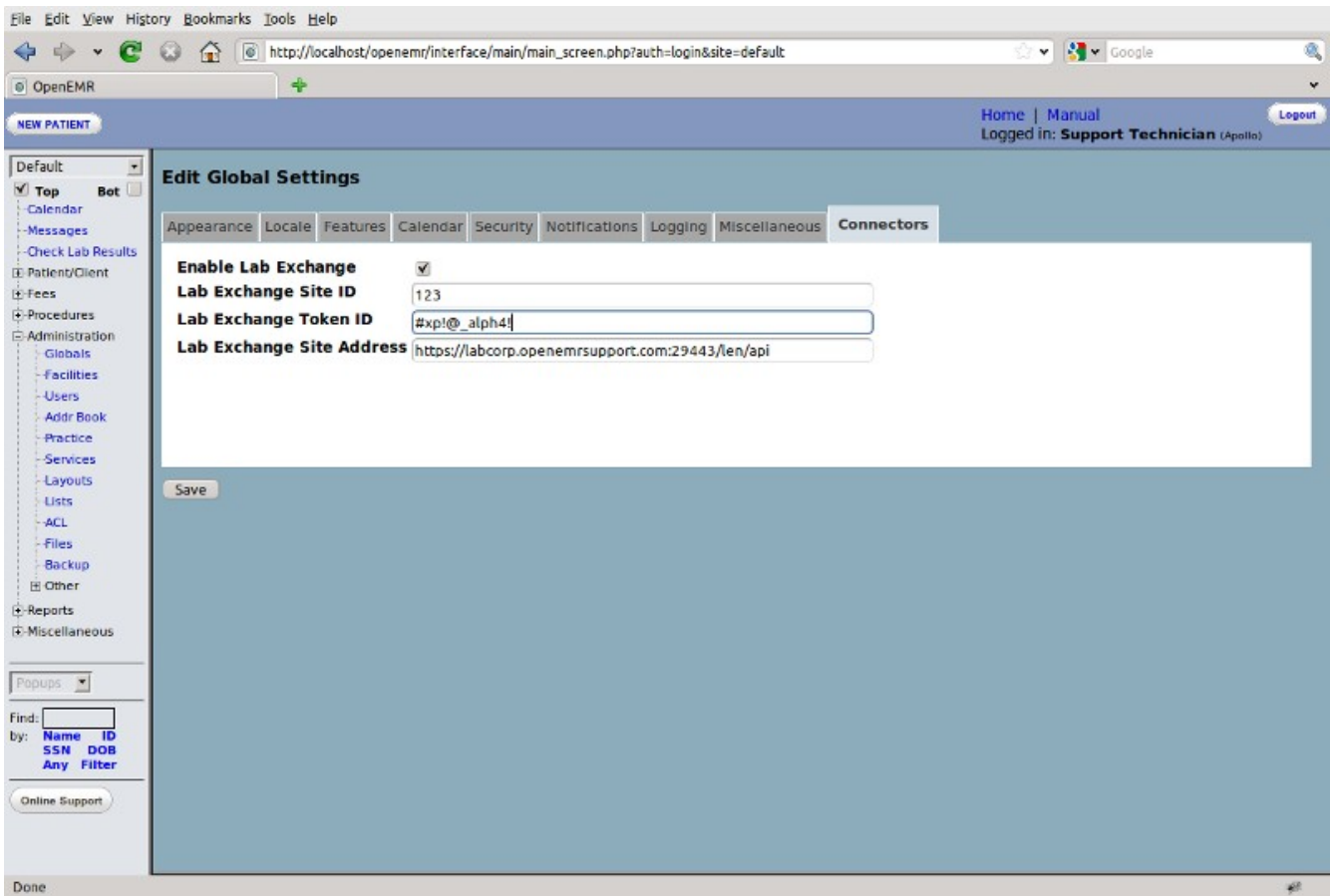


1.0) Configuration

The Laboratory Exchange Network configuration setting is located in OpenEMR's Administration->Globals menu option on the "Connectors" tab.



To enable, check the "Enable Lab Exchange" box and enter your site id, along with your token. The site address value should be `https://labcorp.openemrsupport.com:29443/len/api`

2.0) OpenEMR Menu Options

Check Lab Results

The “Check Lab Results” feature initiates the Laboratory Exchange Network query that pulls down new results from the exchange. This action is required for retrieving new results and will display the LEN Report upon completion.

Procedures->Configuration

The configuration tool is used to build a laboratory test list. This list can be modified manually and is also populated by results from the LEN.

