create table concept (

concept\_id INT64 not null ,

concept\_name STRING not null ,

domain\_id STRING not null ,

vocabulary\_id STRING not null ,

concept\_class\_id STRING not null ,

standard\_concept STRING null ,

concept\_code STRING not null ,

valid\_start\_date DATE not null ,

valid\_end\_date DATE not null ,

invalid\_reason STRING null

)

;

create table vocabulary (

vocabulary\_id STRING not null,

vocabulary\_name STRING not null,

vocabulary\_reference STRING not null,

vocabulary\_version STRING not null,

vocabulary\_concept\_id INT64 not null

)

;

create table domain (

domain\_id STRING not null,

domain\_name STRING not null,

domain\_concept\_id INT64 not null

)

;

create table concept\_class (

concept\_class\_id STRING not null,

concept\_class\_name STRING not null,

concept\_class\_concept\_id INT64 not null

)

;

create table concept\_relationship (

concept\_id\_1 INT64 not null,

concept\_id\_2 INT64 not null,

relationship\_id STRING not null,

valid\_start\_date DATE not null,

valid\_end\_date DATE not null,

invalid\_reason STRING null

)

;

create table relationship (

relationship\_id STRING not null,

relationship\_name STRING not null,

is\_hierarchical STRING not null,

defines\_ancestry STRING not null,

reverse\_relationship\_id STRING not null,

relationship\_concept\_id INT64 not null

)

;

create table concept\_synonym (

concept\_id INT64 not null,

concept\_synonym\_name STRING not null,

language\_concept\_id INT64 not null

)

;

create table concept\_ancestor (

ancestor\_concept\_id INT64 not null,

descendant\_concept\_id INT64 not null,

min\_levels\_of\_separation INT64 not null,

max\_levels\_of\_separation INT64 not null

)

;

create table source\_to\_concept\_map (

source\_code STRING not null,

source\_concept\_id INT64 not null,

source\_vocabulary\_id STRING not null,

source\_code\_description STRING null,

target\_concept\_id INT64 not null,

target\_vocabulary\_id STRING not null,

valid\_start\_date DATE not null,

valid\_end\_date DATE not null,

invalid\_reason STRING null

)

;

create table drug\_strength (

drug\_concept\_id INT64 not null,

ingredient\_concept\_id INT64 not null,

amount\_value FLOAT64 null,

amount\_unit\_concept\_id INT64 null,

numerator\_value FLOAT64 null,

numerator\_unit\_concept\_id INT64 null,

denominator\_value FLOAT64 null,

denominator\_unit\_concept\_id INT64 null,

box\_size INT64 null,

valid\_start\_date DATE not null,

valid\_end\_date DATE not null,

invalid\_reason STRING null

)

;

create table cdm\_source

(

cdm\_source\_name STRING not null ,

cdm\_source\_abbreviation STRING null ,

cdm\_holder STRING null ,

source\_description STRING null ,

source\_documentation\_reference STRING null ,

cdm\_etl\_reference STRING null ,

source\_release\_date DATE null ,

cdm\_release\_date DATE null ,

cdm\_version STRING null ,

vocabulary\_version STRING null

)

;

create table metadata

(

metadata\_concept\_id INT64 not null ,

metadata\_type\_concept\_id INT64 not null ,

name STRING not null ,

value\_as\_string STRING null ,

value\_as\_concept\_id INT64 null ,

metadata\_date DATE null ,

metadata\_datetime DATETIME null

)

;

create table person

(

person\_id INT64 not null ,

gender\_concept\_id INT64 not null ,

year\_of\_birth INT64 not null ,

month\_of\_birth INT64 null,

day\_of\_birth INT64 null,

birth\_datetime DATETIME null,

race\_concept\_id INT64 not null,

ethnicity\_concept\_id INT64 not null,

location\_id INT64 null,

provider\_id INT64 null,

care\_site\_id INT64 null,

person\_source\_value STRING null,

gender\_source\_value STRING null,

gender\_source\_concept\_id INT64 not null,

race\_source\_value STRING null,

race\_source\_concept\_id INT64 not null,

ethnicity\_source\_value STRING null,

ethnicity\_source\_concept\_id INT64 not null

)

