Source Data Mapping Approach to CDMV5.3.1

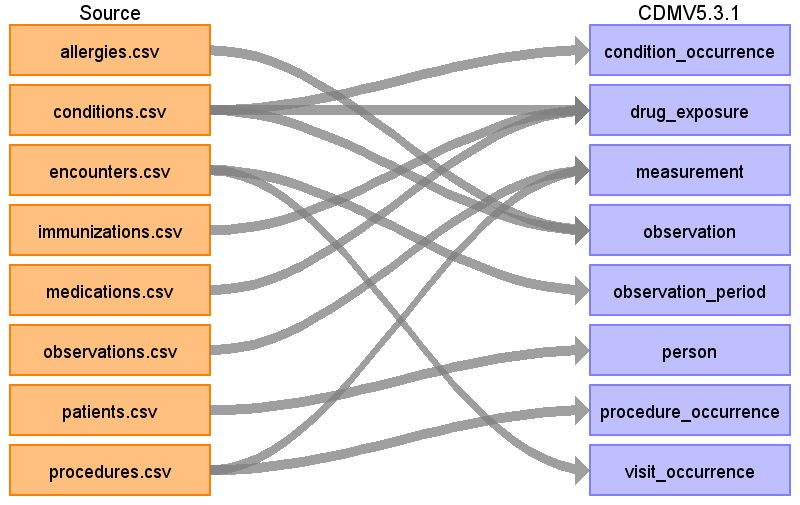
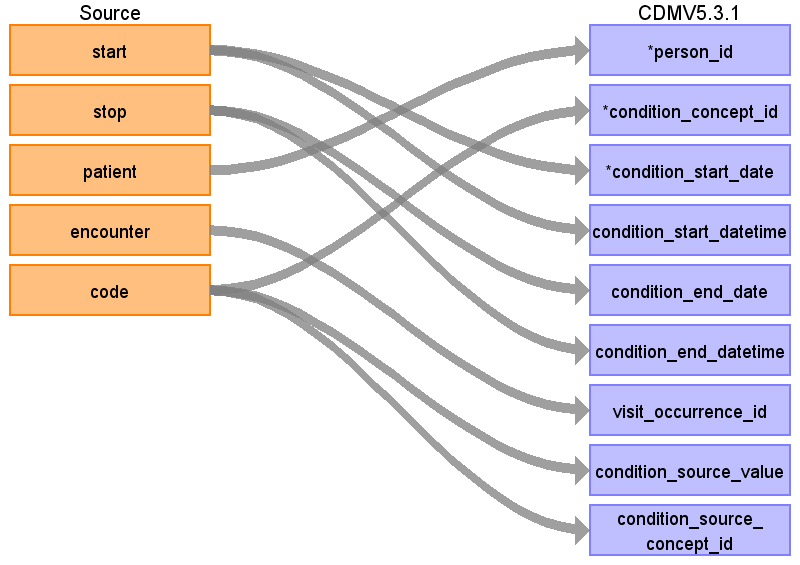


Table name: condition\_occurrence

Reading from conditions.csv



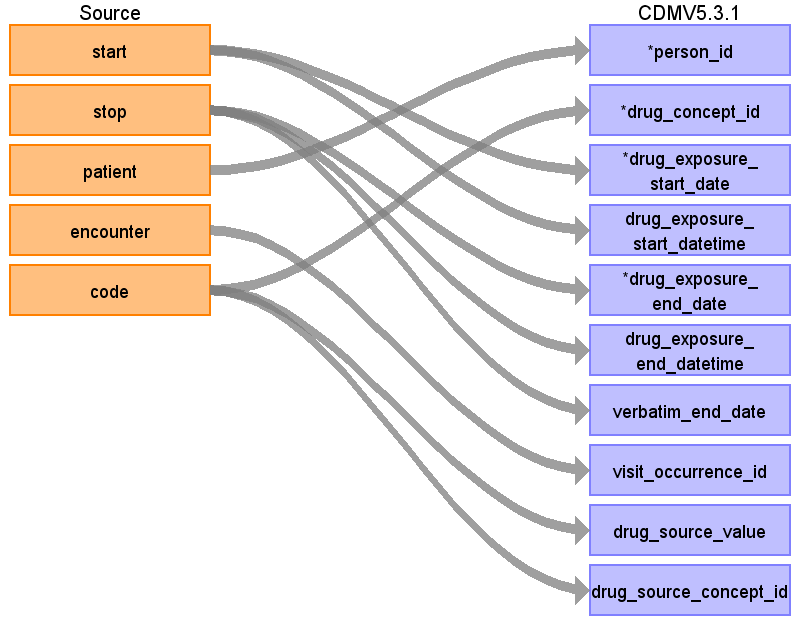
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| condition\_occurrence\_id |  |  | AUTOGENERATE |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| condition\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from conditions c  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = c.code  and ctvm.target\_domain\_id = 'Condition'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| condition\_start\_date | start |  |  |
| condition\_start\_datetime | start |  |  |
| condition\_end\_date | stop |  |  |
| condition\_end\_datetime | stop |  |  |
| condition\_type\_concept\_id |  |  | concept\_id: 32020 |
| stop\_reason |  |  | NULL |
| provider\_id |  |  | NULL |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| condition\_source\_value | code |  |  |
| condition\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join conditions c  on csvm.source\_code = c.code  and csvm.source\_vocabulary\_id = 'SNOMED' |  |
| condition\_status\_source\_value |  |  | NULL |
| condition\_status\_concept\_id |  |  | 0 |

