Source Data Mapping Approach to CDMV5.0.1

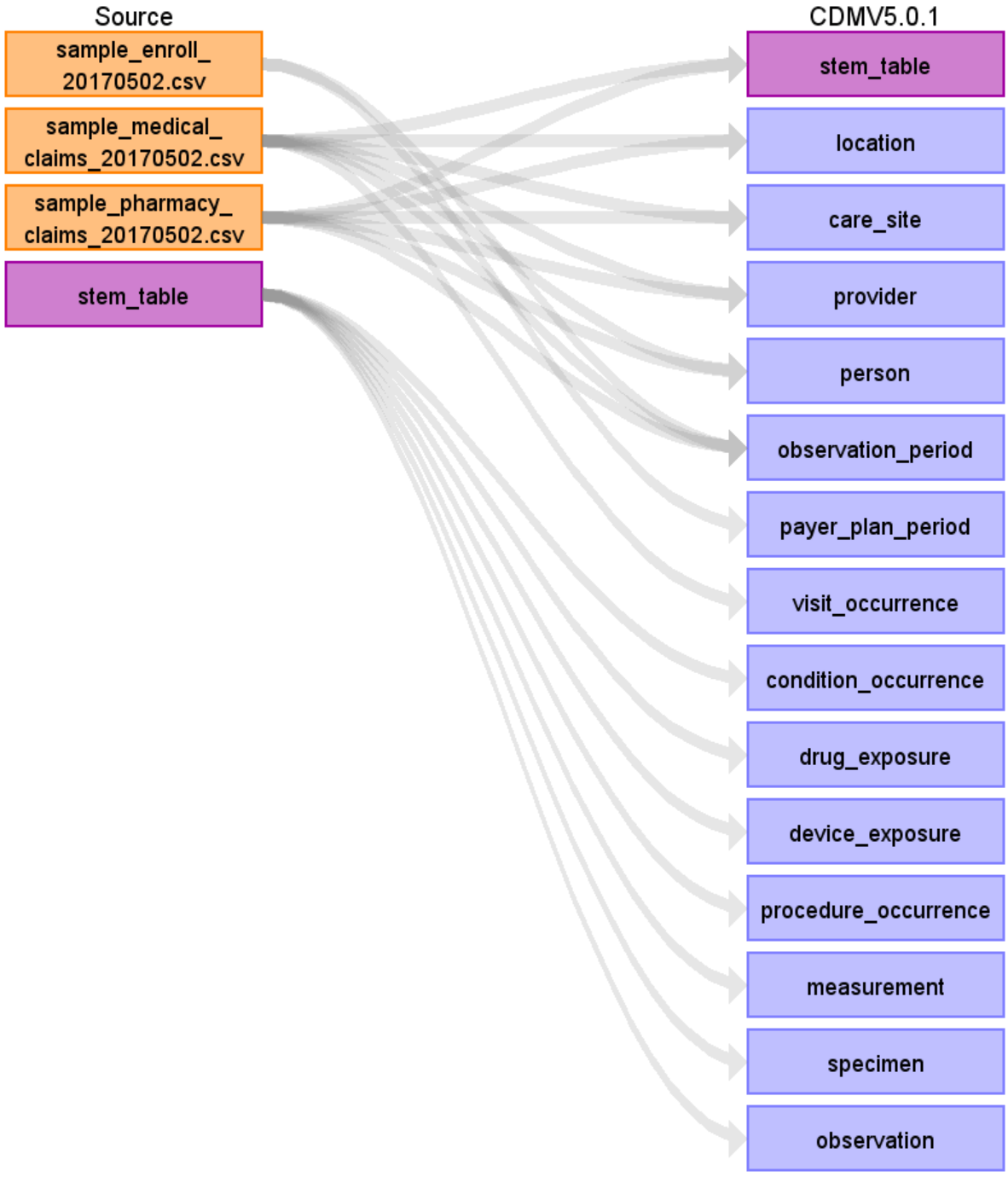


Table name: stem_table

Reading from sample_medical_claims_20170502.csv

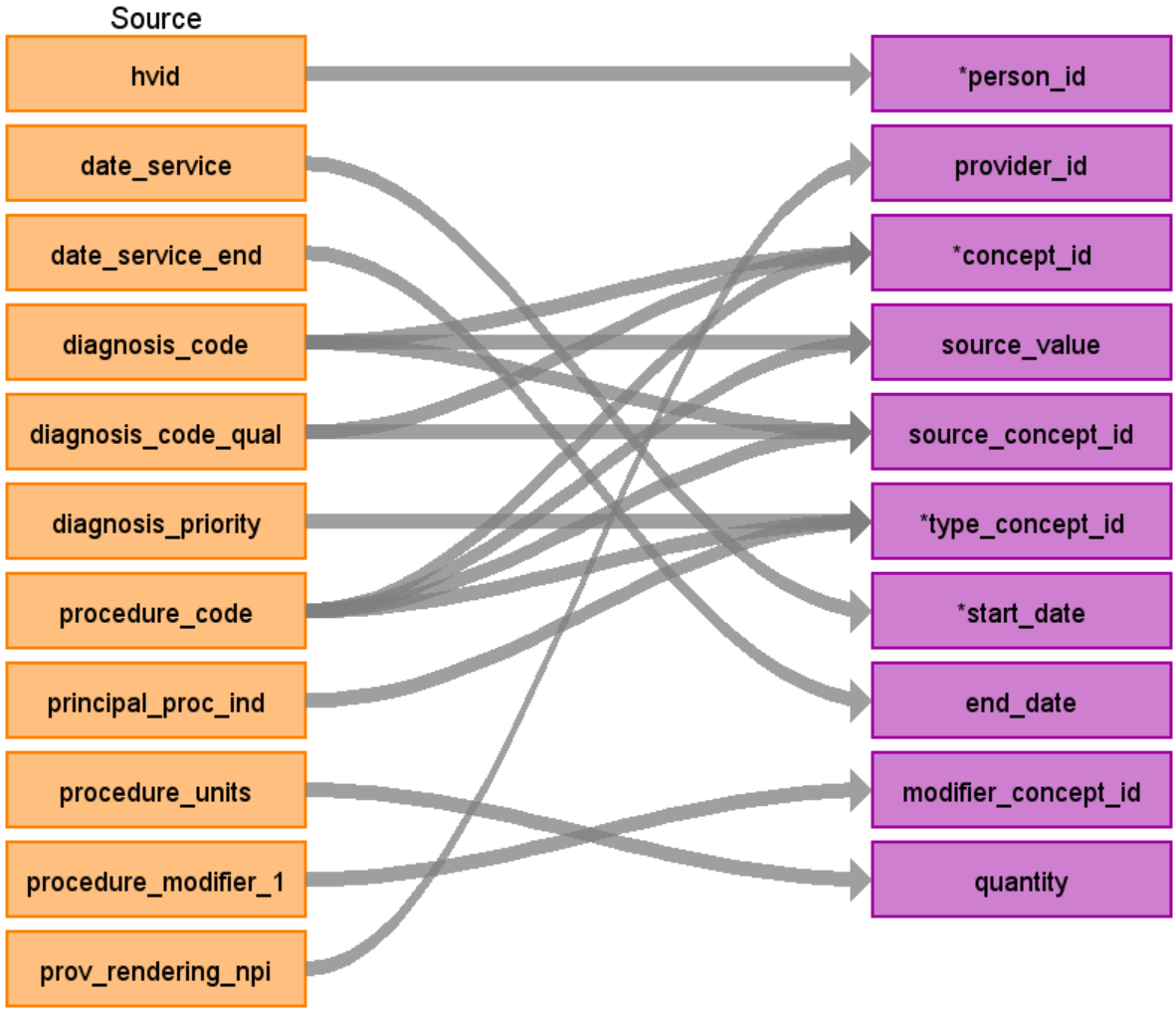
We pull all data into the STEM and we then allow the Vocabulary to decide which CDM table the data lands in.

EXTRA COLUMNS FOR STEM

==========

In addition, create new column STEM_ID as DATA_FEED+"-"+CLAIM_ID+"-"+RECORD_ID to act as a lookup for VISIT_OCCURRENCE_ID.

We can also leverage DATA_FEED, CLAIM_ID and RECORD_ID to help with sorting.



