RESOURCE AND PATIENT MANAGEMENT SYSTEM

Laboratory (LR)
Electronic Signature Enhancement

User’s Guide

Version 5.2, Patch 13
September 2002

Information Technology Support Center
Division of Information Resources
Albuquerque, New Mexico
PREFACE

This document describes how to utilize the RPMS Lab Electronic Signature modification, and describes the new functionality that the RPMS system gains with the RPMS Lab Electronic Signature modification.
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1.0 Release Notes

1.1 Overview

The RPMS Lab Electronic Signature modification, Version 5.2, Patch 13 provides the capability of facilitating and tracking review of laboratory results by physicians.

1.2 New Functionality

Currently, there is no process/methodology in place for alerting physicians when lab results are ready for their review in the IHS RPMS Lab Module. The primary objectives of this project are to provide this alert capability, an easy method of reviewing the lab results, and tracking and auditing of signed lab results.

The events that trigger a lab result to be reviewed and signed by the RPMS Lab Electronic Signature modification are as follows:

- Verified Results entered
- Verified Results edited
2.0 Defining Participating Physicians

2.1 Overview

Participating Physicians are those physicians at a service unit who elect to use the RPMS Lab Electronic Signature enhancement software. Each participating physician must be defined in the Participating Physician file by way of the menu option ‘Enter/Edit/Re-Activate Lab ESIG Physicians’. The alert message process and the trigger events will check to see if a physician is defined as a participating physician before creating the ‘to be notified and reviewed’ cross-reference.

2.2 Entering/Editing/Re-Activating Supervisors

Supervisors are physicians who may have ultimate responsibility for other physicians. A supervisor has the ability to perform any of the new functions for any of their subordinate physicians. This ability will help the supervisor ensure that no lab result will ‘fall through the cracks’. The supervisor will also have the capability of reviewing delinquent lab results for their subordinate physicians. If the physician is defined as a Supervisor in the *PHYSICIAN TYPE field, then the **PHYSICIAN’S SUPERVISOR field will default to themselves.

The supervisor can define the length of time before a lab result will show up on the Delinquent Result Report by defining a set number of days. The minimum value is 1 day and the maximum value is 14 days.

- Critical Results Review Days— this is the number of days from the lab entry verification date in which a lab result containing any critical value (Critical Low or Critical High) should have been reviewed and signed by the responsible physician. If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result.
and will appear on the Delinquent Lab Results Report. See Chapter for an example.

- Abnormal Results Review Days—this is the number of days from the lab entry verification date in which a lab result containing any abnormal value (Low or High) should have been reviewed and signed by the responsible physician. If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result and will appear on the Delinquent Lab Results Report. See Chapter for an example.

- Normal Results Review Days—this is the number of days from the lab entry verification date in which a lab result containing all normal values should have been reviewed and signed by the responsible physician. If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result and will appear on the Delinquent Lab Results Report. See Chapter for an example.

In addition supervisors may also wish to set up surrogates for themselves. See Section 2.8 for more information about setting up surrogates.

2.3 Inactivating Supervisors

The following shows how to inactivate participating supervisory physicians using the menu option – Inactivate Lab ESIG Physicians **NEW**: 
Select Option: Inactivate Lab ESIG Physicians **NEW**
Inactivate Lab ESIG Physicians **NEW**

Select PARTICIPATING PHYSICIAN: JAMES, SHERRYL

This physician is a designated supervisor. All subordinate participating physicians must have a valid supervisor.
DO YOU WISH TO REASSIGN TO ANOTHER SUPERVISOR NOW? YES
Select PARTICIPATING PHYSICIAN: MITRETEK, PROGRAMMER

To inactive physician JAMES, SHERRYL enter "I"
INACTIVE FLAG: ACTIVE// I INACTIVE
Select a SURROGATE PHYSICIAN: MITRETEK, PROGRAMMER
Are you adding 'MITRETEK, PROGRAMMER' as
a new SURROGATE PHYSICIANS (the 1ST for this BLRA LAB PHYSICIANS)? No// Y (Yes)
START DATE: T (MAY 16, 2002) <This is a required field and you will not be
allowed to bypass>
END DATE: Aug 14, 2002 <This field will automatically default to 90days after
start date>

2.4 Re-Activating Supervisors

Below shows how to re-activate a supervisory participating physician:

Select Option: Enter/Edit/Re-activate Lab ESIG Physicians **NEW**
Enter/Edit/Re-activate Lab ESIG Physicians **NEW**

Select PARTICIPATING PHYSICIAN: JAMES, SHERRYL
...OK? Yes//Y (Yes)
PHYSICIAN TYPE: Supervisor//
PHYSICIAN’S SUPERVISOR: MITRETEK, PROGRAMMER// JAMES, SHERRYL <Reset to self as
supervisor>
NORMAL RESULTS REVIEW DAYS: 1// <May want to change these settings if
physician wants>
ABNORMAL RESULTS REVIEW DAYS: 1//
CRITICAL RESULTS REVIEW DAYS: 1//
INACTIVE FLAG: ACTIVE <Using this option and entering through the fields will
automatically activate the selected inactive physician>
Select SURROGATE PHYSICIANS: MITRETEK, PROGRAMMER//
SURROGATE PHYSICIANS: MITRETEK, PROGRAMMER//
START DATE: MAY 16, 2002//
END DATE: AUG 14, 2002// T (MAY 16, 2002) <May want to end date the
surrogate>
Select SURROGATE PHYSICIANS:
2.5 Entering/Editing Non-Supervisors

Non-supervisor physicians are those physicians who will not have responsibility for other physicians. Each non-supervisor physician must have a supervisor defined in the PHYSICIAN’S SUPERVISOR field.