Table name: death

Table name: device\_exposure

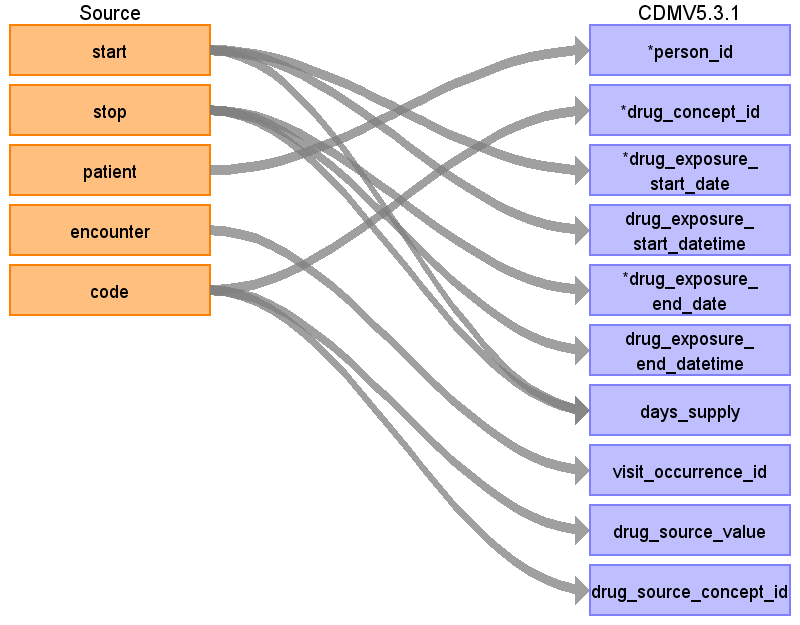
Table name: drug\_exposure

Reading from conditions.csv



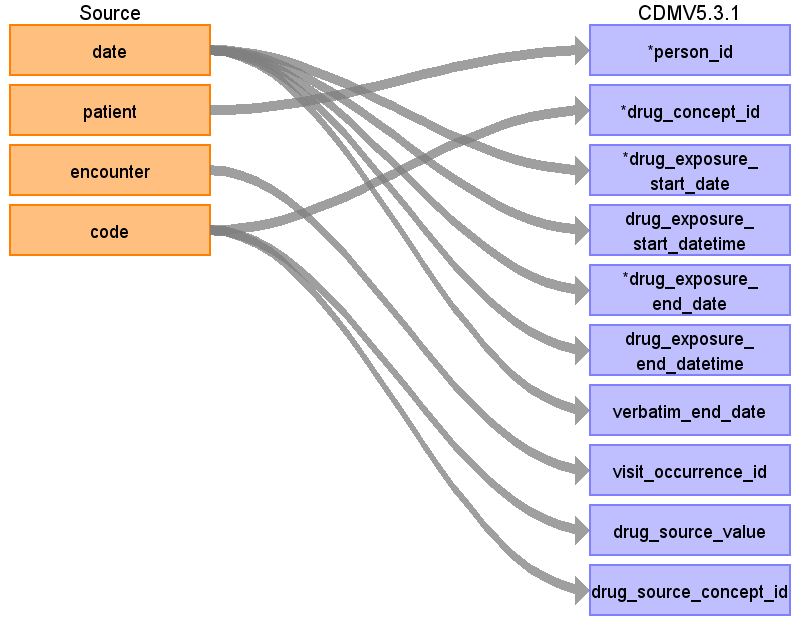
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| drug\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from conditions c  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = c.code  and ctvm.target\_domain\_id = 'Drug'  and ctvm.target\_vocabulary\_id = 'RxNorm' |  |
| drug\_exposure\_start\_date | start |  |  |
| drug\_exposure\_start\_datetime | start |  |  |
| drug\_exposure\_end\_date | stop |  |  |
| drug\_exposure\_end\_datetime | stop |  |  |
| verbatim\_end\_date | stop |  | NULL |
| drug\_type\_concept\_id |  |  | 581452 |
| stop\_reason |  |  | NULL |
| refills |  |  | 0 |
| quantity |  |  | 0 |
| days\_supply |  |  | 0 |
| sig |  |  | NULL |
| route\_concept\_id |  |  | 0 |
| lot\_number |  |  | 0 |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| drug\_source\_value | code |  |  |
| drug\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join conditions c  on csvm.source\_code = c.code  and csvm.source\_vocabulary\_id = 'RxNorm' |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Reading from medications.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| drug\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from medications m  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = m.code  and ctvm.target\_domain\_id = 'Drug'  and ctvm.target\_vocabulary\_id = 'RxNorm' |  |
| drug\_exposure\_start\_date | start |  |  |
| drug\_exposure\_start\_datetime | start |  |  |
| drug\_exposure\_end\_date | stop |  |  |
| drug\_exposure\_end\_datetime | stop |  |  |
| verbatim\_end\_date |  |  | NULL |
| drug\_type\_concept\_id |  |  | 581452 |
| stop\_reason |  |  | NULL |
| refills |  |  | 0 |
| quantity |  |  | 0 |
| days\_supply | start  stop |  | 0 |
| sig |  |  | NULL |
| route\_concept\_id |  |  | 0 |
| lot\_number |  |  | 0 |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| drug\_source\_value | code |  |  |
| drug\_source\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from medications m  join cte\_source\_vocab\_map csvm  on cvm.source\_code = m.code  and cvm.source\_vocabulary\_id = 'RxNorm' |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Reading from immunizations.csv

