Medical Information Integration

OpenEMR Laboratory Results User Documentation Laboratory Exchange Network v1.0

1.0) Configuration

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

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OpenEMR	+					¥
NEW PATIENT					Home Manual Logged in: Support Technic	Logout ian (Apollo)
NEW PATIENT Default Colendar Colendar Colendar Coleck Lab Results Coleck Lab Results Coleck Lab Results Colebals Colebals Colebals Colebals Facilities Users Addr Book Pactice Services Layouts Uists Coles Backup B Other Coleparts Miscellaneous Popups X	Edit Global Settings Appearance Locale Features C Enable Lab Exchange Lab Exchange Site ID Lab Exchange Token ID Lab Exchange Site Address Save	Ialendar Security Notifications ✓ [123 (#xp!@_alph4!] • [https://labcorp.openemrsupport]	Logging Miscellaneous	Connectors	Logged in: Support Technic	ian (Apollo)
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Done						ø

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 rage 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:

								Home Manual Logged in: Support Technician (Apollo)	Logout
Default Top Bot		Lab Results	Report						Î
Calendar Messages		Lab Query Status							
-Check Lab Results		Success retrieving results	from Lab Ex	change Netw	vork				
Patient/Client New/Search Summary		Provider Matching Errors:							
⊡·Visits Create Visit		No errors found							
Current Visit History		Patient Lookup Errors:							
Visit Forms		First Name Middle Name	Last Name	DOB (Gender	External Id	SSN	Address City State Zip Home Phone	
+ Fees		TEST	EDITEST	20010101	F	14455	123456789)	
Procedures Administration		New results from Lab Exch	iange:						
Miscellaneous		LINDA	TEST	19830303	F	33333	333333333	i	
	-	PEGGY	TEST	19750201	F	22222	222222222	!	
Popups									

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 adminstrators in the event the provider can't be identified.

Message Notification

NEW PATIENT	Patient: Linda Test (4047 DOB: 1983-03-03 Age: 2	B Encou	Home Logge	Home Manual Logged in: Support Technician (Apollo)					
Default Top Bot Calendar	Messages (See All)								
Messages	🔲 From 🗄	Patient 🕈	Type 👻	Date 🛡	Status 🔻				
-Check Lab Results	Technician, Support	Test, Linda	Lab Results	2011-03-23	New				
New/SearchSummaryVisits	Add New Delete				<< 25 of 29 >>				
Create Visit Current Visit History									

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	
Default Top Bot Calendar Messages Check Lab Results Default Default Top Bot Calendar Calendar Check Lab Results Default Check Lab Results Check Lab Result Check Lab	Test, Linda Delete History Report Documents Transactions Billing (expand) Edit Demographics (expand)	
	Edit Notes (collapse) Lab 2011-03-23 14:10 (jwallace to drbowen) Patient Test, Linda's lab results have arrived.	
Patient ResultsBatch Results Batch Results Administration ReportsMiscellaneous	Results Please click here to review them. Lab 2011-03-23 14:10 (jwallace to mtimmons) Patient Test, Linda's lab results have arrived. Results Please click here to review them. Lab 2011-03-23 14:10 (jwallace to lkillian) Patient Test, Linda's lab results have arrived. Results Please click here to review them. Please click here to review them. Please click here to review them.	
Popups	Displaying the following number of most recent notes: 3 Click here to view them all.	

Message Body:

lessages (See All)	
	Type: Lab Results To: Technician, Support Image: Status: Technician, Support Patient: Test, Linda Status: New Image: Status: Image: Status: New Image: Status: Image:
	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: Lir DOB: 1983	nda Test (33333) 3-03-03 Age: 28	Er	counter History 🗘	Home Manual Logged in: Support Technician (Apollo)						Logout
Default 🔹	Refresh										
Top Bot		Order	Report			Results and Recommendations					
Messages	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
+ Fees								G-6-PD, Quant	Low 💌	2	146-376
-Procedures -Configuration								G-6-PD, Quant, Blood and RBC	-		
-Pending Review	2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled 💌		Hematology Comments:	-		
Batch Results Administration Reports Miscellaneous Find: TEST, UND Dy: Name ID SSN DOB Any Filter Online Support	Perform William F LabCorp I 1447 York (800) 762 Testing Pa LabCorp I 3060 S Ct (336) 584	hing Laboratory Fac Hancock, MD Burlington k Court Burlington NC 2-4344 athologist, MD EDI Testing nurch Street Burlingto 1-5171	n NC		Sign Resul	ts					

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.

NEW PATIENT	Patient: Linda Test (33333) DOB: 1983-03-03 Age: 28			counter History 🗘	y ≎ Home Manual Logged in: Support Tech				Technic	cian (Ap	Logout pilo)
Default 🔹	Refresh										
Top Bot		Order	Report			Results and Recommendations					
Messages	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
+ Fees								G-6-PD, Quant	Low 💌	2	146-376
-Procedures -Configuration								G-6-PD, Quant, Blood and RBC	-		
-Pending Review	2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled 🔹	[Hematology Comments:	-		
Batch Results Administration Reports Miscellaneous Popups Ind: TEST. LIND	Perform William F LabCorp I 1447 Yorl	ing Laboratory Fac Hancock, MD Burlington k Court Burlington NC	ility		Sign Resul	ts					
by: Name ID SSN DOB Any Filter Online Support	(800) 762 Testing Pa LabCorp I 3060 S CH (336) 584	athologist, MD EDI Testing hurch Street Burlingto I-5171	n NC								

Viewing Signed Results

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

NE		Patient: Linda Test (33333) DOB: 1983-03-03 Age: 28		Encounter History			Home Manual Logged in: Support Technician (Apoll					Logout pilo)
De	efault 💽	Refresh										
V	Top Bot		Order	Report			Results and Recommendations					
	Messages	Date	Name	Reported	Ext Time Collected	Specimen	Status	Group	Name (click for more)	Abn	Value	Range
	Check Lab Results	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
÷.	Fees							G-6-PD, Quant	Low 💌	2	146-376	
	Procedures Configuration								G-6-PD, Quant, Blood and RBC	-		
	Pending Review	2011-02-04	Hematology Comments:	2011-02-04 ?	2011-02-04 10:30 ?		Canceled 💌		Hematology Comments:	•		
	Batch Results					Save						
		Perform	ning Laboratory Fac	ility								
Fine	pups	William F LabCorp 1447 Yor	Hancock, MD Burlington k Court Burlington NC									

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.