Select Option: ENTER/Edit/Re-Activate Participating Lab Physicians **NEW**
Select PARTICIPATING PHYSICIAN: JONES,ED EJ 119 PHYSICIAN
Are you adding ‘JONES,ED’ as a new BLRA LAB PHYSICIANS (the 21ST)? No// Y (Yes)

PHYSICIAN TYPE: <Return> (for non-supervisory physicians, this may be blank)
PHYSICIAN’S SUPERVISOR: CLARK,JOE R <Return>

**WARNING:** You will NOT be able to exit out without entering a PHYSICIAN’S SUPERVISOR for a non-supervisor participating physician. Be sure that a supervisor has been entered first!

Select PARTICIPATING PHYSICIAN: CHAPLIN,JANE JC
Are you adding 'CHARLIE,JENNA' as a new BLRA LAB PHYSICIANS (the 21ST)? No// Y (Yes)
PHYSICIAN TYPE:
PHYSICIAN’S SUPERVISOR: <Return> ??
Select this physician's supervisor
Only select designated supervisor physicians
PHYSICIAN’S SUPERVISOR: ^
EXIT NOT ALLOWED ??
PHYSICIAN’S SUPERVISOR: ^//
2.6 Inactivating Non-Supervisors

When a non-supervisor is inactivated from the participating physician file, a surrogate is required to be designated for a default period of 90 days after start of inactivation. This is to prevent any outstanding lab accessions from being missed.

In addition, this option can be used when a physician leaves the facility. All their outstanding lab results reassigned to another participating physician through the ‘Inactivate a Participating Physician’ option.

<table>
<thead>
<tr>
<th>Select Option: Inactivate Lab ESIG Physicians <strong>NEW</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select PARTICIPATING PHYSICIAN: AOKI, ELLEN</td>
</tr>
<tr>
<td>...OK? Yes// (Yes)</td>
</tr>
<tr>
<td>To inactive physician AOKI, ELLEN enter &quot;I&quot;</td>
</tr>
<tr>
<td>INACTIVE FLAG: ACTIVE// I INACTIVE</td>
</tr>
<tr>
<td>Select a SURROGATE PHYSICIAN: MITRETEK, PROGRAMMER</td>
</tr>
<tr>
<td>...OK? Yes// (Yes)</td>
</tr>
<tr>
<td>END DATE: Aug 14, 2002 &lt;This will automatically default to 90 days after START DATE&gt;</td>
</tr>
</tbody>
</table>

2.7 Re-Activating Participating Physicians

The following steps show how to re-activate an inactive physician:

<table>
<thead>
<tr>
<th>Select Option: ENTER/Edit/Re-Activate Participating Lab Physicians <strong>NEW</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select PARTICIPATING PHYSICIAN: AOKI, ELLEN</td>
</tr>
<tr>
<td>...OK? Yes// (Yes)</td>
</tr>
<tr>
<td>PHYSICIAN TYPE:</td>
</tr>
<tr>
<td>PHYSICIAN'S SUPERVISOR: MITRETEK, PROGRAMMER//</td>
</tr>
<tr>
<td>INACTIVE FLAG: ACTIVE &lt;Using this option will automatically activate the physician&gt;</td>
</tr>
<tr>
<td>Select SURROGATE PHYSICIANS: MITRETEK, PROGRAMMER//</td>
</tr>
<tr>
<td>SURROGATE PHYSICIANS: MITRETEK, PROGRAMMER//</td>
</tr>
<tr>
<td>START DATE: MAY 16, 2002//</td>
</tr>
<tr>
<td>END DATE: AUG 14, 2002 &lt;May want to end date the surrogate&gt;</td>
</tr>
<tr>
<td>Select SURROGATE PHYSICIANS:</td>
</tr>
</tbody>
</table>

2.8 Surrogates

Defining surrogates allows a certain amount of flexibility in the review process. If one physician is temporarily unable to review lab results, an alternate physician may be given the ability to sign off on labs for the unavailable physician. The supervisor
can also do this automatically for their subordinate physicians (i.e. The subordinate physician will have the supervisor defined in their PHYSICIAN’S SUPERVISOR field.).

A physician may allow another physician to review and sign their lab results by entering a specified START DATE and END DATE. Entering a specified date range means that this assigned surrogate will be able to see and sign for the unavailable physician’s lab results only during that date range. After the end of the date range, they will no longer see the other physician’s lab results on their list.