Destination Field	Source Field	Logic	Comment
domain_id			=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Default domain = CONDITION from unless udpated by a Vocabulary mapping from CONCEPT_ID PROCEDURE_CODE: ========== Default domain = PROCEDURE from unless updated by a Vocabulary mapping from CONCEPT_ID =====PHARMACY_CLAIMS===== ========== Default domain = DRUG from unless updated by a Vocabulary mapping from CONCEPT_ID
person_id	hvid		Lookup in PERSON based on
visit_occurrence_id			TBD

provider_id	prov_rendering_npi	=====MEDICAL_CLAIMS===== ==========
		DIAGNOSIS_CODE & PROCEDURE_CODE: ========== Lookup in the PROVIDER table leveraging NPI
		=====PHARMACY_CLAIMS===== ==========
		NDC_CODE: ========== Lookup in the PROVIDER table leveraging NPI
id		Autogenerate

concept_id	diagnosis_code diagnosis_code_qual procedure_code	If no map, map to 0. =====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== 01 = ICD9 02 = ICD10 Use the code in Section 3.1.2. If diagnosis_code_qual=01 use the filter WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM') AND TARGET_STANDARD_CONCEPT IS NOT NULL AND TARGET_INVALID_REASON IS NULL If diagnosis_code_qual=02 use the filter WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM') AND TARGET_STANDARD_CONCEPT IS NOT NULL AND TARGET_INVALID_REASON IS NULL PROCEDURE_CODE: ========== Use the code in Section 3.1.2. WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_STANDARD_CONCEPT IS NOT NULL

source_value	diagnosis_code	=====MEDICAL_CLAIMS=====
	procedure_code	==========
		DIAGNOSIS_CODE:
		==========
		DIAGNOSIS_CODE
		PROCEDURE_CODE:
		==========
		PROCEDURE_CODE
		=====PHARMACY_CLAIMS=====
		==========
		NDC_CODE:
		==========
		NDC_CODE
		Do not change source value if a 9 digit NDC is used over 11 digit.

source_concept_id	diagnosis_code diagnosis_code_qual procedure_code	If no map, map to 0. =====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Use the code in Section 3.1.1. If diagnosis_code_qual=01 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM') AND TARGET_VOCABULARY_ID IN ('ICD9CM') If diagnosis_code_qual=02 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM') AND TARGET_VOCABULARY_ID IN ('ICD10CM') PROCEDURE_CODE: ========== Use the code in Section 3.1.1. WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_CONCEPT_CLASS_ID NOT IN ('HCPCS Modifier','CPT4 Modifier', 'CPT4 Hierarchy', 'ICD10PCS Hierarchy') =====PHARMACY_CLAIMS===== ==========

type_concept_id	diagnosis_priority	=====MEDICAL_CLAIMS=====
	procedure_code	==========
	principal_proc_ind	
		DIAGNOSIS_CODE:
		==========
		Using DIAGNOSIS_PRIORITY:
		1 = 44786627 - Primary Condition
		2+ = 44786629 - Secondary Condition
		PROCEDURE_CODE:
		==========
		Using PRINCIPAL_PROC_IND
		1= 44786630 Primary Procedure
		NULL/'' = 44786631-Secondary Procedure
		=====PHARMACY_CLAIMS=====
		==========
		NDC_CODE
		=========
		When DATA_VENDOR = "WebMD" then 38000175 /*Prescription dispensed in pharmacy*/
		When DATA_VENDOR = "Private Source 17" then 38000177 /*Prescription written*/
		ELSE 0
		For "Private Source 17" we are requesting a new data type of "Drug from Claim"
start_date	date_service	
end_date	date_service_end	

start_time	NULL
days_supply	=====MEDICAL_CLAIMS===== ========== NULL =====PHARMACY_CLAIMS===== ========== NDC_CODE ========= DAYS_SUPPLY
dose_unit_concept_id	0
dose_unit_source_value	NULL
effective_drug_dose	NULL
lot_number	NULL

modifier_concept_id	procedure_modifier_1	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== 0 PROCEDURE_CODE: ========== Using PROCEDURE_MODIFIER_1 Use the code in Section 3.1.1. When mapping PROCEDURE_CODE determine what the VOCABULARY_ID is, then you'll need to use the "Modifier" vocabulary for that same VOCABULARY. Example, if you the PROCEDURE_CODE's VOCABULARY_ID is CPT4 then the MODIFIER_CONCEPT_ID should use the following map: WHERE SOURCE_CONCEPT_CLASS_ID IN ('CPT4 Modifier') AND TARGET_CONCEPT_CLASS_ID IN ('CPT4 Modifier') The list of modifiers are: --CPT4 Modifier --HCPC modifier It is limitation that we are not pulling over PROCEDURE_MODIFIER_2-4 however they are only used about 3% of the time. =====PHARMACY_CLAIMS=====

