Source Data Mapping Approach to Target

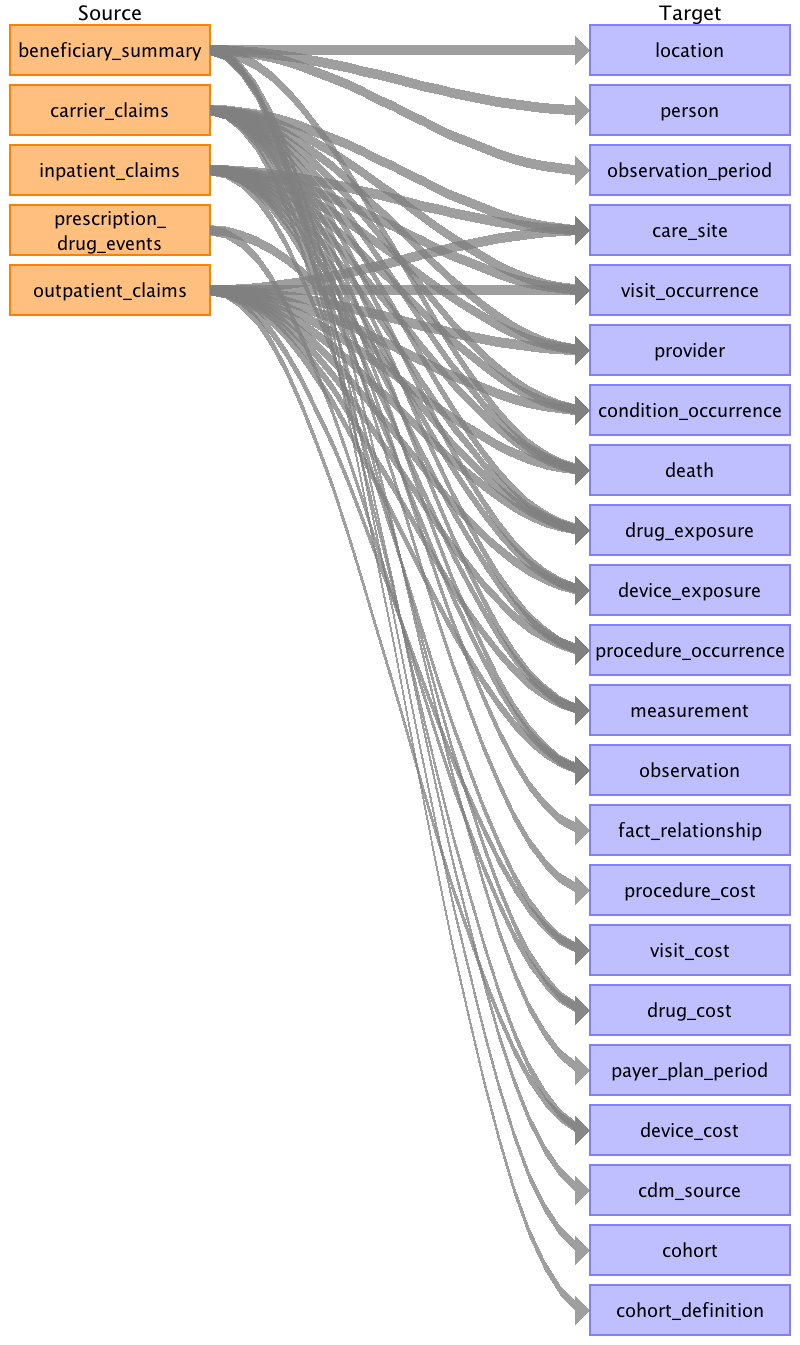


Table name: location

Reading from beneficiary\_summary

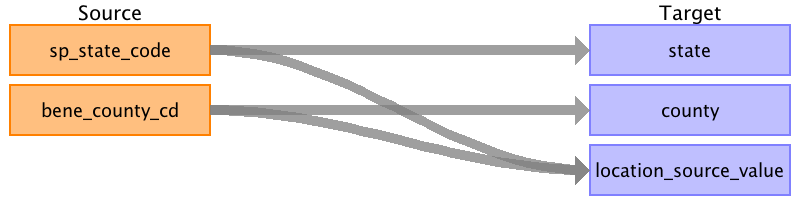
\*Use first year of data

SOURCE\_TO\_CONCEPT\_MAP Entries:

BENE\_RACE\_CD

SP\_STATE\_CD

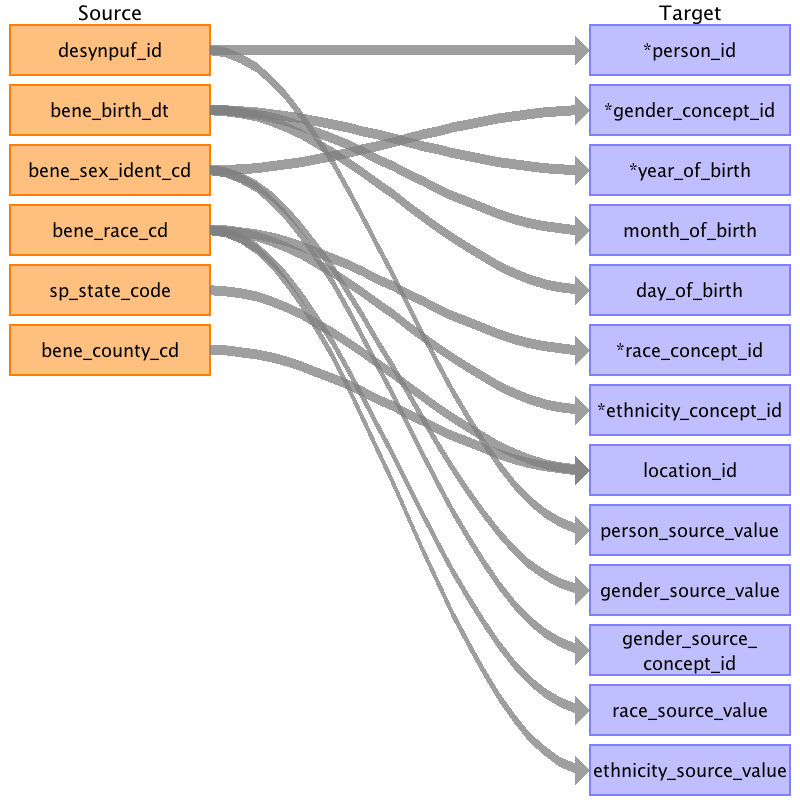
SSA Codes (http://www.resdac.org/cms-data/variables/County-Code) for COUNTY\_CODE IN BENE\_COUNTY\_CD



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| location\_id |  |  |  |
| address\_1 |  |  |  |
| address\_2 |  |  |  |
| city |  |  |  |
| state | sp\_state\_code |  |  |
| zip |  |  |  |
| county | bene\_county\_cd |  |  |
| location\_source\_value | sp\_state\_code  bene\_county\_cd |  | Separate sp\_state\_code and bene\_county\_cd by dash |

Table name: person

Reading from beneficiary\_summary



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id | desynpuf\_id |  |  |
| gender\_concept\_id | bene\_sex\_ident\_cd | male: 1 = 8507  female: 2 = 8532 |  |
| year\_of\_birth | bene\_birth\_dt | Source is YYYYMMDD |  |
| month\_of\_birth | bene\_birth\_dt | Source is YYYYMMDD |  |
| day\_of\_birth | bene\_birth\_dt | Source is YYYYMMDD | We assume that the day of birth is set to '01' |
| time\_of\_birth |  |  | Null |
| race\_concept\_id | bene\_race\_cd | The manual lists the following:  0 = Unknown = 0  1 = White = 8527  2 = Black = 8516  3 = Other = 0  5 = Hispanic = 0  Do not believe these will exist so we may not put them in:  4 = Asian = 8515  6 = North American Native = 38003572 |  |
| ethnicity\_concept\_id | bene\_race\_cd | Manual Says These Exists:  0 = Unknown = 0  1 = White = 38003564  2 = Black = 38003564  3 = Other = 0  5 = Hispanic = 38003563  Possible Other Codes, Do Not Believe Exist in Data:  4 = Asian = 38003564  6 = North American Native = 38003564 |  |
| location\_id | sp\_state\_code  bene\_county\_cd |  | Lookup based on the source values. |
| provider\_id |  |  | Null |
| care\_site\_id |  |  | Null |
| person\_source\_value | desynpuf\_id |  |  |
| gender\_source\_value | bene\_sex\_ident\_cd |  |  |
| gender\_source\_concept\_id | bene\_sex\_ident\_cd |  | 0 |
| race\_source\_value | bene\_race\_cd |  |  |
| race\_source\_concept\_id |  |  |  |
| ethnicity\_source\_value | bene\_race\_cd |  |  |
| ethnicity\_source\_concept\_id |  |  |  |

Table name: observation\_period

Reading from beneficiary\_summary

We are going to look at birth and death date.

We know which months they had claims.

We know how many months they had coverages.

If MONTH = 0 they were not enrolled for that year.

IF MONTH > 0 then they were enrolled.

MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM

We will use the birth and death to correct the tails.

birth = BENE\_BIRTH\_DT

death = BENE\_DEATH\_DT

We need to knit the records together the years.

no overlapping observation periods



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_period\_id |  |  |  |
| person\_id | desynpuf\_id |  |  |
| observation\_period\_start\_date |  |  | If MONTH = 0 they were not enrolled for that year.  IF MONTH > 0 then they were enrolled (for 2008 file date = January 1, 2008)  MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM  We will use the birth and death to correct the tails.  Use birthdate to correct start date if person turned 65 that year: birth = BENE\_BIRTH\_DT  Use death date to correct end date if person died that year: death = BENE\_DEATH\_DT  Otherwise, use January 1st for start date and December 31st for end date |
| observation\_period\_end\_date |  |  | If MONTH = 0 they were not enrolled for that year.  IF MONTH > 0 then they were enrolled (for 2008 file date = January 1, 2008)  MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM  We will use the birth and death to correct the tails.  Use birthdate to correct start date if person turned 65 that year: birth = BENE\_BIRTH\_DT  Use death date to correct end date if person died that year: death = BENE\_DEATH\_DT  Otherwise, use January 1st for start date and December 31st for end date |
| period\_type\_concept\_id |  |  |  |

Table name: care\_site

Reading from outpatient\_claims



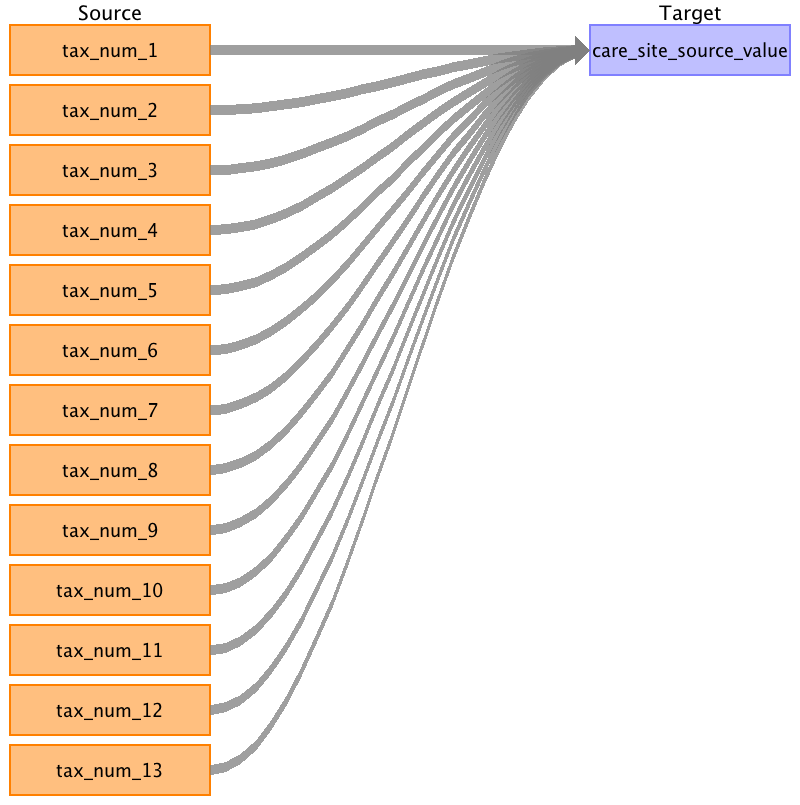
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| care\_site\_id |  |  | Autogenerated, you pull all columns and put distinct values here. |
| care\_site\_name |  |  |  |
| place\_of\_service\_concept\_id |  |  | INPATIENT\_CLAIMS: 8717-Inpatient Hospital  OUTPATIENT\_CLAIMS: 8756-Outpatient Hospital  CARRIER\_CLAIMS: 8940-Office |
| location\_id |  |  |  |
| care\_site\_source\_value | prvdr\_num |  |  |
| place\_of\_service\_source\_value |  |  | INPATIENT\_CLAIMS = "Inpatient Facility"  OUTPATIENT\_CLAIMS = "Outpatient Facility" |

Reading from inpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| care\_site\_id |  |  | Autogenerated, you pull all columns and put distinct values here. |
| care\_site\_name |  |  |  |
| place\_of\_service\_concept\_id |  |  | INPATIENT\_CLAIMS: 8717-Inpatient Hospital  OUTPATIENT\_CLAIMS: 8756-Outpatient Hospital  CARRIER\_CLAIMS: 8940-Office |
| location\_id |  |  |  |
| care\_site\_source\_value | prvdr\_num |  |  |
| place\_of\_service\_source\_value |  |  | INPATIENT\_CLAIMS = "Inpatient Facility"  OUTPATIENT\_CLAIMS = "Outpatient Facility" |

Reading from carrier\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| care\_site\_id |  |  | Autogenerated, you pull all columns and put distinct values here. |
| care\_site\_name |  |  |  |
| place\_of\_service\_concept\_id |  |  | INPATIENT\_CLAIMS: 8717-Inpatient Hospital  OUTPATIENT\_CLAIMS: 8756-Outpatient Hospital  CARRIER\_CLAIMS: 8940-Office |
| location\_id |  |  |  |
| care\_site\_source\_value | tax\_num\_1  tax\_num\_2  tax\_num\_3  tax\_num\_4  tax\_num\_5  tax\_num\_6  tax\_num\_7  tax\_num\_8  tax\_num\_9  tax\_num\_10  tax\_num\_11  tax\_num\_12  tax\_num\_13 |  |  |
| place\_of\_service\_source\_value |  |  | INPATIENT\_CLAIMS = "Inpatient Facility"  OUTPATIENT\_CLAIMS = "Outpatient Facility" |

Table name: visit\_occurrence

Reading from carrier\_claims

A unique visit is defined by a CLAIM\_ID

Visit Roll-Up Logic:

(1--)INPATIENT logic:

(1A)CARRIER\_CLAIM is within an INPATIENT\_CLAIM, it becomes part of that VISIT\_OCCURRENCE

(1B)OP within IP logic

(1B1)OP that ends the day an IP start or starts before IP, OP gets its own visit

(1B2)OP in the middle of an IP, it adopts the IP visit

(1B3)OP starts on the end of an IP visit, OP gets its own visit

(2--)OUTPATIENT logic:

(2A)On one day, there is one OP and one CC, they share NPI, we link them

(2B)On one day, there is one OP and one CC, they do not share an NPI, we end up with 2 visits

(2C)One OP, and two CC visits, CC1 shares an NPI, CC2 does not, CC1 and OP share a visit, and CC2 is its own visit.

(2D)One OP, and two CC that all share NPIs, they all become one visit.

(2E)Two OP visits, and one CC, if they share NPI connect ELSE end up with 3 visits.

(2F)If you have two OP visits, they do not combined.

(3--)CARRIER CLAIMS logic:

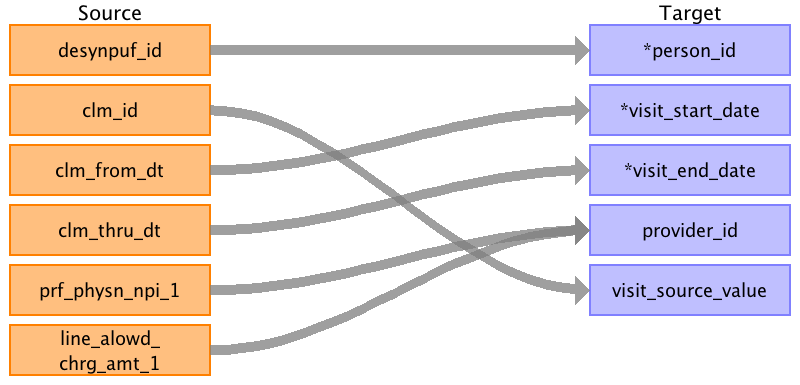
(3A)orphan CCs get categorized 0

In this data we cannot categorize an ER visit, there will only be IP and OP.

CARRIER\_CLAIMS = 0 - ELSE

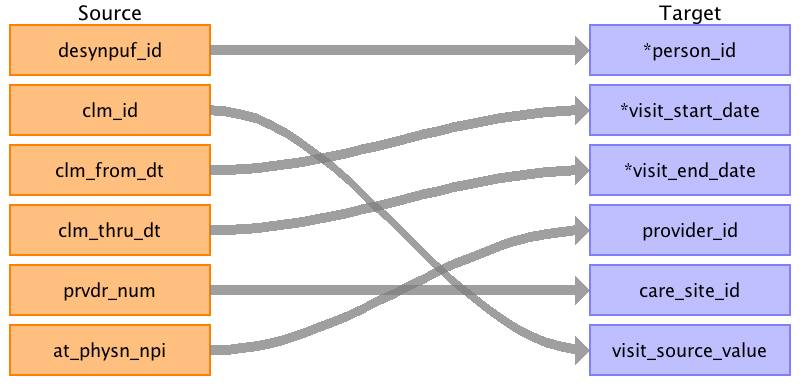
INPATIENT\_CLAIMS = 9201 - Inpatient Visit

OUTPATIENT\_CLAIMS = 9202 - Outpatient Visit



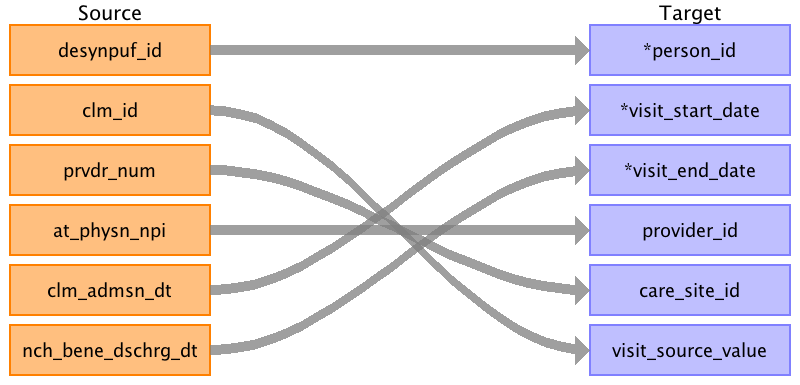
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_occurrence\_id |  |  | Autogenerated (possibly a hash lookup) |
| person\_id | desynpuf\_id |  |  |
| visit\_concept\_id |  |  | CARRIER\_CLAIMS = 0  INPATIENT\_CLAIMS = 9201 - Inpatient Visit  OUTPATIENT\_CLAIMS = 9202 - Outpatient Visit |
| visit\_start\_date | clm\_from\_dt |  |  |
| visit\_start\_time |  |  | Null |
| visit\_end\_date | clm\_thru\_dt |  |  |
| visit\_end\_time |  |  | Null |
| visit\_type\_concept\_id |  |  | 44818517 - Visit derived from encounter on claim |
| provider\_id | line\_alowd\_chrg\_amt\_1  prf\_physn\_npi\_1 | Sum up by PRF\_PHYSN\_NPI the LIN\_ALOWD\_CHRG\_AMT, the NPI with the larges charge amount wins the PROVIDER\_ID. |  |
| care\_site\_id |  |  | CARRIER\_CLAIMS: NULL |
| visit\_source\_value | clm\_id |  |  |
| visit\_source\_concept\_id |  |  | 0 |

Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_occurrence\_id |  |  | Autogenerated (possibly a hash lookup) |
| person\_id | desynpuf\_id |  |  |
| visit\_concept\_id |  |  | CARRIER\_CLAIMS = 0  INPATIENT\_CLAIMS = 9201 - Inpatient Visit  OUTPATIENT\_CLAIMS = 9202 - Outpatient Visit |
| visit\_start\_date | clm\_from\_dt |  |  |
| visit\_start\_time |  |  | Null |
| visit\_end\_date | clm\_thru\_dt |  |  |
| visit\_end\_time |  |  | Null |
| visit\_type\_concept\_id |  |  | 44818517 - Visit derived from encounter on claim |
| provider\_id | at\_physn\_npi | Lookup |  |
| care\_site\_id | prvdr\_num | Lookup | CARRIER\_CLAIMS: NULL |
| visit\_source\_value | clm\_id |  |  |
| visit\_source\_concept\_id |  |  | 0 |

Reading from inpatient\_claims

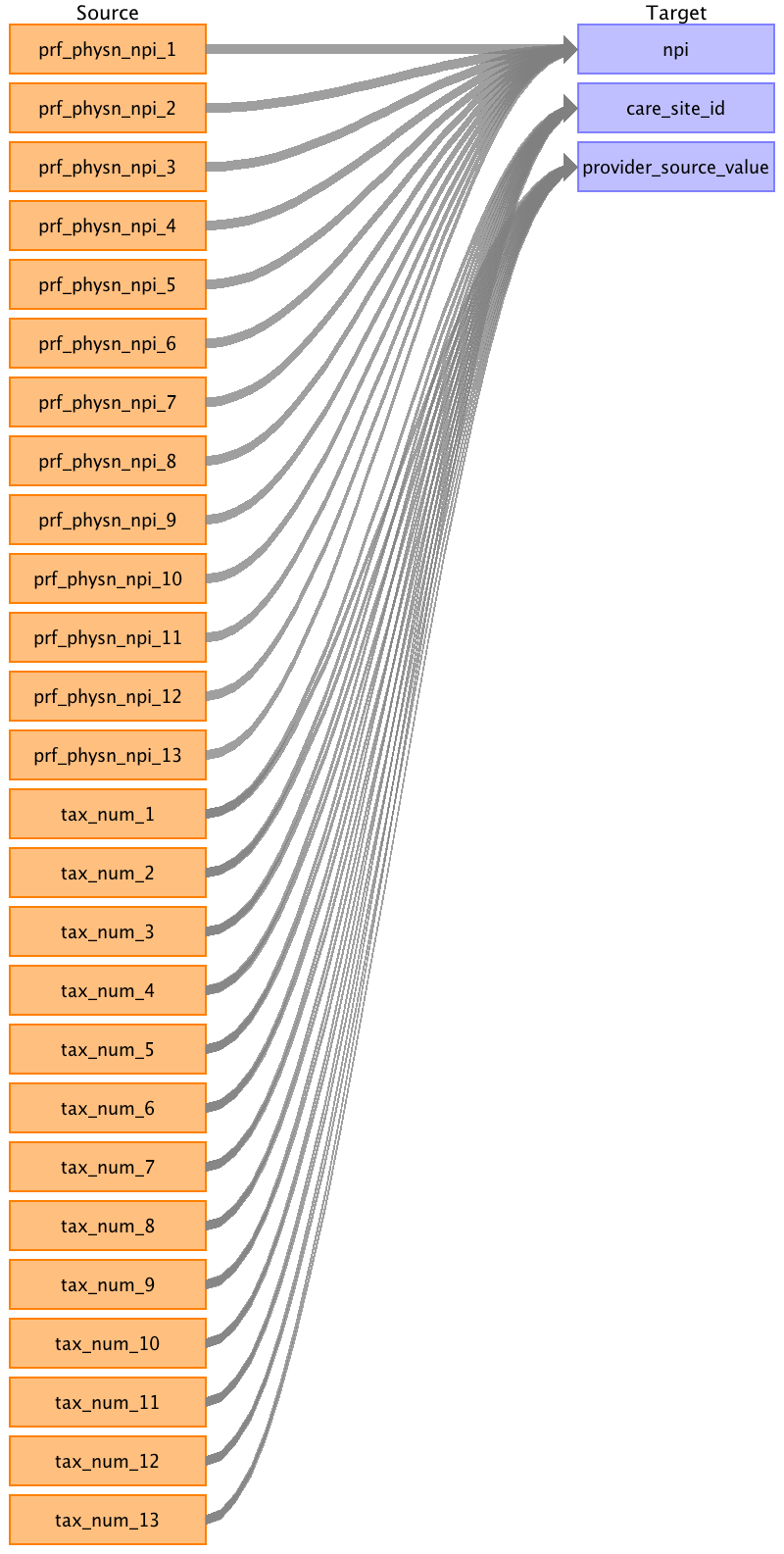


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_occurrence\_id |  |  | Autogenerated (possibly a hash lookup) |
| person\_id | desynpuf\_id |  |  |
| visit\_concept\_id |  |  | CARRIER\_CLAIMS = 0  INPATIENT\_CLAIMS = 9201 - Inpatient Visit  OUTPATIENT\_CLAIMS = 9202 - Outpatient Visit |
| visit\_start\_date | clm\_admsn\_dt |  |  |
| visit\_start\_time |  |  | Null |
| visit\_end\_date | nch\_bene\_dschrg\_dt |  |  |
| visit\_end\_time |  |  | Null |
| visit\_type\_concept\_id |  |  | 44818517 - Visit derived from encounter on claim |
| provider\_id | at\_physn\_npi | Lookup in PROVIDER table. |  |
| care\_site\_id | prvdr\_num | INPATIENT\_CLAIMS: Lookup with the PRVDR\_NUM | CARRIER\_CLAIMS: NULL |
| visit\_source\_value | clm\_id |  |  |
| visit\_source\_concept\_id |  |  | 0 |

Table name: provider

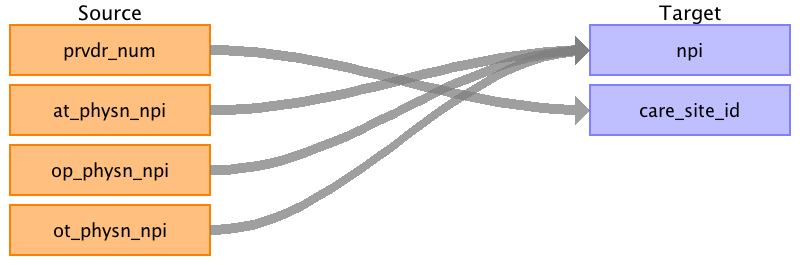
Reading from carrier\_claims

Tax\_IDs will be used in the Care\_Site table as locations for the physician offices.



