIC? NO// YES
TEST ANTIOBIOTIC has now been created.
You must now add a new antibiotic in the ANTIMICROBIAL SUSCEPTIBILITY file
and use TEST ANTIOBIOTIC as the entry for the INTERNAL NAME field.
Do you want to setup NEW ANTIOBIOTIC as a new Bacterial Antibiotic? NO// YES
NAME: NEW ANTIOBIOTIC//
INTERNAL NAME: 2.00581067// NEW ANTIOBIOTIC
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 61. Delete entire order or individual tests [LRCENDEL]
```

```
Select Accessioning menu Option: DELETE ENTIRE order or individual tests
ENTER ORDER NUMBER: : (1-999999999): 361
Order Test
                                                               Accession
                   Urgency Status
 -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: : (1-999999999):
```

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 62. Microbiology Assigning Performing Laboratory for Entire Report

CULTURE & SUSCEPTIBILITY completed: N <enter> (JUL 17, 2012012:54) 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</enter></enter></enter></enter></enter></enter></enter>
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:</enter></enter></enter>
 Entire report Specific sections of report
Designate performing laboratory for: 1// <mark><enter></enter></mark> Entire report Select Performing Laboratory: ZZ BONHAM// <mark><enter></enter></mark> TX VAMC 522 INACTIVE Jan 01, 1997
Sure you want to add this record? NO// YES <enter></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 63. 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: 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 QUANTITY: Select COMMENT: <ENTER> PENICILLIN: **<ENTER>** CLINDAMYCIN: S <ENTER> (SUS) VANCOMYCIN: S <ENTER> (6) GENTAMICIN: S <ENTER> (S) TETRACYCLINE: <ENTER> AMPICILLIN: <ENTER> NITROFURANTOIN: <a>

 ERYTHROMYCIN: <ENTER> OXACILLIN: **R <ENTER>** (RESIS) CEPHALOTHIN: <ENTER> 1 STAPHYLOCOCCUS AUREUS Select ORGANISM: <ENTER> Select BACT RPT REMARK: < BACT RPT DATE APPROVED: N <ENTER> (JUL 17, 2012@12:23) Current performing lab assignments: None Listed Select one of the following: Entire report 1 2 Specific sections of report Designate performing laboratory for: 1// 2 <ENTER> Specific sections of report Bacteriology Report 1 _ 2 _ Gram Stain 3 - Organism Identification 4 - Comment On Specimen Select the section to designate (1-4): 3 <ENTER> STAPHYLOCOCCUS AUREUS including All Susceptibilities 1 -1.1 -STAPHYLOCOCCUS AUREUS Specific Susceptibilities _ 2 ALL items Select the item to designate (1-2): 1.1 <ENTER> 1 _ Clindam Vancmcn 2 _ 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.

Reference: For additional details on these alerts, see the "APPENDIX B: HOW NOTIFICATIONS WORK - TECHNICAL OVERVIEW" section in the CPRS Technical Manual on the VDL.

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</enter></enter></enter></enter></enter></enter></enter></enter></enter>			
Select one of the following:			
1 Entire report 2 Specific sections of report			
Designate performing laboratory for: 1// <mark><enter></enter></mark> Entire report Select Performing Laboratory: LEXINGTON-LD VAMC// <mark><enter></enter></mark> 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></enter>			

Figure 64. Sending an Alert - Microbiology

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: Lab results available 1 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 65. 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
                                 Sex: MALE Age: 77yr as of May 14, 2012
Pat Info:
Provider: LRUSER,ONE
                                       Voice pager:
  Phone: 6655544
                                      Digital pager:
                             CH 0321 2 CH 0514 1 [L621350001]
ACCESSION:
                             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 Sex: MALE Age: 77yr as of May 14, 2012 Pat Info: 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. Two samples of the same view are presented below. The first has the user selecting by Accession number. The second has the user selecting by UID.

Figure 66. Print log book [LRAPBK] Select by Accession

```
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// 1 Accession number

Enter Accession Number: 1

Enter the year 2008 SURGICAL PATHOLOGY accession number to be updated.

Enter Accession Number: 1 for 2008
```

Second Sample of Print Log Book- Select by UID

```
Data entry for 2008 ? YES// <ENTER> (YES)

Enter the year 2008 SURGICAL PATHOLOGY accession number to be updated.