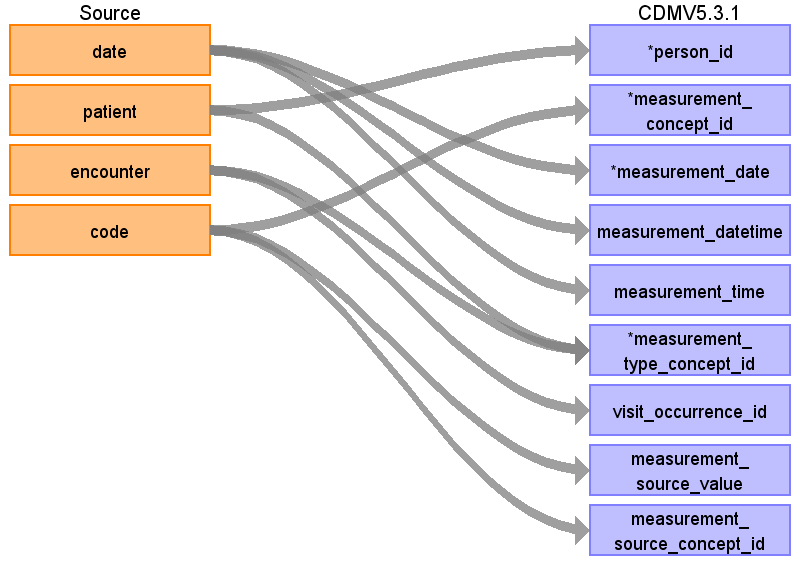


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| drug\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from immunizations i  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = i.code  and ctvm.target\_domain\_id = 'Drug'  and ctvm.target\_vocabulary\_id = 'CVX' |  |
| drug\_exposure\_start\_date | date |  |  |
| drug\_exposure\_start\_datetime | date |  |  |
| drug\_exposure\_end\_date | date |  |  |
| drug\_exposure\_end\_datetime | date |  |  |
| verbatim\_end\_date | date |  | NULL |
| drug\_type\_concept\_id |  |  | 581452 |
| stop\_reason |  |  | NULL |
| refills |  |  | 0 |
| quantity |  |  | 0 |
| days\_supply |  |  | 0 |
| sig |  |  | NULL |
| route\_concept\_id |  |  | 0 |
| lot\_number |  |  | 0 |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| drug\_source\_value | code |  |  |
| drug\_source\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from immunizations i  join cte\_source\_vocab\_map csvm  on csvm.source\_code = i.code  and csvm.source\_vocabulary\_id = 'CVX' |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Table name: fact\_relationship

