

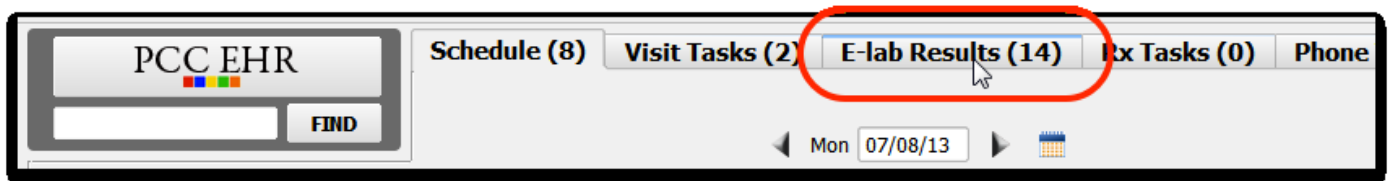
Factor 7: Electronically communicates with labs to order tests and retrieve results

PCC EHR can currently electronically retrieve lab results directly from the following lab and hospital vendors:

- Quest
- Pathgroup
- Fletcher Allen Health Care (hospital in Burlington, VT)
- North Country Hospital (hospital in Newport, VT)

PCC EHR clients working with any of the above lab or hospital vendors have the ability to electronically retrieve lab results.

On a regular basis, these PCC EHR users would review the queue of incoming e-lab results:



The screenshot shows the main interface of the PCC EHR system. At the top, the navigation bar is visible with the same task count buttons as in the previous screenshot. Below the navigation bar, there is a search box and a 'FIND' button. The main content area displays a table of e-lab results. The table has columns for 'Received', 'Patient', 'DOB/Sex', 'Orders', 'Provider', 'Vendor', and 'In Use'. The table contains 14 rows of data, each representing a lab result. The first row is highlighted in blue. Below the table, there is a 'Provider' dropdown menu set to 'ELIZABETH CASEY, GREGORY J CONNOLLY' and a 'Save My Defaults' button. At the bottom right, there is an 'Open Result' button.

Received	Patient	DOB/Sex	Orders	Provider	Vendor	In Use
06/25/13 11:51am	Mickey Mouse	10/22/02	M BARTONELLA SPECIES ANTIBODIES (IGG,IGM) ...	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Mickey Mouse	10/22/02	M CLINDAMYCIN RESISTANCE TEST, (D TEST), CUL...	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Mickey Mouse	10/22/02	M CHILDHOOD ALLERGY (FOOD AND ENVIRONM...	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Louie Duck	07/04/86	M LIPID PANEL, COMPREHENSIVE METABOLIC PA...	GREGORY J CONNOLLY	FAHC	
06/25/13 11:51am	Louie Duck	07/04/86	M CULTURE FOR STAPHYLOCOCCUS COAGULASE ...	GREGORY J CONNOLLY	FAHC	
06/25/13 11:51am	Mickey Mouse	10/22/02	M URINALYSIS, COMPLETE W/REFLEX TO CULTURE	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Daisy Duck	12/21/05	F HEMAGRAM	GREGORY J CONNOLLY	FAHC	
06/25/13 11:51am	Mickey Mouse	10/22/02	M BARTONELLA SPECIES ANTIBODIES (IGG,IGM) ...	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Mickey Mouse	10/22/02	M COMPREHENSIVE METABOLIC PANEL	ELIZABETH CASEY	QUEST	
06/25/13 11:51am	Donald Duck	12/13/04	M LH	GREGORY J CONNOLLY	FAHC	
06/25/13 11:51am	Daisy Duck	12/21/05	F DIFFERENTIAL	GREGORY J CONNOLLY	FAHC	
06/25/13 11:51am	Mickey Mouse	10/22/02	M LIPID PANEL, COMPREHENSIVE METABOLIC PA...	ELIZABETH CASEY	QUEST	

While viewing this queue, the user can click on any column header to sort. You can also filter the list by Provider. Double-clicking on any lab result will open it:

The screenshot shows the PCC EHR interface with a table of lab results. The table has columns for 'Patient', 'DOB/Sex', 'Orders', 'Provider', and 'Vendor'. A red circle highlights the first row of data, which contains the following information:

Patient	DOB/Sex	Orders	Provider	Vendor
Mickey Mouse	10/22/02	M BARTONELLA SPECIES ANTIBODIES (IGG,IGM) ...	ELIZABETH CASEY	QUEST
Mickey Mouse	10/22/02	M CLINDAMYCIN RESISTANCE TEST, (D TEST), CUL...	ELIZABETH CASEY	QUEST
Mickey Mouse	10/22/02	M CHILDHOOD ALLERGY (FOOD AND ENVIRONM...	ELIZABETH CASEY	QUEST

After opening a results file, the user can read a summary of its contents:

See More Details or the Complete Lab Vendor Report

The screenshot shows the 'Import E-lab Results' window. It has three tabs: 'Summary', 'Result Details', and 'Report of Record'. The 'Result Details' tab is selected. The window is divided into two main sections:

Patient Information:

- Patient Name: MICKEY MOUSE
- DOB: 10/22/02
- Sex: Male
- Patient ID: Unknown
- Home Phone: 802-555-1234
- Address: 20 WINOOSKI FALLS WAY SUITE 7, WINOOSKI, VT, 05404

Order Information:

- Requisition #: Unknown
- Requisition Status: Completed
- Lab Vendor: QUEST
- Report Date: 01/09/13
- Date Received: 06/25/13
- Ordering Provider: ELIZABETH CASEY
- Orders Included:
 - BARTONELLA SPECIES ANTIBODIES (IGG,IGM) W/REFLEX (ES) TO TITER

Select the patient to receive the e-lab results.

Best Matches for: MICKEY MOUSE 10/22/02 M

Last	First	DOB/Sex	PCC #	PCP	Patient Flags
Mouse	Mickey	01/28/03	M	3377	
Hollingsworth	Adrianna	10/22/02	F	237	Archived, Tra

Buttons at the bottom: Open Chart, Close, Select.

On the Summary tab, you can see basic patient and order information. Click on the Result Details tab to review more information about the lab results, or click on the Report of Record tab to see the original file as formatted by the lab vendor or hospital.

PCC EHR will automatically search for the patient and display the best matches. Double-click to select the patient:

Next, select the specific visit during which the orders were created:

Import E-lab Results Mickey Mouse 10 yrs, 5 mos 1/28/03 M

Summary Result Details Report of Record

Patient Information:
Patient Name: MICKEY MOUSE
DOB: 10/22/02
Sex: Male
Patient ID: Unknown
Home Phone: 802-555-1234
Address: 20 WINOOSKI FALLS WAY SUITE 7, WINOOSKI, VT, 05404

Order Information:
Requisition #: Unknown
Requisition Status: Completed
Lab Vendor: QUEST
Report Date: 01/09/13
Date Received: 06/25/13
Ordering Provider: ELIZABETH CASEY
Orders Included:
• BARTONELLA SPECIES ANTIBODIES (IGG, IGM) W/REFLEX (ES) TO TITER

1. Select a visit. Visits with Quest Orders All Visits

- 06/25/13 (10)Orders: Bartonella Species Antibodies Elab, CMP E...
- 06/20/13 (2)Orders: Allergy Panel Elab, CMP Elab
- 04/23/13 (1)Order: URINALYSIS, COMPLETE W/REFLEX TO CULT...
- 03/09/13 (8)Orders: Celiac Disease Comprehensive Panel Elab, ...
- 02/05/13 (2)Orders: Lipid Panel Elab, CBC (INCLUDES DIFF/PLT) ...

Open Chart Close Save

W/REFLEX (ES) TO TITER

Open Chart Close Select

or a patient, from Best as

By default, PCC EHR will show you all visits that contain matching lab orders so you can select the correct appointment.

Sometimes the practice may receive e-lab results that do not match an order in the patient's chart. You can pick any visit with labs from the vendor, or pick another visit.

Received a result with no matching orders? Select any visit and add orders as needed.

Import E-lab Results Louie Duck 26 yrs, 4 mos 1/24/87 M

Summary Result Details

Patient Information:
Patient Name: LOUIE DUCK
DOB: 07/04/86
Sex: Male
Patient ID: Unknown

Order Information:
Requisition #: Unknown

There are no matching lab orders for FAHC in the patient's chart.

