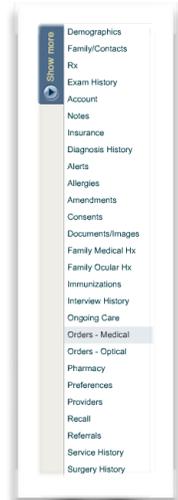


## Introduction

The Orders - Medical screen introduced with RevolutionEHR version 6.1 allows users to enter orders, results, and interpretation and reports for a number of diagnostic tests including ophthalmic, laboratory, and radiology studies.

The Orders - Medical screen can be added to encounter templates as a logical step in an exam sequence. It can also be accessed at any time through the Show More menu along the right side of the screen.

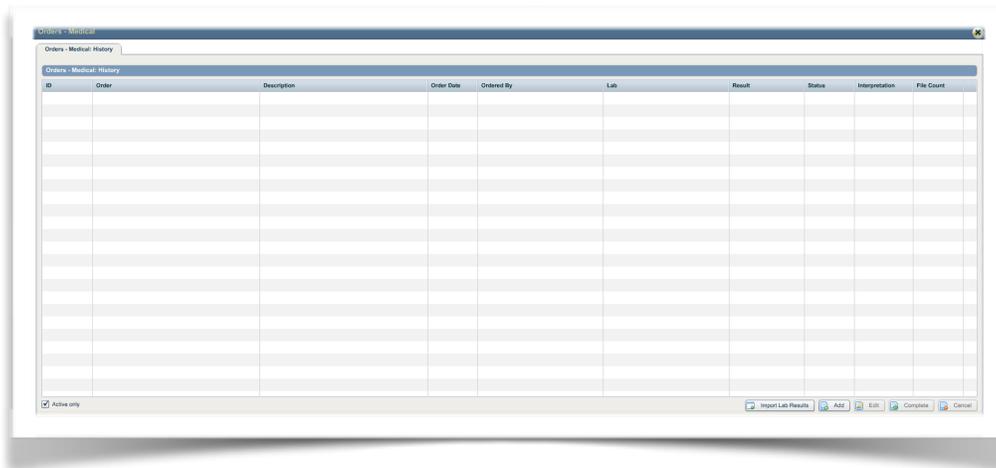
Regardless of how the screen is accessed, Orders - Medical offers the provider the advantage of being able to work within an order without needing to be inside an encounter. As an example, a provider can enter an order for an OCT in the morning and perform the I&R at night without an encounter being open. The same cannot be said for the “Posterior Pole” or “Visual Field Summary” tests that might be used during an encounter.



## Orientation

There are four screens associated with Orders - Medical: the “Orders - Medical: History” screen and three sliders within each order.

The **Orders - Medical: History** screen, as the name suggests, displays a historical list of orders for a given patient:



The bottom right of this screen offers the following options:

- **Import Lab Results** - allows uploading of lab results from a HL7 LRI file
- **Add** - starts a new order
- **Edit** - allows modification of the selected order
- **Complete** - finalizes an order and prevents further modifications. Completing an order should only be performed after all work within an order is finished.
- **Cancel** - deletes an active order

Completed orders will be removed from the default “Active only” history list, but can be seen by unchecking the “Active only” box in the lower left of the screen.

A new order can be started by selecting “Add”. This will take the user into a new order screen consisting of three sliders:

- **Orders - Medical**

Allows the provider to specify the order by LOINC code and description and set a valid date range for the test to be run. By setting the date range via Start and End Date, the provider can create a standing order for a test to be completed within a certain time frame.

The screenshot shows the 'Orders - Medical' form. At the top, there are tabs for 'Orders - Medical: History' and 'New Order'. Below the tabs, there is a search bar for 'Order' and a 'Description' field. The 'Order Date' is set to 07/11/2014, with a checkbox for 'Originated without CPOE'. There are 'Start Date' and 'End Date' fields. The 'Ordered By' field is set to '-Select-'. There are dropdown menus for 'Lab' and 'Frequency'. The 'Type' field has radio buttons for 'Laboratory' and 'Radiology'. There are also radio buttons for 'Internal' and 'External'. Below these are 'Instructions' and 'Comments' text areas. At the bottom, there is a 'Status' field set to 'New' and buttons for 'Cancel Changes' and 'Save Changes'.

