

OpenELIS Design/Requirements

Change/Feature Name : Patient History with Graphing

Date : 4/27/2022

Target Release: OE v.2.8.3.1

Contents

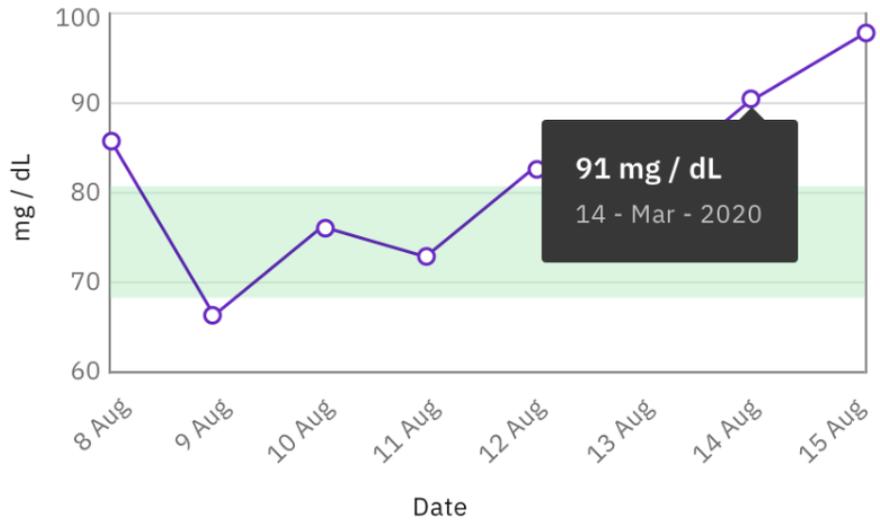
Background	1
User Stories	1
Business Rules:	1
Mockups	2
Localization	6
Considerations	6
Traceability	6
Signatures	6

Background

We need to be able to see patient histories. The menu item would be under Patient -> Patient History. We are using the exact same UI for display of patient history as OpenMRS 3.0, perhaps we can re-use some elements from that work. If not, we will build it out in our frameworks. We would like this to work on the OpenELIS application, and also be able to be run on the consolidated server, acting as a central patient history.

User Stories

- As a results person, I need to be able to see patient history.
- As a validator, I need to see patient histories
 - Link which says “history” bringing up [this](#) graph in a pop up window



Date	Time	Value (mg / dL)
16 - Apr - 2020	04:00	1.1
15 - Apr - 2020	03:25	2.1
14 - Apr - 2020	02:18	3.3 ↑ ↑
09 - Mar - 2020	01.19	1.19 ↑
19 - Feb - 2020	03:18	1.15
17 - Feb - 2010	02:27	1.07
13 - Feb - 2020	15:28	1.14
11 - Feb - 2020	13:29	1.07
08 - Feb - 2020	11:44	1.21 ↑
07 - Feb - 2020	11.10	1.18 ↑

- Future: as a clinician, I need to see patient histories (need to figure out how to manage access)

Business Rules:

We want to be able to generate this history by patient, same search as currently exists

Search

Lab No :

Patient ID :

Last Name :

First Name :

Date of Birth (dd/mm/yyyy): Gender:

We want to be able to display this history by navigating a sidebar, the first level is lab unit (EG: Hematology, secondary items are the panel ordered, the third level an individual test.

We want to show the result date and time for each test

It would be preferable to be able to toggle between order date and result date for the tests.

For the OpenELIS app version: We want to be able to specify if we want to get results from all labs or this lab, default should be this lab, with a box to press to get results for all labs, and a spinning circle while it's searching/downloading the results from the CS.

Mockups

Results

Lab Tests / Blood / Comprehensive Metabolic /

Comprehensive Metabolic

Name Reference Range	2020					
	10 - Jul				19 - Feb	22 -
	18:42	11:21	08:42	07:17	12:44	--
Sodium 136 – 145 mmol/L	137	135 ↓	115 ↓↓	140	142	138
Potassium 3.5 – 5.5 mmol/L	4.2	4.5	4.7	4.8 ↑↑	4.5	4.9
Chloride 99 – 109 mmol/L	102	105	107	102	101	112
CO²-Tot 20 – 31 mmol/L	22	18 ↓	25	26	22	21
BUN SerPl Qn 9.0 – 20.0 mg/dL	10.5	15.2	--	14.2	16.0	13.0
Creatinine 0.7 – 1.3 mg/dL	0.8	Specimen hemolyzed		0.7	0.9	1.0
Glucose 75 – 110 mg/dL	98	132 ↑↑	109	112 ↑	108	107

Rejected tests will show with the rejection reason as shown.