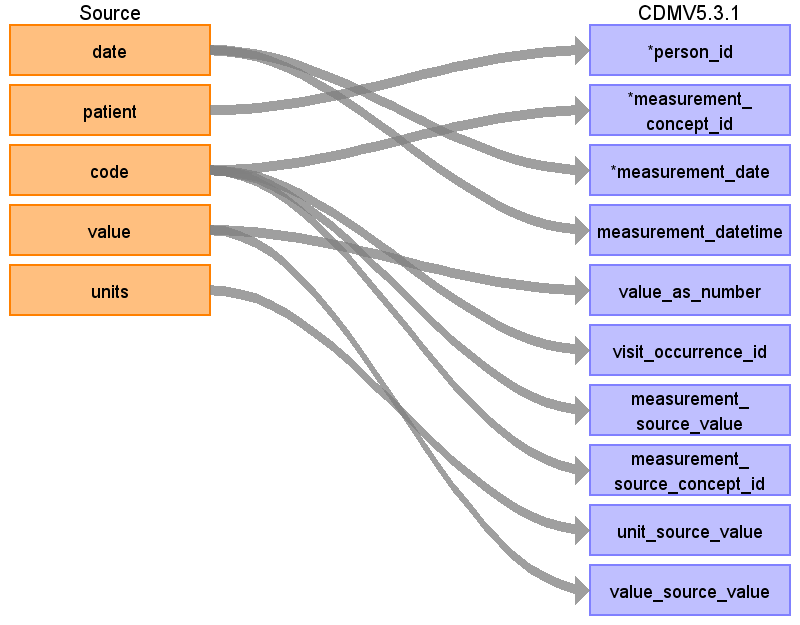
Table name: measurement

Reading from procedures.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| measurement\_id |  |  | autogenerate |
| person\_id | patient | Lookup in the person table: map by mapping person.person\_source\_value to patient. |  |
| measurement\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from procedures pr  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = pr.code  and ctvm.target\_domain\_id = 'Measurement'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| measurement\_date | date |  |  |
| measurement\_datetime | date |  |  |
| measurement\_time | date |  | NULL |
| measurement\_type\_concept\_id | encounter  patient | Join to encounters to lookup encounters.description (same method used to find condition\_occurrence.condition\_type\_concept\_id):  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join procedures p  on p.encounter = e.id  and p.patient = e.patient  Join to encounters to lookup encounters.description (same method used to find condition\_occurrence.condition\_type\_concept\_id):  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join procedures p  on p.encounter = e.id  and p.patient = e.patient | concept\_id: 5001 |
| operator\_concept\_id |  |  | 0 |
| value\_as\_number |  |  |  |
| value\_as\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| range\_low |  |  | NULL |
| range\_high |  |  | NULL |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| measurement\_source\_value | code |  |  |
| measurement\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join procedures pr  on csvm.source\_code = pr.code  and csvm.target\_domain\_id = 'Measurement'  and csvm.source\_vocabulary\_id = 'SNOMED'  and csvm.target\_vocabulary\_id = 'SNOMED' |  |
| unit\_source\_value |  |  |  |
| value\_source\_value |  |  |  |

Reading from observations.csv



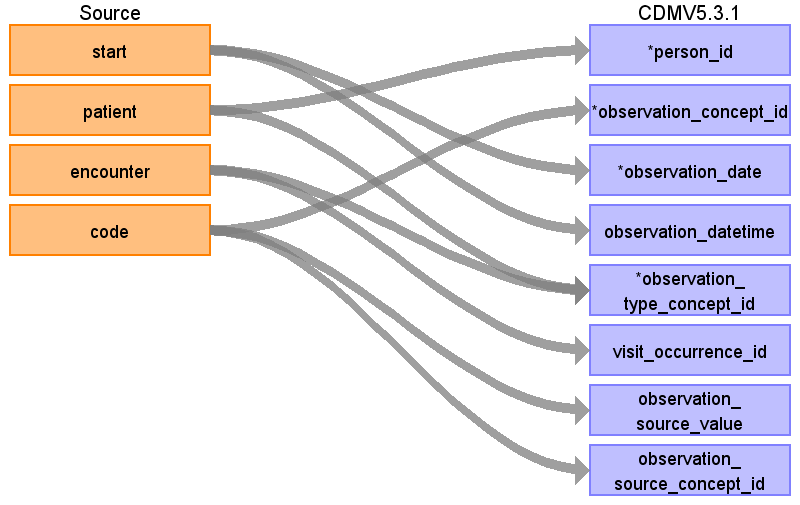
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| measurement\_id |  |  | autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| measurement\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from observations o  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = o.code  and ctvm.target\_domain\_id = 'Measurement'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| measurement\_date | date |  |  |
| measurement\_datetime | date |  |  |
| measurement\_time |  |  | NULL |
| measurement\_type\_concept\_id |  |  | concept\_id: 5001 |
| operator\_concept\_id |  |  | 0 |
| value\_as\_number | value |  |  |
| value\_as\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| range\_low |  |  | NULL |
| range\_high |  |  | NULL |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | code | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| measurement\_source\_value | code |  |  |
| measurement\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join observations o  on csvm.source\_code = o.code  and csvm.source\_vocabulary\_id = 'SNOMED' |  |
| unit\_source\_value | units |  |  |
| value\_source\_value | value |  |  |

Table name: note

Table name: note\_nlp

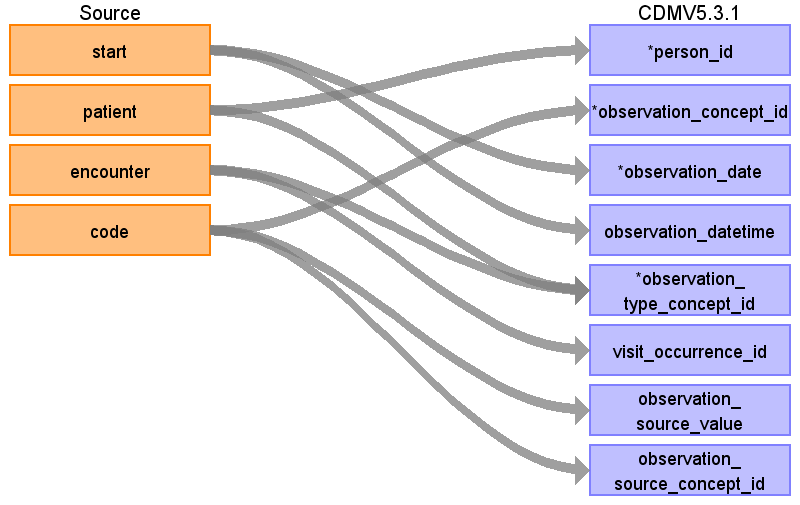
Table name: observation

Reading from allergies.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_id |  |  | AUTOGENERATE |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| observation\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from allergies a  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = a.code  and ctvm.target\_domain\_id = 'Observation'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| observation\_date | start |  |  |
| observation\_datetime | start |  |  |
| observation\_type\_concept\_id | encounter  patient | Join to encounters to lookup encounters.description:  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join allergies a  on a.encounter = e.id  and a.patient = e.patient  Join to encounters to lookup encounters.description:  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join allergies a  on a.encounter = e.id  and a.patient = e.patient |  |
| value\_as\_number |  |  | NULL |
| value\_as\_string |  |  | NULL |
| value\_as\_concept\_id |  |  | 0 |
| qualifier\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| observation\_source\_value | code |  |  |
| observation\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join allergies a  on csvm.source\_code = a.code  and csvm.source\_vocabulary\_id = 'SNOMED' |  |
| unit\_source\_value |  |  | NULL |
| qualifier\_source\_value |  |  | NULL |