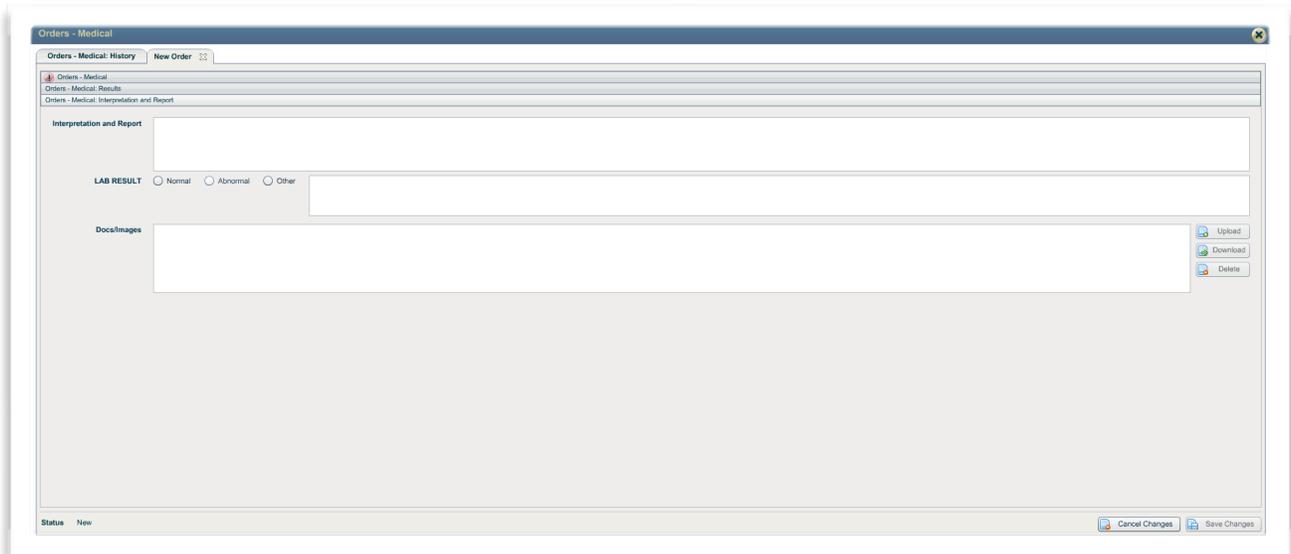
- **Orders - Medical: Results**

The Results slider allows the provider to document the test results in various ways.

The screenshot shows the 'Orders - Medical: Results' form. It has tabs for 'Orders - Medical: History' and 'New Order'. Below the tabs, there is a search bar for 'Orders - Medical: Results'. The 'Report Date' field is set to 07/11/2014. There is a 'Lab Test Type' dropdown menu. The 'Test Name' field is empty. The 'Result Type' field has radio buttons for 'Normal/Abnormal', 'Numeric', 'Image', and 'Other'. The 'LAB RESULT' field is set to '-Select-'. There are radio buttons for 'Normal', 'Abnormal', and 'Unknown'. The 'Specimen Source' field is set to '-Select-' and the 'Disposition' field is empty. There are 'Lab Note' and 'Comments' text areas. At the bottom, there is a 'Status' field set to 'New' and buttons for 'Cancel Changes' and 'Save Changes'.

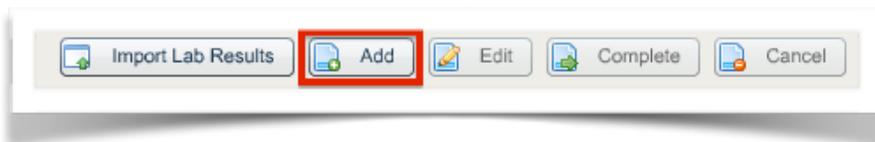
## • Orders - Medical: Interpretation and Report

The Interpretation and Report slider allows the provider to interpret the results and, where applicable, upload associated documents and/or image files. By uploading to the Orders - Medical screen, the provider effectively links the test result to the order. (Note: an order must be saved at least once before a document can be uploaded)

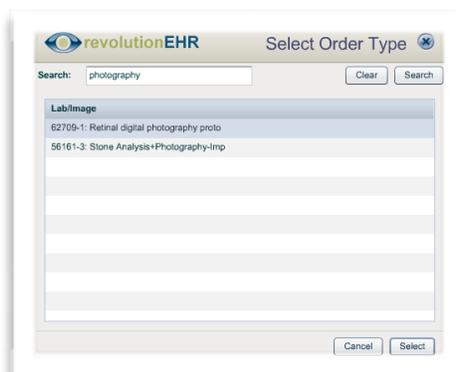


## Entering an Order

- 1) Click "Add" on the **Orders - Medical History** screen.



- 2) On the "Orders - Medical" slider, enter the test in the "Order" field by LOINC code. This can be accomplished by entering text in the search field and pressing "Return" on the keyboard or clicking the blue lookup icon at the far right of the field. Either manner results in a LOINC search window where the provider can search for and select the appropriate code.



3) Enter a description of why the test is being ordered, the start and end date for which the order is active, select a provider, and indicate the “Type” of test being ordered. “Radiology” should only be selected for traditional radiologic studies such as CT, MRI, Xray, etc. All other testing, including ophthalmic diagnostic tests, fall into the default category of “Laboratory”. So unless a provider is ordering a radiology study, this radio button selection should remain on “Laboratory”.

Other fields on this slider can be used at the provider’s discretion.

4) If the provider is entering an order for a test to be performed in the future, the Results and Interpretation and Report sliders do not need to be completed upon order creation. Instead, the provider can return to the order when the results are known and enter the pertinent data.