operator_concept_id		0
qualifier_concept_id		0
qualifier_source_value		NULL
quantity	procedure_units	=====MEDICAL_CLAIMS===== ==========
		DIAGNOSIS_CODE: ========== NULL
		PROCEDURE_CODE: ========== Use PROCEDURE_UNITS as is
		=====PHARMACY_CLAIMS===== ==========
		NDC_CODE: ========= DISPENSED_QUANTITY
range_high		NULL
range_low		NULL

refills	=====MEDICAL_CLAIMS===== ========== NULL =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========= REFILL_AUTH_AMOUNT
route_concept_id	0
route_source_value	NULL
sig	NULL
stop_reason	NULL
unique_device_id	NULL
unit_concept_id	0
unit_source_value	NULL
value_as_concept_id	0
value_as_number	NULL
value_as_string	NULL
value_source_value	NULL
anatomic_site_concept_id	0
disease_status_concept_id	0
specimen_source_id	NULL
anatomic_site_source_valu e	NULL
disease_status_source_val ue	NULL

Reading from sample_pharmacy_claims_20170502.csv

=====PHARMACY_CLAIMS=====

==========

Only keep rows where LOGICAL_DELETE_REASON NOT IN ("Reversed Claim","Reversal")

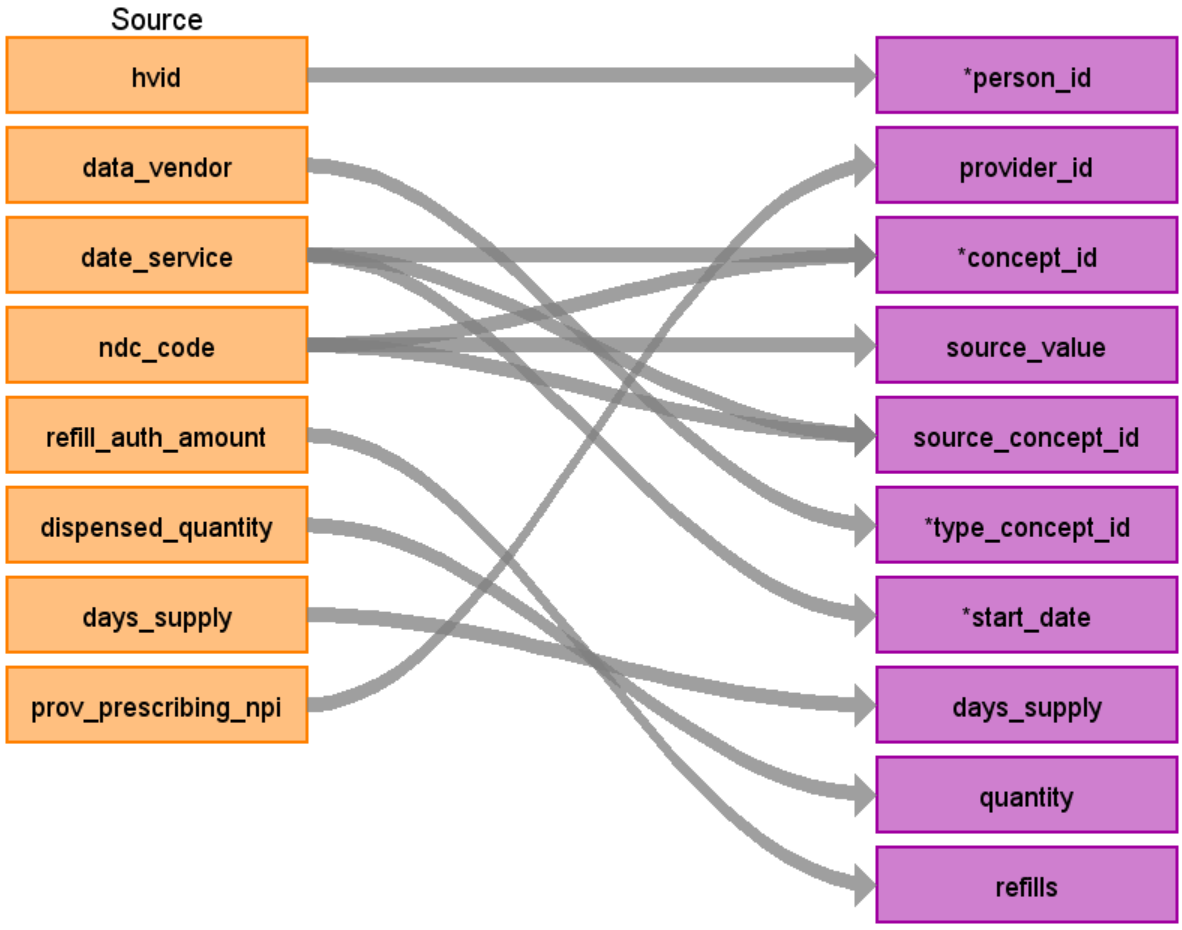
We pull all data into the STEM and we then allow the Vocabulary to decide which CDM table the data lands in.