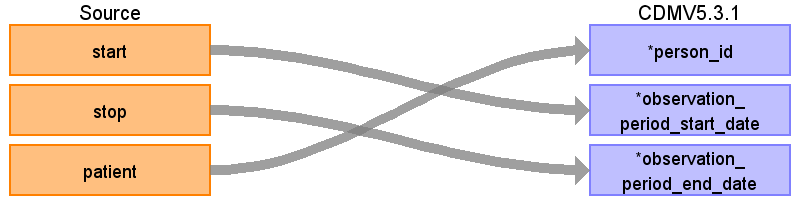
Reading from conditions.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_id |  |  | AUTOGENERATE |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| observation\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from conditions c  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = c.code  and ctvm.target\_domain\_id = 'Observation'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| observation\_date | start |  |  |
| observation\_datetime | start |  |  |
| observation\_type\_concept\_id | encounter  patient | Join to encounters to lookup encounters.description:  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join condition c  on c.encounter = e.id  and c.patient = e.patient  Join to encounters to lookup encounters.description:  select case  when e.description in (  'Encounter for check up (procedure)',  'Encounter for symptom',  'Prenatal visit',  'Outpatient procedure',  'Patient encounter procedure',  'Consultation for treatment',  'Encounter for 'check-up'',  'Encounter for problem',  'Prenatal initial visit',  'Postnatal visit',  'Asthma follow-up',  'Drug addiction therapy',  'Death Certification',  'Domiciliary or rest home patient evaluation and management',  'Patient-initiated encounter',  'Allergic disorder initial assessment',  'Allergic disorder follow-up assessment',  'Drug rehabilitation and detoxification',  'Office Visit',  'Encounter Inpatient',  'Non-urgent orthopedic admission'  )  then 38000215  when e.description in (  'Emergency room admission',  'Obstetric emergency hospital admission',  'Emergency Room Admission',  'Emergency hospital admission for asthma',  'Admission to surgical department',  'Emergency Encounter',  Hospital admission',  'Admission to thoracic surgery department'  )  then 38000183  from  encounters e  join condition c  on c.encounter = e.id  and c.patient = e.patient |  |
| value\_as\_number |  |  | NULL |
| value\_as\_string |  |  | NULL |
| value\_as\_concept\_id |  |  | 0 |
| qualifier\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| provider\_id |  |  | 0 |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| observation\_source\_value | code |  |  |
| observation\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join conditions c  on csvm.source\_code = c.code  and csvm.source\_vocabulary\_id = 'SNOMED' |  |
| unit\_source\_value |  |  | NULL |
| qualifier\_source\_value |  |  | NULL |

Table name: observation\_period

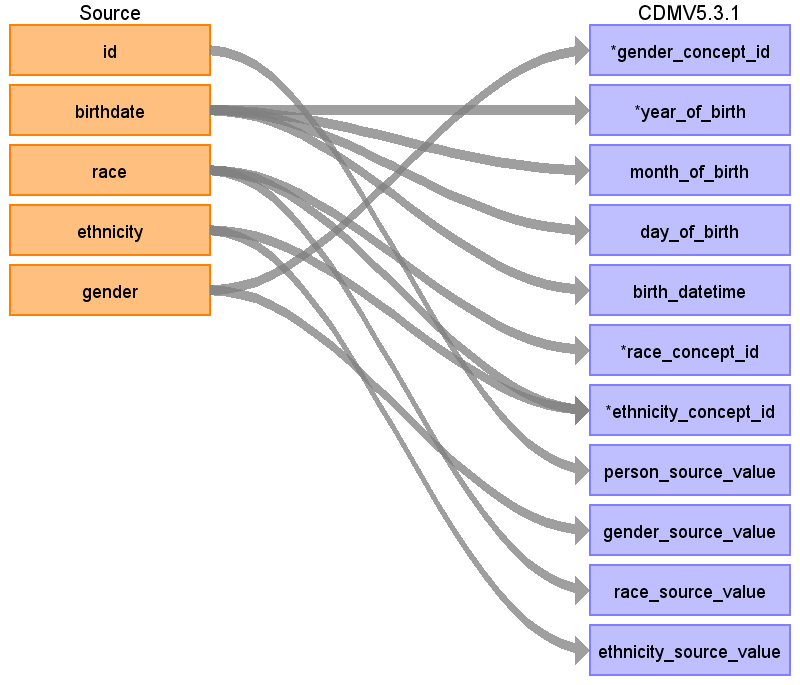
Reading from encounters.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_period\_id |  |  | Autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| observation\_period\_start\_date | start | min(start) group by patient  Take the earliest START per patient |  |
| observation\_period\_end\_date | stop | max(stop) group by patient  Take the latest STOP per patient |  |
| period\_type\_concept\_id |  |  | concept\_id: 44814724 |