Procedures->”Pending Review”

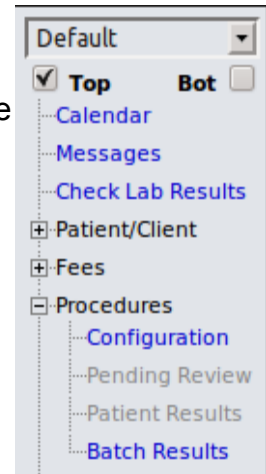
The “Pending Review” feature allows a user to view new laboratory results for a selected patient and allows providers to sign the results.

Procedures->”Patient Results”

The “Patient Results” feature allows a user to view signed laboratory results for a selected patient.

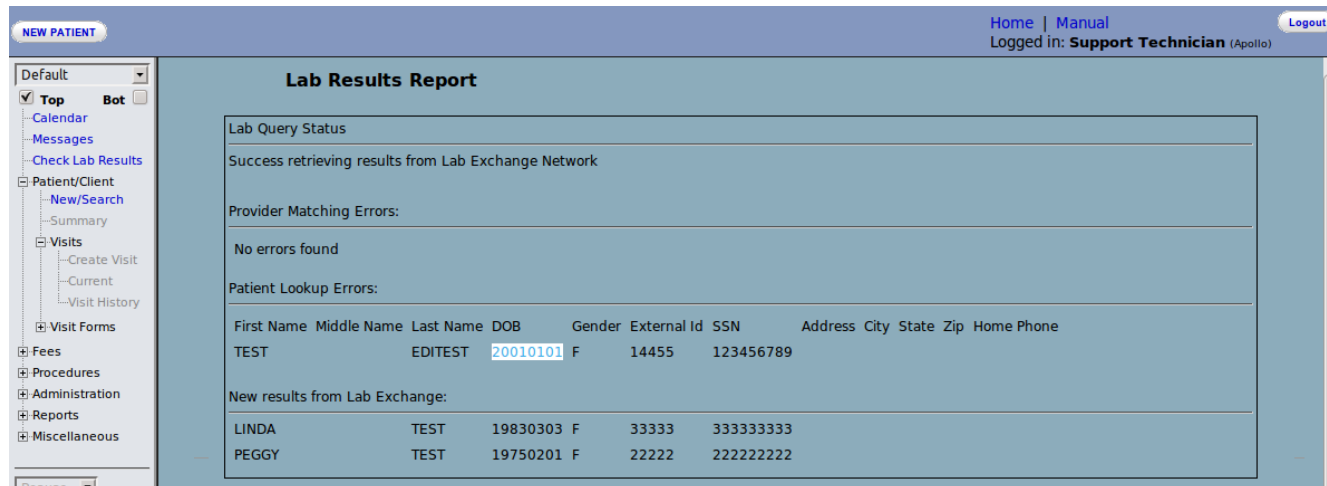
Procedures->”Batch Results”

The “Batch Results” feature is intended to view a block of results for a given date range however the feature is presently bugged and non-functional.



3.0) Retrieving Laboratory Results

To query the LEN for new results, click “Check Lab Results” from the main menu. Below is a screen shot of the resulting report:



The result report is broken down into four sections:

Lab Query Status

The lab query status section displays the communication status with the LEN itself.

Provider Matching Errors

If there are any errors matching up a provider from a given lab result with the provider from the local OpenEMR instance, the provider information from the result will be displayed in this section. It's important to note that if a result's provider goes unmatched, the result is still processed normally with the exception of the message delivery within OpenEMR. For a properly matched provider, that provider will receive a notification message for the lab result. If the provider is unmatched, all the admin users receive a wide-spread notification of the result.

For all lookup errors, the clinic is primarily responsible for addressing the errors. If errors occur in OpenEMR data, then local users can make corrections accordingly. If errors occur in the laboratory data, then clinic administrators need to contact their laboratory representatives.

Patient Lookup Errors

If there are any errors matching the patient information from a given lab result with the patient from the local OpenEMR instance, the patient information from the result will be displayed in this section. In the event that a patient is unsuccessfully matched, the result is not processed on the local system and will remain on the LEN until successfully matched.

For all lookup errors, the clinic is primarily responsible for addressing the errors. If errors occur in OpenEMR data, then local users can make corrections accordingly. If errors occur in the laboratory data, then clinic administrators need to contact their laboratory representatives.

New Results

All successful patient lab result retrievals will be displayed in this section.

4.0) Viewing Laboratory Results

Upon successful retrieval of new results from the LEN, OpenEMR sends a message to either the provider the result is intended for, or to all the administrators in the event the provider can't be identified.

Message Notification

NEW PATIENT Patient: **Linda Test (4047)** DOB: 1983-03-03 Age: 28 Encounter History Home | Manual Logout
Logged in: **Support Technician** (Apollo)

Messages (See All)

<input type="checkbox"/>	From	Patient	Type	Date	Status
<input type="checkbox"/>	Technician, Support	Test, Linda	Lab Results	2011-03-23	New

Add New Delete << 25 of 29 >>

Note: Avoid confusion: The message queue can have messages of every type and lab result messages for multiple patients.