Enter Accession Number: 1 for 2008

Select one of the following:

1 Accession number

2 Unique Identifier (UID)

3 Patient Name

Select one: 1// 2 Unique Identifier (UID)

Unique Identifier: 1513000002 (SP-LX 13 1) for 2008
```

5.4.22 Change How Not-Performed ("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) [LRENTER].

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 67. 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	68.	Cumulative	Report
--------	-----	------------	--------

	CHEM II Profile
PLASMA Ref range low Ref range high	FBS 60 123 mg/dL
[a] Jul 09, 2012 [c] Jun 26, 2012 10:20 [d] Jun 26, 2012 10:13 [g] May 31, 2012 16:06 [i] Feb 08, 2012 09:48	145 H 110 130 H

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 69. Interim report [LRRP2]

```
Select Results menu Option: INTERIM
        Interim report
   1
   2
        Interim report by provider
       Interim report for an accession
   3
       Interim report for chosen tests
   4
   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: <mark>1 <ENTER></mark> Interim report
Select Patient Name: LEDIPATIENT, ONE JR <ENTER>
                                               LRPATIENT, ONE JR X-XX-20
000001111 NO
                 NSC VETERAN
Date to START with: TODAY// Date to START with: TODAY// 
Date to END with: T-7// <mark><ENTER></mark> (AUG 29, 2008)
Print address page? NO// <mark>Y <ENTER></mark> 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
                             Result units Ref. range Site Code
    Test name
GLUCOSE
                               120
                                     mg/dL
                                                 60 to 123
                                                                 [522]
      Eval:
                   70-99 mg/dL NORMAL
                    100-125 mg/dL Impaired Fasting Glucose
      Eval:
      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
                         000-00-1111 Sep 05, 2008@11:23 PRESS '^' TO STOP
LEDIPATIENT, ONE JR
                                                               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 70. 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 mg/dL 60 to 123 120 [522] Eval: 70-99 mg/dL NORMAL Eval: 100-125 mg/dL Impaired Fasting Glucose >/= 126 mg/dL Provisional Diagnosis of Diabetes Eval: Eval: Eval: **5/17/04 Reference Range Changed, OLD RANGE 70-110** _____ KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value 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, LEDIPATIENT, ONE JR 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, 2008011:30 ----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 completed: Aug 20, 2008 17:26 Test(s) ordered: GRAM STAIN * 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 LEDIPATIENT,ONE JR '^' TO STOP 000-00-1111 ROUTING: 1T 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 3 000-00-1111 Sep 05, 2008@11:30 LEDIPATIENT, ONE JR 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 71. Interim report for chosen tests [LRRP3]

Select Results menu Option: INT Interim report 1 2 Interim report by provider 3 Interim report for an accession Interim report for chosen tests 4 5 Interim report for selected tests as ordered 6 Interim reports by location (manual queue) Interim reports for 1 location (manual queue) 7 8 Interim reports for 1 provider (manual queue) CHOOSE 1-8: <mark>4 <enter></mark> 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: << r> 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 Report date: Sep 05, 2008@11:41 LEDIPATIENT, ONE JR 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 [000000000] Report Released: Sep 05, 2008@11:19 Specimen Collection Date: Sep 05, 2008@11:18 Test name Result units Ref. range Site Code GLUCOSE mg/dL 60 to 123 120 [522] 70-99 mg/dL NORMAL Eval: 100-125 mg/dL Impaired Fasting Glucose Eval: >/= 126 mg/dL Provisional Diagnosis of Diabetes Eval: 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@11:41 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 72. 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 [000000000] Report Released: Sep 05, 2008@11:19 Specimen Collection Date: Sep 05, 2008@11:18 Test name Result units Ref. range Site Code mg/dL 60 to 123 [522] GLUCOSE 120 Eval: Eval: >/= 126 mg/dL Provisional Diagnosis of Diabetes Eval: Eval: Eval: **5/17/04 Reference Range Changed, OLD RANGE 70-110** _____ KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value 000-00-1111 Sep 12, 2008@11:48 PRESS '^' TO STOP LEDIPATIENT, ONE JR page 2 000-00-1111 Sep 12, 2008@11:48 LEDIPATIENT, ONE JR 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 73. 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 All locations А 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 [000000000] 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] 70-99 mg/dL NORMAL Eval: 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 000-00-1111 Sep 18, 2008@12:16 PRESS '^' TO STOP LEDIPATIENT, ONE JR page 2 LRPATIENT, ONE JR 000-00-1111 Sep 18, 2008@12:16 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]

Select Results menu Option: INTER Interim report 1 2 Interim report by provider 3 Interim report for an accession Interim report for chosen tests 4 5 Interim report for selected tests as ordered Interim reports by location (manual queue) 6 Interim reports for 1 location (manual queue) 7 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 [000000000] Report Released: Sep 05, 2008@11:19 Specimen Collection Date: Sep 05, 2008@11:18 Result units Ref. range Site Code Test name GLUCOSE 120 mg/dL 60 to 123 [522] 70-99 mg/dL NORMAL 100-125 mg/dL Impaired Fasting Glucose Eval: Eval: >/= 126 mg/dL Provisional Diagnosis of Diabetes Eval: Eval: Eval: **5/17/04 Reference Range Changed, OLD RANGE 70-110** KEY: "L"=Abnormal low, "H"=Abnormal high, "*"=Critical value 000-00-1111 Sep 18, 2008@12:10 PRESS '^' TO STOP LEDIPATIENT, ONE JR 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:

Figure 74. Interim reports for 1 location (manual queue) [LRRS BY LOC]