Table name: person

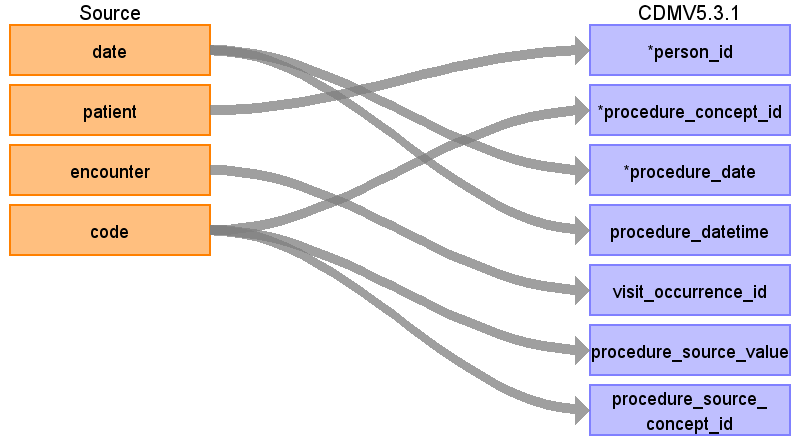
Reading from patients.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id |  |  | Autogenerate |
| gender\_concept\_id | gender | case upper(p.gender)  when 'M' then 8507  when 'F' then 8532  end | Please drop rows with missing/unknown gender. |
| year\_of\_birth | birthdate | Take Year from birthdate |  |
| month\_of\_birth | birthdate | Take month from birthdate |  |
| day\_of\_birth | birthdate | Take day from birthdate |  |
| birth\_datetime | birthdate | With midnight as time 00:00:00 |  |
| race\_concept\_id | race | case upper(race)  when 'WHITE' then 8527  when 'BLACK' then 8516  when 'ASIAN' then 8515  else 0  end |  |
| ethnicity\_concept\_id | race  ethnicity | case when upper(race) in ('HISPANIC') then 38003563 else 0 end  case when upper(ethnicity) in (  'CENTRAL\_AMERICAN',  'DOMINICAN',  'MEXICAN',  'PUERTO\_RICAN',  'SOUTH\_AMERICAN'  ) or upper(race) = 'HISPANIC'  then 38003563 else 0  end |  |
| location\_id |  |  | 0 |
| provider\_id |  |  | NULL |
| care\_site\_id |  |  | 0 |
| person\_source\_value | id |  |  |
| gender\_source\_value | gender |  |  |
| gender\_source\_concept\_id |  |  | 0 |
| race\_source\_value | race |  |  |
| race\_source\_concept\_id |  |  | 0 |
| ethnicity\_source\_value | ethnicity |  |  |
| ethnicity\_source\_concept\_id |  |  | 0 |

Table name: procedure\_occurrence

Reading from procedures.csv



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| procedure\_occurrence\_id |  |  | AUTOGENERATE |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| procedure\_concept\_id | code | Use code to lookup target\_concept\_id in CTE\_TARGET\_VOCAB\_MAP:  select ctvm.target\_concept\_id  from procedures pr  join cte\_target\_vocab\_map ctvm  on ctvm.source\_code = pr.code  and ctvm.target\_domain\_id = 'Procedure'  and ctvm.target\_vocabulary\_id = 'SNOMED' |  |
| procedure\_date | date |  |  |
| procedure\_datetime | date |  |  |
| procedure\_type\_concept\_id |  |  | concept\_id: 38000275 |
| modifier\_concept\_id |  |  | 0 |
| quantity |  |  | NULL |
| provider\_id |  |  | NULL |
| visit\_occurrence\_id | encounter | Lookup visit\_occurrence\_id using encounter, joining to temp table defined in AllVisitTable.sql. |  |
| visit\_detail\_id |  |  | 0 |
| procedure\_source\_value | code |  |  |
| procedure\_source\_concept\_id | code | Use code to lookup source\_concept\_id in CTE\_SOURCE\_VOCAB\_MAP:  select csvm.source\_concept\_id  from cte\_source\_vocab\_map csvm  join procedures pr  on csvm.source\_code = pr.code  and csvm.source\_vocabulary\_id = 'SNOMED' |  |
| modifier\_source\_value |  |  | NULL |

Table name: specimen

Table name: visit\_detail

Table name: visit\_occurrence

Reading from encounters.csv

Use logic found here:

https://github.com/OHDSI/ETL-Synthea/blob/master/ETL/SQL/AllVisitTable.sql

PART 1 - Generate visits by:

-For claim type = ‘Inpatient’ (IP):

---Sort data in ascending order by PERSON\_ID, VISIT\_START\_DATE, VISIT\_END\_DATE.

---Then by PERSON\_ID, collapse lines of claim as long as the time between the VISIT\_END\_DATE of one line and the VISIT\_START\_DATE of the next is <=1.