Select SURROGATE PHYSICIANS: SMITH,SAM SST
   Are you adding 'SMITH,SAM' as a new SURROGATE PHYSICIANS (the 2ND for this BLRA LAB PHYSICIANS)? No// Y (Yes)
   START DATE: T (JUN 28, 2001) <Each of these date fields are required for designating a surrogate>
   END DATE: T+7 (JUL 05, 2001)
Select SURROGATE PHYSICIANS:

The START and END dates define the date range of when the physician is the surrogate. In the example above, Sam Smith will be the surrogate reviewer during the date interval of June 28, 2001 – July 5, 2001. Sam Smith will not be able to review labs as a surrogate after July 5, 2001.

The date range has NO correlation to the date of when a lab is ordered or when the specimen is collected. The date range is ONLY the time frame in which the surrogate is able to review the other physician’s lab result queue.
3.0 Triggers / Event Points

3.1 Overview

Triggers / Event Points have been inserted into RPMS Lab Module code to create a cross-reference when a lab result is verified. The events that trigger a Lab Electronic Signature event are as follows:

3.2 Trigger / Event Points Utilized by the BLRA Modification

The following charts show all the RPMS options that will trigger a cross-reference in the RPMS Lab Module, if the ordering physician is a participating physician.

3.2.1 General Laboratory

<table>
<thead>
<tr>
<th>RPMS Menu Option Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter/verify data (auto instrument)</td>
</tr>
<tr>
<td>Enter/verify data (Load list)</td>
</tr>
<tr>
<td>Enter/verify/modify data (manual)</td>
</tr>
<tr>
<td>Enter/verify data (Work list)</td>
</tr>
<tr>
<td>Group verify (EA, EL, EW)</td>
</tr>
<tr>
<td>Group data review (verified &amp; EM)</td>
</tr>
<tr>
<td>Fast Bypass Data Entry/Verify</td>
</tr>
<tr>
<td>Bypass Data Entry/Verify</td>
</tr>
</tbody>
</table>

3.2.2 Microbiology

<table>
<thead>
<tr>
<th>RPMS Menu Option Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results entry (batch)</td>
</tr>
<tr>
<td>Results entry</td>
</tr>
<tr>
<td>Verification by supervisor</td>
</tr>
</tbody>
</table>

3.2.3 Modifying Accessions

<table>
<thead>
<tr>
<th>RPMS Menu Option Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add tests to a given accession</td>
</tr>
<tr>
<td>Delete test from an accession</td>
</tr>
</tbody>
</table>
3.3 Example Triggered Event

A new physician was set up in the system as a participating physician (see Chapter 2.0 of this manual). This new physician is Adam ADAM. Signing onto the Review option shows his review list with no lab results to review.

Once new lab results are entered into the Lab Package that were ordered by Adam Adam, the results will appear in the “Review/Sign Lab Results” box.

Shown below is the verified lab result in the ‘Review/Sign Lab Results’ list for Adam ADAM:

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September 2002
4.0 Viewing Lab Results

4.1 Overview

Information from data entry through the specific Lab options will trigger a record for a participating physician. If a physician is not participating, a record will not be triggered. A lab result will remain on a participating physician’s review list until it is signed.

4.2 Lab Result Alerts

An alert message will display when signing the primary menu option as a participating physician.

ACCESS CODE:
VERIFY CODE:

Good morning SMITH, SAM
You last signed on Jun 28, 2001 at 16:51
Site set to PARKER HOSP

You have 6 Lab Results to Review
with 5 ABNORMALs

APC Ambulatory Patient Care ...
AQAQ CREDENTIALS Tracking System ...
CHS Contract Health System ...
LAB Laboratory DHCP Menu ...
NUT Nutrition and Dietetics Menu ...
PAT Patient registration ...
PCC Patient Care Component ...
PDU Package Documentation Utilities ...
QAUR QA/UR System ...
T&A Time and Attendance Menu ...

Select RPMS Applications Option:

The message will be different depending on the types of lab results there are to review for the participating physician. Critical and abnormal results are separated out in the alert message.

You have 13 Lab Results to Review
with 1 CRITICAL and with 6 ABNORMALs

If there are only normal results to review, the alert message will appear as below:
You have 5 Lab Results to Review

The participating physician will have the ‘Review/Sign Lab Results **NEW**’ option and will be required to review and sign any lab results that were included in the alert message at the time of sign on.

4.3 Display of Lab Results

4.3.1 Accessing the Review List

When a physician selects the ‘Review/Sign Lab Results **NEW**’ option, it will check to see if that physician is a participating physician in the Electronic Signature Lab enhancement participating physicians file.

Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu

DEL Delinquent Lab Results **NEW**
EDT Enter/Edit Participating Lab Physicians **NEW**
REV Review/Sign Lab Results **NEW**
SGN Signed Lab Results Report **NEW**

Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW**

YOU ARE NOT SET UP AS A PARTICIPATING PHYSICIAN YET. PLEASE TRY LATER.

4.3.2 Electronic Signature

When a participating physician selects the ‘Review/Sign Lab Results **NEW**’ option, they will be prompted to enter their electronic signature code. This verification of the physician’s electronic signature is valid until they exit from the option.