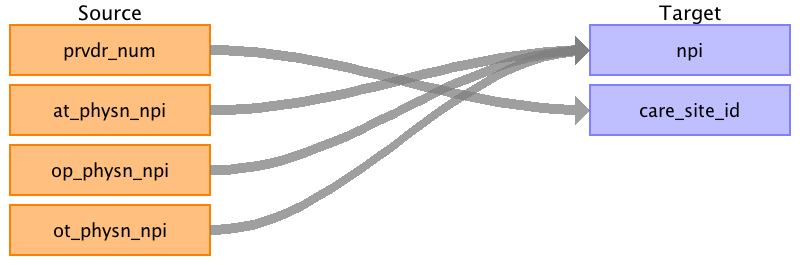
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| provider\_id |  |  | Autogenerated |
| provider\_name |  |  | Null |
| npi | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  |  |
| dea |  |  | Null |
| specialty\_concept\_id |  |  | 0 |
| care\_site\_id | tax\_num\_1  tax\_num\_2  tax\_num\_3  tax\_num\_4  tax\_num\_5  tax\_num\_6  tax\_num\_7  tax\_num\_8  tax\_num\_9  tax\_num\_10  tax\_num\_11  tax\_num\_12  tax\_num\_13 |  | Lookup in the CARE\_SITE table |
| year\_of\_birth |  |  | Null |
| gender\_concept\_id |  |  | 0 |
| provider\_source\_value | tax\_num\_1  tax\_num\_2  tax\_num\_3  tax\_num\_4  tax\_num\_5  tax\_num\_6  tax\_num\_7  tax\_num\_8  tax\_num\_9  tax\_num\_10  tax\_num\_11  tax\_num\_12  tax\_num\_13 |  |  |
| specialty\_source\_value |  |  | Null |
| specialty\_source\_concept\_id |  |  | 0 |
| gender\_source\_value |  |  | Null |
| gender\_source\_concept\_id |  |  | 0 |

Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| provider\_id |  |  | Autogenerated |
| provider\_name |  |  | Null |
| npi | at\_physn\_npi  op\_physn\_npi  ot\_physn\_npi |  |  |
| dea |  |  | Null |
| specialty\_concept\_id |  |  | 0 |
| care\_site\_id | prvdr\_num |  | Lookup in the CARE\_SITE table |
| year\_of\_birth |  |  | Null |
| gender\_concept\_id |  |  | 0 |
| provider\_source\_value |  |  |  |
| specialty\_source\_value |  |  | Null |
| specialty\_source\_concept\_id |  |  | 0 |
| gender\_source\_value |  |  | Null |
| gender\_source\_concept\_id |  |  | 0 |

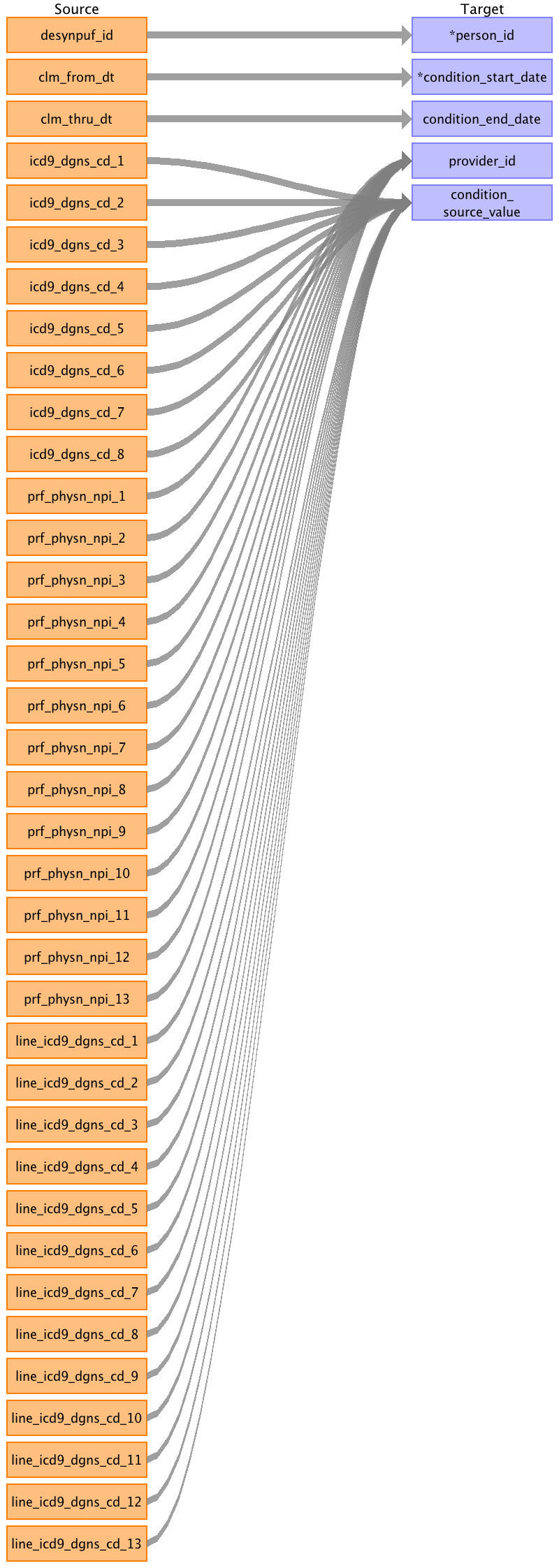
Reading from inpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| provider\_id |  |  | Autogenerated |
| provider\_name |  |  | Null |
| npi | at\_physn\_npi  op\_physn\_npi  ot\_physn\_npi |  |  |
| dea |  |  | Null |
| specialty\_concept\_id |  |  | 0 |
| care\_site\_id | prvdr\_num |  | Lookup in the CARE\_SITE table |
| year\_of\_birth |  |  | Null |
| gender\_concept\_id |  |  | 0 |
| provider\_source\_value |  |  |  |
| specialty\_source\_value |  |  | Null |
| specialty\_source\_concept\_id |  |  | 0 |
| gender\_source\_value |  |  | Null |
| gender\_source\_concept\_id |  |  | 0 |

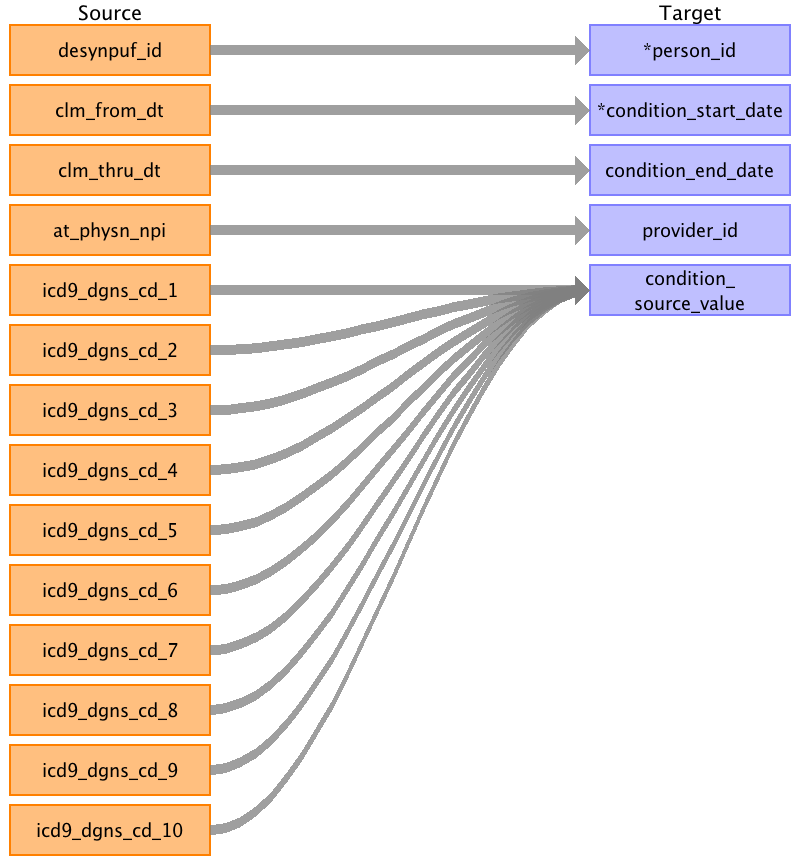
Table name: condition\_occurrence

Reading from carrier\_claims



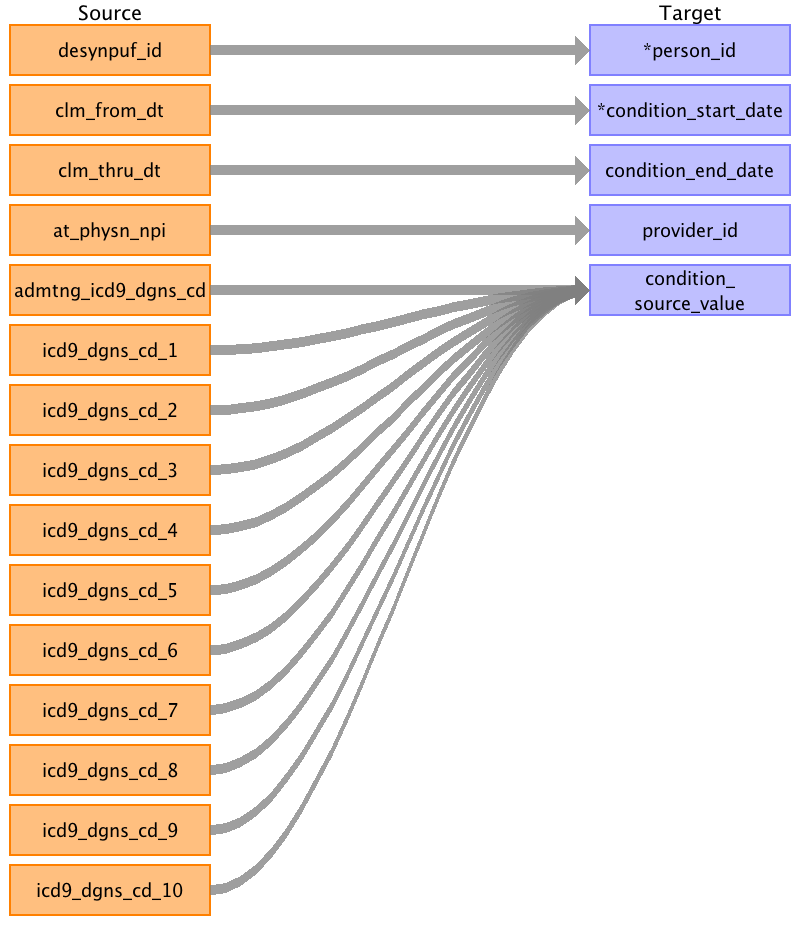
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| condition\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| condition\_concept\_id |  |  | Mapping from CONDITION\_SOURCE\_VALUE into SNOMED (INVALID\_REASON IS NULL). |
| condition\_start\_date | clm\_from\_dt | YYYYMMDD converted to date. | YYYYMMDD converted to date. |
| condition\_end\_date | clm\_thru\_dt | YYYYMMDD converted to date. | YYYYMMDD converted to date. |
| condition\_type\_concept\_id |  |  | Line diagnosis are details and the claim diagnosis are headers. Admitting diagnosis (ADMTNG\_ICD9\_DGNS\_CD) is the last number (e.g. 11)  CARRIER\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 45756835 Carrier claim header - 1st position  --ICD9\_DGNS\_CD\_2 = 45756836 Carrier claim header - 2nd position  --ICD9\_DGNS\_CD\_3 = 45756837 Carrier claim header - 3rd position  --ICD9\_DGNS\_CD\_4 = 45756838 Carrier claim header - 4th position  --ICD9\_DGNS\_CD\_5 = 45756839 Carrier claim header - 5th position  --ICD9\_DGNS\_CD\_6 = 45756840 Carrier claim header - 6th position  --ICD9\_DGNS\_CD\_7 = 45756841 Carrier claim header - 7th position  --ICD9\_DGNS\_CD\_8 = 45756842 Carrier claim header - 8th position  --LINE\_ICD9\_DGNS\_CD\_1 = 45756843 Carrier claim detail - 1st position  --LINE\_ICD9\_DGNS\_CD\_2 = 45756844 Carrier claim detail - 2nd position  --LINE\_ICD9\_DGNS\_CD\_3 = 45756845 Carrier claim detail - 3rd position  --LINE\_ICD9\_DGNS\_CD\_4 = 45756846 Carrier claim detail - 4th position  --LINE\_ICD9\_DGNS\_CD\_5 = 45756847 Carrier claim detail - 5th position  --LINE\_ICD9\_DGNS\_CD\_6 = 45756848 Carrier claim detail - 6th position  --LINE\_ICD9\_DGNS\_CD\_7 = 45756849 Carrier claim detail - 7th position  --LINE\_ICD9\_DGNS\_CD\_8 = 45756850 Carrier claim detail - 8th position  --LINE\_ICD9\_DGNS\_CD\_9 = 45756851 Carrier claim detail - 9th position  --LINE\_ICD9\_DGNS\_CD\_10 = 45756852 Carrier claim detail - 10th position  --LINE\_ICD9\_DGNS\_CD\_11 = 45756853 Carrier claim detail - 11th position  --LINE\_ICD9\_DGNS\_CD\_12 = 45756855 Carrier claim detail - 13th position  --LINE\_ICD9\_DGNS\_CD\_13 = 45756855 Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000200-Inpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000201-Inpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000202-Inpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000203-Inpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000204-Inpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000205-Inpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000206-Inpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000207-Inpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000208-Inpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000209-Inpatient header - 10th position  --ADMTNG\_ICD9\_DGNS\_CD = 38000210-Inpatient header - 11th position  OUTPATEINT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000230-Outpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000231-Outpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000232-Outpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000233-Outpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000234-Outpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000235-Outpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000236-Outpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000237-Outpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000238-Outpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000239-Outpatient header - 10th position |
| stop\_reason |  |  | NULL |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  | CARRIER\_CLAIMS: Lookup the PROVIDER\_ID in the PROVIDER table. Associate a PROVIDER\_ID with the ICD9 line item it goes with. The claim ICD9s will not get a PROVIDER\_ID.  INPATIENT & OUTPATIENT\_CLAIMS: All get mapped to the AT\_PHYSN\_NPI |
| visit\_occurrence\_id |  |  | Associated to right VISIT\_OCCURENCE. |
| condition\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  line\_icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_2  line\_icd9\_dgns\_cd\_3  line\_icd9\_dgns\_cd\_4  line\_icd9\_dgns\_cd\_5  line\_icd9\_dgns\_cd\_6  line\_icd9\_dgns\_cd\_7  line\_icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_9  line\_icd9\_dgns\_cd\_10  line\_icd9\_dgns\_cd\_11  line\_icd9\_dgns\_cd\_12  line\_icd9\_dgns\_cd\_13 |  |  |
| condition\_source\_concept\_id |  |  | Map the CONDITION\_SOURCE\_VALUE to ICD9 CONCEPT\_IDs. |

Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| condition\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| condition\_concept\_id |  |  | Mapping from CONDITION\_SOURCE\_VALUE into SNOMED (INVALID\_REASON IS NULL). |
| condition\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date. |
| condition\_end\_date | clm\_thru\_dt |  | YYYYMMDD converted to date. |
| condition\_type\_concept\_id |  |  | Line diagnosis are details and the claim diagnosis are headers. Admitting diagnosis (ADMTNG\_ICD9\_DGNS\_CD) is the last number (e.g. 11)  CARRIER\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 45756835 Carrier claim header - 1st position  --ICD9\_DGNS\_CD\_2 = 45756836 Carrier claim header - 2nd position  --ICD9\_DGNS\_CD\_3 = 45756837 Carrier claim header - 3rd position  --ICD9\_DGNS\_CD\_4 = 45756838 Carrier claim header - 4th position  --ICD9\_DGNS\_CD\_5 = 45756839 Carrier claim header - 5th position  --ICD9\_DGNS\_CD\_6 = 45756840 Carrier claim header - 6th position  --ICD9\_DGNS\_CD\_7 = 45756841 Carrier claim header - 7th position  --ICD9\_DGNS\_CD\_8 = 45756842 Carrier claim header - 8th position  --LINE\_ICD9\_DGNS\_CD\_1 = 45756843 Carrier claim detail - 1st position  --LINE\_ICD9\_DGNS\_CD\_2 = 45756844 Carrier claim detail - 2nd position  --LINE\_ICD9\_DGNS\_CD\_3 = 45756845 Carrier claim detail - 3rd position  --LINE\_ICD9\_DGNS\_CD\_4 = 45756846 Carrier claim detail - 4th position  --LINE\_ICD9\_DGNS\_CD\_5 = 45756847 Carrier claim detail - 5th position  --LINE\_ICD9\_DGNS\_CD\_6 = 45756848 Carrier claim detail - 6th position  --LINE\_ICD9\_DGNS\_CD\_7 = 45756849 Carrier claim detail - 7th position  --LINE\_ICD9\_DGNS\_CD\_8 = 45756850 Carrier claim detail - 8th position  --LINE\_ICD9\_DGNS\_CD\_9 = 45756851 Carrier claim detail - 9th position  --LINE\_ICD9\_DGNS\_CD\_10 = 45756852 Carrier claim detail - 10th position  --LINE\_ICD9\_DGNS\_CD\_11 = 45756853 Carrier claim detail - 11th position  --LINE\_ICD9\_DGNS\_CD\_12 = 45756855 Carrier claim detail - 13th position  --LINE\_ICD9\_DGNS\_CD\_13 = 45756855 Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000200-Inpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000201-Inpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000202-Inpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000203-Inpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000204-Inpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000205-Inpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000206-Inpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000207-Inpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000208-Inpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000209-Inpatient header - 10th position  --ADMTNG\_ICD9\_DGNS\_CD = 38000210-Inpatient header - 11th position  OUTPATEINT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000230-Outpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000231-Outpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000232-Outpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000233-Outpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000234-Outpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000235-Outpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000236-Outpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000237-Outpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000238-Outpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000239-Outpatient header - 10th position |
| stop\_reason |  |  | NULL |
| provider\_id | at\_physn\_npi |  | CARRIER\_CLAIMS: Lookup the PROVIDER\_ID in the PROVIDER table. Associate a PROVIDER\_ID with the ICD9 line item it goes with. The claim ICD9s will not get a PROVIDER\_ID.  INPATIENT & OUTPATIENT\_CLAIMS: All get mapped to the AT\_PHYSN\_NPI |
| visit\_occurrence\_id |  |  | Associated to right VISIT\_OCCURENCE. |
| condition\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10 |  |  |
| condition\_source\_concept\_id |  |  | Map the CONDITION\_SOURCE\_VALUE to ICD9 CONCEPT\_IDs. |

Reading from inpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| condition\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| condition\_concept\_id |  |  | Mapping from CONDITION\_SOURCE\_VALUE into SNOMED (INVALID\_REASON IS NULL). |
| condition\_start\_date | clm\_from\_dt | YYYYMMDD convert to date. | YYYYMMDD converted to date. |
| condition\_end\_date | clm\_thru\_dt | YYYYMMDD convert to date. | YYYYMMDD converted to date. |
| condition\_type\_concept\_id |  |  | Line diagnosis are details and the claim diagnosis are headers. Admitting diagnosis (ADMTNG\_ICD9\_DGNS\_CD) is the last number (e.g. 11)  CARRIER\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 45756835 Carrier claim header - 1st position  --ICD9\_DGNS\_CD\_2 = 45756836 Carrier claim header - 2nd position  --ICD9\_DGNS\_CD\_3 = 45756837 Carrier claim header - 3rd position  --ICD9\_DGNS\_CD\_4 = 45756838 Carrier claim header - 4th position  --ICD9\_DGNS\_CD\_5 = 45756839 Carrier claim header - 5th position  --ICD9\_DGNS\_CD\_6 = 45756840 Carrier claim header - 6th position  --ICD9\_DGNS\_CD\_7 = 45756841 Carrier claim header - 7th position  --ICD9\_DGNS\_CD\_8 = 45756842 Carrier claim header - 8th position  --LINE\_ICD9\_DGNS\_CD\_1 = 45756843 Carrier claim detail - 1st position  --LINE\_ICD9\_DGNS\_CD\_2 = 45756844 Carrier claim detail - 2nd position  --LINE\_ICD9\_DGNS\_CD\_3 = 45756845 Carrier claim detail - 3rd position  --LINE\_ICD9\_DGNS\_CD\_4 = 45756846 Carrier claim detail - 4th position  --LINE\_ICD9\_DGNS\_CD\_5 = 45756847 Carrier claim detail - 5th position  --LINE\_ICD9\_DGNS\_CD\_6 = 45756848 Carrier claim detail - 6th position  --LINE\_ICD9\_DGNS\_CD\_7 = 45756849 Carrier claim detail - 7th position  --LINE\_ICD9\_DGNS\_CD\_8 = 45756850 Carrier claim detail - 8th position  --LINE\_ICD9\_DGNS\_CD\_9 = 45756851 Carrier claim detail - 9th position  --LINE\_ICD9\_DGNS\_CD\_10 = 45756852 Carrier claim detail - 10th position  --LINE\_ICD9\_DGNS\_CD\_11 = 45756853 Carrier claim detail - 11th position  --LINE\_ICD9\_DGNS\_CD\_12 = 45756855 Carrier claim detail - 13th position  --LINE\_ICD9\_DGNS\_CD\_13 = 45756855 Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000200-Inpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000201-Inpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000202-Inpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000203-Inpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000204-Inpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000205-Inpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000206-Inpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000207-Inpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000208-Inpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000209-Inpatient header - 10th position  --ADMTNG\_ICD9\_DGNS\_CD = 38000210-Inpatient header - 11th position  OUTPATEINT\_CLAIMS:  --ICD9\_DGNS\_CD\_1 = 38000230-Outpatient header - 1st position  --ICD9\_DGNS\_CD\_2 = 38000231-Outpatient header - 2nd position  --ICD9\_DGNS\_CD\_3 = 38000232-Outpatient header - 3rd position  --ICD9\_DGNS\_CD\_4 = 38000233-Outpatient header - 4th position  --ICD9\_DGNS\_CD\_5 = 38000234-Outpatient header - 5th position  --ICD9\_DGNS\_CD\_6 = 38000235-Outpatient header - 6th position  --ICD9\_DGNS\_CD\_7 = 38000236-Outpatient header - 7th position  --ICD9\_DGNS\_CD\_8 = 38000237-Outpatient header - 8th position  --ICD9\_DGNS\_CD\_9 = 38000238-Outpatient header - 9th position  --ICD9\_DGNS\_CD\_10 = 38000239-Outpatient header - 10th position |
| stop\_reason |  |  | NULL |
| provider\_id | at\_physn\_npi |  | CARRIER\_CLAIMS: Lookup the PROVIDER\_ID in the PROVIDER table. Associate a PROVIDER\_ID with the ICD9 line item it goes with. The claim ICD9s will not get a PROVIDER\_ID.  INPATIENT & OUTPATIENT\_CLAIMS: All get mapped to the AT\_PHYSN\_NPI |
| visit\_occurrence\_id |  |  | Associated to right VISIT\_OCCURENCE. |
| condition\_source\_value | admtng\_icd9\_dgns\_cd  icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10 |  |  |
| condition\_source\_concept\_id |  |  | Map the CONDITION\_SOURCE\_VALUE to ICD9 CONCEPT\_IDs. |