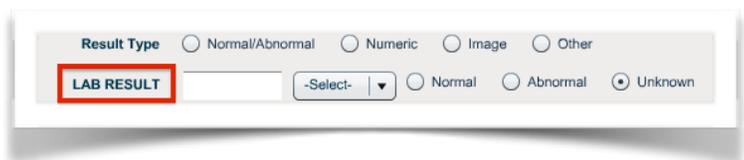
It can be good practice, however, to proceed to the Results slider and indicate the expected “Result Type”. As a critical part of MU scoring, indicating the “Result Type” during the creation of an order seeks to overcome the possibility that the provider will forget to return to the slider at a later date.

“Result Type” can be:

- **Normal/Abnormal:** indicates that the provider will record the results simply as “normal” or “abnormal”
- **Numeric:** indicates that the provider will enter a numerical result for the test being ordered
- **Image:** indicates that the result of the test being ordered will be an image.
- **Other:** indicates that the results will be something other than the available options. Also removes the test from being considered in the Incorporate Clinical Lab-Test Results objective in Stage 1 and 2 MU calculations.

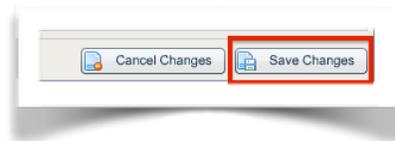
When the results are known, the “Orders - Medical: Results” slider can be used to record results of traditional hematology, culturing, etc. All of the fields on the slider are optional so the provider is free to document the results in a manner that makes the most sense.

From a MU perspective, the “LAB RESULT” field needs to be completed to trigger the numerator for the Stage 1 Menu and Stage 2 Core objective: Incorporate Clinical Lab-Test Results. See the MU scoring section of this guide for more details.

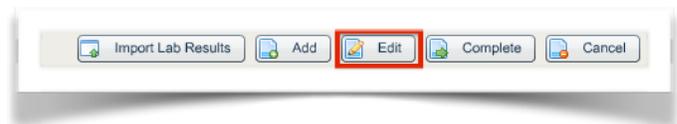


5) On the final slider, “Orders - Medical: Interpretation and Report”, enter a clinical narrative about the reliability of the test, what the results show, and what the response will be based on the results. If the test has related documents or images that the provider wishes to link to the order:

1. Click “Save Changes” in lower right



2. Double-click the order to reopen or highlight it and select “Edit” on the Orders - Medical History screen



3. Return to the Orders - Medical: Interpretation and Report slider and select “Upload”



6) When finished working with the order, click the “Save Changes” button again to close it.

## Examples of Orders

### 1) OCT order for glaucoma suspect

Orders - Medical History 57119-0

Order: 57119-0: Ophthalmic OCT pri

Description: OCT of RNFL and GCC ordered OU for evaluation of glaucoma suspect

Reason for test

Order Date: 07/11/2014

Start Date: 07/11/2014 End Date: 07/11/2014

Ordered By: Carter, John

Ordering provider selected

Date Range entered

Status: New

Orders - Medical History 57119-0

Orders - Medical Results

Report Date

Lab Test Type

Test Name

Result Type:  Image  Other

LAB RESULT

Normal

Specimen Source

Disposition

Lab Note

Comments

Status: New

Orders - Medical History 57119-0

Orders - Medical Results

Orders - Medical Interpretation and Report

Interpretation and Report: Good SSI / reliability OLI. No signs of RNFL or GCC compromise in either eye. No tx indicated. Repeat 1 year.

LAB RESULT: Normal  Abnormal  Other

Decks/Images: July-11-2014-O...

Resulting image file uploaded

Interpretation and Report completed

Status: New

## 2) Visual Field order for glaucoma suspect

Orders - Medical: History 28629-4

Orders - Medical

Order: 28629-4 Primary study **Test ordered via LOINC**

Description: 24-2 ordered OI for glaucoma evaluation **Reason for test**

Order Date: 07/11/2014 Originated without CPOE Start Date: 07/11/2014 End Date: 07/11/2014

Ordered By: Carter, John **Ordering provider selected**

Lab: -Select- Frequency: -Select- Type: Laboratory Internal External

Instructions:

Comments:

Ordering provider selected Date Range entered

Orders - Medical: Results  
Orders - Medical: Interpretation and Report

Status: New [Cancel Changes](#) [Save Changes](#)

Orders - Medical: History 28629-4

Orders - Medical: Results

Report Date: -Select-

Lab Test Type: -Select-

Test Name:

Result Type:  Normal/Abnormal  Numeric  Image  Other **Result Type for a Visual Field is "Other"**

LAB RESULT: -Select-  Normal  Abnormal  Unknown

Normals:

Specimen Source: -Select- Disposition:

Lab Note:

Comments:

Orders - Medical: Interpretation and Report

Status: New [Cancel Changes](#) [Save Changes](#)

Orders - Medical: History 28629-4

Orders - Medical: Results

Orders - Medical: Interpretation and Report

Interpretation and Report: Good pt cooperation and reliability. No glaucomatous defects noted in either eye. No tx indicated. Repeat 1 year.