If a physician currently does not have an electronic signature defined, they will get the message ‘No Electronic Signature code to check’. An electronic signature may be enter by selecting the ‘User’s Toolbox’ option and the ‘Electronic Signature code Edit’ option.
You will have 60 seconds before timeout to enter your electronic signature for verification!!

No Electronic Signature code to check.

Select Lab E-SIG Menu Option: TBOX User's Toolbox

Display User Characteristics
Edit User Characteristics
Electronic Signature code Edit
Menu Templates ...
Spooler Menu ...
Switch UCI
TaskMan User
User Help

Select User's Toolbox Option: ELECTRonic Signature code Edit
This option is designed to permit you to enter or change your Initials, Signature Block Information, Office Phone number, and Voice and Digital Pagers numbers.
In addition, you are permitted to enter a new Electronic Signature Code or to change an existing code.

INITIAL: BJM//
SIGNATURE BLOCK PRINTED NAME: BETTY J MEDUSA//
SIGNATURE BLOCK TITLE:
OFFICE PHONE:
VOICE PAGER:
DIGITAL PAGER:

Your typing will not show.
ENTER NEW SIGNATURE CODE: {enter a unique code for your electronic signature}
RE-ENTER SIGNATURE CODE FOR VERIFICATION: {you must enter it again to confirm}
DONE

Display User Characteristics
Edit User Characteristics
Electronic Signature code Edit
Menu Templates ...
Spooler Menu ...
Switch UCI
TaskMan User
User Help

Select User's Toolbox Option:

If a physician’s electronic signature is over 90 days old a message will alert the physician to change their electronic signature.
Select Laboratory DHCP Menu Option: SIG Lab E-SIG Menu

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEL</td>
<td>Delinquent Lab Results <strong>NEW</strong></td>
</tr>
<tr>
<td>EDT</td>
<td>Enter/Edit Participating Lab Physicians <strong>NEW</strong></td>
</tr>
<tr>
<td>REV</td>
<td>Review/Sign Lab Results <strong>NEW</strong></td>
</tr>
<tr>
<td>SGN</td>
<td>Signed Lab Results Report <strong>NEW</strong></td>
</tr>
</tbody>
</table>

Select Lab E-SIG Menu Option: REV Review/Sign Lab Results **NEW**

You will have 60 seconds before timeout to enter your electronic signature for verification!!

Enter your Current Signature Code: SIGNATURE VERIFIED

Your Electronic Signature Code has expired, you need to create a new one.

Your typing will not show.

ENTER NEW SIGNATURE CODE:

RE-ENTER SIGNATURE CODE FOR VERIFICATION:

Physicians will be given three attempts to sign on to the menu option. If a physician cannot recall their electronic signature code by the three attempts, they must ask the system manager to clear out the electronic signature code and then a new one must be entered through the option ‘Electronic Signature Code Edit’ in the User’s Toolbox.

The electronic signature will only need to be entered once, upon entry to the option ‘Review/Sign Lab Results’. However, if a physician signs off or exits to another menu the electronic signature must be re-entered upon the next entry into ‘Review/Sign Lab Results’.
Select Laboratory DHCP Menu Option: SIG Lab E-SIG Menu

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEL</td>
<td>Delinquent Lab Results <strong>NEW</strong></td>
</tr>
<tr>
<td>EDT</td>
<td>Enter/Edit Participating Lab Physicians <strong>NEW</strong></td>
</tr>
<tr>
<td>REV</td>
<td>Review/Sign Lab Results <strong>NEW</strong></td>
</tr>
<tr>
<td>SGN</td>
<td>Signed Lab Results Report <strong>NEW</strong></td>
</tr>
</tbody>
</table>

Select Lab E-SIG Menu Option: REV Review/Sign Lab Results **NEW**

You will have 60 seconds before timeout to enter your electronic signature for verification!!

Enter your Current Signature Code: SIGNATURE VERIFIED

Once the electronic signature is entered and verified, the Review List will display.

### 4.3.3 Review List

A participating physician will see the lab results on ‘Review/Sign Lab Results’ list which they are responsible for as well as any lab results in which they have been assigned to review and sign as a temporary surrogate. The order of the list is as follows, the oldest lab results containing any critical value, i.e. Critical Low or Critical High flagged results, then the oldest lab results containing any abnormal value; i.e. Low or High flagged results, then the oldest lab results containing any values without reference ranges (N/A), and then results containing only normal values (referred to as normal results). Pending results come after the complete results within their category of CRIT, ABN, N/A, and NOR.