Table name: death

One record per deceased person

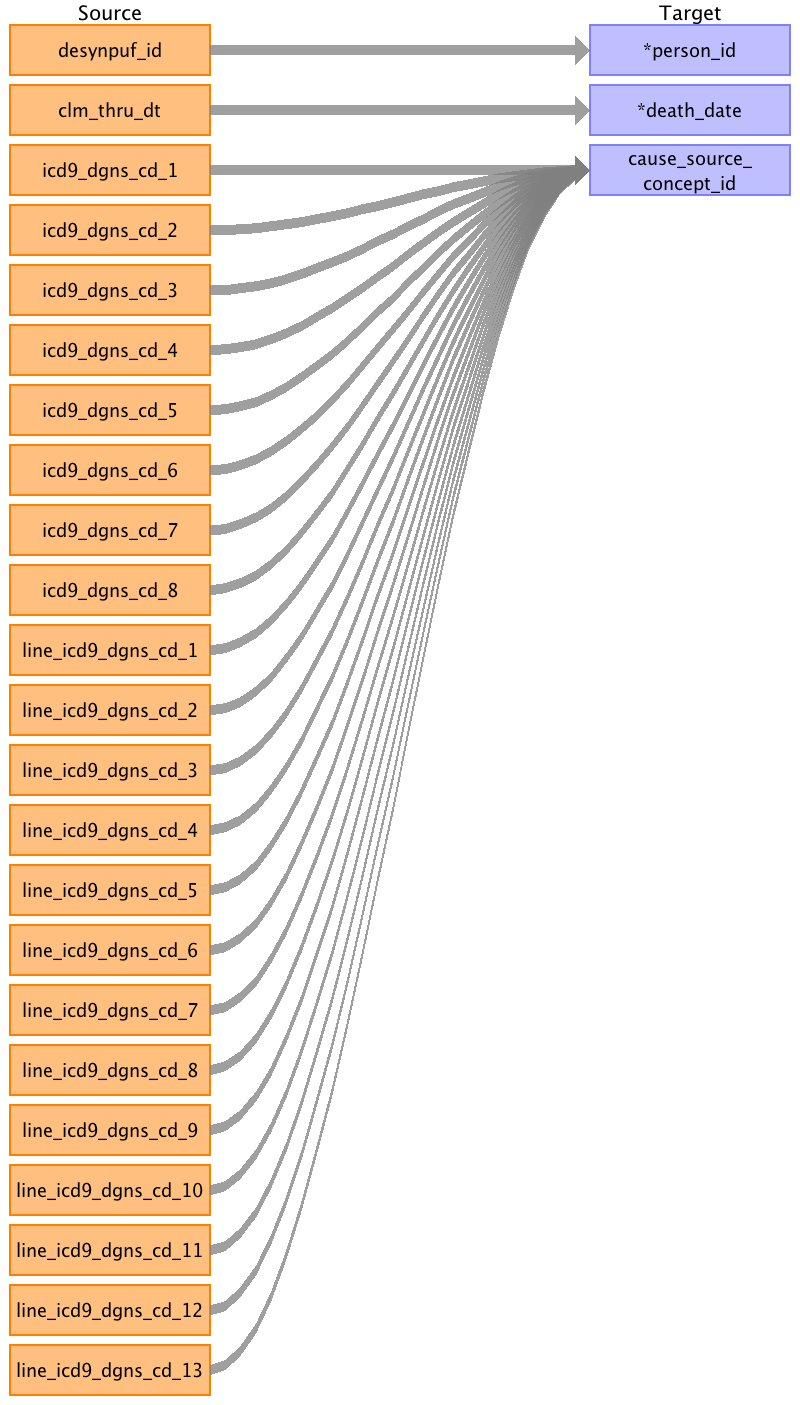
Use beneficiary\_summary as preferred source

Reading from beneficiary\_summary



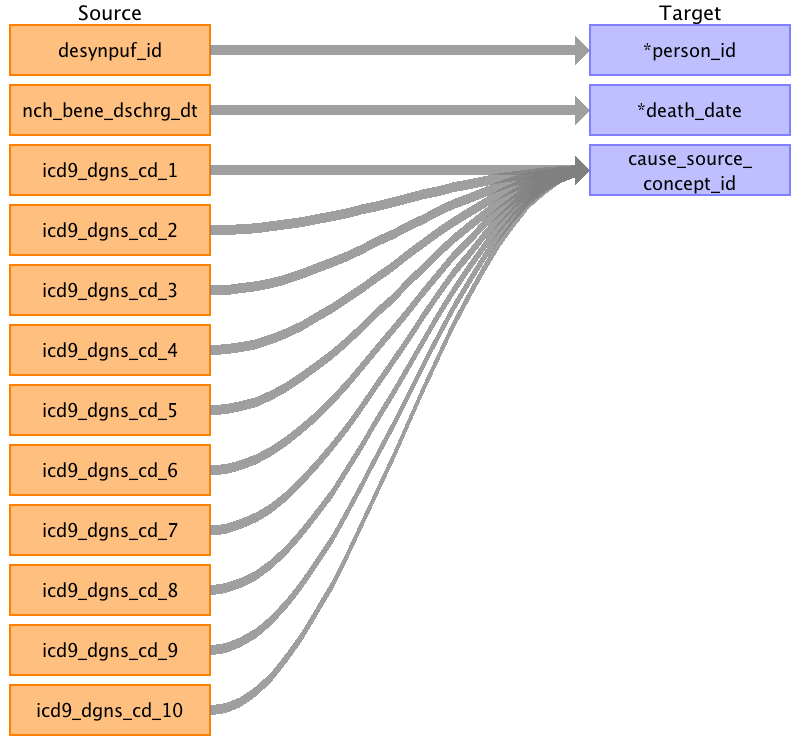
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id | desynpuf\_id |  |  |
| death\_date | bene\_death\_dt |  |  |
| death\_type\_concept\_id |  |  | Inpatient\_claims, Outpatient\_claims, Carrier\_claims: 38003567 - death captured by condition  Beneficiary\_summary: 38003565 - Payer enrollment status "Deceased" |
| cause\_concept\_id |  |  | 0 |
| cause\_source\_value |  |  | Null |
| cause\_source\_concept\_id |  |  | Inpatient\_claims, Outpatient\_claims, and Carrier\_claims files: write record if ICD9 codes are one of the following: '7616','798','7980','7981','7982','7989','E9131','E978'  Beneficiary\_summary: 0 |

Reading from carrier\_claims



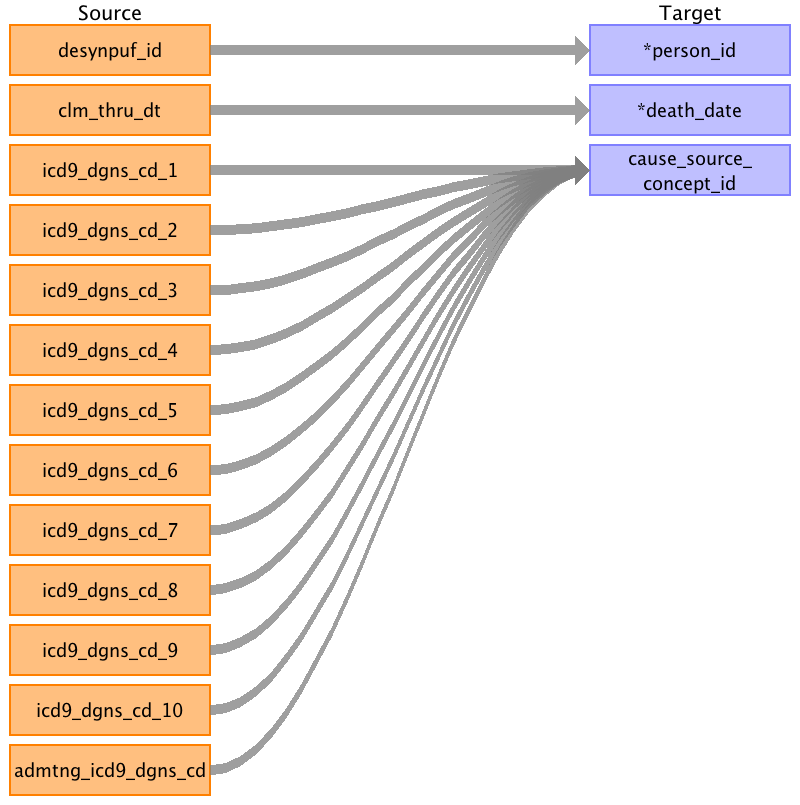
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id | desynpuf\_id |  |  |
| death\_date | clm\_thru\_dt |  |  |
| death\_type\_concept\_id |  |  | Inpatient\_claims, Outpatient\_claims, Carrier\_claims: 38003567 - death captured by condition  Beneficiary\_summary: 38003565 - Payer enrollment status "Deceased" |
| cause\_concept\_id |  |  | 0 |
| cause\_source\_value |  |  | Null |
| cause\_source\_concept\_id | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_1  line\_icd9\_dgns\_cd\_2  line\_icd9\_dgns\_cd\_3  line\_icd9\_dgns\_cd\_4  line\_icd9\_dgns\_cd\_5  line\_icd9\_dgns\_cd\_6  line\_icd9\_dgns\_cd\_7  line\_icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_9  line\_icd9\_dgns\_cd\_10  line\_icd9\_dgns\_cd\_11  line\_icd9\_dgns\_cd\_12  line\_icd9\_dgns\_cd\_13 |  | Inpatient\_claims, Outpatient\_claims, and Carrier\_claims files: write record if ICD9 codes are one of the following: '7616','798','7980','7981','7982','7989','E9131','E978'  Beneficiary\_summary: 0 |

Reading from inpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id | desynpuf\_id |  |  |
| death\_date | nch\_bene\_dschrg\_dt |  |  |
| death\_type\_concept\_id |  |  | Inpatient\_claims, Outpatient\_claims, Carrier\_claims: 38003567 - death captured by condition  Beneficiary\_summary: 38003565 - Payer enrollment status "Deceased" |
| cause\_concept\_id |  |  | 0 |
| cause\_source\_value |  |  | Null |
| cause\_source\_concept\_id | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10 |  | Inpatient\_claims, Outpatient\_claims, and Carrier\_claims files: write record if ICD9 codes are one of the following: '7616','798','7980','7981','7982','7989','E9131','E978'  Beneficiary\_summary: 0 |

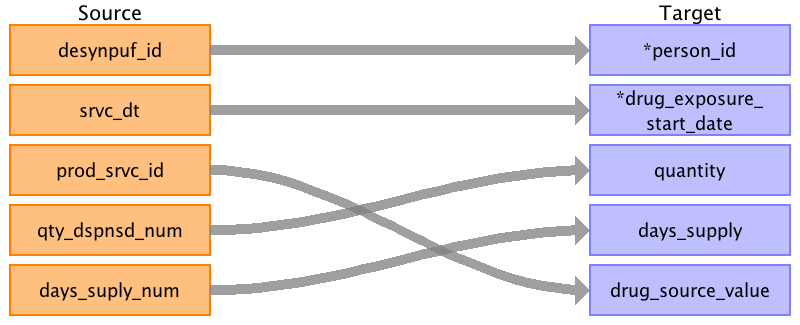
Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| person\_id | desynpuf\_id |  |  |
| death\_date | clm\_thru\_dt |  |  |
| death\_type\_concept\_id |  |  | Inpatient\_claims, Outpatient\_claims, Carrier\_claims: 38003567 - death captured by condition  Beneficiary\_summary: 38003565 - Payer enrollment status "Deceased" |
| cause\_concept\_id |  |  | 0 |
| cause\_source\_value |  |  | Null |
| cause\_source\_concept\_id | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  admtng\_icd9\_dgns\_cd |  | Inpatient\_claims, Outpatient\_claims, and Carrier\_claims files: write record if ICD9 codes are one of the following: '7616','798','7980','7981','7982','7989','E9131','E978'  Beneficiary\_summary: 0 |

Table name: drug\_exposure

Reading from prescription\_drug\_events



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| drug\_concept\_id |  |  | RX: Use the VOCABULARY to translate the NDC into a RxNorm CONCEPT\_ID.  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS: Use the VOCABULARY to figure out which HCPCs have the DOMAIN = "Drug", if so the entry is written into the DRUG\_EXPOSURE table and not the PROCEDURE\_OCCURRENCE. The cost data also ends up in the DRUG\_COST table not the PROCEDURE\_COST. |
| drug\_exposure\_start\_date | srvc\_dt |  | YYYYMMDD converted to date. |
| drug\_exposure\_end\_date |  |  | Outpatient\_claims, carrier\_claims: YYYYMMDD converted to date.  Prescription\_drug\_events: Null |
| drug\_type\_concept\_id |  |  | RX: 38000175-Prescription dispensed in pharmacy  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: 38000179-Physician administered drug (identified as procedure) |
| stop\_reason |  |  | NULL |
| refills |  |  | NULL |
| quantity | qty\_dspnsd\_num |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| days\_supply | days\_suply\_num |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| sig |  |  | NULL |
| route\_concept\_id |  |  | NULL |
| effective\_drug\_dose |  |  | NULL |
| dose\_unit\_concept\_id |  |  | NULL |
| lot\_number |  |  | NULL |
| provider\_id |  |  | RX: null |
| visit\_occurrence\_id |  |  | RX: Null for PRESCRIPTION\_DRUG\_EVENTS  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Track the VISIT\_OCCURENCE\_ID associated with record. |
| drug\_source\_concept\_id |  |  | RX: Translate NDC to NDC CONCEPT\_ID  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| drug\_source\_value | prod\_srvc\_id |  |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Reading from carrier\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DRUG\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DEVICE\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

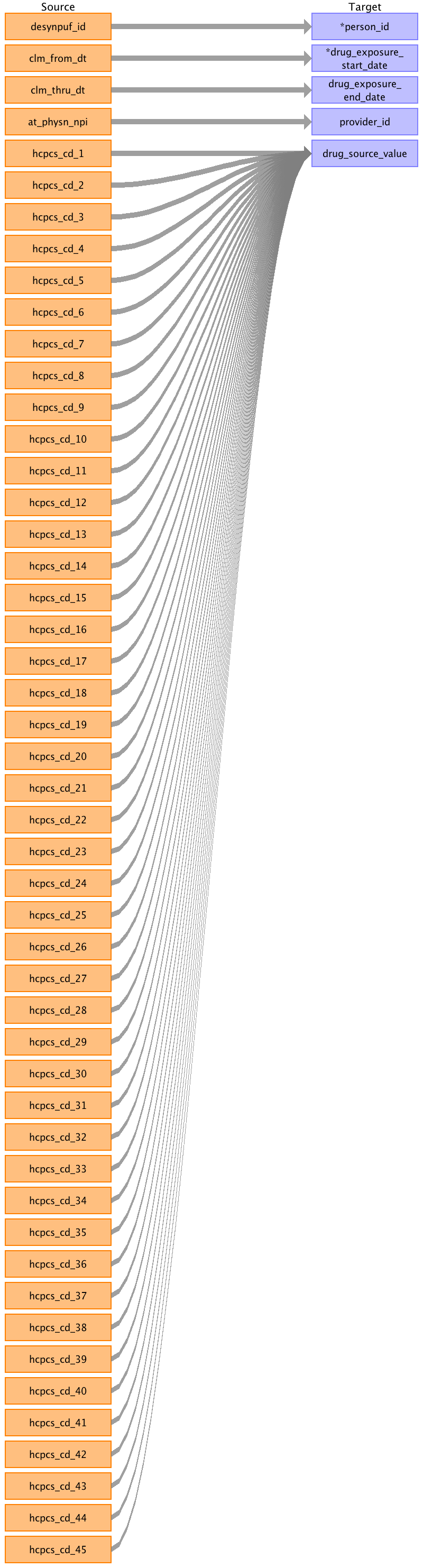


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| drug\_concept\_id |  |  | RX: Use the VOCABULARY to translate the NDC into a RxNorm CONCEPT\_ID.  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS: Use the VOCABULARY to figure out which HCPCs have the DOMAIN = "Drug", if so the entry is written into the DRUG\_EXPOSURE table and not the PROCEDURE\_OCCURRENCE. The cost data also ends up in the DRUG\_COST table not the PROCEDURE\_COST. |
| drug\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date. |
| drug\_exposure\_end\_date | clm\_thru\_dt |  | Outpatient\_claims, carrier\_claims: YYYYMMDD converted to date.  Prescription\_drug\_events: Null |
| drug\_type\_concept\_id |  |  | RX: 38000175-Prescription dispensed in pharmacy  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: 38000179-Physician administered drug (identified as procedure) |
| stop\_reason |  |  | NULL |
| refills |  |  | NULL |
| quantity |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| days\_supply |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| sig |  |  | NULL |
| route\_concept\_id |  |  | NULL |
| effective\_drug\_dose |  |  | NULL |
| dose\_unit\_concept\_id |  |  | NULL |
| lot\_number |  |  | NULL |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  | RX: null |
| visit\_occurrence\_id |  |  | RX: Null for PRESCRIPTION\_DRUG\_EVENTS  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Track the VISIT\_OCCURENCE\_ID associated with record. |
| drug\_source\_concept\_id |  |  | RX: Translate NDC to NDC CONCEPT\_ID  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| drug\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13 |  |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Reading from outpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DRUG\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DEVICE\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

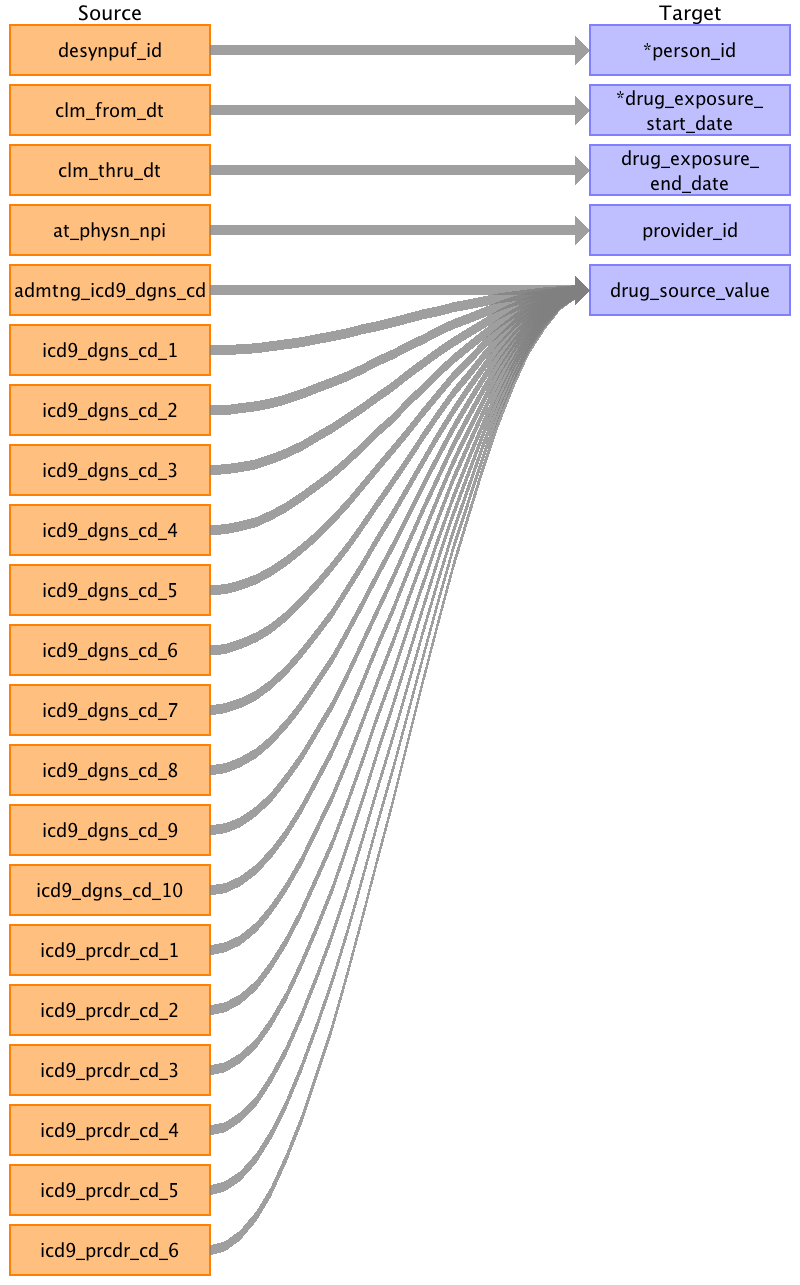


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| drug\_concept\_id |  |  | RX: Use the VOCABULARY to translate the NDC into a RxNorm CONCEPT\_ID.  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS: Use the VOCABULARY to figure out which HCPCs have the DOMAIN = "Drug", if so the entry is written into the DRUG\_EXPOSURE table and not the PROCEDURE\_OCCURRENCE. The cost data also ends up in the DRUG\_COST table not the PROCEDURE\_COST. |
| drug\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date. |
| drug\_exposure\_end\_date | clm\_thru\_dt |  | Outpatient\_claims, carrier\_claims: YYYYMMDD converted to date.  Prescription\_drug\_events: Null |
| drug\_type\_concept\_id |  |  | RX: 38000175-Prescription dispensed in pharmacy  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: 38000179-Physician administered drug (identified as procedure) |
| stop\_reason |  |  | NULL |
| refills |  |  | NULL |
| quantity |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| days\_supply |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| sig |  |  | NULL |
| route\_concept\_id |  |  | NULL |
| effective\_drug\_dose |  |  | NULL |
| dose\_unit\_concept\_id |  |  | NULL |
| lot\_number |  |  | NULL |
| provider\_id | at\_physn\_npi |  | RX: null |
| visit\_occurrence\_id |  |  | RX: Null for PRESCRIPTION\_DRUG\_EVENTS  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Track the VISIT\_OCCURENCE\_ID associated with record. |
| drug\_source\_concept\_id |  |  | RX: Translate NDC to NDC CONCEPT\_ID  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| drug\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  hcpcs\_cd\_14  hcpcs\_cd\_15  hcpcs\_cd\_16  hcpcs\_cd\_17  hcpcs\_cd\_18  hcpcs\_cd\_19  hcpcs\_cd\_20  hcpcs\_cd\_21  hcpcs\_cd\_22  hcpcs\_cd\_23  hcpcs\_cd\_24  hcpcs\_cd\_25  hcpcs\_cd\_26  hcpcs\_cd\_45  hcpcs\_cd\_44  hcpcs\_cd\_27  hcpcs\_cd\_43  hcpcs\_cd\_42  hcpcs\_cd\_41  hcpcs\_cd\_40  hcpcs\_cd\_39  hcpcs\_cd\_38  hcpcs\_cd\_37  hcpcs\_cd\_36  hcpcs\_cd\_35  hcpcs\_cd\_28  hcpcs\_cd\_29  hcpcs\_cd\_30  hcpcs\_cd\_31  hcpcs\_cd\_32  hcpcs\_cd\_33  hcpcs\_cd\_34 |  |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Reading from inpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DRUG\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DEVICE\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



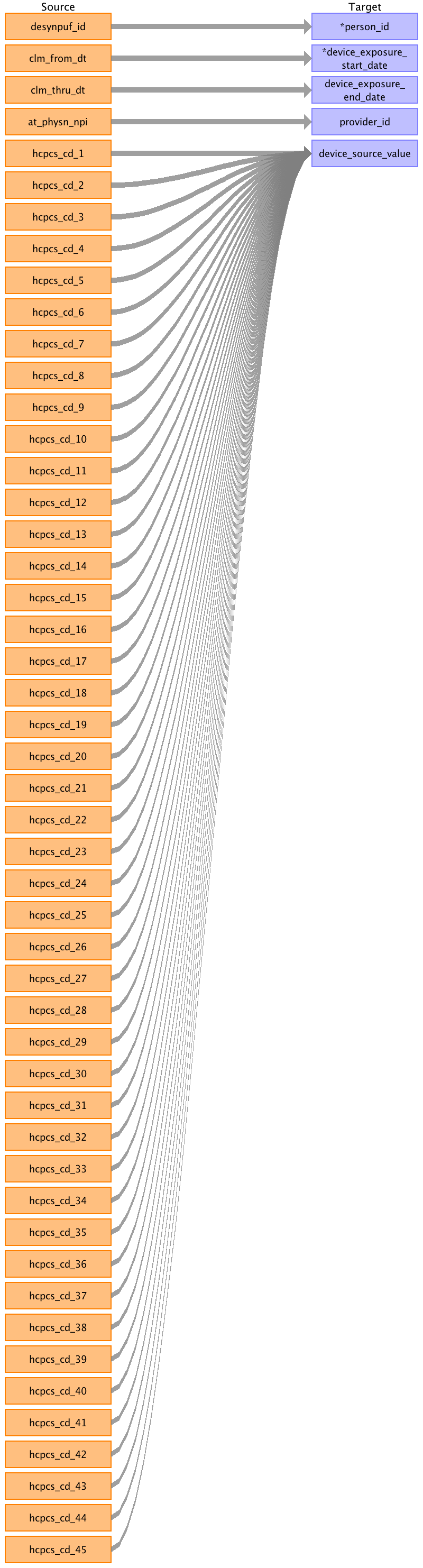
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| drug\_concept\_id |  |  | RX: Use the VOCABULARY to translate the NDC into a RxNorm CONCEPT\_ID.  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS: Use the VOCABULARY to figure out which HCPCs have the DOMAIN = "Drug", if so the entry is written into the DRUG\_EXPOSURE table and not the PROCEDURE\_OCCURRENCE. The cost data also ends up in the DRUG\_COST table not the PROCEDURE\_COST. |
| drug\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date. |
| drug\_exposure\_end\_date | clm\_thru\_dt |  | Outpatient\_claims, carrier\_claims: YYYYMMDD converted to date.  Prescription\_drug\_events: Null |
| drug\_type\_concept\_id |  |  | RX: 38000175-Prescription dispensed in pharmacy  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: 38000179-Physician administered drug (identified as procedure) |
| stop\_reason |  |  | NULL |
| refills |  |  | NULL |
| quantity |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| days\_supply |  |  | CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: NULL |
| sig |  |  | NULL |
| route\_concept\_id |  |  | NULL |
| effective\_drug\_dose |  |  | NULL |
| dose\_unit\_concept\_id |  |  | NULL |
| lot\_number |  |  | NULL |
| provider\_id | at\_physn\_npi |  | RX: null |
| visit\_occurrence\_id |  |  | RX: Null for PRESCRIPTION\_DRUG\_EVENTS  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Track the VISIT\_OCCURENCE\_ID associated with record. |
| drug\_source\_concept\_id |  |  | RX: Translate NDC to NDC CONCEPT\_ID  CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS & INPATIENT\_CLAIMS: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| drug\_source\_value | admtng\_icd9\_dgns\_cd  icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  icd9\_prcdr\_cd\_1  icd9\_prcdr\_cd\_2  icd9\_prcdr\_cd\_3  icd9\_prcdr\_cd\_4  icd9\_prcdr\_cd\_5  icd9\_prcdr\_cd\_6 |  |  |
| route\_source\_value |  |  | NULL |
| dose\_unit\_source\_value |  |  | NULL |

