Data Integration Engineer (InterOp) Test

The objective of this test is to evaluate basic competence in handling health care data sources, create mappings and data transformations.. It is meant to be completed in a few hours and is not a full representation of one’s abilities. The requirements below are purposefully ambiguous and open to interpretation by the tester and varied results are expected.

Assignment

1. Evaluate the following attached FHIR resources (patient,provider, encounter) for a patient.
   1. Patient - fhir\_sample\_patient.json
   2. Provider - fhir\_sample\_provider.json
   3. Encounter - fhir\_sample\_encounter.json
2. Using javascript, extract data from these resources, programmatically clean, map and transform the data and generate csv files with the following information. Save the script in a .js file.

* Convert any date in MM/DD/YYYY format.
* Convert gender values to M, F or U
* For more than one identifier in any resource, add a new row with all the information except other id and id type.
* Use following OID to ID type mapping:
  + Urn:oid:2.16.528.1.1007.3.1 to NPI
  + Urn:oid:2.16.840.1.113883.2.4.6.3 EHR ID
  + Urn:oid:2.16.840.1.113883.2.4.6.3 MRN

Patient.csv

Patient\_id,first\_name,last\_name,suffix,prefix,dob,gender,address1,address2,city,state,zip,country,phone,marital\_status,death\_date,patient\_status,email

Provider.csv

provider\_id,first\_name,last\_name,suffix,dob,gender,speciality,organization,other\_id,id\_type,phone,email

Encounter.csv

encounter\_id,patient\_id,practitioner\_id,encounter\_date,encounter\_reason,encounter\_status,encounter\_notes, encounter\_status

Submission

Upon completion of the above assignment, please email all the javascript files and the generated csv files to your recruiter. Also, create a general document explaining the data, their relationship, challenges and enhancements.