---ACC#-----------PATIENT----------COLLECT DATE--PROVIDER-----STATUS---COMPLETE---
1 HE 0503 3 HAETLAI, MARVIN 5/3/02@14:57: MITRETEK, PRO CRIT YES
2 HE 0503 5 KAALAR, BIANCA 5/3/02@14:59: MITRETEK, PRO CRIT YES
3 HE 0516 3 KAALAR, JERICO M 5/16/02@14:18 MITRETEK, PRO CRIT YES
4 HE 0516 4 WEBNOM, CLIFTON 5/16/02@14:21 MITRETEK, PRO CRIT PEND
5 HE 0503 2 JABBENAME, SUNSH 5/3/02@14:54: MITRETEK, PRO ABN YES
6 CH 0507 1 KAALAR, BIANCA 5/7/02@11:14: MITRETEK, PRO ABN YES
7 CH 0507 2 GATOR, ALLI 5/7/02@13:58: MITRETEK, PRO N/A YES
8 HE 0507 1 GUMAZ, ALETHA JO 5/7/02@14:01: MITRETEK, PRO NOR YES
9 UA 0510 1 HALLAR, BROOKLYN 5/10/02@17:07 MITRETEK, PRO NOR YES

----------Enter ?? for more actions-------------------------------
R Review Lab Result P Patient Sort Display
C Subordinate Provider Results Q Quit
Select Option: Quit/
Betty MEDUSA designates ED JONES as her surrogate below. When Ed Jones signs on to review his lab results, he will also be able to review and sign Betty Medusa’s lab results as well.

Select User's Toolbox Option:  Enter/Edit/Re-Activate Participating Lab Physicians **NEW**
Select SURROGATE PHYSICIANS: JONES, ED

START DATE: JUL 10, 2001
END DATE: JUL 30, 2001
Select SURROGATE PHYSICIANS:

Shown below is what Ed Jones sees in his ‘Review/Sign Lab Results’ list after Betty has designated Ed Jones as her surrogate.

![Figure 4-2: Participating Physician who is a surrogate](image-url)
4.3.4 Patient Sort Display

The Patient Sort Display will reorder the Review List to group patients together alphabetically before sorting by critical, abnormal, no references (N/A), and normal by oldest date.

![Image of Patient Sort Display]

Figure 4-3: Patient Sort Display

4.3.5 Check Subordinate Providers

Participating supervisory physicians who have assigned subordinate participating physicians will be able to review and sign all the subordinate physicians’ results through this option ‘Check Subordinate Providers’ from their ‘Review/Sign Lab Results’ list.
4.3.6 Review

To see the detail of a listed lab result, the ‘Review’ option may be selected at the prompt. A reviewing physician may select one lab result to review and process or may select multiple lab results accessions to review and process at one time.

The first selected lab result is a Hematology panel whose total results is more than 1 page. The default at the following prompt will be ‘Next Page’ for those labs in which the results do not fit on one page.
Select the ‘Next Page’ option to continue to see the rest of the results.
Microbiology results could have several pages of results. In the top right hand corner of the screen, will display the total number of pages of results as well as what the current page of results that is displayed.

### 4.3.6.1 Previous Accession

When multiple accessions have been selected by the participating physician to be reviewed and processed, the ‘Previous’ action can be used to return to a previous accession.

### 4.3.6.2 Next Accession

When multiple accessions have been selected by the participating physician to be reviewed and processed, the ‘Next’ action can be used to proceed onto the next accession.
4.3.6.3 Sign Action

When a physician selects the ‘Sign’ action, it indicates that a lab result has been reviewed and processed. Once signed, it will fall off of the Review List and will appear on the physician’s Signed Results Report. This accession will no longer appear on the physician’s review list unless a Lab Technician or Supervisor modifies it.

If a result has been defined as a “pending” accession, an accession that contains a result with no entered value, a physician will not be able to ‘sign’ the accession. It cannot be signed until all result values have been entered.

If a physician has mistakenly signed off on an accession, they are given an immediate one-time chance to change their mind and ‘unsign’ the accession at the time of the ‘sign’ action. Remember, once signed, the accession will no longer be on the physician’s Result List.
4.3.6.4 **Forward Result**

The Forward Result action gives a participating physician the ability to send the results of a particular accession to another physician via a mailman message. ‘Additional Comments’ may be attached to the message. A question of whether comments will be added to the message is asked of the physician and answering ‘Yes’ to this question allows them to add any special comments to the email message containing the lab result for a particular patient.

![Figure 4-8: Additional Comments Prompt](image)
Figure 4-9: Adding Additional Comments

A physician using this option will be asked to select the person or persons they would like to send the message to. They may select any user who has been set up in their RPMS system, this can include providers, supervisor, managers, and does not necessarily have to be a Lab Electronic Signature enhancement software package participating provider. The mailman message will be sent via MailMan. If the facility has set up the means to send MailMan messages out across the network, physicians may also be able to send the email outside of their current facility by entering the name and address of the individual (e.g. SMITH@tucson.ihs.gov).
When Adam Adam signs on, he will be alerted that he has a mail message to review.
Good afternoon ADAM  
You last signed on today at 13:21  
You have 1 new message [1 in the 'IN' basket]  
Site set to PARKER HOSP

AFC  Ambulatory Patient Care ...  
AQAQ  CREDENTIALS Tracking System ...  
CHS  Contract Health System ...  
DEN  Dental Data System Menu ...  
EXP  EXPDATE  
FPIS  FACILITY PRIVATE INSURANCE SYSTEM ...  
IVP  IV Menu ...  
LAB  Laboratory DHCP Menu ...  
MCH  CHILDHOOD Immunizations ...  
** Out of order: NEW IMMUNIZATION PACKAGE HAS BEEN LOADED.  
NFS  Nursing Acuity System ...  
NTWK  Network Management ...  
NUT  Nutrition and Dietetics Menu ...  
PAT  Patient registration ...  
PCC  Patient Care Component ...  
PCU  Package Documentation Utilities ...