Table name: device\_exposure

Reading from outpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DEVICE\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| device\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| device\_concept\_id |  |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| device\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date |
| device\_exposure\_end\_date | clm\_thru\_dt |  | NULL |
| device\_type\_concept\_id |  |  | Use concept\_id = 44818705 for "Inferred from procedure claim" for all mappings of HCPCS, ICD9 diagnosis or ICD9 procedure codes. |
| unique\_device\_id |  |  | Null |
| quantity |  |  | Null |
| provider\_id | at\_physn\_npi |  | OUTPATIENT\_CLAIMS: Lookup Provider in PROVIDER table. |
| visit\_occurrence\_id |  |  | At the row level you are assigning a VISIT, this occurs prior to writing to this table. Track that ID and write here. |
| device\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  hcpcs\_cd\_14  hcpcs\_cd\_15  hcpcs\_cd\_16  hcpcs\_cd\_17  hcpcs\_cd\_18  hcpcs\_cd\_19  hcpcs\_cd\_20  hcpcs\_cd\_21  hcpcs\_cd\_45  hcpcs\_cd\_44  hcpcs\_cd\_43  hcpcs\_cd\_42  hcpcs\_cd\_41  hcpcs\_cd\_40  hcpcs\_cd\_39  hcpcs\_cd\_38  hcpcs\_cd\_37  hcpcs\_cd\_36  hcpcs\_cd\_35  hcpcs\_cd\_34  hcpcs\_cd\_33  hcpcs\_cd\_32  hcpcs\_cd\_31  hcpcs\_cd\_30  hcpcs\_cd\_29  hcpcs\_cd\_28  hcpcs\_cd\_27  hcpcs\_cd\_26  hcpcs\_cd\_25  hcpcs\_cd\_22  hcpcs\_cd\_23  hcpcs\_cd\_24 |  |  |
| device\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |

Reading from carrier\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DEVICE\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

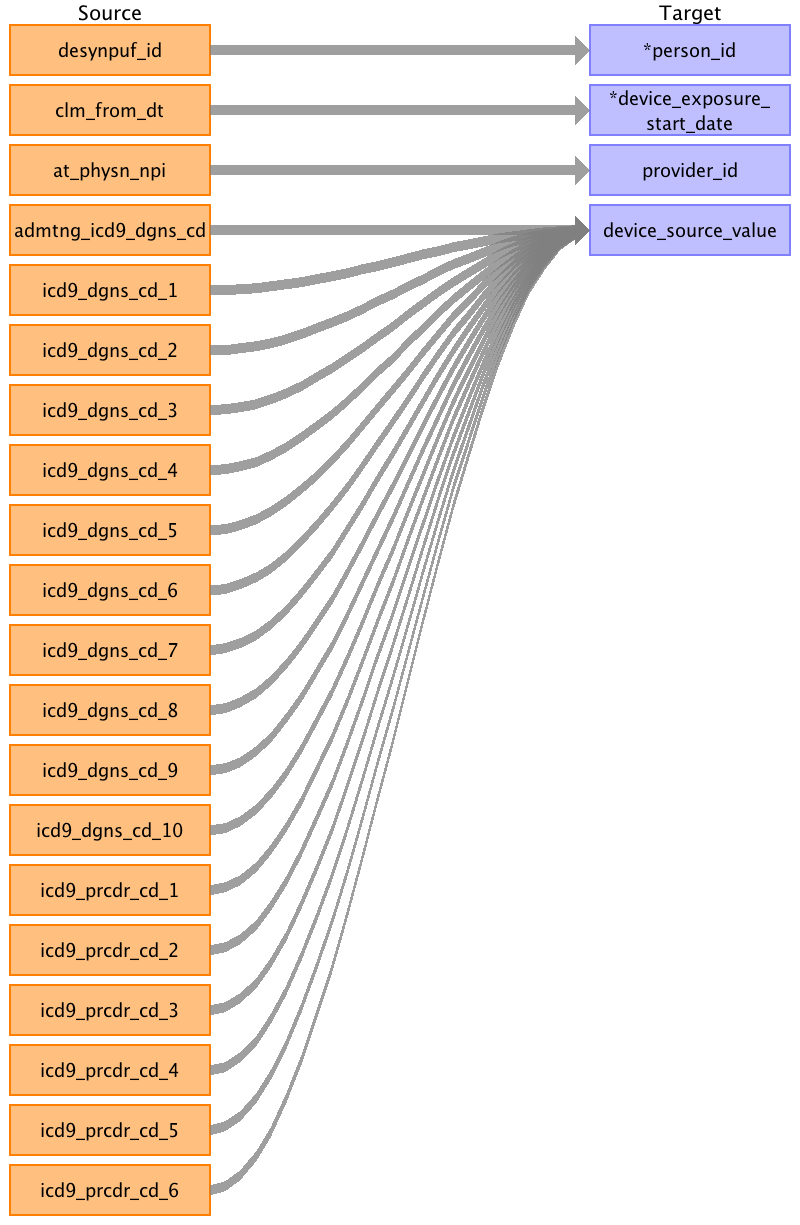


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| device\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| device\_concept\_id | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13 |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| device\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date |
| device\_exposure\_end\_date | clm\_thru\_dt |  | NULL |
| device\_type\_concept\_id |  |  | Use concept\_id = 44818705 for "Inferred from procedure claim" for all mappings of HCPCS, ICD9 diagnosis or ICD9 procedure codes. |
| unique\_device\_id |  |  | Null |
| quantity |  |  | Null |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  | OUTPATIENT\_CLAIMS: Lookup Provider in PROVIDER table. |
| visit\_occurrence\_id |  |  | At the row level you are assigning a VISIT, this occurs prior to writing to this table. Track that ID and write here. |
| device\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_12  hcpcs\_cd\_13 |  |  |
| device\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |

Reading from inpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the DEVICE\_EXPOSURE domain, else it will go to a MEASUREMENT, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



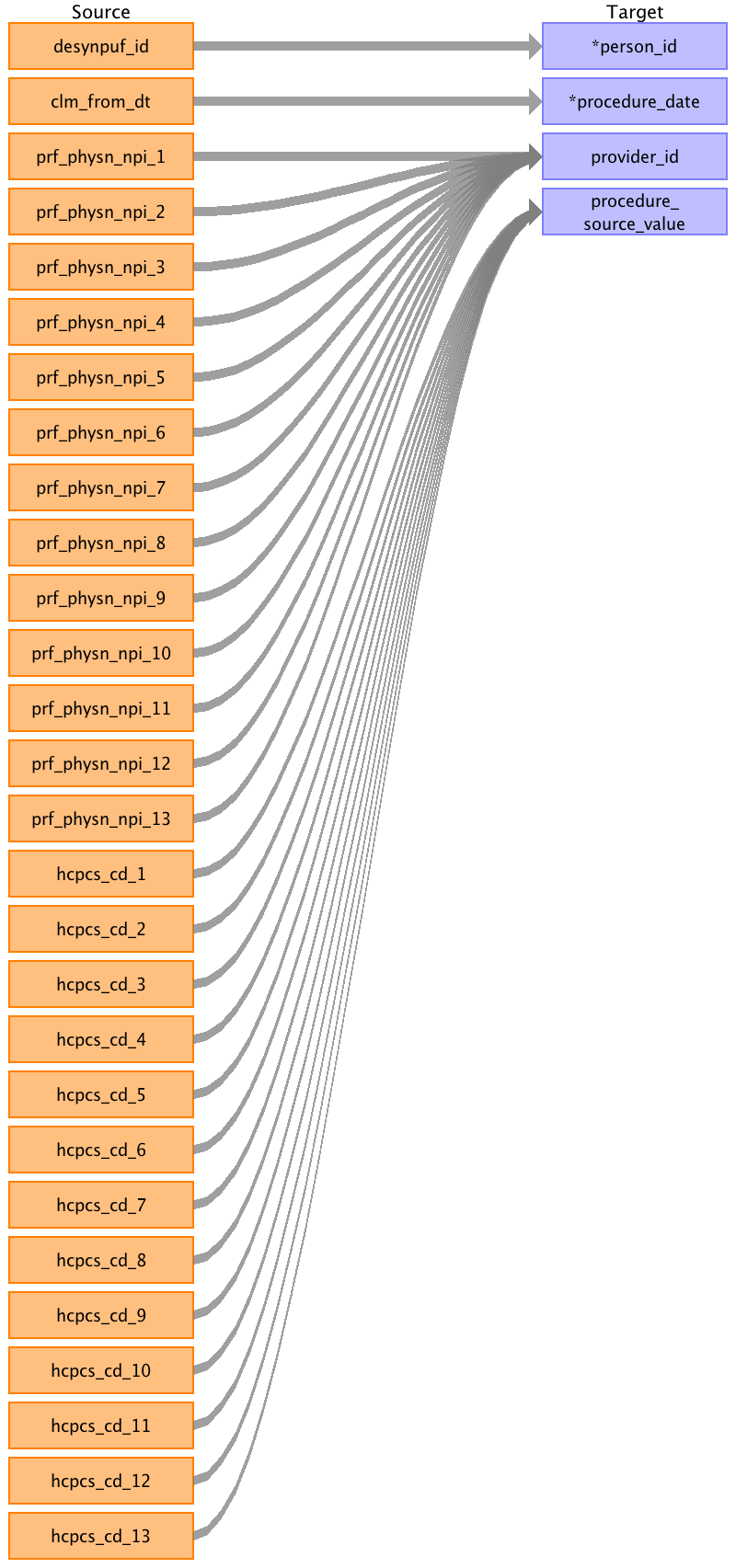
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| device\_exposure\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| device\_concept\_id |  |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| device\_exposure\_start\_date | clm\_from\_dt |  | YYYYMMDD converted to date |
| device\_exposure\_end\_date |  |  | NULL |
| device\_type\_concept\_id |  |  | Use concept\_id = 44818705 for "Inferred from procedure claim" for all mappings of HCPCS, ICD9 diagnosis or ICD9 procedure codes. |
| unique\_device\_id |  |  | Null |
| quantity |  |  | Null |
| provider\_id | at\_physn\_npi |  | OUTPATIENT\_CLAIMS: Lookup Provider in PROVIDER table. |
| visit\_occurrence\_id |  |  | At the row level you are assigning a VISIT, this occurs prior to writing to this table. Track that ID and write here. |
| device\_source\_value | admtng\_icd9\_dgns\_cd  icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  icd9\_prcdr\_cd\_1  icd9\_prcdr\_cd\_2  icd9\_prcdr\_cd\_3  icd9\_prcdr\_cd\_4  icd9\_prcdr\_cd\_5  icd9\_prcdr\_cd\_6 |  |  |
| device\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |

Table name: procedure\_occurrence

Reading from carrier\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the PROCEDURE\_OCCURRENCE domain, else it will go to a DEVICE\_EXPOSURE, OBSERVATION, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

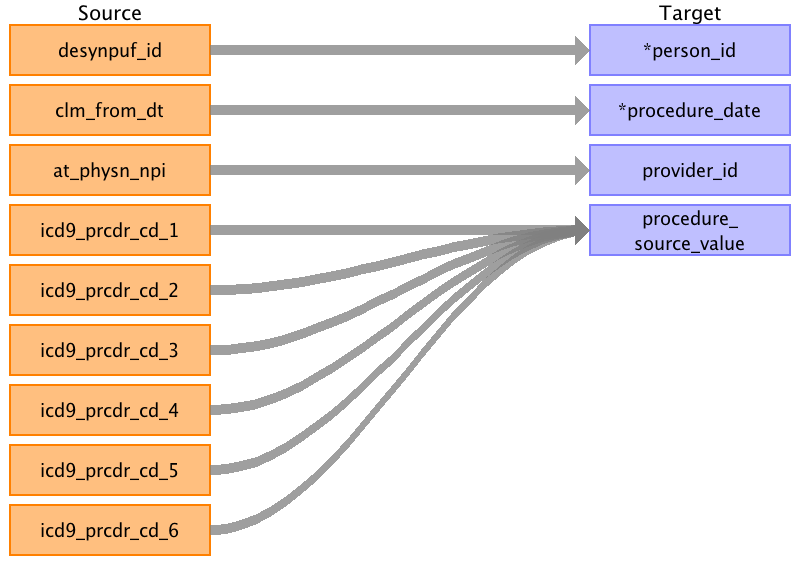


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| procedure\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| procedure\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs.  If no CONCEPT\_ID is found, write as procedure occurrence with CONCEPT\_ID = 0. |
| procedure\_date | clm\_from\_dt | YYYYMMDD converted to date. | When CLM\_FROM\_DT != CLM\_THRU\_DT we do not know which date the procedure occured, we will default to the CLM\_FROM\_DT. |
| procedure\_type\_concept\_id |  |  | CARRIER\_CLAIMS (details)  --HCPCS\_CD\_1 - 45756900-Carrier claim detail - 1st position  --HCPCS\_CD\_2 - 45756901 Carrier claim detail - 2nd position  --HCPCS\_CD\_3 - 45756902 Carrier claim detail - 3rd position  --HCPCS\_CD\_4 - TBD45756903        Carrier claim detail - 4th position  --HCPCS\_CD\_5 - TBD45756904        Carrier claim detail - 5th position  --HCPCS\_CD\_6 - TBD45756905        Carrier claim detail - 6th position  --HCPCS\_CD\_7 - TBD45756906        Carrier claim detail - 7th position  --HCPCS\_CD\_8 - TBD45756907        Carrier claim detail - 8th position  --HCPCS\_CD\_9 - TBD45756908        Carrier claim detail - 9th position  --HCPCS\_CD\_10 - TBD45756909        Carrier claim detail - 10th position  --HCPCS\_CD\_11 - TBD45756910        Carrier claim detail - 11th position  --HCPCS\_CD\_12 - TBD45756911        Carrier claim detail - 12th position  --HCPCS\_CD\_13 - TBD45756912        Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_PRCDR\_CD\_1 - 38000251-Inpatient header - 1st position  --ICD9\_PRCDR\_CD\_2 - 38000252-Inpatient header - 2nd position  --ICD9\_PRCDR\_CD\_3 - 38000253-Inpatient header - 3rd position  --ICD9\_PRCDR\_CD\_4 - 38000254-Inpatient header - 4th position  --ICD9\_PRCDR\_CD\_5 - 38000255-Inpatient header - 5th position  --ICD9\_PRCDR\_CD\_6 - 38000256-Inpatient header - 6th position  OUTPATIENT\_CLAIMS (DETAILS)  --HCPCS\_CD\_1 - 38000267-Outpatient detail - 1st position  --HCPCS\_CD\_2 - 45756856 Outpatient detail – 2nd position  --HCPCS\_CD\_3 - 45756857 Outpatient detail – 3rd position  --HCPCS\_CD\_4 - 45756858 Outpatient detail - 4th position  --HCPCS\_CD\_5 - 45756859 Outpatient detail - 5th position  --HCPCS\_CD\_6 - 45756860 Outpatient detail - 6th position  --HCPCS\_CD\_7 - 45756861 Outpatient detail - 7th position  --HCPCS\_CD\_8 - 45756862 Outpatient detail - 8th position  --HCPCS\_CD\_9 - 45756863 Outpatient detail - 9th position  --HCPCS\_CD\_10 - 45756864 Outpatient detail - 10th position  --HCPCS\_CD\_11 - 45756865 Outpatient detail - 11th position  --HCPCS\_CD\_12 - 45756866 Outpatient detail - 12th position  --HCPCS\_CD\_13 - 45756867 Outpatient detail - 13th position  --HCPCS\_CD\_14 - 45756868 Outpatient detail - 14th position  --HCPCS\_CD\_15 - TBD45756869        Outpatient detail - 15th position  --HCPCS\_CD\_16 - TBD45756870        Outpatient detail - 16th position  --HCPCS\_CD\_17 - TBD45756871        Outpatient detail - 17th position  --HCPCS\_CD\_18 - TBD45756872        Outpatient detail - 18th position  --HCPCS\_CD\_19 - TBD45756873        Outpatient detail - 19th position  --HCPCS\_CD\_20 - TBD45756874        Outpatient detail - 20th position  --HCPCS\_CD\_21 - TBD45756875        Outpatient detail - 21st position  --HCPCS\_CD\_22 - TBD45756876        Outpatient detail - 22nd position  --HCPCS\_CD\_23 - TBD45756877        Outpatient detail - 23rd position  --HCPCS\_CD\_24 - TBD45756878        Outpatient detail - 24th position  --HCPCS\_CD\_25 - TBD45756879        Outpatient detail - 25th position  --HCPCS\_CD\_26 - TBD45756880        Outpatient detail - 26th position  --HCPCS\_CD\_27 - TBD45756881        Outpatient detail - 27th position  --HCPCS\_CD\_28 - TBD45756882        Outpatient detail - 28th position  --HCPCS\_CD\_29 - TBD45756883        Outpatient detail - 29th position  --HCPCS\_CD\_30 - TBD45756884        Outpatient detail - 30th position  --HCPCS\_CD\_31 - TBD45756885        Outpatient detail - 31st position  --HCPCS\_CD\_32 - TBD45756886        Outpatient detail - 32nd position  --HCPCS\_CD\_33 - TBD45756887        Outpatient detail - 33rd position  --HCPCS\_CD\_34 - TBD45756888        Outpatient detail - 34th position  --HCPCS\_CD\_35 - TBD45756889        Outpatient detail - 35th position  --HCPCS\_CD\_36 - TBD45756890        Outpatient detail - 36th position  --HCPCS\_CD\_37 - TBD45756891        Outpatient detail - 37th position  --HCPCS\_CD\_38 - TBD45756892        Outpatient detail - 38th position  --HCPCS\_CD\_39 - TBD45756893        Outpatient detail - 39th position  --HCPCS\_CD\_40 - TBD45756894        Outpatient detail - 40th position  --HCPCS\_CD\_41 - TBD45756895        Outpatient detail - 41st position  --HCPCS\_CD\_42 - TBD45756896        Outpatient detail - 42nd position  --HCPCS\_CD\_43 - TBD45756897        Outpatient detail - 43rd position  --HCPCS\_CD\_44 - TBD45756898        Outpatient detail - 44th position  --HCPCS\_CD\_45 - TBD45756899        Outpatient detail - 45th position |
| modifier\_concept\_id |  |  | 0 |
| quantity |  |  | NULL |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 | Lookup the NPI in the PROVIDER table and associate with the HCPC\_CD\_XX of the same number (e.g. pick PRF\_PHYSN\_NPI\_13 for the row written for HCPCS\_CD\_13) |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| procedure\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13 |  |  |
| procedure\_source\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs. |
| qualifier\_source\_value |  |  | NULL |

Reading from inpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the PROCEDURE\_OCCURRENCE domain, else it will go to a DEVICE\_EXPOSURE, OBSERVATION, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

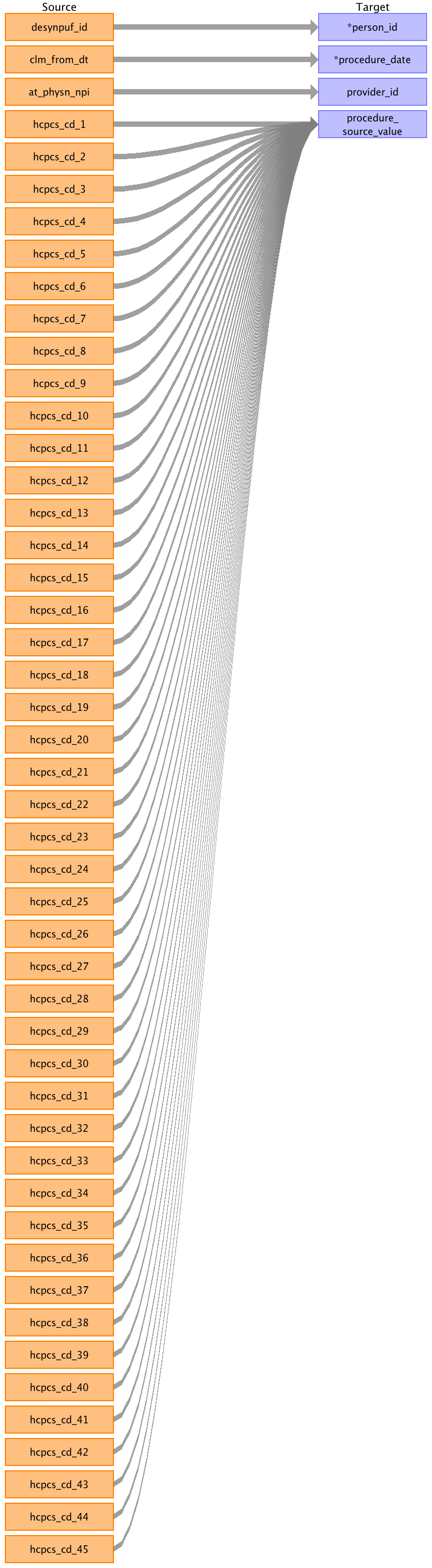


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| procedure\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| procedure\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs.  If no CONCEPT\_ID is found, write as procedure occurrence with CONCEPT\_ID = 0. |
| procedure\_date | clm\_from\_dt | YYYYMMDD converted to date. | When CLM\_FROM\_DT != CLM\_THRU\_DT we do not know which date the procedure occured, we will default to the CLM\_FROM\_DT. |
| procedure\_type\_concept\_id |  |  | CARRIER\_CLAIMS (details)  --HCPCS\_CD\_1 - 45756900-Carrier claim detail - 1st position  --HCPCS\_CD\_2 - 45756901 Carrier claim detail - 2nd position  --HCPCS\_CD\_3 - 45756902 Carrier claim detail - 3rd position  --HCPCS\_CD\_4 - TBD45756903        Carrier claim detail - 4th position  --HCPCS\_CD\_5 - TBD45756904        Carrier claim detail - 5th position  --HCPCS\_CD\_6 - TBD45756905        Carrier claim detail - 6th position  --HCPCS\_CD\_7 - TBD45756906        Carrier claim detail - 7th position  --HCPCS\_CD\_8 - TBD45756907        Carrier claim detail - 8th position  --HCPCS\_CD\_9 - TBD45756908        Carrier claim detail - 9th position  --HCPCS\_CD\_10 - TBD45756909        Carrier claim detail - 10th position  --HCPCS\_CD\_11 - TBD45756910        Carrier claim detail - 11th position  --HCPCS\_CD\_12 - TBD45756911        Carrier claim detail - 12th position  --HCPCS\_CD\_13 - TBD45756912        Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_PRCDR\_CD\_1 - 38000251-Inpatient header - 1st position  --ICD9\_PRCDR\_CD\_2 - 38000252-Inpatient header - 2nd position  --ICD9\_PRCDR\_CD\_3 - 38000253-Inpatient header - 3rd position  --ICD9\_PRCDR\_CD\_4 - 38000254-Inpatient header - 4th position  --ICD9\_PRCDR\_CD\_5 - 38000255-Inpatient header - 5th position  --ICD9\_PRCDR\_CD\_6 - 38000256-Inpatient header - 6th position  OUTPATIENT\_CLAIMS (DETAILS)  --HCPCS\_CD\_1 - 38000267-Outpatient detail - 1st position  --HCPCS\_CD\_2 - 45756856 Outpatient detail – 2nd position  --HCPCS\_CD\_3 - 45756857 Outpatient detail – 3rd position  --HCPCS\_CD\_4 - 45756858 Outpatient detail - 4th position  --HCPCS\_CD\_5 - 45756859 Outpatient detail - 5th position  --HCPCS\_CD\_6 - 45756860 Outpatient detail - 6th position  --HCPCS\_CD\_7 - 45756861 Outpatient detail - 7th position  --HCPCS\_CD\_8 - 45756862 Outpatient detail - 8th position  --HCPCS\_CD\_9 - 45756863 Outpatient detail - 9th position  --HCPCS\_CD\_10 - 45756864 Outpatient detail - 10th position  --HCPCS\_CD\_11 - 45756865 Outpatient detail - 11th position  --HCPCS\_CD\_12 - 45756866 Outpatient detail - 12th position  --HCPCS\_CD\_13 - 45756867 Outpatient detail - 13th position  --HCPCS\_CD\_14 - 45756868 Outpatient detail - 14th position  --HCPCS\_CD\_15 - TBD45756869        Outpatient detail - 15th position  --HCPCS\_CD\_16 - TBD45756870        Outpatient detail - 16th position  --HCPCS\_CD\_17 - TBD45756871        Outpatient detail - 17th position  --HCPCS\_CD\_18 - TBD45756872        Outpatient detail - 18th position  --HCPCS\_CD\_19 - TBD45756873        Outpatient detail - 19th position  --HCPCS\_CD\_20 - TBD45756874        Outpatient detail - 20th position  --HCPCS\_CD\_21 - TBD45756875        Outpatient detail - 21st position  --HCPCS\_CD\_22 - TBD45756876        Outpatient detail - 22nd position  --HCPCS\_CD\_23 - TBD45756877        Outpatient detail - 23rd position  --HCPCS\_CD\_24 - TBD45756878        Outpatient detail - 24th position  --HCPCS\_CD\_25 - TBD45756879        Outpatient detail - 25th position  --HCPCS\_CD\_26 - TBD45756880        Outpatient detail - 26th position  --HCPCS\_CD\_27 - TBD45756881        Outpatient detail - 27th position  --HCPCS\_CD\_28 - TBD45756882        Outpatient detail - 28th position  --HCPCS\_CD\_29 - TBD45756883        Outpatient detail - 29th position  --HCPCS\_CD\_30 - TBD45756884        Outpatient detail - 30th position  --HCPCS\_CD\_31 - TBD45756885        Outpatient detail - 31st position  --HCPCS\_CD\_32 - TBD45756886        Outpatient detail - 32nd position  --HCPCS\_CD\_33 - TBD45756887        Outpatient detail - 33rd position  --HCPCS\_CD\_34 - TBD45756888        Outpatient detail - 34th position  --HCPCS\_CD\_35 - TBD45756889        Outpatient detail - 35th position  --HCPCS\_CD\_36 - TBD45756890        Outpatient detail - 36th position  --HCPCS\_CD\_37 - TBD45756891        Outpatient detail - 37th position  --HCPCS\_CD\_38 - TBD45756892        Outpatient detail - 38th position  --HCPCS\_CD\_39 - TBD45756893        Outpatient detail - 39th position  --HCPCS\_CD\_40 - TBD45756894        Outpatient detail - 40th position  --HCPCS\_CD\_41 - TBD45756895        Outpatient detail - 41st position  --HCPCS\_CD\_42 - TBD45756896        Outpatient detail - 42nd position  --HCPCS\_CD\_43 - TBD45756897        Outpatient detail - 43rd position  --HCPCS\_CD\_44 - TBD45756898        Outpatient detail - 44th position  --HCPCS\_CD\_45 - TBD45756899        Outpatient detail - 45th position |
| modifier\_concept\_id |  |  | 0 |
| quantity |  |  | NULL |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| procedure\_source\_value | icd9\_prcdr\_cd\_1  icd9\_prcdr\_cd\_2  icd9\_prcdr\_cd\_3  icd9\_prcdr\_cd\_4  icd9\_prcdr\_cd\_5  icd9\_prcdr\_cd\_6 |  |  |
| procedure\_source\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs. |
| qualifier\_source\_value |  |  | NULL |