;

create table observation\_period

(

observation\_period\_id INT64 not null ,

person\_id INT64 not null ,

observation\_period\_start\_date DATE not null ,

observation\_period\_end\_date DATE not null ,

period\_type\_concept\_id INT64 not null

)

;

create table specimen

(

specimen\_id INT64 not null ,

person\_id INT64 not null ,

specimen\_concept\_id INT64 not null ,

specimen\_type\_concept\_id INT64 not null ,

specimen\_date DATE null ,

specimen\_datetime DATETIME not null ,

quantity FLOAT64 null ,

unit\_concept\_id INT64 null ,

anatomic\_site\_concept\_id INT64 not null ,

disease\_status\_concept\_id INT64 not null ,

specimen\_source\_id STRING null ,

specimen\_source\_value STRING null ,

unit\_source\_value STRING null ,

anatomic\_site\_source\_value STRING null ,

disease\_status\_source\_value STRING null

)

;

create table death

(

person\_id INT64 not null ,

death\_date DATE not null ,

death\_datetime DATETIME null ,

death\_type\_concept\_id INT64 not null ,

cause\_concept\_id INT64 null ,

cause\_source\_value STRING null,

cause\_source\_concept\_id INT64 null

)

;

create table visit\_occurrence

(

visit\_occurrence\_id INT64 not null ,

person\_id INT64 not null ,

visit\_concept\_id INT64 not null ,

visit\_start\_date DATE not null ,

visit\_start\_datetime DATETIME null ,

visit\_end\_date DATE not null ,

visit\_end\_datetime DATETIME null ,

visit\_type\_concept\_id INT64 not null ,

provider\_id INT64 null,

care\_site\_id INT64 null,

visit\_source\_value STRING null,

visit\_source\_concept\_id INT64 null ,

admitted\_source\_concept\_id INT64 null ,

admitted\_source\_value STRING null ,

discharge\_to\_concept\_id INT64 null ,

discharge\_to\_source\_value STRING null ,

preceding\_visit\_occurrence\_id INT64 null

)

;

create table visit\_detail

(

visit\_detail\_id INT64 not null ,

person\_id INT64 not null ,

visit\_detail\_concept\_id INT64 not null ,

visit\_detail\_start\_date DATE not null ,

visit\_detail\_start\_datetime DATETIME null ,

visit\_detail\_end\_date DATE not null ,

visit\_detail\_end\_datetime DATETIME null ,

visit\_detail\_type\_concept\_id INT64 not null ,

provider\_id INT64 null ,

care\_site\_id INT64 null ,

visit\_detail\_source\_value STRING null ,

visit\_detail\_source\_concept\_id INT64 not null ,

admitted\_source\_value STRING null ,

admitted\_source\_concept\_id INT64 not null ,

discharge\_to\_source\_value STRING null ,

discharge\_to\_concept\_id INT64 not null ,

preceding\_visit\_detail\_id INT64 null ,

visit\_detail\_parent\_id INT64 null ,

visit\_occurrence\_id INT64 not null

)

;

create table procedure\_occurrence

(

procedure\_occurrence\_id INT64 not null ,

person\_id INT64 not null ,

procedure\_concept\_id INT64 not null ,

procedure\_date DATE null ,

procedure\_datetime DATETIME not null ,

procedure\_type\_concept\_id INT64 not null ,

modifier\_concept\_id INT64 not null ,

quantity INT64 null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

procedure\_source\_value STRING null ,

procedure\_source\_concept\_id INT64 not null ,

modifier\_source\_value STRING null

)

;

create table drug\_exposure

(

drug\_exposure\_id INT64 not null ,

person\_id INT64 not null ,

drug\_concept\_id INT64 not null ,

drug\_exposure\_start\_date DATE not null ,

drug\_exposure\_start\_datetime DATETIME null ,

drug\_exposure\_end\_date DATE not null ,

drug\_exposure\_end\_datetime DATETIME null ,

verbatim\_end\_date DATE null ,

drug\_type\_concept\_id INT64 not null ,

stop\_reason STRING null ,

refills INT64 null ,

quantity FLOAT64 null ,

days\_supply INT64 null ,

sig STRING null ,

route\_concept\_id INT64 not null ,

lot\_number STRING null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

drug\_source\_value STRING null ,

drug\_source\_concept\_id INT64 not null ,

route\_source\_value STRING null ,

dose\_unit\_source\_value STRING null

)