The UI mockup above is borrowed from our friends at OpenMRS, The arrows show high, the double arrows a critical high, all abnormal results should be bolded as well.

Biochemistry

Search

Unit Type:

1- 5 of 5

Lab No. :

 = Sample or order is nonconforming

Save all normal results

Save all results

Retest all results

Accession Number	Test Name	Result	Save	Retest	Notes
TESTA220000000000035			<input type="checkbox"/>	<input type="checkbox"/>	
	GPT/ALAT(Serum) 	Result History 45 UI/L (7-40)	<input type="checkbox"/>	<input type="checkbox"/>	
	GOT/ASAT(Serum) 	Result History 56 UI/L (3-40)	<input type="checkbox"/>	<input type="checkbox"/>	
	Creatinine(Serum) 	Result History 52 mg/l (6-13)	<input type="checkbox"/>	<input type="checkbox"/>	
	Total cholesterol(Serum) 	Result History 4.00 g/l (1.50-2.60)	<input type="checkbox"/>	<input type="checkbox"/>	
	HDL cholesterol(Serum) 	Result History 98.00 g/l (0.35-0.70)	<input type="checkbox"/>	<input type="checkbox"/>	

1- 5 of 5

If one clicks on result history, if it's a numeric test, it should show a graph of that result over time. If the result type is not numeric, its the same table, but no graph.

← Creatinine SerPl Qn – Trend

1 day

1 week

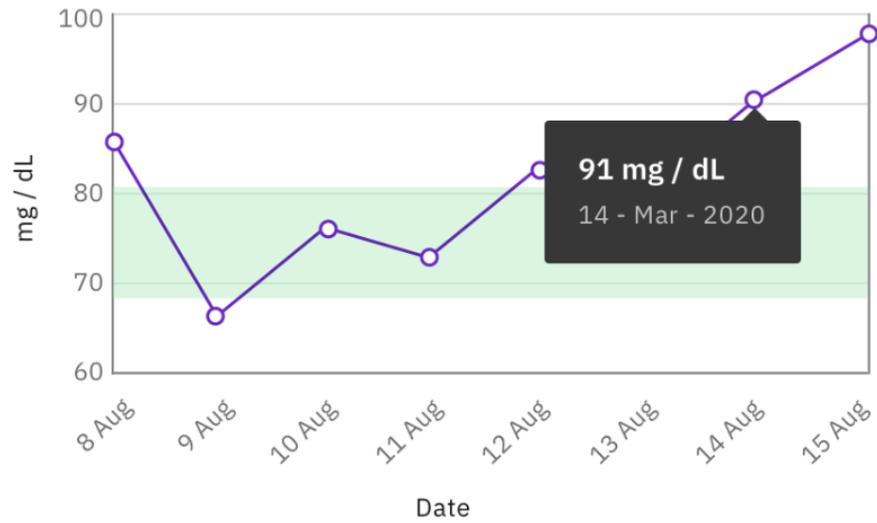
1 month

6 mths

1 year

3 years

All



Date	Time	Value (mg / dL)
16 - Apr - 2020	04:00	1.1
15 - Apr - 2020	03:25	2.1
14 - Apr - 2020	02:18	3.3 ↑ ↑
09 - Mar - 2020	01:19	1.19 ↑
19 - Feb - 2020	03:18	1.15
17 - Feb - 2010	02:27	1.07
13 - Feb - 2020	15:28	1.14
11 - Feb - 2020	13:29	1.07
08 - Feb - 2020	11:44	1.21 ↑
07 - Feb - 2020	11:10	1.18 ↑

HIV Care and Treatment

Results

Panel

Tree

Split

Full

- ^ Bloodwork (7)
- v HIV Adult Lab Set (3)
- v Hematology (2)
- v Chemistry (2)
- v Chemistry (2)
- v HIV Adult Lab Set (3)
- v Hematology (2)

HIV Adult Lab Set	2019			
	28 – Aug 04:03 AM	25 – Aug 02:18 AM	24 – Aug 01:37 AM	28 – Jul 04:03 AM
Haemoglobin 10.4 – 17.8 g/dL		14.1	13.1	
X-ray, chest				
HIV viral load copies/ml	217.0	0.0	0.0	115.0
Complete blood count				
Hematocrit 32.3 – 51.9 %		36.0	36.0	
Haemoglobin 10.4 – 17.8 g/dL		14.1	13.1	

Localization

English	French
Trend	

Considerations

Traceability

Signatures

Role	Signature	Date

Stakeholder		
Feature Lead Casey		
Dev		