1. Select a visit. Visits with FAHC Orders All Visits

If a hospital or lab vendor sends unsolicited lab results to your practice, or "copies" results to you from a different care provider, you can place those results into the patient's chart without selecting a visit date:

Import E-lab Results Mickey Mouse 10 yrs, 4 mos 3/18/03 M

Summary Result Details Report of Record

Patient Information:
Patient Name: MICKEY MOUSE
DOB: 10/22/02
Sex: Male
Home Phone: 802-555-1234

Comments:
PRIORITY
FASTING: UNKNOWN

Order Information:
Requisition #: Unknown
Requisition Status: Completed
Lab Vendor: QUEST
Report Date: 01/17/13
Date Received: 08/13/13
Ordering Provider: ELIZABETH CASEY
Orders Included:

Name	Status
CLINDAMYCIN RESISTANCE TEST, (D TEST)	Final Results
CULTURE, AEROBIC AND ANAEROBIC W/GRAM STAIN	Final Results

1. Select a visit. Visits with Quest Orders All Visits

select a visit

- 08/13/13 (10)Orders: Amylase Elab, Bartonella Species Antibodi...
- 04/19/13 (3)Orders: CBC (INCLUDES DIFF/PLT) Elab, CMP Elab, L...
- 03/30/13 (1)Order: CULTURE, AEROBIC AND ANAEROBIC W/GR...
- 03/26/13 (2)Orders: CBC (INCLUDES DIFF/PLT) Elab, Lipid Panel ...
- Accept unsolicited e-lab results without a visit

Open Chart Close Save

After you select a visit, PCC EHR will match the e-lab results with the patient's orders:

Import E-lab Results **Mickey Mouse 10 yrs, 5 mos 1/28/03 M**

Summary | **Result Details** | Report of Record

Patient Information:
 Patient Name: MICKEY MOUSE
 DOB: 10/22/02
 Sex: Male
 Patient ID: Unknown
 Home Phone: 802-555-1234
 Address: 20 WINOOSKI FALLS WAY SUITE 7, WINOOSKI, VT, 05404

Order Information:
 Requisition #: Unknown
 Requisition Status: Completed
 Lab Vendor: QUEST
 Report Date: 06/29/13
 Date Received: 06/25/13
 Ordering Provider: ELIZABETH CASEY
 Orders Included:

- BARTONELLA SPECIES ANTIBODIES (IGG,IGM) W/REFLEX (ES) TO TITER
- COMPREHENSIVE

1. Select a visit. Visits with Quest Orders All Visits
 06/25/13 (10)Orders: Bartonella Species Antibodies Elab, CMP E

2. Select orders to attach to received results.

Received Results: BARTONELLA SPECIES ANTIBODIES (IGG,IGM) W/REFLEX (ES) TO TITER
 Attach to Order: Bartonella Species Antibodies Elab

Received Results: COMPREHENSIVE METABOLIC PANEL
 Attach to Order: CMP Elab

Received Results: SED RATE BY MODIFIED WESTERGREN
 Attach to Order: Sed Rate Elab

Received Results: CBC (INCLUDES DIFF/PLT)
 Attach to Order: CBC (INCLUDES DIFF/PLT) Elab

Received Results: C-REACTIVE PROTEIN
 Attach to Order: C-Reactive Protein Elab

Received Results: AMYLASE
 Attach to Order: Amylase Elab

Received Results: LIPASE
 Attach to Order: Lipase Elab

PCC EHR Automatically Matches Results w/ Orders

Open Chart | Close | Save

If all matching is complete and correct, you can click Save to finish and return to the queue.

If a match does not look correct, or no matching order was found, you can use the pull-down menus to specify an order. You can pick an existing order from the selected appointment, create an order of the suggested type, or create any order for the same vendor.

Received Results: LIPASE
 Attach to Order: Select an order

Allergy Panel Elab
Create Order: Lipase Elab
 Create a different Quest order

**Select an Existing Order on the Chart Note,
 Create the Suggested Order, or
 Create any Order From that Vendor**

Click Save to finish the import and return to the E-lab Results queue. After importing e-lab results, clinicians and other users can review results wherever they look at lab orders. Results will be visible on the

Signing queue, for the physician's review and signature, and they will appear on the chart note in the patient's Visit History. Results will also appear on the patient's Flowsheets.