LAB RESULT:  Normal  Abnormal  Other

Docs/Images:  July 11, 2014.VF... **Result uploaded**

Interpretation and Report completed

Upload Download Delete

Status: New [Cancel Changes](#) [Save Changes](#)

### 3) Hemoglobin A1c order

Orders - Medical: History 62854-5

Orders - Medical

Order: 62854-5: Glycosylated hemoglobin assay

Description: Hemoglobin A1c ordered for diabetes evaluation based on retinal findings

Order Date: 07/11/2014

Start Date: 07/11/2014

End Date: 07/11/2014

Ordered By: Carter, John

Lab: -Select-

Frequency: -Select-

Type:  Laboratory  Radiology

Instructions:

Comments:

Ordering provider selected Date range entered

Orders - Medical: Results

Orders - Medical: Interpretation and Report

Status: New

Cancel Changes Save Changes

Orders - Medical: History 62854-5

Orders - Medical: Results

Report Date: 07/12/2014

Lab Test Type: -Select-

Test Name:

Result Type:  Normal  Abnormal  Numeric  Image  Other

LAB RESULT: 10.5

Normal:  Normal  Abnormal  Unknown

Specimen Source: -Select-

Disposition:

Lab Note:

Comments:

LAB RESULT recorded in numerical format

Orders - Medical: Interpretation and Report

Status: New

Cancel Changes Save Changes

Orders - Medical: History 62854-5

Orders - Medical: Interpretation and Report

Interpretation and Report: Elevated hemoglobin A1c with retinal findings. Referral to PCP for DM management. Return for retinal evaluation 4 months.

LAB RESULT:  Normal  Abnormal  Other

Docs/Images:

Interpretation and Report completed

Upload

Download

Delete

Status: New

Cancel Changes Save Changes

#### 4) Complete Blood Count order

Orders - Medical: History 69742-5

Order: 69742-5: CBC W Diff pnt. Unspecified Bld **Test ordered via LOINC**

Description: CBC w/ differential ordered based on retinal hemorrhages OU **Reason for test**

Order Date: 07/11/2014  Originated without CPOE **Start Date**: 07/11/2014 **End Date**: 07/11/2014

Ordered By: Carter, John

Lab: -Select- Frequency: -Select- Type:  Laboratory  Radiology

Instructions:

Comments: **Ordering provider selected** **Date Range entered**

Orders - Medical: Results  
Orders - Medical: Interpretation and Report

Status: New

Orders - Medical: History 69742-5

Orders - Medical: Results

Report Date:

Lab Test Type: -Select-

Test Name:

Result Type:  Normal/Abnormal  Numeric  Image  Other

LAB RESULT: -Select-  Normal  Abnormal  Unknown

Normals:

Specimen Source: -Select- Disposition:

Lab Note:

Comments: **LAB RESULT recorded as abnormal**

Orders - Medical: Interpretation and Report

Status: New

Given the multiple tests involved in a complete blood count, the provider chose to record the results as “Normal/Abnormal” rather than “Numeric”.

If any of the tests are abnormal, the provider has the option of using the other fields in the order to specify what test was abnormal.

Orders - Medical: History 69742-5

Orders - Medical: Results  
Orders - Medical: Interpretation and Report

Interpretation and Report: **CBC indicates high white blood cell count. Consult with PCP for further evaluation and management. Repeat retinal examination 4 months.**

LAB RESULT:  Normal  Abnormal  Other

Docs/Images:

**Interpretation and Report completed**

Upload

Status: New

5) MRI order

Orders - Medical: History 24590-2

Orders - Medical

Order 24590-2: Brain MRI **Test ordered via LOINC**

Description MRI of brain ordered to evaluate for high signal abnormalities **Reason for test**

Order Date 07/11/2014 Start Date 07/11/2014 End Date 07/11/2014

Ordered By Carter, John

Lab -Select- Frequency -Select- Type  Laboratory  Radiology

Instructions

Comments

Ordering provider selected Date range entered Order type changed to Radiology

Orders - Medical: Results  
Orders - Medical: Interpretation and Report

Status New Cancel Changes Save Changes

Orders - Medical: History 24590-2

Orders - Medical: Results

Report Date

Lab Test Type -Select-

Test Name

Result Type  Normal/Abnormal  Numeric  Image  Other **Result type for an MRI is "Image"**

LAB RESULT -Select-  Normal  Abnormal  Unknown

Normals

Specimen Source -Select- Disposition

Lab Note

Comments

Orders - Medical: Interpretation and Report

Status New Cancel Changes Save Changes

Orders - Medical: History 24590-2

Orders - Medical: Results

Orders - Medical: Interpretation and Report

Interpretation and Report MRI shows multiple high signal abnormalities consistent with potential for MS. STAT neuro consult requested for IV steroid initiation. Repeat ONH evaluation 1 month.