Figure 4-11: Mail Message Alert
Figure 4-12: Accessing MailMan

VA MailMan 7.1 service for ADAM.ADAMPARKER-40.PHX.IHS.GOV
You last used MailMan: 03 Jul 01 15:45
You have 1 new message.

AML Assume another identity as a surrogate
HML MailMan Help ...
NML New messages and responses
CML Other MailMan Functions ...
RML Read a message
SML Send a Message

Select MailMan Menu Option: [ ]
Figure 4-13: Sample Mail Message with the Additional Comments

Notice on the next screen that the accession that was forwarded is still on the Review List. The ‘Forward Accession’ action ONLY emails the results; the responsible physician must still sign it to remove it from their Review List.
If a physician wants to change the responsibility of a lab accession, they must ‘Reassign’ it.

4.3.6.5 Reassign Results

Reassigning a lab accession removes the lab accession from the responsible physician and gives it to another participating physician. A physician may only reassign a lab accession to a participating physician. The former responsible physician may still be the ordering physician but the lab may be turned over to be reviewed and sign to someone else.
Once reassigned, the lab accession will no longer be on the physician’s Result list.
Figure 4-16: Reassigned Accession Removed from Result List

WARNING: RESTRICTED GOVERNMENT DATA, UNAUTHORIZED
ENTRY INTO THIS SYSTEM OR USE OF THIS DATA IS A FEDERAL CRIME

<table>
<thead>
<tr>
<th>ACC#</th>
<th>PATIENT</th>
<th>DATE</th>
<th>PROVIDER</th>
<th>STATUS</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 0601 6</td>
<td>ACORD, MARILIS</td>
<td>8/2/01816:47</td>
<td>MEDUSA, BETTY CRIT</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>CH 0601 4</td>
<td>OSTACH, RACHEL</td>
<td>8/2/01816:44</td>
<td>MEDUSA, BETTY ABN</td>
<td>PEND</td>
<td></td>
</tr>
<tr>
<td>CH 0601 5</td>
<td>BROWN, DANIELLE</td>
<td>8/2/01816:41</td>
<td>MEDUSA, BETTY ABN</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>CH 0601 1</td>
<td>SIMON, PATRICIA</td>
<td>8/3/01816:41</td>
<td>MEDUSA, BETTY ABN</td>
<td>PEND</td>
<td></td>
</tr>
<tr>
<td>CH 0601 3</td>
<td>SIMON, KATLIN</td>
<td>8/3/01816:47</td>
<td>MEDUSA, BETTY NOR</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>CH 0603 3</td>
<td>PALMER, JOHN</td>
<td>8/3/01819:42</td>
<td>MEDUSA, BETTY NOR</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

Enter ?? for more actions
R Review Lab Result  P Patient Sort Display
C Other Provider Results Q Quit
C Subordinate Provider Results
4.3.6.6 Full Patient Summary

Figure 4-17: The Full Patient Summary can be accessed during the review of a lab result.
5.0 Reports

There are currently only two reports in the RPMS Lab Electronic Signature Enhancement: the Signed Lab Results Report and the Delinquent Lab Results Report.

5.1 Signed Lab Results Report

The Signed Lab Results Report displays a historical record of each lab accession that a participating physician was responsible for and by whom and when that lab result was signed. This can provide a guide for a physician on whom signed their lab results if surrogates have been defined. This report will be sorted by LAB DATE (collection date) and displayed on the screen from the most recent down to the oldest.

Since the amount of information does not quite fit a screen, one column does not immediately show. By entering a ‘>’ at the ‘Select Action’ prompt, the last column can be seen.
### 5.2 Delinquent Lab Results Report

The Delinquent Lab Results Report is for supervisors only and contains a list of all outstanding unsigned lab results for those physicians who are subordinate to the supervisor. This list is sorted by Critical Results first, Abnormal Results second, and Normal Results third. Critical Results are highlighted and will blink. Abnormal Results are only highlighted. A lab result is considered delinquent if the number of days to review exceeds the number defined in the supervisors setup. The supervisor has the ability to define this number for each of the type of lab results. See Section 2.2 for more information on these three fields.