---Then each consolidated inpatient claim is considered as one inpatient visit, set

------MIN(VISIT\_START\_DATE) as VISIT\_START\_DATE

------MAX(VISIT\_END\_DATE) as VISIT\_END\_DATE

------‘IP’ as PLACE\_OF\_SERVICE\_SOURCE\_VALUE

---See if any ‘outpatient’ (OP) or ‘emergency’ (ER) or 'urgent' (ER) records occur during an ‘inpatient’ visit. These should be consolidated into that ‘inpatient’ visit, unless it is an ‘emergency’ or 'urgent' visit that starts and ends on the first day of the ‘inpatient’ visit. Types of outpatient (OP) visits not collapsed: [1] if an OP starts before an IP but ends during an IP or [2] if an OP starts before and ends after an IP visit. If an OP is collapsed into an IP and its VISIT\_END\_DATE is greater than the IP's VISIT\_END\_DATE it does not change the IP VISIT\_END\_DATE.

-For claim type in ('emergency','urgent') (ER)

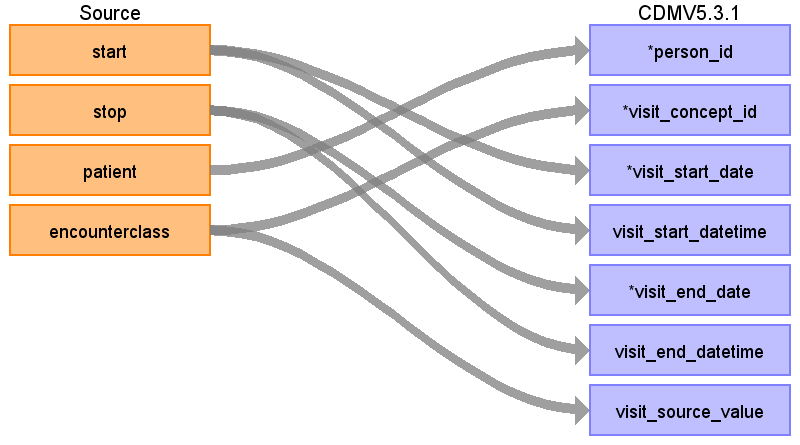
---Sort data in ascending order by PERSON\_ID, VISIT\_START\_DATE, VISIT\_END\_DATE.

---Then by PERSON\_ID, collapse all (ER) claims that start on the same day as one ER visit, then take VISIT\_START\_DATE as VISIT\_START\_DATE, MAX (VISIT\_END\_DATE) as VISIT\_END\_DATE, and ‘ER’ as PLACE\_OF\_SERVICE\_SOURCE\_VALUE.

-For claim type in ('ambulatory', 'wellness', 'outpatient') (OP)

---Sort data in ascending order by PERSON\_ID, VISIT\_START\_DATE, VISIT\_END\_DATE.

---Then by PERSON\_ID take VISIT\_START\_DATE as VISIT\_START\_DATE, MAX (VISIT\_END\_DATE) as VISIT\_END\_DATE, and ‘OP’ as PLACE\_OF\_SERVICE\_SOURCE\_VALUE.



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_occurrence\_id |  |  | Autogenerate |
| person\_id | patient | Map by mapping person.person\_source\_value to patient.  Find person.person\_id by mapping encouters.patient to person.person\_source\_value. |  |
| visit\_concept\_id | encounterclass | case  when lower(encouterclass) = 'ambulatory' then 9202  when lower(encouterclass) = 'emergency' then 9203  when lower(encouterclass) = 'inpatient' then 9201  when lower(encouterclass) = 'wellness' then 9202  when lower(encouterclass) = 'urgentcare' then 9203  when lower(encouterclass) = 'outpatient' then 9202  else 0  end |  |
| visit\_start\_date | start |  |  |
| visit\_start\_datetime | start |  |  |
| visit\_end\_date | stop |  |  |
| visit\_end\_datetime | stop |  |  |
| visit\_type\_concept\_id |  |  | 44818517 |
| provider\_id |  |  | NULL |
| care\_site\_id |  |  | NULL |
| visit\_source\_value | encounterclass |  |  |
| visit\_source\_concept\_id |  |  | 0 |
| admitting\_source\_concept\_id |  |  | 0 |
| admitting\_source\_value |  |  | NULL |
| discharge\_to\_concept\_id |  |  | 0 |
| discharge\_to\_source\_value |  |  | NULL |
| preceding\_visit\_occurrence\_id |  |  | For a given person, find the previous visit:  lag(visit\_occurrence\_id)  over(partition by person\_id order by visit\_start\_date) |

Table name: cohort

Table name: cohort\_attribute

Table name: condition\_era

Table name: dose\_era

Table name: drug\_era

Table name: cost

Table name: payer\_plan\_period

Table name: care\_site

Table name: location

Table name: provider

Table name: cdm\_source

Table name: metadata

Table name: attribute\_definition

Table name: cohort\_definition

Appendix: source tables

Table: allergies.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| start | date | 2008-03-24 |  |
| stop | date |  |  |
| patient | varchar | 99a94a01-bb91-4ad7-9a69-b9bd0f114d47 |  |
| encounter | varchar | c430e49d-9612-4ba0-92ec-70ab4afdcb5f |  |
| code | int | 419474003 |  |
| description | varchar | Allergy to mould |  |