Reading from outpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the PROCEDURE\_OCCURRENCE domain, else it will go to a DEVICE\_EXPOSURE, OBSERVATION, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



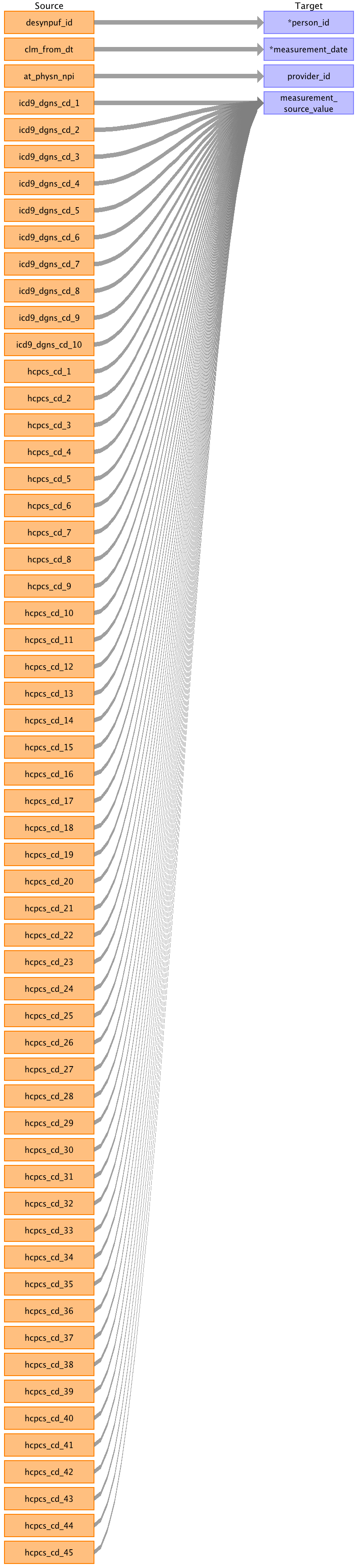
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| procedure\_occurrence\_id |  |  | Autogenerated |
| person\_id | desynpuf\_id |  |  |
| procedure\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs.  If no CONCEPT\_ID is found, write as procedure occurrence with CONCEPT\_ID = 0. |
| procedure\_date | clm\_from\_dt | YYYYMMDD converted to date. | When CLM\_FROM\_DT != CLM\_THRU\_DT we do not know which date the procedure occured, we will default to the CLM\_FROM\_DT. |
| procedure\_type\_concept\_id |  |  | CARRIER\_CLAIMS (details)  --HCPCS\_CD\_1 - 45756900-Carrier claim detail - 1st position  --HCPCS\_CD\_2 - 45756901 Carrier claim detail - 2nd position  --HCPCS\_CD\_3 - 45756902 Carrier claim detail - 3rd position  --HCPCS\_CD\_4 - TBD45756903        Carrier claim detail - 4th position  --HCPCS\_CD\_5 - TBD45756904        Carrier claim detail - 5th position  --HCPCS\_CD\_6 - TBD45756905        Carrier claim detail - 6th position  --HCPCS\_CD\_7 - TBD45756906        Carrier claim detail - 7th position  --HCPCS\_CD\_8 - TBD45756907        Carrier claim detail - 8th position  --HCPCS\_CD\_9 - TBD45756908        Carrier claim detail - 9th position  --HCPCS\_CD\_10 - TBD45756909        Carrier claim detail - 10th position  --HCPCS\_CD\_11 - TBD45756910        Carrier claim detail - 11th position  --HCPCS\_CD\_12 - TBD45756911        Carrier claim detail - 12th position  --HCPCS\_CD\_13 - TBD45756912        Carrier claim detail - 13th position  INPATIENT\_CLAIMS:  --ICD9\_PRCDR\_CD\_1 - 38000251-Inpatient header - 1st position  --ICD9\_PRCDR\_CD\_2 - 38000252-Inpatient header - 2nd position  --ICD9\_PRCDR\_CD\_3 - 38000253-Inpatient header - 3rd position  --ICD9\_PRCDR\_CD\_4 - 38000254-Inpatient header - 4th position  --ICD9\_PRCDR\_CD\_5 - 38000255-Inpatient header - 5th position  --ICD9\_PRCDR\_CD\_6 - 38000256-Inpatient header - 6th position  OUTPATIENT\_CLAIMS (DETAILS)  --HCPCS\_CD\_1 - 38000267-Outpatient detail - 1st position  --HCPCS\_CD\_2 - 45756856 Outpatient detail – 2nd position  --HCPCS\_CD\_3 - 45756857 Outpatient detail – 3rd position  --HCPCS\_CD\_4 - 45756858 Outpatient detail - 4th position  --HCPCS\_CD\_5 - 45756859 Outpatient detail - 5th position  --HCPCS\_CD\_6 - 45756860 Outpatient detail - 6th position  --HCPCS\_CD\_7 - 45756861 Outpatient detail - 7th position  --HCPCS\_CD\_8 - 45756862 Outpatient detail - 8th position  --HCPCS\_CD\_9 - 45756863 Outpatient detail - 9th position  --HCPCS\_CD\_10 - 45756864 Outpatient detail - 10th position  --HCPCS\_CD\_11 - 45756865 Outpatient detail - 11th position  --HCPCS\_CD\_12 - 45756866 Outpatient detail - 12th position  --HCPCS\_CD\_13 - 45756867 Outpatient detail - 13th position  --HCPCS\_CD\_14 - 45756868 Outpatient detail - 14th position  --HCPCS\_CD\_15 - TBD45756869        Outpatient detail - 15th position  --HCPCS\_CD\_16 - TBD45756870        Outpatient detail - 16th position  --HCPCS\_CD\_17 - TBD45756871        Outpatient detail - 17th position  --HCPCS\_CD\_18 - TBD45756872        Outpatient detail - 18th position  --HCPCS\_CD\_19 - TBD45756873        Outpatient detail - 19th position  --HCPCS\_CD\_20 - TBD45756874        Outpatient detail - 20th position  --HCPCS\_CD\_21 - TBD45756875        Outpatient detail - 21st position  --HCPCS\_CD\_22 - TBD45756876        Outpatient detail - 22nd position  --HCPCS\_CD\_23 - TBD45756877        Outpatient detail - 23rd position  --HCPCS\_CD\_24 - TBD45756878        Outpatient detail - 24th position  --HCPCS\_CD\_25 - TBD45756879        Outpatient detail - 25th position  --HCPCS\_CD\_26 - TBD45756880        Outpatient detail - 26th position  --HCPCS\_CD\_27 - TBD45756881        Outpatient detail - 27th position  --HCPCS\_CD\_28 - TBD45756882        Outpatient detail - 28th position  --HCPCS\_CD\_29 - TBD45756883        Outpatient detail - 29th position  --HCPCS\_CD\_30 - TBD45756884        Outpatient detail - 30th position  --HCPCS\_CD\_31 - TBD45756885        Outpatient detail - 31st position  --HCPCS\_CD\_32 - TBD45756886        Outpatient detail - 32nd position  --HCPCS\_CD\_33 - TBD45756887        Outpatient detail - 33rd position  --HCPCS\_CD\_34 - TBD45756888        Outpatient detail - 34th position  --HCPCS\_CD\_35 - TBD45756889        Outpatient detail - 35th position  --HCPCS\_CD\_36 - TBD45756890        Outpatient detail - 36th position  --HCPCS\_CD\_37 - TBD45756891        Outpatient detail - 37th position  --HCPCS\_CD\_38 - TBD45756892        Outpatient detail - 38th position  --HCPCS\_CD\_39 - TBD45756893        Outpatient detail - 39th position  --HCPCS\_CD\_40 - TBD45756894        Outpatient detail - 40th position  --HCPCS\_CD\_41 - TBD45756895        Outpatient detail - 41st position  --HCPCS\_CD\_42 - TBD45756896        Outpatient detail - 42nd position  --HCPCS\_CD\_43 - TBD45756897        Outpatient detail - 43rd position  --HCPCS\_CD\_44 - TBD45756898        Outpatient detail - 44th position  --HCPCS\_CD\_45 - TBD45756899        Outpatient detail - 45th position |
| modifier\_concept\_id |  |  | 0 |
| quantity |  |  | NULL |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| procedure\_source\_value | hcpcs\_cd\_1  hcpcs\_cd\_45  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  hcpcs\_cd\_14  hcpcs\_cd\_15  hcpcs\_cd\_16  hcpcs\_cd\_17  hcpcs\_cd\_18  hcpcs\_cd\_19  hcpcs\_cd\_20  hcpcs\_cd\_21  hcpcs\_cd\_22  hcpcs\_cd\_44  hcpcs\_cd\_43  hcpcs\_cd\_42  hcpcs\_cd\_41  hcpcs\_cd\_40  hcpcs\_cd\_39  hcpcs\_cd\_38  hcpcs\_cd\_37  hcpcs\_cd\_36  hcpcs\_cd\_35  hcpcs\_cd\_34  hcpcs\_cd\_33  hcpcs\_cd\_32  hcpcs\_cd\_23  hcpcs\_cd\_24  hcpcs\_cd\_25  hcpcs\_cd\_26  hcpcs\_cd\_27  hcpcs\_cd\_28  hcpcs\_cd\_29  hcpcs\_cd\_30  hcpcs\_cd\_31 |  |  |
| procedure\_source\_concept\_id |  |  | In CARRIER\_CLAIMS & OUTPATIENT\_CLAIMS map to HCPC CONCEPT\_IDs.  IN INPATIENT\_CLAIMS map to ICD9 Procedures CONCEPT\_IDs. |
| qualifier\_source\_value |  |  | NULL |

Table name: measurement

Reading from outpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the MEASUREMENT domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

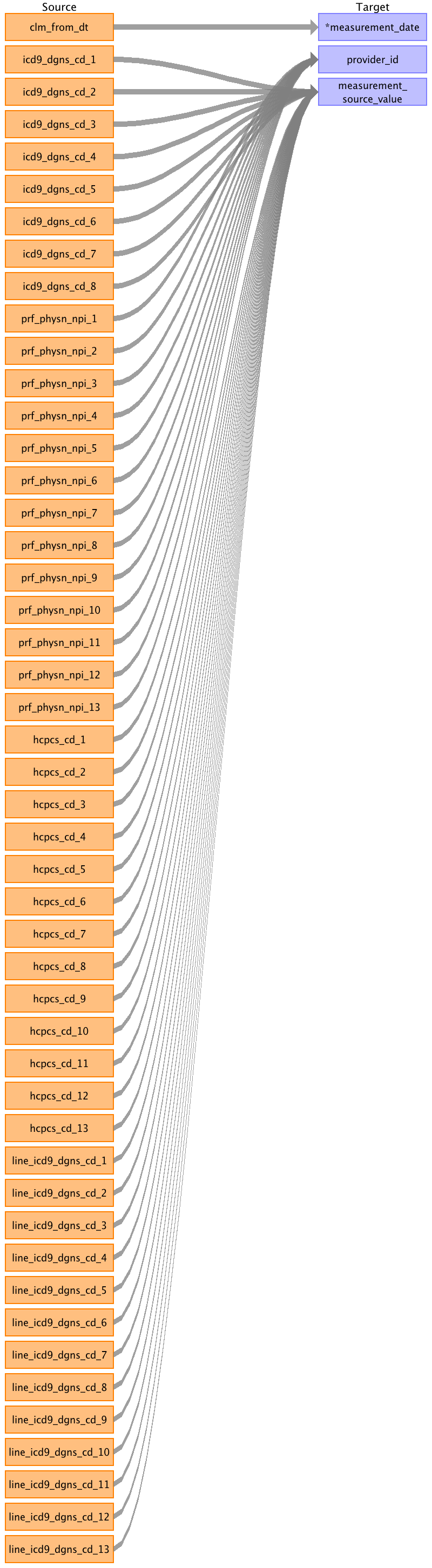


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| measurement\_id |  |  | autogenerated |
| person\_id | desynpuf\_id |  |  |
| measurement\_concept\_id |  |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| measurement\_date | clm\_from\_dt |  |  |
| measurement\_time |  |  | null |
| measurement\_type\_concept\_id |  |  | Use concept id = 45754907 for "Derived value" for all HCPCS, ICD9 diagnoses and ICD9 procedure codes mapped. |
| operator\_concept\_id |  |  | null |
| value\_as\_number |  |  | null |
| value\_as\_concept\_id |  |  | null |
| unit\_concept\_id |  |  | null |
| range\_low |  |  | 0 |
| range\_high |  |  | 0 |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| measurement\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  hcpcs\_cd\_14  hcpcs\_cd\_15  hcpcs\_cd\_16  hcpcs\_cd\_17  hcpcs\_cd\_18  hcpcs\_cd\_19  hcpcs\_cd\_20  hcpcs\_cd\_21  hcpcs\_cd\_22  hcpcs\_cd\_23  hcpcs\_cd\_24  hcpcs\_cd\_25  hcpcs\_cd\_26  hcpcs\_cd\_27  hcpcs\_cd\_28  hcpcs\_cd\_29  hcpcs\_cd\_30  hcpcs\_cd\_31  hcpcs\_cd\_32  hcpcs\_cd\_33  hcpcs\_cd\_34  hcpcs\_cd\_35  hcpcs\_cd\_36  hcpcs\_cd\_37  hcpcs\_cd\_38  hcpcs\_cd\_39  hcpcs\_cd\_40  hcpcs\_cd\_41  hcpcs\_cd\_42  hcpcs\_cd\_43  hcpcs\_cd\_44  hcpcs\_cd\_45 |  |  |
| measurement\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | null |
| value\_source\_value |  |  | null |

Reading from carrier\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the MEASUREMENT domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

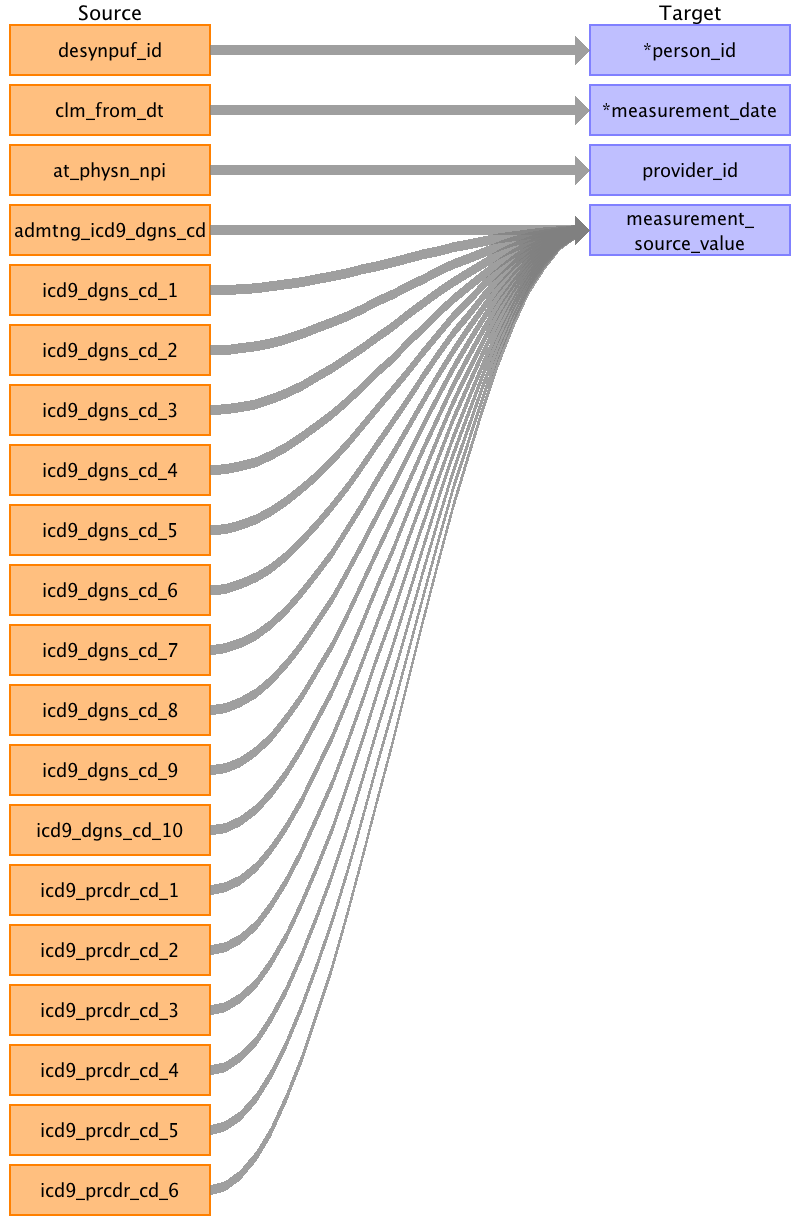


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| measurement\_id |  |  | autogenerated |
| person\_id |  |  |  |
| measurement\_concept\_id |  |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| measurement\_date | clm\_from\_dt |  |  |
| measurement\_time |  |  | null |
| measurement\_type\_concept\_id |  |  | Use concept id = 45754907 for "Derived value" for all HCPCS, ICD9 diagnoses and ICD9 procedure codes mapped. |
| operator\_concept\_id |  |  | null |
| value\_as\_number |  |  | null |
| value\_as\_concept\_id |  |  | null |
| unit\_concept\_id |  |  | null |
| range\_low |  |  | 0 |
| range\_high |  |  | 0 |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| measurement\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  line\_icd9\_dgns\_cd\_1  line\_icd9\_dgns\_cd\_2  line\_icd9\_dgns\_cd\_3  line\_icd9\_dgns\_cd\_4  line\_icd9\_dgns\_cd\_5  line\_icd9\_dgns\_cd\_6  line\_icd9\_dgns\_cd\_7  line\_icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_9  line\_icd9\_dgns\_cd\_10  line\_icd9\_dgns\_cd\_11  line\_icd9\_dgns\_cd\_12  line\_icd9\_dgns\_cd\_13 |  |  |
| measurement\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | null |
| value\_source\_value |  |  | null |

Reading from inpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the MEASUREMENT domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, OBSERVATION, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



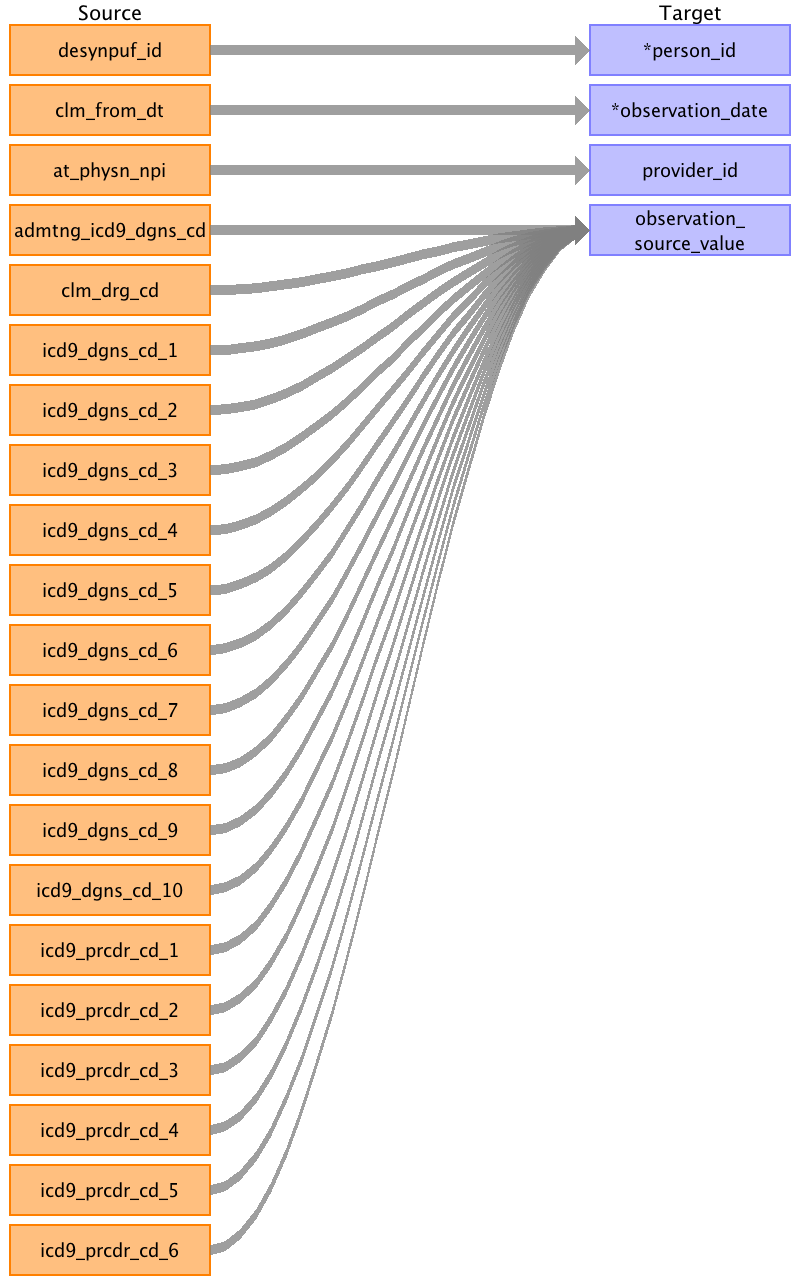
|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| measurement\_id |  |  | autogenerated |
| person\_id | desynpuf\_id |  |  |
| measurement\_concept\_id |  |  | ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| measurement\_date | clm\_from\_dt |  |  |
| measurement\_time |  |  | null |
| measurement\_type\_concept\_id |  |  | Use concept id = 45754907 for "Derived value" for all HCPCS, ICD9 diagnoses and ICD9 procedure codes mapped. |
| operator\_concept\_id |  |  | null |
| value\_as\_number |  |  | null |
| value\_as\_concept\_id |  |  | null |
| unit\_concept\_id |  |  | null |
| range\_low |  |  | 0 |
| range\_high |  |  | 0 |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Associate to proper VISIT\_OCCURRENCE\_ID. |
| measurement\_source\_value | admtng\_icd9\_dgns\_cd  icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  icd9\_prcdr\_cd\_1  icd9\_prcdr\_cd\_2  icd9\_prcdr\_cd\_3  icd9\_prcdr\_cd\_4  icd9\_prcdr\_cd\_5  icd9\_prcdr\_cd\_6 |  |  |
| measurement\_source\_concept\_id |  |  | ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | null |
| value\_source\_value |  |  | null |

Table name: observation

Reading from inpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the OBSERVATION domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

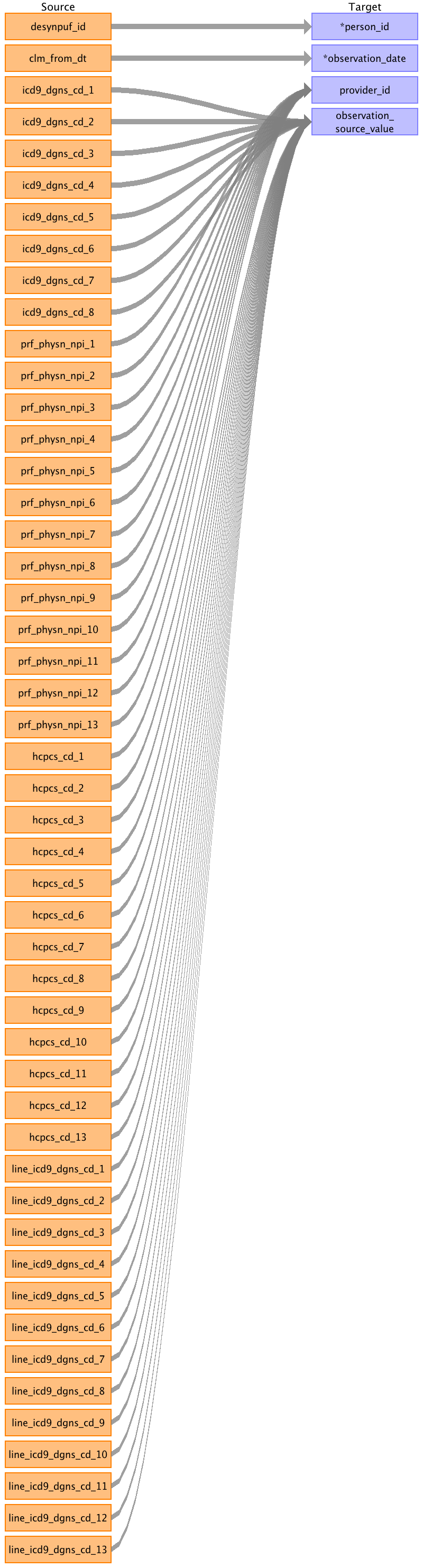


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_id |  |  | autogenerated |
| person\_id | desynpuf\_id |  |  |
| observation\_concept\_id |  |  | INPATIENT\_CLAIMS: Use DRG concept IDs  ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| observation\_date | clm\_from\_dt | YYYYMMDD converted to date. |  |
| observation\_time |  |  | NULL |
| observation\_type\_concept\_id |  |  | Use 38000282-Chief complaint for all DRG, HCPCS, ICD9 diagnosis and ICD9 procedure fields mapped. |
| value\_as\_number |  |  | NULL |
| value\_as\_string |  |  | NULL |
| value\_as\_concept\_id |  |  | 0 |
| qualifier\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Track this as writing records. |
| observation\_source\_value | clm\_drg\_cd  icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  admtng\_icd9\_dgns\_cd  icd9\_dgns\_cd\_10  icd9\_prcdr\_cd\_1  icd9\_prcdr\_cd\_2  icd9\_prcdr\_cd\_3  icd9\_prcdr\_cd\_4  icd9\_prcdr\_cd\_5  icd9\_prcdr\_cd\_6 |  |  |
| observation\_source\_concept\_id |  |  | INPATIENT\_CLAIMS: Convert DRG from CLM\_DRG\_CD to CONCEPT\_ID, look for the source DRG in the CONCEPT.CONCEPT\_CODE and use the CLM\_FROM\_DT to determine the appropriate DRG to select.  ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | NULL |
| qualifier\_source\_value |  |  | NULL |

Reading from carrier\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the OBSERVATION domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.