;

create table device\_exposure

(

device\_exposure\_id INT64 not null ,

person\_id INT64 not null ,

device\_concept\_id INT64 not null ,

device\_exposure\_start\_date DATE not null ,

device\_exposure\_start\_datetime DATETIME null ,

device\_exposure\_end\_date DATE null ,

device\_exposure\_end\_datetime DATETIME null ,

device\_type\_concept\_id INT64 not null ,

unique\_device\_id STRING null ,

quantity INT64 null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

device\_source\_value STRING null ,

device\_source\_concept\_id INT64 null

)

;

create table condition\_occurrence

(

condition\_occurrence\_id INT64 not null ,

person\_id INT64 not null ,

condition\_concept\_id INT64 not null ,

condition\_start\_date DATE not null ,

condition\_start\_datetime DATETIME null ,

condition\_end\_date DATE null ,

condition\_end\_datetime DATETIME null ,

condition\_type\_concept\_id INT64 not null ,

stop\_reason STRING null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

condition\_source\_value STRING null ,

condition\_source\_concept\_id INT64 not null ,

condition\_status\_source\_value STRING null,

condition\_status\_concept\_id INT64 not null

)

;

create table measurement

(

measurement\_id INT64 not null ,

person\_id INT64 not null ,

measurement\_concept\_id INT64 not null ,

measurement\_date DATE not null ,

measurement\_datetime DATETIME null ,

measurement\_time STRING null,

measurement\_type\_concept\_id INT64 not null ,

operator\_concept\_id INT64 null ,

value\_as\_number FLOAT64 null ,

value\_as\_concept\_id INT64 null ,

unit\_concept\_id INT64 null ,

range\_low FLOAT64 null ,

range\_high FLOAT64 null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

measurement\_source\_value STRING null ,

measurement\_source\_concept\_id INT64 null ,

unit\_source\_value STRING null ,

value\_source\_value STRING null

)

;

create table note

(

note\_id INT64 not null ,

person\_id INT64 not null ,

note\_date DATE not null ,

note\_datetime DATETIME null ,

note\_type\_concept\_id INT64 not null ,

note\_class\_concept\_id INT64 not null ,

note\_title STRING null ,

note\_text STRING not null ,

encoding\_concept\_id INT64 not null ,

language\_concept\_id INT64 not null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

note\_source\_value STRING null

)

;

create table note\_nlp

(

note\_nlp\_id INT64 not null ,

note\_id INT64 not null ,

section\_concept\_id INT64 null ,

snippet STRING null ,

offset STRING null ,

lexical\_variant STRING not null ,

note\_nlp\_concept\_id INT64 null ,

note\_nlp\_source\_concept\_id INT64 null,

nlp\_system STRING null ,

nlp\_date DATE not null ,

nlp\_datetime DATETIME null ,

term\_exists STRING null ,

term\_temporal STRING null ,

term\_modifiers STRING null

)

;

create table observation

(

observation\_id INT64 not null ,

person\_id INT64 not null ,

observation\_concept\_id INT64 not null ,

observation\_date DATE not null ,

observation\_datetime DATETIME null ,

observation\_type\_concept\_id INT64 not null ,

value\_as\_number FLOAT64 null ,

value\_as\_string STRING null ,

value\_as\_concept\_id INT64 null ,

qualifier\_concept\_id INT64 null ,

unit\_concept\_id INT64 null ,

provider\_id INT64 null ,

visit\_occurrence\_id INT64 null ,

visit\_detail\_id INT64 null ,

observation\_source\_value STRING null ,

observation\_source\_concept\_id INT64 not null ,

unit\_source\_value STRING null ,

qualifier\_source\_value STRING null

)

;

create table fact\_relationship

(

domain\_concept\_id\_1 INT64 not null ,

fact\_id\_1 INT64 not null ,

domain\_concept\_id\_2 INT64 not null ,

fact\_id\_2 INT64 not null ,

relationship\_concept\_id INT64 not null

)

;

create table location

(

location\_id INT64 not null ,

address\_1 STRING null ,

address\_2 STRING null ,

city STRING null ,

state STRING null ,

zip STRING null ,

county STRING null ,

location\_source\_value STRING null

)