Table: careplans.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| id | varchar | 906fceed-443f-4f59-acab-562f80c5cb44 |  |
| start | date | 2016-11-09 |  |
| stop | date |  |  |
| patient | varchar | b6750e05-91df-471b-97bb-a19ab9fe79c5 |  |
| encounter | varchar | 17781139-da60-46dc-ba6e-13637cb13c61 |  |
| code | int | 53950000 |  |
| description | varchar | Respiratory therapy |  |
| reasoncode | int | 10509002 |  |
| reasondescription | varchar | Acute bronchitis (disorder) |  |

Table: conditions.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| start | date | 2017-12-26 |  |
| stop | date |  |  |
| patient | varchar | ffab9299-0b3d-474f-96a4-bb279c244c7c |  |
| encounter | varchar | 50bbccc5-bb6b-4073-8244-045f10a28469 |  |
| code | int | 444814009 |  |
| description | varchar | Viral sinusitis (disorder) |  |

Table: encounters.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| id | varchar | 8ead2604-2f95-4ecb-a898-8c29f74709fb |  |
| start | varchar | 1983-04-24T05:36:43Z |  |
| stop | varchar | 2001-10-05T03:47:01Z |  |
| patient | varchar | 24121ee3-3413-4e42-8e17-0410204adf10 |  |
| encounterclass | varchar | ambulatory | case  when lower(encouterclass) = 'ambulatory' then 9202  when lower(encouterclass) = 'emergency' then 9203  when lower(encouterclass) = 'inpatient' then 9201  when lower(encouterclass) = 'wellness' then 9202  when lower(encouterclass) = 'urgentcare' then 9203  when lower(encouterclass) = 'outpatient' then 9202  else 0  end |
| code | int | 185349003 |  |
| description | varchar | Encounter for check up (procedure) |  |
| cost | real | 129.16 |  |
| reasoncode | int |  |  |
| reasondescription | varchar |  |  |

Table: imaging\_studies.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| id | varchar | 26cd0a95-10a6-4a30-8af1-ebc602d39b72 |  |
| date | date | 2015-10-26 |  |
| patient | varchar | 5dacca68-eb32-45ea-bf9d-f224f96e4299 |  |
| encounter | varchar | fcd7e8af-0242-4efb-a392-642ed4cb01d1 |  |
| bodysite\_code | int | 51185008 |  |
| bodysite\_description | varchar | Thoracic structure (body structure) |  |
| modality\_code | varchar | CT |  |
| modality\_description | varchar | Computed Tomography |  |
| sop\_code | varchar | 1.2.840.10008.5.1.4.1.1.2 |  |
| sop\_description | varchar | CT Image Storage |  |

Table: immunizations.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| date | date | 2016-06-16 |  |
| patient | varchar | 8734f7b8-4525-4db3-b8b7-60da22f729b5 |  |
| encounter | varchar | c9557a0c-7f03-48ba-9975-667d28f2dc39 |  |
| code | int | 140 |  |
| description | varchar | Influenza seasonal injectable preservative free |  |
| cost | real | 140.52 |  |

Table: medications.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| start | date | 2016-04-03 |  |
| stop | date |  |  |
| patient | varchar | 5dacca68-eb32-45ea-bf9d-f224f96e4299 |  |
| encounter | varchar | 93917d59-daf9-4206-b59c-c73262c4ca9f |  |
| code | int | 316672 |  |
| description | varchar | Simvistatin 10 MG |  |
| cost | real | 263.49 |  |
| dispenses | int | 1 |  |
| totalcost | real | 3161.88 |  |
| reasoncode | int |  |  |
| reasondescription | varchar |  |  |

Table: observations.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| date | date | 1986-06-20 |  |
| patient | varchar | cfe0b091-a7b4-4fbb-a0a2-d0fd86a596e4 |  |
| encounter | varchar | e84bdba6-e316-4c1f-a778-99a05f0dde1f |  |
| code | varchar | 72514-3 |  |
| description | varchar | Pain severity - 0-10 verbal numeric rating [Score] - Reported |  |
| value | varchar | Never smoker |  |
| units | varchar | mg/dL |  |
| type | varchar | numeric |  |

Table: patients.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| id | varchar | e31a194d-e8b1-4e81-a511-5da4ad99f8c8 |  |
| birthdate | date | 1926-02-23 |  |
| deathdate | date |  |  |
| ssn | varchar | 999-41-5589 |  |
| drivers | varchar |  |  |
| passport | varchar |  |  |
| prefix | varchar | Mr. |  |
| first | varchar | Benito209 |  |
| last | varchar | Marks830 |  |
| suffix | varchar |  |  |
| maiden | varchar |  |  |
| marital | varchar | M |  |
| race | varchar | white |  |
| ethnicity | varchar | irish |  |
| gender | varchar | M |  |
| birthplace | varchar | Boston |  |
| address | varchar | 192 MacGyver Dam |  |
| city | varchar | Boston |  |
| state | varchar | Massachusetts |  |
| zip | int | 02108 |  |

Table: procedures.csv

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| date | date | 2018-02-27 |  |
| patient | varchar | 24121ee3-3413-4e42-8e17-0410204adf10 |  |
| encounter | varchar | 7a9a4f7d-060c-4de9-b03d-0eee972ff7f1 |  |
| code | varchar | 428191000124101 |  |
| description | varchar | Documentation of current medications |  |
| cost | real | 516.65 |  |
| reasoncode | int | 72892002 |  |
| reasondescription | varchar | Normal pregnancy |  |