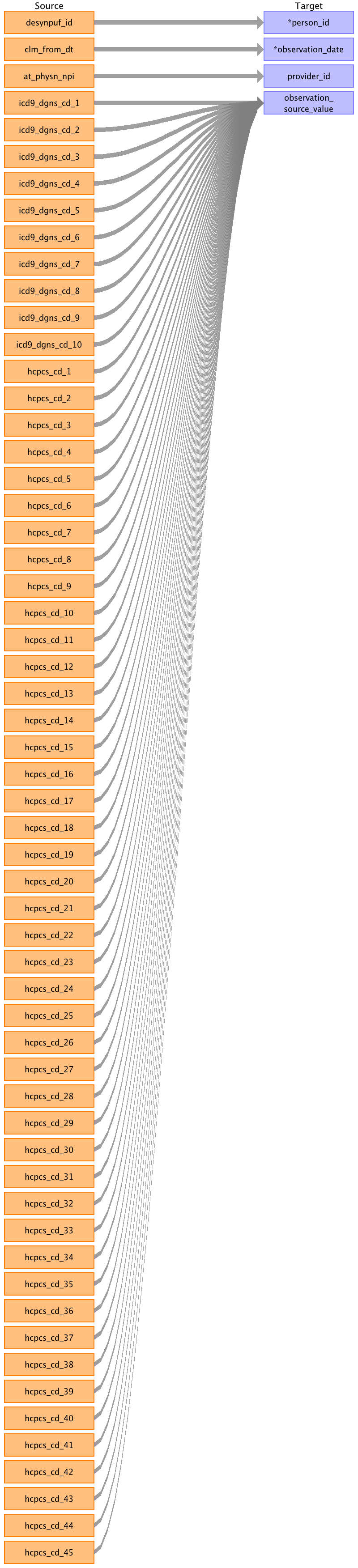


|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_id |  |  | autogenerated |
| person\_id | desynpuf\_id |  |  |
| observation\_concept\_id |  |  | INPATIENT\_CLAIMS: Use DRG concept IDs  ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| observation\_date | clm\_from\_dt |  |  |
| observation\_time |  |  | NULL |
| observation\_type\_concept\_id |  |  | Use 38000282-Chief complaint for all DRG, HCPCS, ICD9 diagnosis and ICD9 procedure fields mapped. |
| value\_as\_number |  |  | NULL |
| value\_as\_string |  |  | NULL |
| value\_as\_concept\_id |  |  | 0 |
| qualifier\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| provider\_id | prf\_physn\_npi\_1  prf\_physn\_npi\_2  prf\_physn\_npi\_3  prf\_physn\_npi\_4  prf\_physn\_npi\_5  prf\_physn\_npi\_6  prf\_physn\_npi\_7  prf\_physn\_npi\_8  prf\_physn\_npi\_9  prf\_physn\_npi\_10  prf\_physn\_npi\_11  prf\_physn\_npi\_12  prf\_physn\_npi\_13 |  |  |
| visit\_occurrence\_id |  |  | Track this as writing records. |
| observation\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_8  hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  line\_icd9\_dgns\_cd\_1  line\_icd9\_dgns\_cd\_2  line\_icd9\_dgns\_cd\_3  line\_icd9\_dgns\_cd\_4  line\_icd9\_dgns\_cd\_5  line\_icd9\_dgns\_cd\_6  line\_icd9\_dgns\_cd\_7  line\_icd9\_dgns\_cd\_8  line\_icd9\_dgns\_cd\_9  line\_icd9\_dgns\_cd\_10  line\_icd9\_dgns\_cd\_11  line\_icd9\_dgns\_cd\_12  line\_icd9\_dgns\_cd\_13 |  |  |
| observation\_source\_concept\_id |  |  | INPATIENT\_CLAIMS: Convert DRG from CLM\_DRG\_CD to CONCEPT\_ID, look for the source DRG in the CONCEPT.CONCEPT\_CODE and use the CLM\_FROM\_DT to determine the appropriate DRG to select.  ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | NULL |
| qualifier\_source\_value |  |  | NULL |

Reading from outpatient\_claims

For HCPCS, ICD9 diagnosis and ICD9 procedure columns, use VOCABULARY to determine if the code belongs to the OBSERVATION domain, else it will go to a DEVICE\_EXPOSURE, PROCEDURE\_OCCURRENCE, MEASUREMENT, or DRUG\_EXPOSURE.

CAUTION: The MEASUREMENT and OBSERVATION CDM tables do not have cost tables associated with them in CDM v5. If HCPCS are mapped to these tables, the associated costs will be lost. Since SynPUF is fake data, we will go ahead with using the VOCABULARY assignments and not include the costs associated with HCPCS in the MEASUREMENT and OBSERVATION tables. However, when creating a specification document for real data, we DO NOT recommend using the VOCABULARY for HCPCS domain assignment for CDM v5, as certain cost data will not be included in the final CDM. This is not an issue with ICD9 procedure codes as these associated costs are stored at the VISIT\_COST table.



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| observation\_id |  |  | autogenerated |
| person\_id | desynpuf\_id |  |  |
| observation\_concept\_id |  |  | INPATIENT\_CLAIMS: Use DRG concept IDs  ALL SOURCE FILES: Use Concept\_Relationship table to match standard concepts from the following fields mapped: HCPCS, ICD9 diagnoses and procedures. |
| observation\_date | clm\_from\_dt |  |  |
| observation\_time |  |  | NULL |
| observation\_type\_concept\_id |  |  | Use 38000282-Chief complaint for all DRG, HCPCS, ICD9 diagnosis and ICD9 procedure fields mapped. |
| value\_as\_number |  |  | NULL |
| value\_as\_string |  |  | NULL |
| value\_as\_concept\_id |  |  | 0 |
| qualifier\_concept\_id |  |  | 0 |
| unit\_concept\_id |  |  | 0 |
| provider\_id | at\_physn\_npi |  |  |
| visit\_occurrence\_id |  |  | Track this as writing records. |
| observation\_source\_value | icd9\_dgns\_cd\_1  icd9\_dgns\_cd\_2  icd9\_dgns\_cd\_3  icd9\_dgns\_cd\_4  icd9\_dgns\_cd\_7  icd9\_dgns\_cd\_5  icd9\_dgns\_cd\_6  icd9\_dgns\_cd\_8  icd9\_dgns\_cd\_9  icd9\_dgns\_cd\_10  hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13  hcpcs\_cd\_14  hcpcs\_cd\_15  hcpcs\_cd\_16  hcpcs\_cd\_17  hcpcs\_cd\_18  hcpcs\_cd\_19  hcpcs\_cd\_45  hcpcs\_cd\_20  hcpcs\_cd\_21  hcpcs\_cd\_22  hcpcs\_cd\_23  hcpcs\_cd\_24  hcpcs\_cd\_25  hcpcs\_cd\_26  hcpcs\_cd\_44  hcpcs\_cd\_43  hcpcs\_cd\_42  hcpcs\_cd\_41  hcpcs\_cd\_40  hcpcs\_cd\_39  hcpcs\_cd\_38  hcpcs\_cd\_37  hcpcs\_cd\_36  hcpcs\_cd\_35  hcpcs\_cd\_34  hcpcs\_cd\_33  hcpcs\_cd\_32  hcpcs\_cd\_27  hcpcs\_cd\_28  hcpcs\_cd\_29  hcpcs\_cd\_31  hcpcs\_cd\_30 |  |  |
| observation\_source\_concept\_id |  |  | INPATIENT\_CLAIMS: Convert DRG from CLM\_DRG\_CD to CONCEPT\_ID, look for the source DRG in the CONCEPT.CONCEPT\_CODE and use the CLM\_FROM\_DT to determine the appropriate DRG to select.  ALL SOURCE FILES: Use SOURCE\_CONCEPT\_ID for each HCPCS, ICD9 diagnosis or ICD9 procedure mapped. |
| unit\_source\_value |  |  | NULL |
| qualifier\_source\_value |  |  | NULL |

Table name: note

Table name: specimen

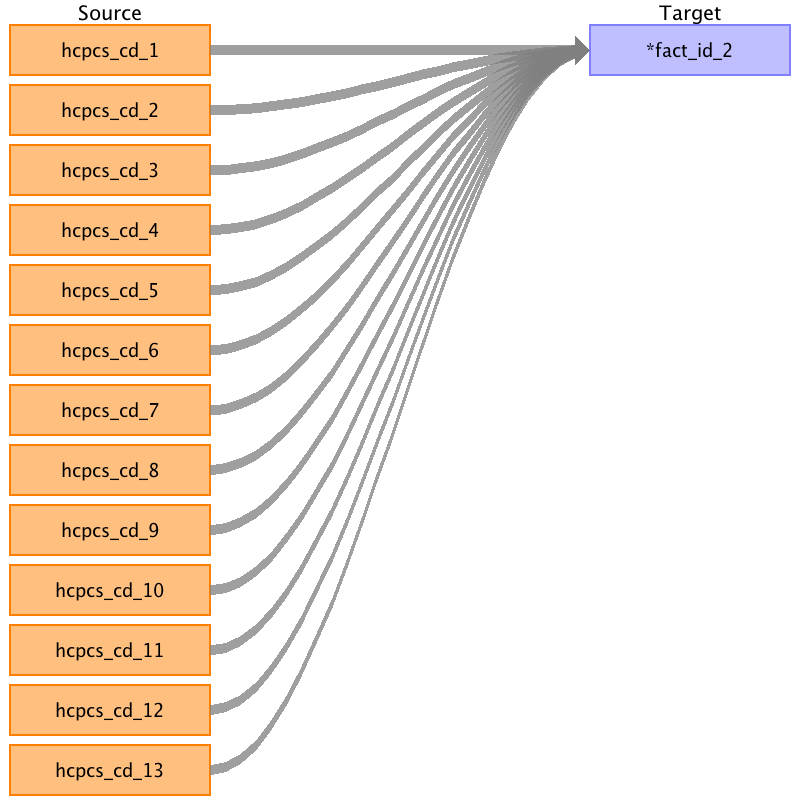
Table name: fact\_relationship

Reading from carrier\_claims

We will capture two relationships:

(1) CARE\_SITE --> PROCEDURE\_OCCURRENCE [relationship\_concept\_id = 44818841-Procedure site of (SNOMED)]

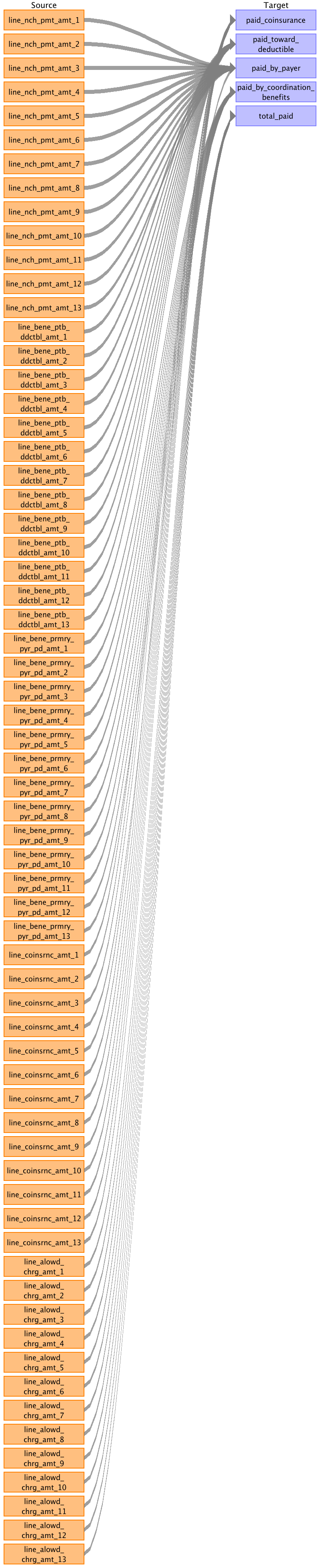
(2) CONDITION\_OCCURRENCE/DRUG\_EXPOSURE/DEVICE\_EXPOSURE/MEASUREMENT/OBSERVATION --> PROCEDURE\_OCCURRENCE [relationship\_concept\_id = 44818784-Has associated procedure (SNOMED)]



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| domain\_concept\_id\_1 |  |  | (1) CARE\_SITE --> PROCEDURE\_OCCURRENCE: 57-Care site  (2) CONDITION/ETC --> PROCEDURE\_OCCURRENCE: 13-Drug; 17-Device; 19-Condition; 21-Measurement; 27-Observation |
| fact\_id\_1 |  |  | (1) CARE\_SITE --> PROCEDURE\_OCCURRENCE: TAX\_NUM\_1 to TAX\_NUM\_13 (Lookup related CARE\_SITE\_ID)  (2) CONDITION/ETC --> PROCEDURE\_OCCURRENCE: LINE\_DGNS\_CD\_1 to LINE\_DGNS\_CD\_13 (Lookup related CONDITON\_OCCURRENCE\_ID, DRUG\_EXPOSURE\_ID, DEVICE\_EXPOSURE\_ID, MEASUREMENT\_ID, or OBSERVATION\_ID) |
| domain\_concept\_id\_2 |  |  | 10-Procedure |
| fact\_id\_2 | hcpcs\_cd\_1  hcpcs\_cd\_2  hcpcs\_cd\_3  hcpcs\_cd\_4  hcpcs\_cd\_5  hcpcs\_cd\_6  hcpcs\_cd\_7  hcpcs\_cd\_8  hcpcs\_cd\_9  hcpcs\_cd\_10  hcpcs\_cd\_11  hcpcs\_cd\_12  hcpcs\_cd\_13 |  | Lookup related PROCEDURE\_OCCURRENCE\_ID |
| relationship\_concept\_id |  |  | (1) CARE\_SITE --> PROCEDURE\_OCCURRENCE: 44818841-Procedure site of (SNOMED)  (2) CONDITION/ETC --> PROCEDURE\_OCCURRENCE: 44818784-Has associated procedure (SNOMED) |

Table name: procedure\_cost

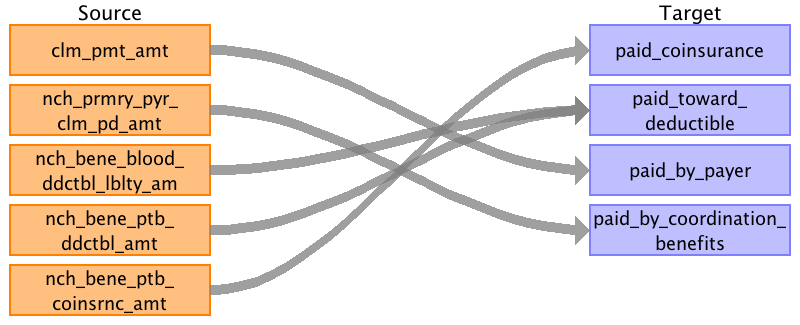
Reading from carrier\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| procedure\_cost\_id |  |  | autogenerated |
| procedure\_occurrence\_id |  |  | Once the records for the procedures are written to the PROCEDURE\_OCCURRENCE table, then you'll be able to use that autogenerated ID for this column. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | Null |
| paid\_coinsurance | line\_coinsrnc\_amt\_1  line\_coinsrnc\_amt\_2  line\_coinsrnc\_amt\_3  line\_coinsrnc\_amt\_13  line\_coinsrnc\_amt\_5  line\_coinsrnc\_amt\_6  line\_coinsrnc\_amt\_7  line\_coinsrnc\_amt\_8  line\_coinsrnc\_amt\_9  line\_coinsrnc\_amt\_10  line\_coinsrnc\_amt\_11  line\_coinsrnc\_amt\_12 |  |  |
| paid\_toward\_deductible | line\_bene\_ptb\_ddctbl\_amt\_1  line\_bene\_ptb\_ddctbl\_amt\_2  line\_bene\_ptb\_ddctbl\_amt\_3  line\_bene\_ptb\_ddctbl\_amt\_4  line\_bene\_ptb\_ddctbl\_amt\_5  line\_bene\_ptb\_ddctbl\_amt\_6  line\_bene\_ptb\_ddctbl\_amt\_7  line\_bene\_ptb\_ddctbl\_amt\_8  line\_bene\_ptb\_ddctbl\_amt\_9  line\_bene\_ptb\_ddctbl\_amt\_10  line\_bene\_ptb\_ddctbl\_amt\_11  line\_bene\_ptb\_ddctbl\_amt\_12  line\_bene\_ptb\_ddctbl\_amt\_13 |  |  |
| paid\_by\_payer | line\_nch\_pmt\_amt\_1  line\_nch\_pmt\_amt\_2  line\_nch\_pmt\_amt\_3  line\_nch\_pmt\_amt\_4  line\_nch\_pmt\_amt\_5  line\_nch\_pmt\_amt\_6  line\_nch\_pmt\_amt\_7  line\_nch\_pmt\_amt\_8  line\_nch\_pmt\_amt\_9  line\_nch\_pmt\_amt\_10  line\_nch\_pmt\_amt\_11  line\_nch\_pmt\_amt\_12  line\_nch\_pmt\_amt\_13  line\_coinsrnc\_amt\_4 |  |  |
| paid\_by\_coordination\_benefits | line\_bene\_prmry\_pyr\_pd\_amt\_1  line\_bene\_prmry\_pyr\_pd\_amt\_2  line\_bene\_prmry\_pyr\_pd\_amt\_3  line\_bene\_prmry\_pyr\_pd\_amt\_4  line\_bene\_prmry\_pyr\_pd\_amt\_5  line\_bene\_prmry\_pyr\_pd\_amt\_6  line\_bene\_prmry\_pyr\_pd\_amt\_7  line\_bene\_prmry\_pyr\_pd\_amt\_8  line\_bene\_prmry\_pyr\_pd\_amt\_9  line\_bene\_prmry\_pyr\_pd\_amt\_10  line\_bene\_prmry\_pyr\_pd\_amt\_11  line\_bene\_prmry\_pyr\_pd\_amt\_12  line\_bene\_prmry\_pyr\_pd\_amt\_13 |  |  |
| total\_out\_of\_pocket |  |  | PAID\_TOWARD\_DEDUCTIBLE + PAID\_COINSURANCE |
| total\_paid | line\_alowd\_chrg\_amt\_1  line\_alowd\_chrg\_amt\_2  line\_alowd\_chrg\_amt\_3  line\_alowd\_chrg\_amt\_4  line\_alowd\_chrg\_amt\_5  line\_alowd\_chrg\_amt\_6  line\_alowd\_chrg\_amt\_7  line\_alowd\_chrg\_amt\_8  line\_alowd\_chrg\_amt\_9  line\_alowd\_chrg\_amt\_10  line\_alowd\_chrg\_amt\_11  line\_alowd\_chrg\_amt\_12  line\_alowd\_chrg\_amt\_13 |  |  |
| revenue\_code\_concept\_id |  |  | 0 |
| payer\_plan\_period\_id |  |  | CARRIER\_CLAIMS: Lookup to the PAYER\_PLAN\_PERIOD table, the default it to select PART B. |
| revenue\_code\_source\_value |  |  | NULL |

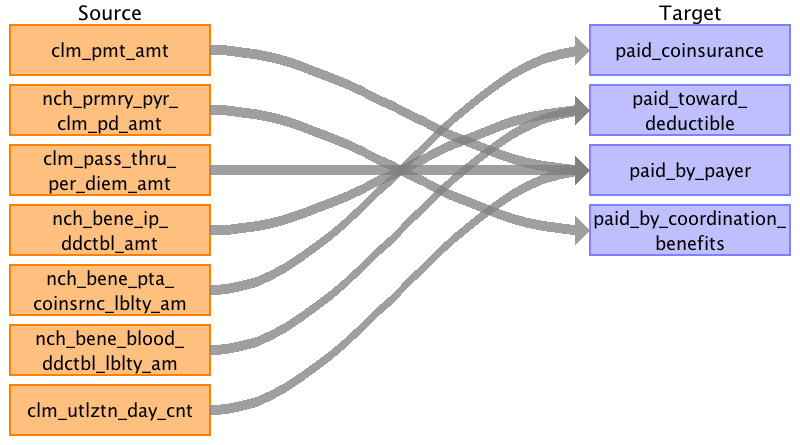
Table name: visit\_cost

Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_cost\_id |  |  | Autogenerated |
| visit\_occurrence\_id |  |  | Maintain the VISIT\_OCCURRENCE\_ID as you are pulling the information from this table and write it here. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | Null |
| paid\_coinsurance | nch\_bene\_ptb\_coinsrnc\_amt |  |  |
| paid\_toward\_deductible | nch\_bene\_ptb\_ddctbl\_amt  nch\_bene\_blood\_ddctbl\_lblty\_am |  | Inpatient Claims: NCH\_BENE\_IP\_DDCTBLE\_AMT + NCH\_BENE\_BLOOD\_DDCTBLE\_LBLTY\_AM  Outpatient Claims: NCH\_BENE\_BLOOD\_DDCTBL\_LBLTY\_AM + NCH\_BENE\_PTB\_DDCTBL\_AMT |
| paid\_by\_payer | clm\_pmt\_amt |  | Inpatient Claims: CLM\_PMT\_AMT + (CLM\_UTLZTN\_DAY\_CNT \* CLM\_PASS\_THRU\_PER\_DIEM\_AMT) |
| paid\_by\_coordination\_benefits | nch\_prmry\_pyr\_clm\_pd\_amt |  |  |
| total\_out\_of\_pocket |  |  | sum of CDM tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid |  |  | sum of CDM tables (PAID\_BY\_PAYER + PAID\_BY\_COORDINATION\_BENEFITS + TOTAL\_OUT\_OF\_POCKET) |
| payer\_plan\_period\_id |  |  | Lookup the PAYER\_PLAN\_PERIOD, but for INPATIENT\_CLAIMS we will default to PARTA for OUTPATIENT\_CLAIMS we will default to PARTB ELSE NULL. |

Reading from inpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| visit\_cost\_id |  |  | Autogenerated |
| visit\_occurrence\_id |  |  | Maintain the VISIT\_OCCURRENCE\_ID as you are pulling the information from this table and write it here. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | Null |
| paid\_coinsurance | nch\_bene\_pta\_coinsrnc\_lblty\_am |  |  |
| paid\_toward\_deductible | nch\_bene\_ip\_ddctbl\_amt  nch\_bene\_blood\_ddctbl\_lblty\_am |  | Inpatient Claims: NCH\_BENE\_IP\_DDCTBLE\_AMT + NCH\_BENE\_BLOOD\_DDCTBLE\_LBLTY\_AM  Outpatient Claims: NCH\_BENE\_BLOOD\_DDCTBL\_LBLTY\_AM + NCH\_BENE\_PTB\_DDCTBL\_AMT |
| paid\_by\_payer | clm\_utlztn\_day\_cnt  clm\_pass\_thru\_per\_diem\_amt  clm\_pmt\_amt |  | Inpatient Claims: CLM\_PMT\_AMT + (CLM\_UTLZTN\_DAY\_CNT \* CLM\_PASS\_THRU\_PER\_DIEM\_AMT) |
| paid\_by\_coordination\_benefits | nch\_prmry\_pyr\_clm\_pd\_amt |  |  |
| total\_out\_of\_pocket |  |  | sum of CDM tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid |  |  | sum of CDM tables (PAID\_BY\_PAYER + PAID\_BY\_COORDINATION\_BENEFITS + TOTAL\_OUT\_OF\_POCKET) |
| payer\_plan\_period\_id |  |  | Lookup the PAYER\_PLAN\_PERIOD, but for INPATIENT\_CLAIMS we will default to PARTA for OUTPATIENT\_CLAIMS we will default to PARTB ELSE NULL. |