Users can also access the messages for a specific patient by first entering that patient's record and accessing the Notes section

NEW PATIENT Patient: **Linda Test (33333)** DOB: 1983-03-03 Age: 28 Encounter History

Test, Linda Delete
History | Report | Documents | Transactions

Billing (expand)

Edit **Demographics** (expand)

Edit **Notes** (collapse)

Lab Results 2011-03-23 14:10 (jwallace to drbowen) Patient Test, Linda's lab results have arrived. Please click [here](#) to review them.

Lab Results 2011-03-23 14:10 (jwallace to mtimmons) Patient Test, Linda's lab results have arrived. Please click [here](#) to review them.

Lab Results 2011-03-23 14:10 (jwallace to lkillian) Patient Test, Linda's lab results have arrived. Please click [here](#) to review them.

Displaying the following number of most recent notes: **3**
[Click here to view them all.](#)

Message Body:

Messages (See All)

Type: Lab Results **To:** Technician, Support

Patient: Test, Linda **Status:** New

2011-03-23 14:10 Patient Test, Linda's lab results have arrived. Please click [here](#) to review them.

Send message Print message Cancel

Note: The message body simply provides a link to access the result. Clicking “here” will take you to the “Pending Review” menu option.

Pending Review

To access the “Pending Review” menu option, you need to first enter a specific patient record. Once in the record, click “Pending Review” to view the results awaiting signature.

NEW PATIENT Patient: **Linda Test (33333)** Encounter History Home | Manual Logout

DOB: 1983-03-03 Age: 28 Logged in: **Support Technician** (Apollo)

Default Refresh

Order		Report				Results and Recommendations				
Date	Name	Reported	Ext Time Collected	Specimen	Status	Group	Name (click for more)	Abn	Value	Range
2011-02-04	G-6-PD, Quant, Blood and RBC	2011-02-04 ?	2011-02-04 10:30 ?		Final	--	G-6-PD, Blood	High	45	Undefined
							G-6-PD, Quant	Low	2	146-376
							G-6-PD, Quant, Blood and RBC			
2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled	--	Hematology Comments:			

Sign Results

Performing Laboratory Facility

William F Hancock, MD
LabCorp Burlington
1447 York Court Burlington NC
(800) 762-4344

Testing Pathologist, MD
LabCorp EDI Testing
3060 S Church Street Burlington NC
(336) 584-5171

Find: TEST, LIND
by: Name ID
SSN DOB
Any Filter

Online Support

5.0) Processing Results

Signing New Results

Once the results have been viewed, a provider needs to sign the report. At the bottom of the data area on the report there is a “Sign Results” button. Clicking this button will sign the report and remove the result entry from the pending review area.

The screenshot shows the patient results page for Linda Test (33333). The page includes a navigation menu on the left, a patient header, and a table of results. The table has columns for Order, Report, and Results and Recommendations. The results table shows two rows: one for G-6-PD, Quant, Blood and RBC with a status of 'Final', and one for Hematology Comments with a status of 'Canceled'. A 'Sign Results' button is located below the table.

Order		Report				Results and Recommendations				
Date	Name	Reported	Ext Time Collected	Specimen	Status	Group	Name (click for more)	Abn	Value	Range
2011-02-04	G-6-PD, Quant, Blood and RBC	2011-02-04 ?	2011-02-04 10:30 ?		Final	--	G-6-PD, Blood	High	45	Undefined
							G-6-PD, Quant	Low	2	146-376
							G-6-PD, Quant, Blood and RBC			
2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled	--	Hematology Comments:			

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William F Hancock, MD
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Viewing Signed Results

Once the report has been signed, the results are viewable from the “Patient Results” menu option.

The screenshot shows the patient results page for Linda Test (33333) after the report has been signed. The page layout is similar to the previous screenshot, but the 'Sign Results' button has been replaced by a 'Save' button. The table of results remains the same, showing the signed G-6-PD results and the canceled Hematology Comments.

Order		Report				Results and Recommendations				
Date	Name	Reported	Ext Time Collected	Specimen	Status	Group	Name (click for more)	Abn	Value	Range
2011-02-04	G-6-PD, Quant, Blood and RBC	2011-02-04 ?	2011-02-04 10:30 ?		Final	--	G-6-PD, Blood	High	45	Undefined
							G-6-PD, Quant	Low	2	146-376
							G-6-PD, Quant, Blood and RBC			
2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled	--	Hematology Comments:			

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Modifications to the Report

Some fields on the patient results report can be modified. From the “Patient Results” screen, changes can be persisted to the database with the save button at the bottom of the data area.