;

create table care\_site

(

care\_site\_id INT64 not null ,

care\_site\_name STRING null ,

place\_of\_service\_concept\_id INT64 null ,

location\_id INT64 null ,

care\_site\_source\_value STRING null ,

place\_of\_service\_source\_value STRING null

)

;

create table provider

(

provider\_id INT64 not null ,

provider\_name STRING null ,

npi STRING null ,

dea STRING null ,

specialty\_concept\_id INT64 null ,

care\_site\_id INT64 null ,

year\_of\_birth INT64 null ,

gender\_concept\_id INT64 not null ,

provider\_source\_value STRING null ,

specialty\_source\_value STRING null ,

specialty\_source\_concept\_id INT64 null ,

gender\_source\_value STRING null ,

gender\_source\_concept\_id INT64 null

)

;

create table payer\_plan\_period

(

payer\_plan\_period\_id INT64 not null ,

person\_id INT64 not null ,

payer\_plan\_period\_start\_date DATE not null ,

payer\_plan\_period\_end\_date DATE not null ,

payer\_concept\_id INT64 not null ,

payer\_source\_value STRING null ,

payer\_source\_concept\_id INT64 null ,

plan\_concept\_id INT64 null ,

plan\_source\_value STRING null ,

plan\_source\_concept\_id INT64 null ,

sponsor\_concept\_id INT64 null ,

sponsor\_source\_value STRING null ,

sponsor\_source\_concept\_id INT64 null ,

family\_source\_value STRING null ,

stop\_reason\_concept\_id INT64 null ,

stop\_reason\_source\_value STRING null ,

stop\_reason\_source\_concept\_id INT64 null

)

;

create table cost

(

cost\_id INT64 not null ,

cost\_event\_id INT64 not null ,

cost\_domain\_id STRING not null,

cost\_type\_concept\_id INT64 not null ,

currency\_concept\_id INT64 null ,

total\_charge FLOAT64 null ,

total\_cost FLOAT64 null ,

total\_paid FLOAT64 null ,

paid\_by\_payer FLOAT64 null ,

paid\_by\_patient FLOAT64 null ,

paid\_patient\_copay FLOAT64 null ,

paid\_patient\_coinsurance FLOAT64 null ,

paid\_patient\_deductible FLOAT64 null ,

paid\_by\_primary FLOAT64 null ,

paid\_ingredient\_cost FLOAT64 null ,

paid\_dispensing\_fee FLOAT64 null ,

payer\_plan\_period\_id INT64 null ,

amount\_allowed FLOAT64 null ,

revenue\_code\_concept\_id INT64 null ,

reveue\_code\_source\_value STRING null,

drg\_concept\_id INT64 null,

drg\_source\_value STRING null

)

;

create table drug\_era

(

drug\_era\_id INT64 not null ,

person\_id INT64 not null ,

drug\_concept\_id INT64 not null ,

drug\_era\_start\_date DATE not null ,

drug\_era\_end\_date DATE not null ,

drug\_exposure\_count INT64 null ,

gap\_days INT64 null

)

;

create table dose\_era

(

dose\_era\_id INT64 not null ,

person\_id INT64 not null ,

drug\_concept\_id INT64 not null ,

unit\_concept\_id INT64 not null ,

dose\_value FLOAT64 not null ,

dose\_era\_start\_date DATE not null ,

dose\_era\_end\_date DATE not null

)

;

create table condition\_era

(

condition\_era\_id INT64 not null ,

person\_id INT64 not null ,

condition\_concept\_id INT64 not null ,

condition\_era\_start\_date DATE not null ,

condition\_era\_end\_date DATE not null ,

condition\_occurrence\_count INT64 null

)

;

create table cohort

(

cohort\_definition\_id INT64 not null ,

subject\_id INT64 not null ,

cohort\_start\_date DATE not null ,

cohort\_end\_date DATE not null

)

;

create table cohort\_attribute

(

cohort\_definition\_id INT64 not null ,

subject\_id INT64 not null ,

cohort\_start\_date DATE not null ,

cohort\_end\_date DATE not null ,

attribute\_definition\_id INT64 not null ,

value\_as\_number FLOAT64 null ,

value\_as\_concept\_id INT64 null

)

;