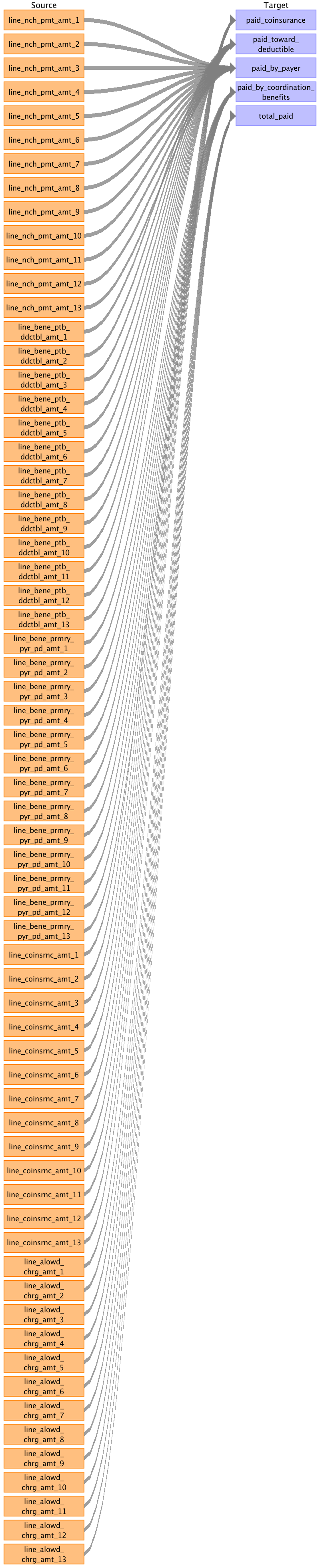
Table name: drug\_cost

Reading from prescription\_drug\_events



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_cost\_id |  |  | Autogenerated |
| drug\_exposure\_id |  |  | When pulling record into DRUG\_EXPOSURE keep track of that ID generated before writing to DRUG\_COST table. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | NULL |
| paid\_coinsurance | ptnt\_pay\_amt |  |  |
| paid\_toward\_deductible |  |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| paid\_by\_payer |  |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| paid\_by\_coordination\_benefits |  |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| total\_out\_of\_pocket |  |  | SUM of CDM tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid | tot\_rx\_cst\_amt |  | CARRIER\_CLAIMS: We are using the allowed amounts here and not the sum of PAID\_BY\_COORDINATION\_BENEFITS, PAID\_BY\_PAYER, and TOTAL\_OUT\_OF\_POCKET. |
| ingredient\_cost |  |  | Null |
| dispensing\_fee |  |  | Null |
| average\_wholesale\_price |  |  | Null |
| payer\_plan\_period\_id |  |  | CARRIER\_CLAIMS: Lookup in the PAYER\_PLAN\_PERIOD table for a PARTB plan, ELSE NULL  PRESCRIPTION\_DRUG\_EVENTS: Lookup in the PAYER\_PLAN\_PERIOD table for a PARTD plan, ELSE NULL. |

Reading from carrier\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| drug\_cost\_id |  |  | Autogenerated |
| drug\_exposure\_id |  |  | When pulling record into DRUG\_EXPOSURE keep track of that ID generated before writing to DRUG\_COST table. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | NULL |
| paid\_coinsurance | line\_coinsrnc\_amt\_1  line\_coinsrnc\_amt\_2  line\_coinsrnc\_amt\_3  line\_coinsrnc\_amt\_4  line\_coinsrnc\_amt\_5  line\_coinsrnc\_amt\_6  line\_coinsrnc\_amt\_7  line\_coinsrnc\_amt\_8  line\_coinsrnc\_amt\_9  line\_coinsrnc\_amt\_10  line\_coinsrnc\_amt\_11  line\_coinsrnc\_amt\_12  line\_coinsrnc\_amt\_13 |  |  |
| paid\_toward\_deductible | line\_bene\_ptb\_ddctbl\_amt\_1  line\_bene\_ptb\_ddctbl\_amt\_2  line\_bene\_ptb\_ddctbl\_amt\_3  line\_bene\_ptb\_ddctbl\_amt\_4  line\_bene\_ptb\_ddctbl\_amt\_5  line\_bene\_ptb\_ddctbl\_amt\_6  line\_bene\_ptb\_ddctbl\_amt\_7  line\_bene\_ptb\_ddctbl\_amt\_8  line\_bene\_ptb\_ddctbl\_amt\_9  line\_bene\_ptb\_ddctbl\_amt\_10  line\_bene\_ptb\_ddctbl\_amt\_11  line\_bene\_ptb\_ddctbl\_amt\_12  line\_bene\_ptb\_ddctbl\_amt\_13 |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| paid\_by\_payer | line\_nch\_pmt\_amt\_1  line\_nch\_pmt\_amt\_2  line\_nch\_pmt\_amt\_3  line\_nch\_pmt\_amt\_4  line\_nch\_pmt\_amt\_5  line\_nch\_pmt\_amt\_6  line\_nch\_pmt\_amt\_7  line\_nch\_pmt\_amt\_8  line\_nch\_pmt\_amt\_9  line\_nch\_pmt\_amt\_10  line\_nch\_pmt\_amt\_11  line\_nch\_pmt\_amt\_12  line\_nch\_pmt\_amt\_13 |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| paid\_by\_coordination\_benefits | line\_bene\_prmry\_pyr\_pd\_amt\_1  line\_bene\_prmry\_pyr\_pd\_amt\_2  line\_bene\_prmry\_pyr\_pd\_amt\_3  line\_bene\_prmry\_pyr\_pd\_amt\_4  line\_bene\_prmry\_pyr\_pd\_amt\_5  line\_bene\_prmry\_pyr\_pd\_amt\_6  line\_bene\_prmry\_pyr\_pd\_amt\_7  line\_bene\_prmry\_pyr\_pd\_amt\_8  line\_bene\_prmry\_pyr\_pd\_amt\_9  line\_bene\_prmry\_pyr\_pd\_amt\_10  line\_bene\_prmry\_pyr\_pd\_amt\_11  line\_bene\_prmry\_pyr\_pd\_amt\_12  line\_bene\_prmry\_pyr\_pd\_amt\_13 |  | PRESCRIPTION\_DRUG\_EVENTS: Null |
| total\_out\_of\_pocket |  |  | SUM of CDM tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid | line\_alowd\_chrg\_amt\_1  line\_alowd\_chrg\_amt\_2  line\_alowd\_chrg\_amt\_3  line\_alowd\_chrg\_amt\_13  line\_alowd\_chrg\_amt\_12  line\_alowd\_chrg\_amt\_4  line\_alowd\_chrg\_amt\_5  line\_alowd\_chrg\_amt\_6  line\_alowd\_chrg\_amt\_7  line\_alowd\_chrg\_amt\_8  line\_alowd\_chrg\_amt\_11  line\_alowd\_chrg\_amt\_9  line\_alowd\_chrg\_amt\_10 |  | CARRIER\_CLAIMS: We are using the allowed amounts here and not the sum of PAID\_BY\_COORDINATION\_BENEFITS, PAID\_BY\_PAYER, and TOTAL\_OUT\_OF\_POCKET. |
| ingredient\_cost |  |  | Null |
| dispensing\_fee |  |  | Null |
| average\_wholesale\_price |  |  | Null |
| payer\_plan\_period\_id |  |  | CARRIER\_CLAIMS: Lookup in the PAYER\_PLAN\_PERIOD table for a PARTB plan, ELSE NULL  PRESCRIPTION\_DRUG\_EVENTS: Lookup in the PAYER\_PLAN\_PERIOD table for a PARTD plan, ELSE NULL. |

Table name: payer\_plan\_period

Reading from beneficiary\_summary

We are going to look at birth and death date.

We know which months they had claims.

We know how many months they had coverages.

If MONTH = 0 they were not enrolled for that year.

IF MONTH > 0 then they were enrolled.

MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM

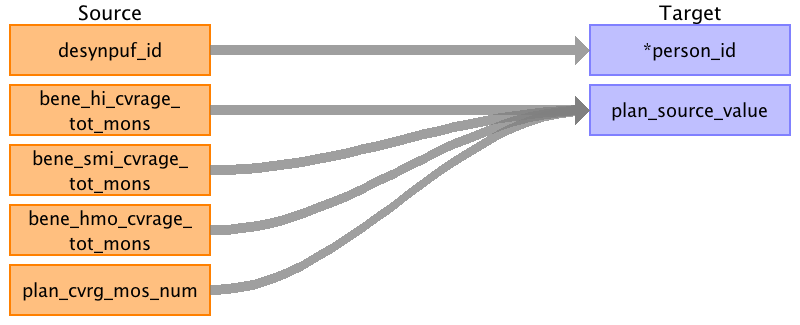
We will use the birth and death to correct the tails.

birth = BENE\_BIRTH\_DT

death = BENE\_DEATH\_DT

We need to knit the records together the years.

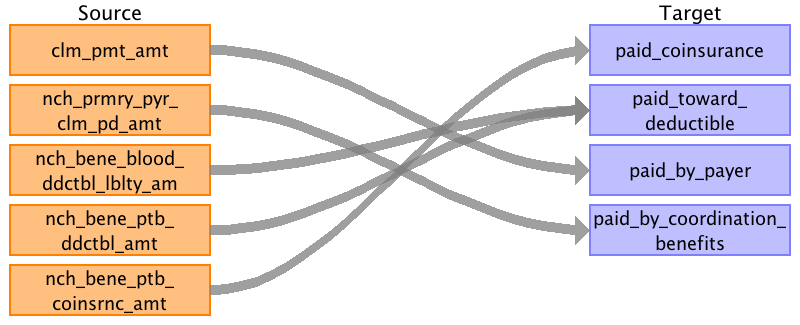
We will have overlapping payer plan periods.



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| payer\_plan\_period\_id |  |  |  |
| person\_id | desynpuf\_id |  |  |
| payer\_plan\_period\_start\_date |  |  | If MONTH = 0 they were not enrolled for that year.  IF MONTH > 0 then they were enrolled (for 2008 file date = January 1, 2008)  MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM  We will use the birth and death to correct the tails.  Use birthdate to correct start date if person turned 65 that year: birth = BENE\_BIRTH\_DT  Use death date to correct end date if person died that year: death = BENE\_DEATH\_DT  Otherwise, use January 1st for start date and December 31st for end date |
| payer\_plan\_period\_end\_date |  |  | If MONTH = 0 they were not enrolled for that year.  IF MONTH > 0 then they were enrolled (for 2008 file date = January 1, 2008)  MONTH = any of these variables: BENE\_HI\_CVRAGE\_TOT\_MONS, BENE\_SMI\_CVRAGE\_TOT\_MONS, BENE\_HMO\_CVRAGE\_TOT\_MONS, PLAN\_CVRG\_MONS\_NUM  We will use the birth and death to correct the tails.  Use birthdate to correct start date if person turned 65 that year: birth = BENE\_BIRTH\_DT  Use death date to correct end date if person died that year: death = BENE\_DEATH\_DT  Otherwise, use January 1st for start date and December 31st for end date |
| payer\_source\_value |  |  | Medicare |
| plan\_source\_value | bene\_hi\_cvrage\_tot\_mons  bene\_smi\_cvrage\_tot\_mons  bene\_hmo\_cvrage\_tot\_mons  plan\_cvrg\_mos\_num |  | if value from bene\_hi\_covrage\_tot\_mons = Part A  if value from bene\_smi\_cvrage\_tot\_mons = Part B  if value from bene\_hmo\_cvrage\_tot\_mons = HMO  if value from plan\_cvrg\_mos\_num = Part D |
| family\_source\_value |  |  | Null |

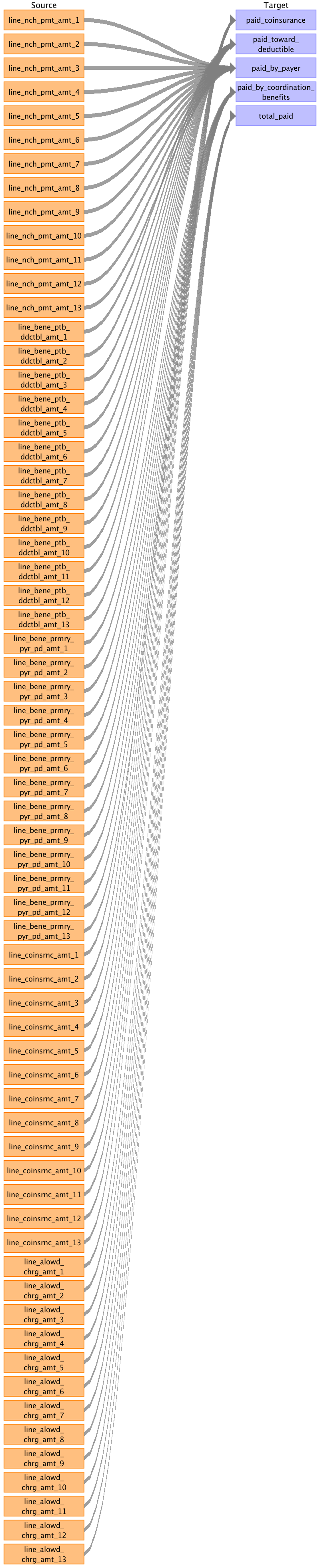
Table name: device\_cost

Reading from outpatient\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| device\_cost\_id |  |  | autogenerated |
| device\_exposure\_id |  |  | As writing the DEVICE\_EXPOSURE table keep track of ID and write here. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | Null |
| paid\_coinsurance | nch\_bene\_ptb\_coinsrnc\_amt |  |  |
| paid\_toward\_deductible | nch\_bene\_blood\_ddctbl\_lblty\_am  nch\_bene\_ptb\_ddctbl\_amt |  | Sum of NCH\_BENE\_BLOOD\_DDCTBL\_LBLTY\_AM + NCH\_BENE\_PTB\_DDCTBL\_AMT |
| paid\_by\_payer | clm\_pmt\_amt |  |  |
| paid\_by\_coordination\_benefits | nch\_prmry\_pyr\_clm\_pd\_amt |  |  |
| total\_out\_of\_pocket |  |  | Sum of CDM Tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid |  |  | OUTPATIENT\_CLAIMS: Sum of CDM tables (PAID\_BY\_PAYER + PAID\_BY\_COORDINATION\_BENEFITS + TOTAL\_OUT\_OF\_POCKET) |
| payer\_plan\_period\_id |  |  | Look up to PAYER\_PLAN\_PERIOD and select PARTB plans, else NULL. |

Reading from carrier\_claims



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| device\_cost\_id |  |  | autogenerated |
| device\_exposure\_id |  |  | As writing the DEVICE\_EXPOSURE table keep track of ID and write here. |
| currency\_concept\_id |  |  | 44818668-United States dollar |
| paid\_copay |  |  | Null |
| paid\_coinsurance | line\_coinsrnc\_amt\_1  line\_coinsrnc\_amt\_2  line\_coinsrnc\_amt\_3  line\_coinsrnc\_amt\_4  line\_coinsrnc\_amt\_5  line\_coinsrnc\_amt\_6  line\_coinsrnc\_amt\_7  line\_coinsrnc\_amt\_8  line\_coinsrnc\_amt\_9  line\_coinsrnc\_amt\_10  line\_coinsrnc\_amt\_11  line\_coinsrnc\_amt\_12  line\_coinsrnc\_amt\_13 |  |  |
| paid\_toward\_deductible | line\_bene\_ptb\_ddctbl\_amt\_1  line\_bene\_ptb\_ddctbl\_amt\_2  line\_bene\_ptb\_ddctbl\_amt\_3  line\_bene\_ptb\_ddctbl\_amt\_4  line\_bene\_ptb\_ddctbl\_amt\_5  line\_bene\_ptb\_ddctbl\_amt\_6  line\_bene\_ptb\_ddctbl\_amt\_7  line\_bene\_ptb\_ddctbl\_amt\_8  line\_bene\_ptb\_ddctbl\_amt\_9  line\_bene\_ptb\_ddctbl\_amt\_10  line\_bene\_ptb\_ddctbl\_amt\_11  line\_bene\_ptb\_ddctbl\_amt\_12  line\_bene\_ptb\_ddctbl\_amt\_13 |  | Sum of NCH\_BENE\_BLOOD\_DDCTBL\_LBLTY\_AM + NCH\_BENE\_PTB\_DDCTBL\_AMT |
| paid\_by\_payer | line\_nch\_pmt\_amt\_1  line\_nch\_pmt\_amt\_2  line\_nch\_pmt\_amt\_3  line\_nch\_pmt\_amt\_4  line\_nch\_pmt\_amt\_5  line\_nch\_pmt\_amt\_6  line\_nch\_pmt\_amt\_7  line\_nch\_pmt\_amt\_8  line\_nch\_pmt\_amt\_9  line\_nch\_pmt\_amt\_10  line\_nch\_pmt\_amt\_11  line\_nch\_pmt\_amt\_12  line\_nch\_pmt\_amt\_13 |  |  |
| paid\_by\_coordination\_benefits | line\_bene\_prmry\_pyr\_pd\_amt\_1  line\_bene\_prmry\_pyr\_pd\_amt\_2  line\_bene\_prmry\_pyr\_pd\_amt\_3  line\_bene\_prmry\_pyr\_pd\_amt\_4  line\_bene\_prmry\_pyr\_pd\_amt\_5  line\_bene\_prmry\_pyr\_pd\_amt\_6  line\_bene\_prmry\_pyr\_pd\_amt\_7  line\_bene\_prmry\_pyr\_pd\_amt\_8  line\_bene\_prmry\_pyr\_pd\_amt\_9  line\_bene\_prmry\_pyr\_pd\_amt\_10  line\_bene\_prmry\_pyr\_pd\_amt\_11  line\_bene\_prmry\_pyr\_pd\_amt\_12  line\_bene\_prmry\_pyr\_pd\_amt\_13 |  |  |
| total\_out\_of\_pocket |  |  | Sum of CDM Tables (PAID\_COINSURANCE + PAID\_TOWARD\_DEDUCTIBLE) |
| total\_paid | line\_alowd\_chrg\_amt\_1  line\_alowd\_chrg\_amt\_2  line\_alowd\_chrg\_amt\_3  line\_alowd\_chrg\_amt\_4  line\_alowd\_chrg\_amt\_5  line\_alowd\_chrg\_amt\_6  line\_alowd\_chrg\_amt\_7  line\_alowd\_chrg\_amt\_8  line\_alowd\_chrg\_amt\_9  line\_alowd\_chrg\_amt\_10  line\_alowd\_chrg\_amt\_11  line\_alowd\_chrg\_amt\_12  line\_alowd\_chrg\_amt\_13 |  | OUTPATIENT\_CLAIMS: Sum of CDM tables (PAID\_BY\_PAYER + PAID\_BY\_COORDINATION\_BENEFITS + TOTAL\_OUT\_OF\_POCKET) |
| payer\_plan\_period\_id |  |  | Look up to PAYER\_PLAN\_PERIOD and select PARTB plans, else NULL. |

Table name: drug\_era

Table name: dose\_era

Table name: condition\_era

Table name: cdm\_source

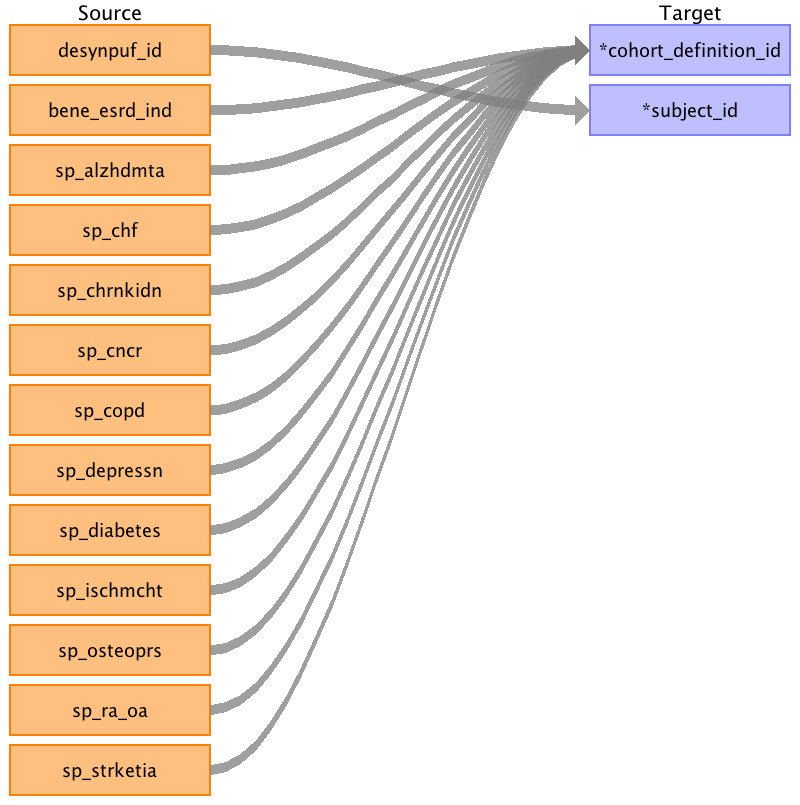
Reading from beneficiary\_summary

Generated

|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| cdm\_source\_name |  |  | Medicare Claims Synthetic Public Use Files (SynPUFs) |
| cdm\_source\_abbreviation |  |  | CDM\_MDCR\_SynPUF |
| cdm\_holder |  |  | OHDSI |
| source\_description |  |  | Medicare Claims Synthetic Public Use Files (SynPUFs) were created to allow interested parties to gain familiarity using Medicare claims data while protecting beneficiary privacy. The data structure of the Medicare SynPUFs is very similar to the CMS Limited Data Sets, but with a smaller number of variables. They provide data analysts and software developers the opportunity to develop programs and products utilizing the identical formats and variable names as those which appear in the actual CMS data files. The files have been designed so that programs and procedures created on the SynPUFs will function on CMS Limited Data Sets. The SynPUFs also provide a robust set of metadata on the CMS claims data that have not been available in the public domain.  Although these files have very limited inferential research value to draw conclusions about Medicare beneficiaries due to the synthetic processes used to create the files, they increase access to realistic Medicare claims data files in a timely and less expensive manner to spur the innovation necessary to achieve the goals of better care for beneficiaries and improve the health of the population. |
| source\_documentation\_reference |  |  | http://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SynPUFs/ |
| cdm\_etl\_reference |  |  |  |
| source\_release\_date |  |  |  |
| cdm\_release\_date |  |  | get current date |
| cdm\_version |  |  |  |
| vocabulary\_version |  |  | Populate this field with the vocabulary you use:  SELECT VOCABULARY\_VERSION  FROM [vocabulary]  WHERE VOCABULARY\_ID = 'None' |

Table name: cohort

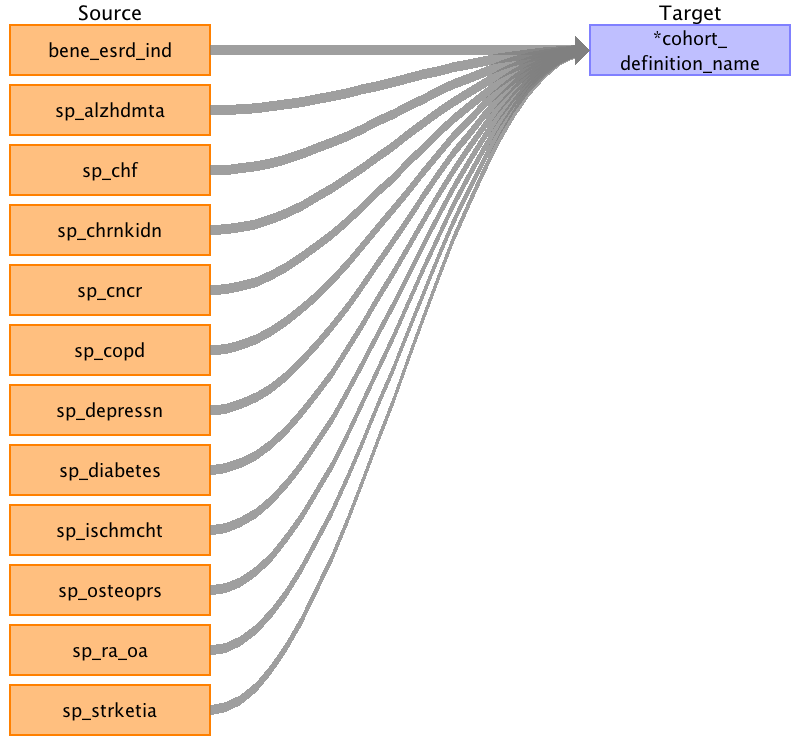
Reading from beneficiary\_summary



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| cohort\_definition\_id | sp\_alzhdmta  sp\_chf  sp\_chrnkidn  sp\_cncr  sp\_copd  sp\_depressn  sp\_diabetes  sp\_ischmcht  sp\_osteoprs  sp\_ra\_oa  sp\_strketia  bene\_esrd\_ind |  | Depending on the column, will depend on the COHORT\_DEFINITION\_ID used. |
| subject\_id | desynpuf\_id |  |  |
| cohort\_start\_date |  |  | The BENEFICIARY\_SUMMARY files come as yearly files. We concatinate them together and append the year. That YEAR column will be what determines the START\_DATE and END\_DATE.  START\_DATE = '01/01' + YEAR |
| cohort\_end\_date |  |  | The BENEFICIARY\_SUMMARY files come as yearly files. We concatinate them together and append the year. That YEAR column will be what determines the START\_DATE and END\_DATE.  END\_DATE = '12/31' + YEAR |