EXTRA COLUMNS FOR STEM

==========

In addition, create new column STEM_ID as DATA_FEED+"-"+CLAIM_ID+"-"+RECORD_ID to act as a lookup for VISIT_OCCURRENCE_ID.

We can also leverage DATA_FEED, CLAIM_ID and RECORD_ID to help with sorting.



Destination Field	Source Field	Logic	Comment

domain_id		=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Default domain = CONDITION from unless udpated by a Vocabulary mapping from CONCEPT_ID PROCEDURE_CODE: ========== Default domain = PROCEDURE from unless updated by a Vocabulary mapping from CONCEPT_ID =====PHARMACY_CLAIMS===== ========== Default domain = DRUG from unless updated by a Vocabulary mapping from CONCEPT_ID
person_id	hvid	Lookup in PERSON based on
visit_occurrence_id		TBD

provider_id	prov_prescribing_npi	=====MEDICAL_CLAIMS===== ==========
		DIAGNOSIS_CODE & PROCEDURE_CODE: ========== Lookup in the PROVIDER table leveraging NPI
		=====PHARMACY_CLAIMS===== ==========
		NDC_CODE: ========== Lookup in the PROVIDER table leveraging NPI
id		Autogenerate

concept_id	ndc_code	If no map, map to 0.
	date_service	
		=====MEDICAL_CLAIMS=====
		==========
		DIAGNOSIS_CODE:
		==========
		01 = ICD9
		02 = ICD10
		Use the code in Section 3.1.2.
		If diagnosis_code_qual=01 use the filter
		WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM')
		AND TARGET_STANDARD_CONCEPT IS NOT NULL
		AND TARGET_INVALID_REASON IS NULL
		If diagnosis_code_qual=02 use the filter
		WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM')
		AND TARGET_STANDARD_CONCEPT IS NOT NULL
		AND TARGET_INVALID_REASON IS NULL
		PROCEDURE_CODE:
		==========
		Use the code in Section 3.1.2.
		WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS')
		AND TARGET_STANDARD_CONCEPT IS NOT NULL

source_value	ndc_code	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== DIAGNOSIS_CODE PROCEDURE_CODE: ========== PROCEDURE_CODE =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========== NDC_CODE Do not change source value if a 9 digit NDC is used over 11 digit.

source_concept_id	ndc_code	If no map, map to 0.
	date_service	
		=====MEDICAL_CLAIMS=====
		==========
		DIAGNOSIS_CODE:
		==========
		Use the code in Section 3.1.1.
		If diagnosis_code_qual=01 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM')
		AND TARGET_VOCABULARY_ID IN ('ICD9CM')
		If diagnosis_code_qual=02 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM')
		AND TARGET_VOCABULARY_ID IN ('ICD10CM')
		PROCEDURE_CODE:
		==========
		Use the code in Section 3.1.1.
		WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS')
		AND TARGET_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS')
		AND TARGET_CONCEPT_CLASS_ID NOT IN ('HCPCS Modifier','CPT4 Modifier', 'CPT4 Hierarchy', 'ICD10PCS Hierarchy')
		=====PHARMACY_CLAIMS=====
		==========
		NDC CODE