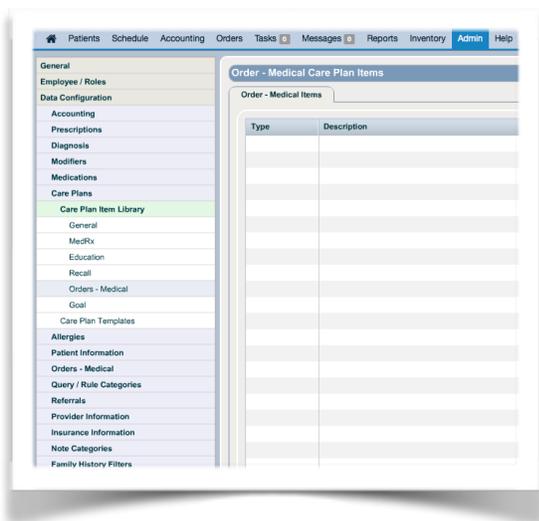
LAB RESULT  Normal  Abnormal  Other **Interpretation and Report completed**

Docs/Images  July-11,-2014-M... **Resulting image file uploaded**

Upload  
Download  
Delete

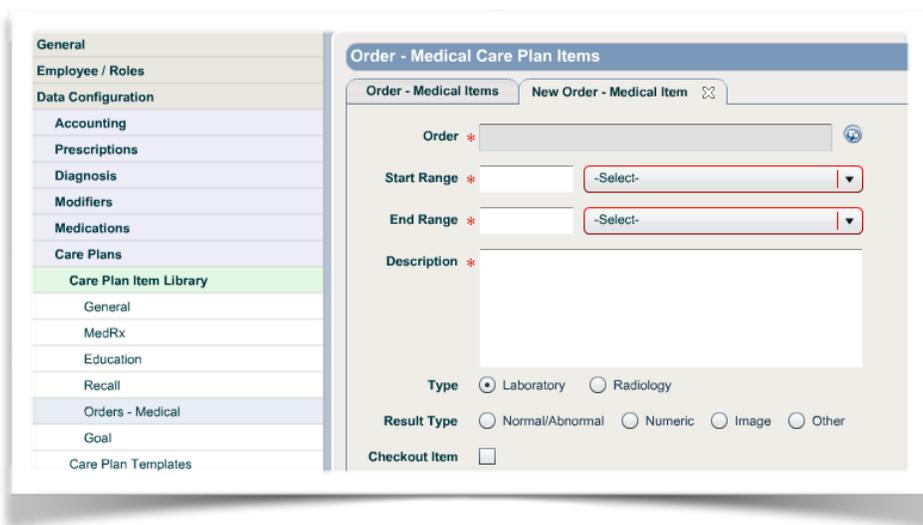
Status New Cancel Changes Save Changes

## Creating Orders by Care Plan Item



Another method that can be utilized to enter medical orders for a patient is through the creation of care plan items. The Orders - Medical care plan item library can be located by navigating to **Admin > Data Configuration > Care Plans > Care Plan Item Library > Orders - Medical**.

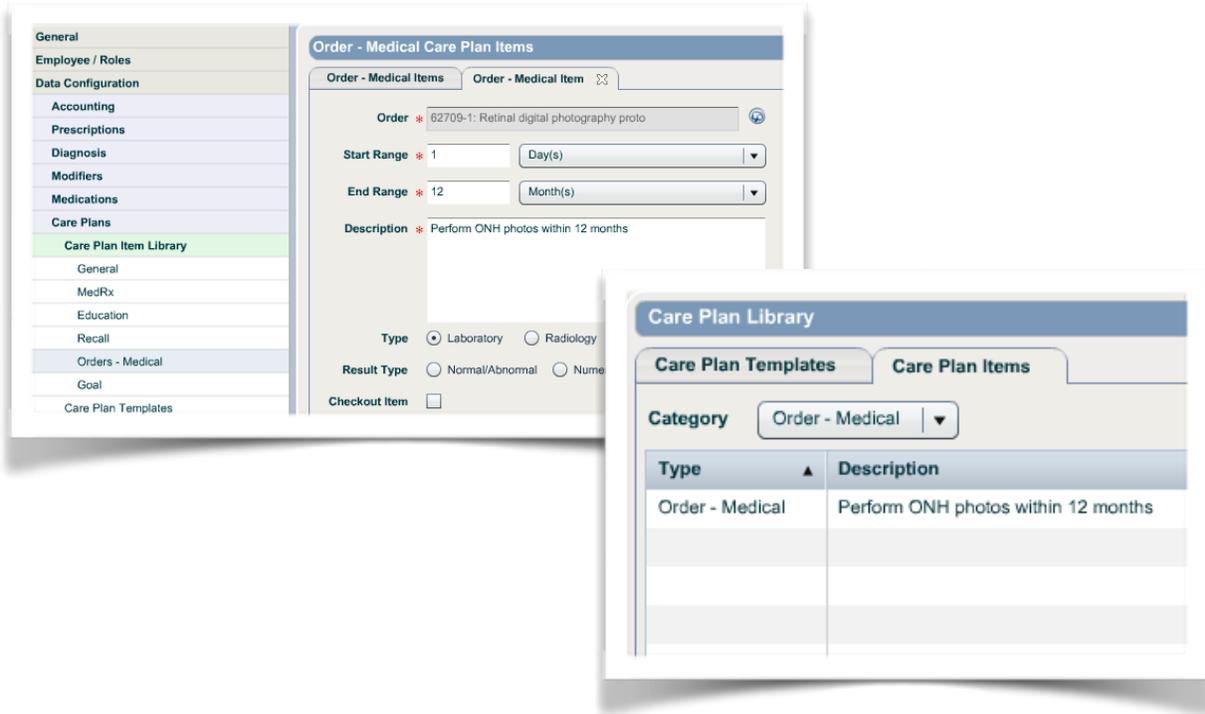
Clicking “Add Item” in the lower right of the Orders - Medical Care Plan Item screen allows the creation of a new care plan item. Notice that the information available on this screen is identical to the some of the most important information found in the Orders - Medical screen/sliders:



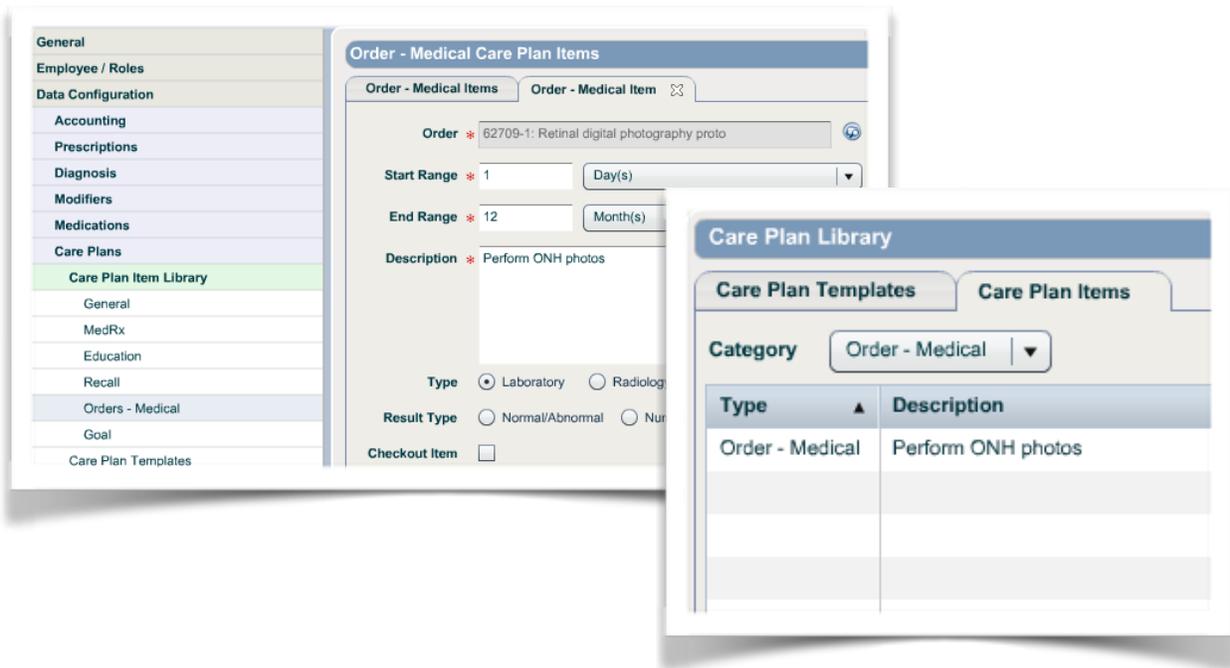
To create a care plan item:

- 1) Enter the order by LOINC code
- 2) Enter the date range for which the order is to be active. As an example, if a provider was setting up a care plan for fundus photography to be performed within the next year, she could set the Start Range to 1 day and the End Range to 12 months.
- 3) Enter a description. This description will appear in the Care Plan Items list in the Plan step of an encounter AND the actual plan for the patient so it's important to enter information that will allow easy recognition of the proper order and satisfy the provider's standards for documentation.

Good description for easy recognition in an encounter:

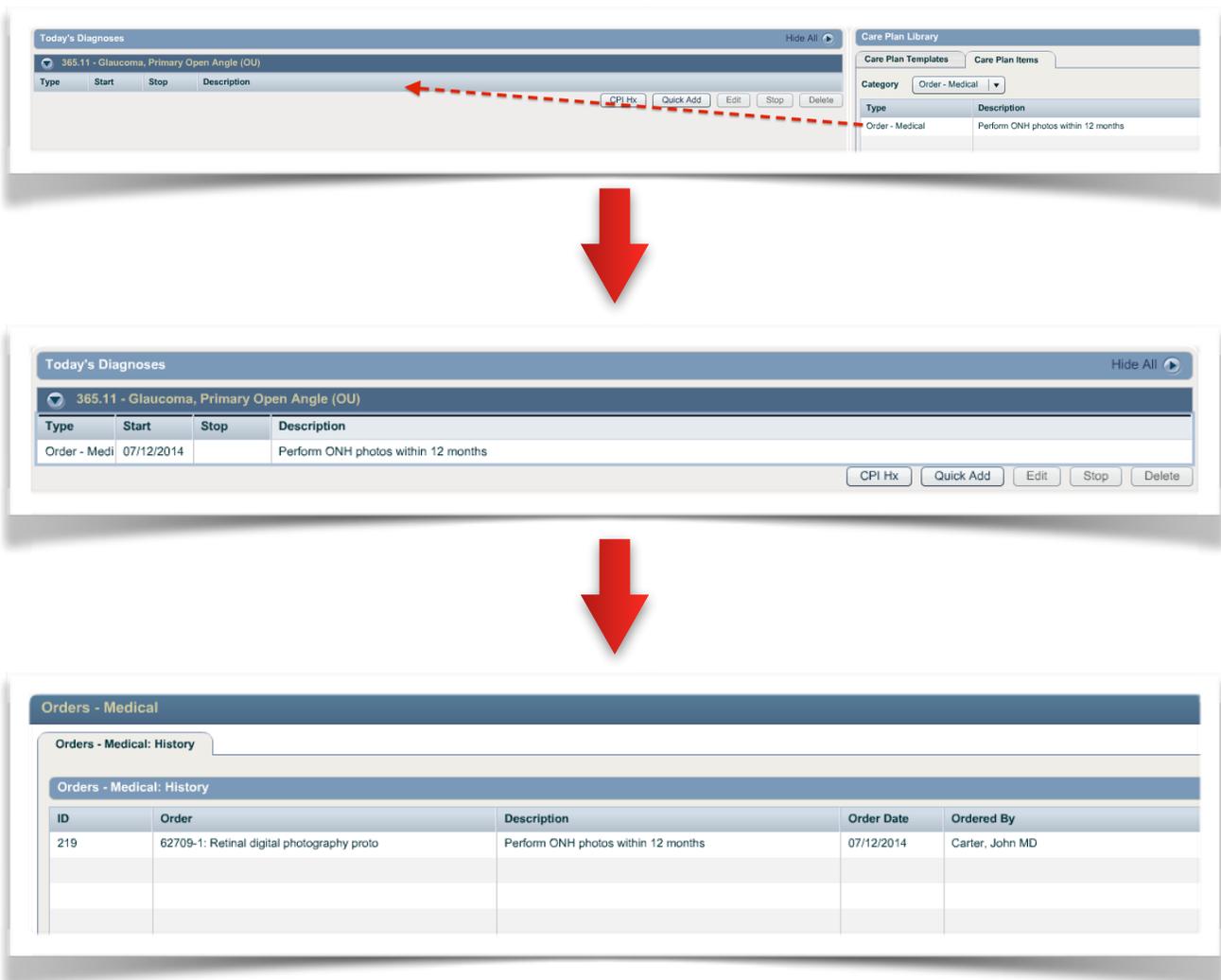


Poor description resulting in provider not being able to tell time frame for order:



- 4) Unless creating a care plan for a traditional radiology study such as a CT, MRI, or Xray, leave the Type radio selection as “Laboratory”.
- 5) Indicate the anticipated Result Type:
  - “Normal/Abnormal” and “Numeric” typically pertain to hematology, cultures, etc.,
  - “Image” typically pertains to traditional radiology (i.e., CT, MRI, Xray) and ophthalmic imaging studies (OCT and retinal photography)
  - “Other” allows documentation of results that don’t fit the other options (i.e., Visual Field)
- 6) Select “Checkout item” if you’d like the front office to see this order appear in the “Check-Out Tasks”.
- 7) Click Update to save the Care Plan

