**SyntheaTM Patient Generator [Enhancement]**

SyntheaTM is a Synthetic Patient Population Simulator. The goal is to output synthetic, realistic (but not real), patient data and associated health records in a variety of formats.

In addition to default implementation, this enhancement version includes the following:

* Modified Disease Module (Condition), to generate ICD-10 conditions.
* Generate data in alternative geographic locations with relevant geographical standard, such as Europe.
* Generate Questionnaires, QuestionnairesResponses type of FHIR R4 resources in a flexible and configurable way.

### **Generate Synthetic Patients:**

Generating the population one at a time...

./run\_synthea

By default, it will include one questionnaire. Command-line arguments need to be provided to specify a number for questionnaires to be loaded. The argument “-qr” specifies the number of questionnaires to be loaded.

Usage is:

run\_synthea [-s seed] [-p populationSize] [-m moduleFilter] [state [city]] [-qr questionnairesCount]

For example:

run\_synthea -qr 5

**Code Lifecycle:**

|  |  |  |
| --- | --- | --- |
| Load Quesionnaires | Generate QuesionnairesResponses | Add QuesionnairesResponses to FhirR4 |
| Class: Provider.java  Method: csvLineToQuestionnaire()  Class: Provider.java  Method: loadQuestionnaire()  Class: Generator.java  Method: main()  Class: App.java  Method: main() | Class: Generator.java  Method: updatePerson()  Class: Provider.java  Method: getQuestionnaireresponse ()  Class: EncounterModule.java  Method: createEncounter()  Class: EncounterModule.java  Method: process()  Class: Generator.java  Method: createPerson()  Class: Generator.java  Method: generatePerson() | Class: FhirR4.java  Method: questionnaireResponse()  Class: FhirR4.java  Method: convertToFHIR () |