<table>
<thead>
<tr>
<th>ENT</th>
<th>COLLECTION DATE</th>
<th>RESPONSIBLE</th>
<th>SIGNING</th>
<th>DATE/TIME SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>,CATHERINE</td>
<td>11/12/0113:27:29</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>11/12/0113:32:04</td>
</tr>
<tr>
<td>,CATHERINE</td>
<td>11/12/0112:36:23</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>11/12/0112:55:24</td>
</tr>
<tr>
<td>,CLENDA</td>
<td>12/30/0110:59:03</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>12/30/0110:19:51</td>
</tr>
<tr>
<td>,ALICK L</td>
<td>10/29/0111:30:17</td>
<td>ADAM,ADAM</td>
<td>POND,HENRY</td>
<td>10/29/0111:31:09</td>
</tr>
<tr>
<td>,ANDERSON</td>
<td>10/29/0111:20:23</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>10/29/0111:35:33</td>
</tr>
<tr>
<td>LYFT, ELDER</td>
<td>10/26/0118:00:40</td>
<td>ADAM,ADAM</td>
<td>POND,HENRY</td>
<td>10/29/0114:48:45</td>
</tr>
<tr>
<td>,CLENDA</td>
<td>10/26/0116:56:48</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>10/12/0113:34:31</td>
</tr>
<tr>
<td>TKE, WEL</td>
<td>10/26/0116:53:17</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>10/29/0113:56:21</td>
</tr>
<tr>
<td>,CATHERINE</td>
<td>10/26/0116:51:20</td>
<td>ADAM,ADAM</td>
<td>ADAM,ADAM</td>
<td>10/12/0113:39:15</td>
</tr>
<tr>
<td>H, ANITA ANN</td>
<td>09/0119:25:10</td>
<td>ADAM,ADAM</td>
<td>JONES,HOWARD</td>
<td>10/24/0114:11:45</td>
</tr>
</tbody>
</table>

<<< Enter ?? for more actions

Select Action: Quit//
<table>
<thead>
<tr>
<th>#</th>
<th>ACC#</th>
<th>PATIENT</th>
<th>LAB DATE</th>
<th>PHYSICIAN</th>
<th>STATUS</th>
<th>OVERDUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CH 0003 2</td>
<td>SIMON, PATRICIA</td>
<td>8/3/01</td>
<td>MEDUSA, BETTY</td>
<td>DRILL</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>CH 0002 2</td>
<td>SIMON, BERNAUD</td>
<td>8/2/01</td>
<td>ADAM, ADAM</td>
<td>ABN</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>CH 0003 ?</td>
<td>BROWN, DANIELLE</td>
<td>8/3/01</td>
<td>JONES, ED</td>
<td>ABN</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>CH 0003 5</td>
<td>MERTZ, FRED</td>
<td>8/3/01</td>
<td>JONES, ED</td>
<td>N/R</td>
<td>2</td>
</tr>
</tbody>
</table>
6.0 Audit Tracking

Anyone who has been assigned the BLRAZLAB security key has the sensitive job of monitoring users viewing patients’ lab results. There are two options that the BLRAZLAB security gives access to; the audit report and the archive and purge option. The auditing of the Lab ESIG software must be turned “ON” at your site for the Audit report to be used.

**Warning:** If your site does NOT have auditing of the Lab ESIG software turned on, please see your supervisor or IRM. To turn on audit and archiving, see the section 6.3 of this manual and the post-install section of the Installation Manual/Release Notes for the Lab Electronic Signature Enhancement V. 5.2, Patch 13.

6.1 AUDIT EVENTS

The current five RPMS Menu options that will log an audit event are:

- Interim Report [LRRP2]
- Interim Report by Provider [LRRD]
- Interim Report by Location [LRRS]
- Interim Report for 1 Provider [BLR LRRD BY MD]
- Interim Report for 1 Location [LRRS BY LOC]

Another function that will log an audit event is the new Lab Review/Sign Lab Results menu option. If a participating physician reviews the detail of a lab accession, the review event will be logged to the Lab Audit File.

6.2 LAB AUDIT REPORT

The Print Lab Audit Report displays the information about users reviewing lab results. There are several different ways in which this data can be presented on the report. The specific information that is displayed are the date and time that the user reviewed the lab accession, the user who reviewed the lab accession, the menu option the user used to review the lab accession, the patient, and the lab accession.

**Note:** To run this report you must have the BLRAZLAB security key. If you need access to this option, please see your site IRM. The site may choose to allocate the security key to a single individual who will run the report for all other personnel.
6.2.1 Date Range

Selecting to print the Lab Audit Report by Date Range sorts the output by the Date and Time that a user reviewed a particular accession for the specified date range.

Date to START with: T-10 (MAY 06, 2002)  <START DATE must be before the END DATE>
Date to END with: T (MAY 16, 2002)
DEVICE: Right Margin: 80/ <select a printer to print report to or press return to print to your screen>
6.2.2 Single Date

Selecting to print the Lab Audit Report by Single Date sorts the output by the Date and Time that a user reviewed a particular accession for the specified date.
6.2.3 User

Selecting to print the Lab Audit Report by User allows the auditor to select a specific user or users to print the report by. The auditor will be prompted for a list of users to select from. This list is based upon all users who have an entry in the Lab Audit File.

Select Lab Menu Testing Option: REP Print Lab Audit Report

Report Options

1) By Date Range
2) By Single Date
3) By User
4) By Menu Option
5) QUIT

Select Report Option: (1-5): 3

Select User(s):
1 MITRETEK, PROGRAMMER
2 MEDUSA, BETTY
3 JONES, ED

Enter a list or range of numbers (1-3): 1

DEVICE: Right Margin:80// <select a printer to print report to or press return to print to your screen>
6.2.4 Menu Option

Selecting to print the Lab Audit Report by Menu Option allows the auditor to select a specific menu option or options to print the report by. The auditor will be prompted for a list of menu options to select from. This list is based upon all menu options that have an entry in the Lab Audit File.