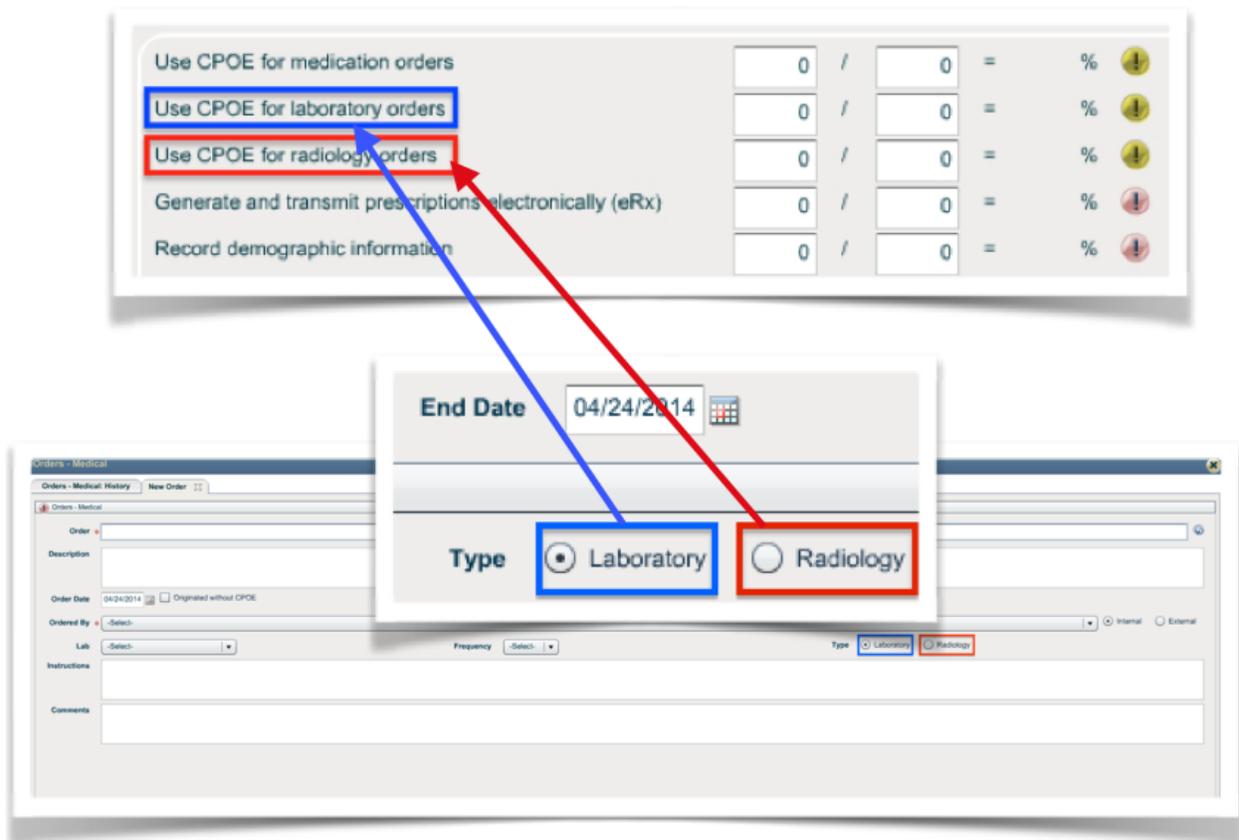
Once saved, the Care Plan Item becomes available within the “Plan” step of an encounter. Dragging and dropping the Care Plan Item into a diagnosis creates a standing order for the test.



## Meaningful Use Scoring

**CPOE for Laboratory and Radiology Orders** are scored through actions taken on the first Orders - Medical slider. All orders are either laboratory or radiology. Scorecard counts are triggered solely by the “Type” radio selection. An order with a “Type” indication of Laboratory will score 1/1 on CPOE for Laboratory Orders while an order with a Radiology indication will score 1/1 on CPOE for Radiology Orders.

In the event that an order originated outside of Revolution EHR, the “Originated without CPOE” box should be checked. This will result in the denominator increasing, but not the numerator.



## Common LOINC Codes

The following is a list of common LOINC codes for generating orders. Additional LOINC codes can be found through search at <http://search.loinc.org/>

57119-0	Ophthalmic OCT panel
57108-3	Macular grid.center point thickness OCT
57109-1	Macular grid.center subfield thickness OCT
57112-5	Macular grid.inner inferior subfield thickness OCT
57111-7	Macular grid.inner nasal subfield thickness OCT
57110-9	Macular grid.inner superior point thickness OCT
57113-3	Macular grid.inner temporal point thickness OCT
57116-6	Macular grid.outer inferior subfield thickness OCT
57115-8	Macular grid.outer nasal subfield thickness OCT
57114-1	Macular grid.outer superior point thickness OCT
57117-4	Macular grid.outer temporal point thickness OCT
57118-2	Macular grid.total volume OCT
65900-3	Retinal digital photography – Flash setting
65901-1	Images captured in the retinal digital photography Number
65904-5	Eye.left – fields photographed in retinal digital photography
65898-9	Eye.right – fields photographed in retinal digital photography
62709-1	PhenX retinal digital photography protocol
65905-2	Other eye field – Eye-left Retinal digital photography
65899-7	Other eye field – Eye-right Retinal digital photography
29112-0	Photo documentation Eye - left
29111-2	Photo documentation Eye - right
70940-2	Confrontation visual field
28629-4	Perimetry study
29046-2	Perimeter format Goldmann
29046-0	Perimeter format Humphrey
29053-6	Perimeter format Kowa

29047-8	Perimeter format Octopus
46673-0	Color vision
62681-2	PhenX – color vision protocol
70942-8	Ocular alignment and motility
70948-5	Ocular physical exam
28630-2	Tonometry study
66068-8	Cornea thickness Eye-left
64744-6	Cornea thickness Eye-right
29004-9	Tear secretion 1 Eye-left Schirmer test
29003-1	Tear secretion 1 Eye-right Schirmer test
29006-4	Tear secretion 2 Eye-left Schirmer test
29005-6	Tear secretion 2 Eye-right Schirmer test
41807-9	Orbit CT
36777-1	Orbit MRI
36886-0	Orbit X-ray