

HL7 INDIA VIRTUAL FHIR CONNECTATHON 3RD TO 5TH JULY 2020

FHIR STARTER TRACK- FETCHING PATIENT & LAB RESULT DATA

FHIR in Action- Client query Part 1 & 2

Use case Author:

 Aditya Joshi (Chair, Education Committee, HL7 India. elearning@hl7india.org

Use case Contributor & Technical Implementer:

• Sahil Khanna (Senior Software Engineer at Philips Healthcare) sahil.khanna@philips.com

Version: 1.0

Creation date: 4th July 2020

Confidential. Not to share in public domain.

HL7 India Standards Institute

21, 1st Floor, 14th A Main 'E' Block Sahakarnagar Bangalore – 560092 HL7 India FHIR Connectathon- FHIR Starter Track- Get Patient & Lab result data Using FHIR query

Objective

Intent of this use case is to make participants aware about FHIR Rest API. Use cases involves fetching Patient demographic data based on various parameters like name, gender, unique id etc.

Use Case: Patient (Joe, Doe) arrives at the hospital, registers himself at the registration desk in order to meet the primary care provider. Based on the initial diagnosis, the provider orders for a Heart Rate Test. Patient (Joe, Doe) gets the Heart Rate Test done and results/Patient Data is available in the Clinical Data Repository (CDR).

Pre-Requisite: In order to execute the workflow, you will require Postman Application

Workflow Description:

When the patient arrives at the hospital and gets register himself at the registration desk, "Patient" resource is created in the CDR. Now the patient information is available in the CDR, for the end user. Once the patient gets the Heart Rate test (LOINC Code for Heart Rate: "8867-4") done, the "Observation" resource is created in the CDR and is available to be viewed by the end user.

Session Exercises

Part 1: Fetching Patient data using various parameters

Fetch the Patient Details where

- 1. First Name is "Doe"
- 2. Last Name is "Joe"
- 3. Gender is "female"
- 4. First Name is "Doe" and Last Name is "Joe" and Gender is "female"
- 5. System is "https://test.org/identifiers/PatientIdentifier" and MRN is "20021986"

For each use case mentioned above, write a separate FHIR query.

Page | 1 Date: 4/July/2020

HL7 India FHIR Connectathon- FHIR Starter Track- Get Patient & Lab result data Using FHIR query

Part 2: Fetching lab results for specific patient

1. Business Use case: Search for all lab results for Patient whose resource id ("156341") is known to client system

2. Another business use case: Search for specific all Heart Rate vitals data (Loinc Code is "8867-4") Patient whose resource id ("156341") is known to client system

You first have to figure out which resource will provide us the above information. Then build your query like-

http://fhir.hl7fundamentals.org/r4/<ResourceName>?parameter...

Just to help you all, that resource is Observation. So, your query would look like-

http://fhir.hl7fundamentals.org/r4/Observation?.....

Note: Observation refers to Patient resource.

Page | 2 Date: 4/July/2020