Select Lab Menu Testing Option: BLRA LAB AUDIT REPORT
Print Lab Audit Report
Report Options
1) By Date Range
2) By Single Date
3) By User
4) By Menu Option
5) QUIT
Select Report Option: (1-5): 4
Select Menu Option(s):

Select Menu Option(s):
1 Interim reports by location (manual queue)
2 Interim reports for 1 location (manual queue)
3 Interim report
4 Interim report by provider
5 IHS Interim report for 1 provider (manual queue)
6 Review/Sign Lab Results **NEW**
Enter a list or range of numbers (1-6): 1
DEVICE: Right Margin: 80// <select a printer to print report to or press return to print to your screen>
6.3 Archive Audit Data

When running the Archive audit data [BLRA LAB AUDIT ARCHIVE] option, data will be automatically purged when the archive file has successfully been created. The BLRA LAB AUDIT ARCHIVE option is recommended for scheduling through TaskMan.

If the site would like the audit and archive functionality to track user access of lab data, the Lab ESIG audit and archive functions must be turned on at the site. The following steps must be used to turn on and utilize the audit and archive functionality of the Lab ESIG software:

1. Set Lab Parameters using the option “Enter/Edit Lab Parameters”
2. Select the LAB ESIG parameters to edit
3. Turn-on auditing
4. Select number of days to keep audit data in the system
5. Enter the location (directory pathname) to store archives of the audit data
6. After entering all parameters, schedule the BLRA LAB AUDIT ARCHIVE option in TaskMan

**Note:** It is recommended that the scheduling of the archive of audit data have a frequency of at least once a week, if not more frequently. Depending on your site and user activity in the Lab package it may be necessary to run this option at least once a day.

7. Once the auditing and archive functions are set in motion, the BLRA LAB AUDIT RPT option can be used by designated personnel with the BLRAZLAB security key to run audit reports and view the user activity and access in the Lab package.
The option BLRA PARAMETERS ENTER/EDIT must be used to setup the archive parameters before the option BLRA LAB AUDIT ARCHIVE can be scheduled to run in TaskMan.

<table>
<thead>
<tr>
<th>Select OPTION NAME: <strong>BLRA PARAMETERS ENTER/EDIT</strong></th>
<th>Lab Parameters Enter/Edit</th>
</tr>
</thead>
</table>

Select BLRA LAB PARAMETERS LAB FILE: ?

Answer with BLRA LAB PARAMETERS LAB FILE:

LAB ESIG AUDIT

You may enter a new BLRA LAB PARAMETERS, if you wish Answer must be 1-20 characters in length.

Select BLRA LAB PARAMETERS LAB FILE: **LAB ESIG AUDIT**

THE CURRENT LAB ESIG PARAMETERS ARE:

LAB FILE: LAB ESIG AUDIT AUDIT ON?: OFF
NUMBER OF DAYS TO KEEP: 1 FILE DIRECTORY:
ARCHIVE LAST RUN:

Would you like to edit these parameters? YES// Y <Return>
AUDIT ON?: OFF// ON

Please enter the number of days to keep the Lab ESIT Audit data. Select from 1 to 7 days (default is 7).
NUMBER OF DAYS TO KEEP: 1// 3

Enter a directory path to which the archiving will store the Audit data files * Warning! The directory must have write and delete access! *
FILE DIRECTORY: ?

Enter NT directory pathnames in the following format: C:\
FILE DIRECTORY: D:\RLOAD

*** THE LAB ESIG AUDITING AND ARCHIVING IS TURNED ON ***
*** PLEASE SCHEDULE THE 'BLRA LAB ARCHIVE' OPTION IN TASKMAN ***

The archived data will be a flat text file and will be in the following format:

<table>
<thead>
<tr>
<th>ACCESSION#</th>
<th>DATE/TIME STAMP</th>
<th>MENU OPTION</th>
<th>PATIENT</th>
<th>USER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI 99 1</td>
<td>6/8/2001 12:25</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>CH 0413 22</td>
<td>6/8/2001 15:12:25</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>HE 0413 17</td>
<td>6/8/2001 15:12:57</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>MI 98 58</td>
<td>6/8/2001 15:13:01</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>HE 0311 6</td>
<td>6/8/2001 15:13:19</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>MI 98 55</td>
<td>6/8/2001 15:13:20</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
<tr>
<td>CH 0416 12</td>
<td>6/8/2001 15:12:23</td>
<td>IR BY LOC</td>
<td>SMITH, ANITA ANN</td>
<td>RPMS, III</td>
</tr>
</tbody>
</table>

This format can easily be imported into excel, delimited by the “^” for reading and analysis.
7.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the ITSC Help Desk by:

**Phone:** (505) 248-4371 or (888) 830-7280

**Fax:** (505) 248-4199


**Email:** RPMSHelp@mail.ihs.gov