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

Select Results menu Option: INTERIM Interim report 1 2 Interim report by provider 3 Interim report for an accession Interim report for chosen tests 4 5 Interim report for selected tests as ordered Interim reports by location (manual queue) 6 Interim reports for 1 location (manual queue) 7 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 [000000000] Report Released: Sep 05, 2008@11:19 Specimen Collection Date: Sep 05, 2008@11:18 Result units Ref. range Site Code Test name mg/dL 60 to 123 GLUCOSE 120 [522] 70-99 mg/dL NORMAL 100-125 mg/dL Impaired Fasting Glucose Eval: Eval: >/= 126 mg/dL Provisional Diagnosis of Diabetes Eval: 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@12:25 PRESS '^' TO STOP LEDIPATIENT, ONE JR 000-00-1111 AGE: 88 LOC: 1 TEST (NORTH) Sep 18, 2008@ 12:25 ----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

Figure 75. Interim reports for 1 provider (manual queue) [LRRD BY MD]

Accession [UID]: MICRO 08 11 [000000000] 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 000-00-1111 AGE: 88 LOC: 1 TEST (NORTH) Sep 18, 2008@ 12:25 ----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 [000000000] 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 + + + 000-00-1111 ROUTING: 1T '^' TO STOP LEDIPATIENT, ONE JR LEDIPATIENT, ONE JR 000-00-1111 Sep 18, 2008@12:25 PRESS '^' TO STOP page 2 000-00-1111 Sep 18, 2008@12:25 LEDIPATIENT, ONE JR Performing Lab Sites:

[522]	Dallas Office of Informa 1234 Anyplace Avenue Vis		[CLIA#	987654321]		
LEDIPA	TIENT, ONE JR	000-00-1111	Sep	page 3 18, 2008@12:25		
Perfor	Performing Lab Sites:					
[522]	Dallas Office of Informa 1234 Anyplace Avenue Vis		[CLIA#	987654321]		
Select	Results menu Option:					

5.5.7 File 63 Remediation Results MailMan Message for 'CH'

Figure 76. 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 TEST: 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)

Enter measure action (in IN backet), Ignore (/	<pre>^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(191, "CH", 6939879.858091,478)</pre>
Enter message action (in in basket): ignore//	Enter message action (in IN basket): Ignore//

5.5.8 File 63 Remediation Results MailMan Message for 'Micro'

Figure 77. 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 _____ _____ D ^XYZDEF D ^LRMISR AMPICILLIN B (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 _____ CURRENT ANTIBIOTIC NAME PROPOSED (FIELD NUMBER) SET OF CODES SET OF CODES _____ _____ AMPICILLIN X SCREEN M:MAYBE;N:NEVER; A:ALWAYS DISPLAY;N:NEVER (2.00602)DISPLAY; R: RESTRICT DISPLAY; -----_____ TOTAL: 1 ANALYZE - MISSING INTERP and/or SCREEN _____ INTERP FIELD ANTIBIOTIC NAME SCREEN FIELD

(FIELD NUMBER)	NEEDED		NE	EDED
AMPICILLIN C (2.00522599)	2.00522	25991	2.	005225992
TOTAL: 1				
ANALYZE - BAD FIELD NUMBER	and DEFINITIC	N, LAB DATA I	NOT UPDATED	
ANTIBIOTIC NAME (FIELD NUMBER)	NEW FIELD #	NEW INTERP	NEW SCREEN	OCCURRENCES FOUND
CEFPODOXIME (2.0046)	TBD	TBD	TBD	0
TRIMETH/SULF2 (199)	TBD	TBD	TBD	1
TOTAL: 2				

*** END OF REPORT ***				
Enter message action (in IN basket): Ignore//				

5.5.9 Modify AP& MICRO Report for Pathologist's Signature

Performing Laboratory information should display after the e-signature but not before, so that the Pathologist's signature is more visible.

Figure 78. Move Pathologist Signature on AP e-Report

```
ONE, LABUSER,MD

CPT:88305(x2)

/es/ ONE, LABUSER,MD

PATHOLOGIST

Signed Jan 04, 2012@13:36

Performing Laboratory:

Surgical Pathology Report Performed By:

VA BOSTON HEALTHCARE SYSTEM - WEST ROXBURY DIVISION [CLIA# 22D0989792]

1400 VFW PARKWAY WEST ROXBURY, MA 02132-4927
```

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: 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	(eGFR) is Estimated Glomerular Filtration Rate test. A test for kidney function. Specifically, it estimates how much blood passes through the tiny filters in the kidneys, called glomeruli, each minute.
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: R—required O (null) —optional C—conditional on the trigger event
RP/#	Repetition indicates the number of times you can repeat a field:
(repetition)	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 is the ordinal position of a data field within a segment.
(sequence number)	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 Terms.
	1

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	VA Software Document Library.
VHA	Veterans Health Administration.
VIE	Vitria Interface Engine.
VISN	Veterans Integrated Service Network.
VistA	Veterans Information System and Technology Architecture.