Table name: cohort\_definition

Reading from beneficiary\_summary



|  |  |  |  |
| --- | --- | --- | --- |
| Destination Field | Source Field | Logic | Comment |
| cohort\_definition\_id |  |  | Autogenerated |
| cohort\_definition\_name | sp\_alzhdmta  sp\_chf  sp\_chrnkidn  sp\_cncr  sp\_copd  sp\_depressn  sp\_diabetes  sp\_ischmcht  sp\_osteoprs  sp\_ra\_oa  sp\_strketia  bene\_esrd\_ind |  | Depending on the column will depend on the values listed in COHORT\_DEFINITION\_NAME, COHORT\_DEFINITION\_DESCRIPTION. It will be listed in the following format: [COLUMN\_NAME][COHORT\_DEFINITION\_NAME][COHORT\_DEFINITION\_DESCRIPTION],  [SP\_ALZHDMTA][Alzheimer's Disease and Related Disorders or Senile Dementia][Algorithm: At least 1 inpatient, HOP or Carrier claim with DX codes during the yearly period Codes: DX 331.0, 331.1, 331.11, 331.19, 331.2, 331.7, 290.0, 290.1, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 294.0, 294.1, 294.10, 294.11, 294.8, 797 (any DX on the claim)],  [SP\_CHF][Heart Failure][Algorithm: At least 1 inpatient, HOP or Carrier claim with DX codes during the yearly period Codes: DX 398.91, 402.01, 402.11, 402.91, 404.01, 404.11, 404.91, 404.03, 404.13, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 (any DX on the claim)],  [SP\_CHRNKIDN][Chronic Kidney Disease][Algorithm: At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the yearly period Codes: DX 016.00, 016.01, 016.02, 016.03, 016.04, 016.05, 016.06, 095.4, 189.0, 189.9, 223.0, 236.91, 249.40, 249.41, 250.40, 250.41, 250.42, 250.43, 271.4, 274.1, 274.10, 283.11, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 440.1, 442.1, 572.4, 580.0, 580.4, 580.81, 580.89, 580.9, 581.0, 581.1, 581.2, 581.3, 581.81, 581.89, 581.9, 582.0, 582.1, 582.2, 582.4, 582.81, 582.89, 582.9, 583.0, 583.1, 583.2, 583.4, 583.6, 583.7, 583.81, 583.89, 583.9, 584.5, 584.6, 584.7, 584.8, 584.9, 585, 585.1, 585.2, 585.3, 585.4, 585.5, 585.6, 585.9, 586, 587, 588.0, 588.1, 588.81, 588.89, 588.9, 591, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19, 753.20, 753.21, 753.22, 753.23, 753.29, 794.4 (any DX on the claim)],  [SP\_CNCR][Female Breast, Colorectal, Prostate, or Lung Cancer][Algorithm: At least 1 inpatient or 2 HOP or Carrier claims with DX codes during yearly time period Codes: DX 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9, 233.0, 154.0, 154.1, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 230.3, 230.4, 185, 233.4, 162.0, 162.2, 162.3, 162.4, 162.5, 162.8, 162.9, 231.2 (any DX on the claim)],  [SP\_COPD][Chronic Obstructive Pulmonary Disease][Algorithm: At least 1 inpatient, or 2 HOP or Carrier claims with DX codes during yearly period Codes: DX 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 494.0, 494.1, 496 (any DX on the claim)],  [SP\_DEPRESSN][Depression][Algorithm: At least 1 inpatient, HOP or Carrier claim with DX codes during the yearly period Codes: DX 296.20, 296.21, 296.22, 296.23, 296.24, 296.25, 296.26, 296.30, 296.31, 296.32, 296.33, 296.34, 296.35, 296.36, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.89, 298.0, 300.4, 309.1, 311 (any DX on the claim)],  [SP\_DIABETES][Diabetes][Algorithm: At least 1 inpatient or 2 HOP or Carrier claim with DX codes during the yearly period Codes: DX 249.00, 249.01, 249.10, 249.11, 249.20, 249.21, 249.30, 249.31, 249.40, 249.41, 249.50, 249.51, 249.60, 249.61, 249.70, 249.71, 249.80, 249.81, 249.90, 249.91, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 366.41 (any DX on the claim)],  [SP\_ISCHMCHT][Ischemic Heart Disease][Algorithm: At least 1 inpatient, HOP or Carrier claim with DX, Procedure or HCPC codes during the yearly period Codes: DX 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.10, 414.11, 414.12, 414.19, 414.2, 414.3, 414.8, 414.9 Proc 00.66, 36.01, 36.02, 36.03, 36.04, 36.05, 36.06, 36.07, 36.09, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2, 36.31, 36.32 HCPCS 33510, 33511, 33512, 33513, 33514, 33515, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 33542, 33545, 33548, 92975, 92977, 92980, 92982, 92995, 33140, 33141 (any DX, PROC or HCPCS on the claim)],  [SP\_OSTEOPRS][Osteoporosis][Algorithm: At least 1 inpatient, HOP or Carrier claim with DX code during the yearly period Codes: DX 733.00, 733.01, 733.02, 733.03, 733.09 (any DX on the claim)],  [SP\_RA\_OA][rheumatoid arthritis and osteoarthritis (RA/OA)][Algorithm: At least 2 inpatient, HOP or Carrier claims with DX codes during yearly period Codes: DX 714.0, 714.1, 714.2, 714.30, 714.31, 714.32, 714.33, 715.00, 715.04, 715.09, 715.10, 715.11, 715.12, 715.13, 715.14, 715.15, 715.16, 715.17, 715.18, 715.20, 715.21, 715.22, 715.23, 715.24, 715.25, 715.26, 715.27, 715.28, 715.30, 715.31, 715.32, 715.33, 715.34, 715.35, 715.36, 715.37, 715.38, 715.80, 715.89, 715.90, 715.98 (any DX on the claim)],  [SP\_STRKETIA][Stroke / Transient Ischemic Attack][Algorithm: At least 1 inpatient claim or 2 HOP or Carrier claims with DX codes during the yearly period Codes: DX 430, 431, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 435.0, 435.1, 435.3, 435.8, 435.9, 436, 997.02 (any DX on the claim)],  [BENE\_ESRD\_IND][End Stage Renal Disease Indicator][Algorithm: Indicator in the beneficiary summary files showing the patient does have end stage renal disease Codes: ] |
| cohort\_definition\_description |  |  | Information is under cohort\_definition\_name field. |
| definition\_type\_concept\_id |  |  | 0 |
| cohort\_definition\_syntax |  |  | NULL |
| subject\_concept\_id |  |  | 56-Person |
| cohort\_initiation\_date |  |  | GETDATE() |

Table name: cohort\_attribute

Table name: attribute\_definition

Appendix: source tables

Table: beneficiary\_summary

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| desynpuf\_id | varchar | List truncated... |  |
| bene\_birth\_dt | int | 19421001 |  |
| bene\_death\_dt | int | 0 |  |
| bene\_sex\_ident\_cd | smallint | 2 |  |
| bene\_race\_cd | smallint | 1 |  |
| bene\_esrd\_ind | varchar | 0 |  |
| sp\_state\_code | smallint | 5 |  |
| bene\_county\_cd | smallint | 200 | THIS CODE SPECIFIES THE SSA CODE FOR THE COUNTY OF RESIDENCE OF  THE BENEFICIARY. EACH STATE HAS A SERIES OF CODES BEGINNING WITH '000'  FOR EACH COUNTY WITHIN THAT STATE. CERTAIN CITIES WITHIN THAT STATE  HAVE THEIR OWN CODE. COUNTY CODES MUST BE COMBINED WITH STATE  CODES IN ORDER TO LOCATE THE SPECIFIC COUNTY. THE CODING SYSTEM IS  THE SSA SYSTEM, NOT THE FEDERAL INFORMATION PROCESSING STANDARD  (FIPS). |
| bene\_hi\_cvrage\_tot\_mons | smallint | 12 |  |
| bene\_smi\_cvrage\_tot\_mons | smallint | 12 |  |
| bene\_hmo\_cvrage\_tot\_mons | smallint | 0 |  |
| plan\_cvrg\_mos\_num | smallint | 12 |  |
| sp\_alzhdmta | smallint | 2 |  |
| sp\_chf | smallint | 2 |  |
| sp\_chrnkidn | smallint | 2 |  |
| sp\_cncr | smallint | 2 |  |
| sp\_copd | smallint | 2 |  |
| sp\_depressn | smallint | 2 |  |
| sp\_diabetes | smallint | 2 |  |
| sp\_ischmcht | smallint | 2 |  |
| sp\_osteoprs | smallint | 2 |  |
| sp\_ra\_oa | smallint | 2 |  |
| sp\_strketia | smallint | 2 |  |
| medreimb\_ip | real | 0.0 |  |
| benres\_ip | real | 0.0 |  |
| pppymt\_ip | real | 0.0 |  |
| medreimb\_op | real | 0.0 |  |
| benres\_op | real | 0.0 |  |
| pppymt\_op | real | 0.0 |  |
| medreimb\_car | real | 0.0 |  |
| benres\_car | real | 0.0 |  |
| pppymt\_car | real | 0.0 |  |

Table: carrier\_claims

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| desynpuf\_id | varchar | AEF310232161AC91 |  |
| clm\_id | bigint | List truncated... |  |
| clm\_from\_dt | int | 20090216 |  |
| clm\_thru\_dt | int | 20081106 |  |
| icd9\_dgns\_cd\_1 | varchar | 4011 |  |
| icd9\_dgns\_cd\_2 | varchar |  |  |
| icd9\_dgns\_cd\_3 | varchar |  |  |
| icd9\_dgns\_cd\_4 | varchar |  |  |
| icd9\_dgns\_cd\_5 | varchar |  |  |
| icd9\_dgns\_cd\_6 | varchar |  |  |
| icd9\_dgns\_cd\_7 | varchar |  |  |
| icd9\_dgns\_cd\_8 | varchar |  |  |
| prf\_physn\_npi\_1 | bigint | 888901330 |  |
| prf\_physn\_npi\_2 | bigint | 0 |  |
| prf\_physn\_npi\_3 | bigint | 0 |  |
| prf\_physn\_npi\_4 | bigint | 0 |  |
| prf\_physn\_npi\_5 | bigint | 0 |  |
| prf\_physn\_npi\_6 | bigint | 0 |  |
| prf\_physn\_npi\_7 | bigint | 0 |  |
| prf\_physn\_npi\_8 | bigint | 0 |  |
| prf\_physn\_npi\_9 | bigint | 0 |  |
| prf\_physn\_npi\_10 | bigint | 0 |  |
| prf\_physn\_npi\_11 | bigint | 0 |  |
| prf\_physn\_npi\_12 | bigint | 0 |  |
| prf\_physn\_npi\_13 | bigint | 0 |  |
| tax\_num\_1 | int | 532092265 |  |
| tax\_num\_2 | int | 0 |  |
| tax\_num\_3 | int | 0 |  |
| tax\_num\_4 | int | 0 |  |
| tax\_num\_5 | int | 0 |  |
| tax\_num\_6 | int | 0 |  |
| tax\_num\_7 | int | 0 |  |
| tax\_num\_8 | int | 0 |  |
| tax\_num\_9 | int | 0 |  |
| tax\_num\_10 | int | 0 |  |
| tax\_num\_11 | int | 0 |  |
| tax\_num\_12 | int | 0 |  |
| tax\_num\_13 | int | 0 |  |
| hcpcs\_cd\_1 | varchar | 99213 |  |
| hcpcs\_cd\_2 | varchar |  |  |
| hcpcs\_cd\_3 | varchar |  |  |
| hcpcs\_cd\_4 | varchar |  |  |
| hcpcs\_cd\_5 | varchar |  |  |
| hcpcs\_cd\_6 | varchar |  |  |
| hcpcs\_cd\_7 | varchar |  |  |
| hcpcs\_cd\_8 | varchar |  |  |
| hcpcs\_cd\_9 | varchar |  |  |
| hcpcs\_cd\_10 | varchar |  |  |
| hcpcs\_cd\_11 | varchar |  |  |
| hcpcs\_cd\_12 | varchar |  |  |
| hcpcs\_cd\_13 | varchar |  |  |
| line\_nch\_pmt\_amt\_1 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_2 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_3 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_4 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_5 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_6 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_7 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_8 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_9 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_10 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_11 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_12 | real | 0.0 |  |
| line\_nch\_pmt\_amt\_13 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_1 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_2 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_3 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_4 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_5 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_6 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_7 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_8 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_9 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_10 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_11 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_12 | real | 0.0 |  |
| line\_bene\_ptb\_ddctbl\_amt\_13 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_1 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_2 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_3 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_4 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_5 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_6 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_7 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_8 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_9 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_10 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_11 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_12 | real | 0.0 |  |
| line\_bene\_prmry\_pyr\_pd\_amt\_13 | real | 0.0 |  |
| line\_coinsrnc\_amt\_1 | real | 0.0 |  |
| line\_coinsrnc\_amt\_2 | real | 0.0 |  |
| line\_coinsrnc\_amt\_3 | real | 0.0 |  |
| line\_coinsrnc\_amt\_4 | real | 0.0 |  |
| line\_coinsrnc\_amt\_5 | real | 0.0 |  |
| line\_coinsrnc\_amt\_6 | real | 0.0 |  |
| line\_coinsrnc\_amt\_7 | real | 0.0 |  |
| line\_coinsrnc\_amt\_8 | real | 0.0 |  |
| line\_coinsrnc\_amt\_9 | real | 0.0 |  |
| line\_coinsrnc\_amt\_10 | real | 0.0 |  |
| line\_coinsrnc\_amt\_11 | real | 0.0 |  |
| line\_coinsrnc\_amt\_12 | real | 0.0 |  |
| line\_coinsrnc\_amt\_13 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_1 | real | 10.0 |  |
| line\_alowd\_chrg\_amt\_2 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_3 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_4 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_5 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_6 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_7 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_8 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_9 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_10 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_11 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_12 | real | 0.0 |  |
| line\_alowd\_chrg\_amt\_13 | real | 0.0 |  |
| line\_prcsg\_ind\_cd\_1 | varchar | A | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_2 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_3 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_4 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_5 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_6 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_7 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_8 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_9 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_10 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_11 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_12 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_prcsg\_ind\_cd\_13 | varchar |  | Develop logic to eliminate columns associated to bad claims.  Remove Conditions and Procedures associated to values I (for 'Invalid data') and M (for multiple submittal - duplicate line item) |
| line\_icd9\_dgns\_cd\_1 | varchar | 4019 |  |
| line\_icd9\_dgns\_cd\_2 | varchar |  |  |
| line\_icd9\_dgns\_cd\_3 | varchar |  |  |
| line\_icd9\_dgns\_cd\_4 | varchar |  |  |
| line\_icd9\_dgns\_cd\_5 | varchar |  |  |
| line\_icd9\_dgns\_cd\_6 | varchar |  |  |
| line\_icd9\_dgns\_cd\_7 | varchar |  |  |
| line\_icd9\_dgns\_cd\_8 | varchar |  |  |
| line\_icd9\_dgns\_cd\_9 | varchar |  |  |
| line\_icd9\_dgns\_cd\_10 | varchar |  |  |
| line\_icd9\_dgns\_cd\_11 | varchar |  |  |
| line\_icd9\_dgns\_cd\_12 | varchar |  |  |
| line\_icd9\_dgns\_cd\_13 | varchar |  |  |

Table: inpatient\_claims

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| desynpuf\_id | varchar | List truncated... |  |
| clm\_id | bigint | List truncated... |  |
| segment | smallint | 1 |  |
| clm\_from\_dt | int | 20080522 |  |
| clm\_thru\_dt | int | 20080529 |  |
| prvdr\_num | varchar | 23006G |  |
| clm\_pmt\_amt | real | 4000.0 |  |
| nch\_prmry\_pyr\_clm\_pd\_amt | real | 0.0 |  |
| at\_physn\_npi | bigint | 0 |  |
| op\_physn\_npi | bigint | 0 |  |
| ot\_physn\_npi | bigint | 0 |  |
| clm\_admsn\_dt | int | 20080522 |  |
| admtng\_icd9\_dgns\_cd | varchar | 78605 |  |
| clm\_pass\_thru\_per\_diem\_amt | real | 0.0 |  |
| nch\_bene\_ip\_ddctbl\_amt | real | 1024.0 |  |
| nch\_bene\_pta\_coinsrnc\_lblty\_am | real | 0.0 |  |
| nch\_bene\_blood\_ddctbl\_lblty\_am | real | 0.0 |  |
| clm\_utlztn\_day\_cnt | int | 3 |  |
| nch\_bene\_dschrg\_dt | int | 20080529 |  |
| clm\_drg\_cd | varchar | 882 |  |
| icd9\_dgns\_cd\_1 | varchar | 486 |  |
| icd9\_dgns\_cd\_2 | varchar | 4019 |  |
| icd9\_dgns\_cd\_3 | varchar | 4019 |  |
| icd9\_dgns\_cd\_4 | varchar | 4019 |  |
| icd9\_dgns\_cd\_5 | varchar |  |  |
| icd9\_dgns\_cd\_6 | varchar |  |  |
| icd9\_dgns\_cd\_7 | varchar |  |  |
| icd9\_dgns\_cd\_8 | varchar |  |  |
| icd9\_dgns\_cd\_9 | varchar |  |  |
| icd9\_dgns\_cd\_10 | varchar |  |  |
| icd9\_prcdr\_cd\_1 | varchar |  |  |
| icd9\_prcdr\_cd\_2 | varchar |  |  |
| icd9\_prcdr\_cd\_3 | varchar |  |  |
| icd9\_prcdr\_cd\_4 | varchar |  |  |
| icd9\_prcdr\_cd\_5 | varchar |  |  |
| icd9\_prcdr\_cd\_6 | varchar |  |  |
| hcpcs\_cd\_1 | varchar |  |  |
| hcpcs\_cd\_2 | varchar |  |  |
| hcpcs\_cd\_3 | varchar |  |  |
| hcpcs\_cd\_4 | varchar |  |  |
| hcpcs\_cd\_5 | varchar |  |  |
| hcpcs\_cd\_6 | varchar |  |  |
| hcpcs\_cd\_7 | varchar |  |  |
| hcpcs\_cd\_8 | varchar |  |  |
| hcpcs\_cd\_9 | varchar |  |  |
| hcpcs\_cd\_10 | varchar |  |  |
| hcpcs\_cd\_11 | varchar |  |  |
| hcpcs\_cd\_12 | varchar |  |  |
| hcpcs\_cd\_13 | varchar |  |  |
| hcpcs\_cd\_14 | varchar |  |  |
| hcpcs\_cd\_15 | varchar |  |  |
| hcpcs\_cd\_16 | varchar |  |  |
| hcpcs\_cd\_17 | varchar |  |  |
| hcpcs\_cd\_18 | varchar |  |  |
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| hcpcs\_cd\_24 | varchar |  |  |
| hcpcs\_cd\_25 | varchar |  |  |
| hcpcs\_cd\_26 | varchar |  |  |
| hcpcs\_cd\_27 | varchar |  |  |
| hcpcs\_cd\_28 | varchar |  |  |
| hcpcs\_cd\_29 | varchar |  |  |
| hcpcs\_cd\_30 | varchar |  |  |
| hcpcs\_cd\_31 | varchar |  |  |
| hcpcs\_cd\_32 | varchar |  |  |
| hcpcs\_cd\_33 | varchar |  |  |
| hcpcs\_cd\_34 | varchar |  |  |
| hcpcs\_cd\_35 | varchar |  |  |
| hcpcs\_cd\_36 | varchar |  |  |
| hcpcs\_cd\_37 | varchar |  |  |
| hcpcs\_cd\_38 | varchar |  |  |
| hcpcs\_cd\_39 | varchar |  |  |
| hcpcs\_cd\_40 | varchar |  |  |
| hcpcs\_cd\_41 | varchar |  |  |
| hcpcs\_cd\_42 | varchar |  |  |
| hcpcs\_cd\_43 | varchar |  |  |
| hcpcs\_cd\_44 | varchar |  |  |
| hcpcs\_cd\_45 | varchar |  |  |

Table: prescription\_drug\_events

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| desynpuf\_id | varchar | 91D777A10F0E8C60 |  |
| pde\_id | bigint | List truncated... |  |
| srvc\_dt | int | 20090323 |  |
| prod\_srvc\_id | varchar | 00002840099 |  |
| qty\_dspnsd\_num | real | 30.0 |  |
| days\_suply\_num | smallint | 30 |  |
| ptnt\_pay\_amt | real | 0.0 |  |
| tot\_rx\_cst\_amt | real | 10.0 |  |

Table: outpatient\_claims

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Type | Most freq. value | Comment |
| desynpuf\_id | varchar | AD5D4E087BF57C05 |  |
| clm\_id | bigint | List truncated... |  |
| segment | smallint | 1 |  |
| clm\_from\_dt | int | 0 |  |
| clm\_thru\_dt | int | 0 |  |
| prvdr\_num | varchar | 0502NA |  |
| clm\_pmt\_amt | real | 100.0 |  |
| nch\_prmry\_pyr\_clm\_pd\_amt | real | 0.0 |  |
| at\_physn\_npi | bigint | 0 |  |
| op\_physn\_npi | bigint | 0 |  |
| ot\_physn\_npi | bigint | 0 |  |
| nch\_bene\_blood\_ddctbl\_lblty\_am | real | 0.0 |  |
| icd9\_dgns\_cd\_1 | varchar | 4019 |  |
| icd9\_dgns\_cd\_2 | varchar |  |  |
| icd9\_dgns\_cd\_3 | varchar |  |  |
| icd9\_dgns\_cd\_4 | varchar |  |  |
| icd9\_dgns\_cd\_5 | varchar |  |  |
| icd9\_dgns\_cd\_6 | varchar |  |  |
| icd9\_dgns\_cd\_7 | varchar |  |  |
| icd9\_dgns\_cd\_8 | varchar |  |  |
| icd9\_dgns\_cd\_9 | varchar |  |  |
| icd9\_dgns\_cd\_10 | varchar |  |  |
| icd9\_prcdr\_cd\_1 | varchar |  |  |
| icd9\_prcdr\_cd\_2 | varchar |  |  |
| icd9\_prcdr\_cd\_3 | varchar |  |  |
| icd9\_prcdr\_cd\_4 | varchar |  |  |
| icd9\_prcdr\_cd\_5 | varchar |  |  |
| icd9\_prcdr\_cd\_6 | varchar |  |  |
| nch\_bene\_ptb\_ddctbl\_amt | real | 0.0 |  |
| nch\_bene\_ptb\_coinsrnc\_amt | real | 0.0 |  |
| admtng\_icd9\_dgns\_cd | varchar |  |  |
| hcpcs\_cd\_1 | varchar | 36415 |  |
| hcpcs\_cd\_2 | varchar |  |  |
| hcpcs\_cd\_3 | varchar |  |  |
| hcpcs\_cd\_4 | varchar |  |  |
| hcpcs\_cd\_5 | varchar |  |  |
| hcpcs\_cd\_6 | varchar |  |  |
| hcpcs\_cd\_7 | varchar |  |  |
| hcpcs\_cd\_8 | varchar |  |  |
| hcpcs\_cd\_9 | varchar |  |  |
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| hcpcs\_cd\_11 | varchar |  |  |
| hcpcs\_cd\_12 | varchar |  |  |
| hcpcs\_cd\_13 | varchar |  |  |
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| hcpcs\_cd\_15 | varchar |  |  |
| hcpcs\_cd\_16 | varchar |  |  |
| hcpcs\_cd\_17 | varchar |  |  |
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| hcpcs\_cd\_25 | varchar |  |  |
| hcpcs\_cd\_26 | varchar |  |  |
| hcpcs\_cd\_27 | varchar |  |  |
| hcpcs\_cd\_28 | varchar |  |  |
| hcpcs\_cd\_29 | varchar |  |  |
| hcpcs\_cd\_30 | varchar |  |  |
| hcpcs\_cd\_31 | varchar |  |  |
| hcpcs\_cd\_32 | varchar |  |  |
| hcpcs\_cd\_33 | varchar |  |  |
| hcpcs\_cd\_34 | varchar |  |  |
| hcpcs\_cd\_35 | varchar |  |  |
| hcpcs\_cd\_36 | varchar |  |  |
| hcpcs\_cd\_37 | varchar |  |  |
| hcpcs\_cd\_38 | varchar |  |  |
| hcpcs\_cd\_39 | varchar |  |  |
| hcpcs\_cd\_40 | varchar |  |  |
| hcpcs\_cd\_41 | varchar |  |  |
| hcpcs\_cd\_42 | varchar |  |  |
| hcpcs\_cd\_43 | varchar |  |  |
| hcpcs\_cd\_44 | varchar |  |  |
| hcpcs\_cd\_45 | varchar |  |  |