type_concept_id	data_vendor	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Using DIAGNOSIS_PRIORITY: 1 = 44786627 - Primary Condition 2+ = 44786629 - Secondary Condition PROCEDURE_CODE: ========== Using PRINCIPAL_PROC_IND 1= 44786630 Primary Procedure NULL/'' = 44786631-Secondary Procedure =====PHARMACY_CLAIMS===== ========== NDC_CODE ========= When DATA_VENDOR = "WebMD" then 38000175 /*Prescription dispensed in pharmacy*/ When DATA_VENDOR = "Private Source 17" then 38000177 /*Prescription written*/ ELSE 0 For "Private Source 17" we are requesting a new data type of "Drug from Claim"
start_date	date_service	
end_date		

start_time		NULL
days_supply	days_supply	=====MEDICAL_CLAIMS=====
		==========
		NULL
		=====PHARMACY_CLAIMS=====
		==========
		NDC_CODE
		=========
		DAYS_SUPPLY
dose_unit_concept_id		0
dose_unit_source_value		NULL
effective_drug_dose		NULL
lot_number		NULL

modifier_concept_id

=====MEDICAL_CLAIMS=====

==========

DIAGNOSIS_CODE:

==========

0

PROCEDURE_CODE:

==========

Using PROCEDURE_MODIFIER_1

Use the code in Section 3.1.1.

When mapping PROCEDURE_CODE determine what the VOCABULARY_ID is, then you'll need to use the "Modifier" vocabulary for that same VOCABULARY. Example, if you the PROCEDURE_CODE's VOCABULARY_ID is CPT4 then the MODIFIER_CONCEPT_ID should use the following map:

WHERE SOURCE_CONCEPT_CLASS_ID IN ('CPT4 Modifier')

AND TARGET_CONCEPT_CLASS_ID IN ('CPT4 Modifier')

The list of modifiers are:

--CPT4 Modifier

--HCPC modifier

It is limitation that we are not pulling over PROCEDURE_MODIFIER_2-4 however they are only used about 3% of the time.

=====PHARMACY_CLAIMS=====

operator_concept_id		0
qualifier_concept_id		0
qualifier_source_value		NULL
quantity	dispensed_quantity	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== NULL PROCEDURE_CODE: ========== Use PROCEDURE_UNITS as is =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========= DISPENSED_QUANTITY
range_high		NULL
range_low		NULL

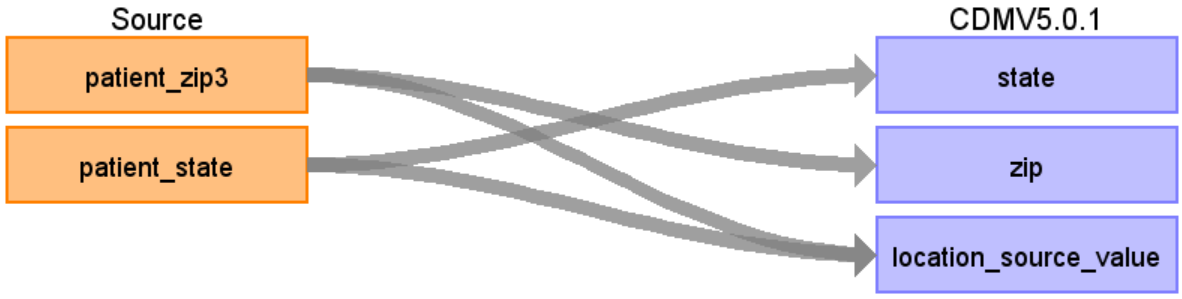
refills	refill_auth_amount	=====MEDICAL_CLAIMS===== ========== NULL =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========= REFILL_AUTH_AMOUNT
route_concept_id		0
route_source_value		NULL
sig		NULL
stop_reason		NULL
unique_device_id		NULL
unit_concept_id		0
unit_source_value		NULL
value_as_concept_id		0
value_as_number		NULL
value_as_string		NULL
value_source_value		NULL
anatomic_site_concept_id		0
disease_status_concept_id		0
specimen_source_id		NULL
anatomic_site_source_value		NULL
disease_status_source_value		NULL

Table name: location

The only locations we actually have are on the patient.

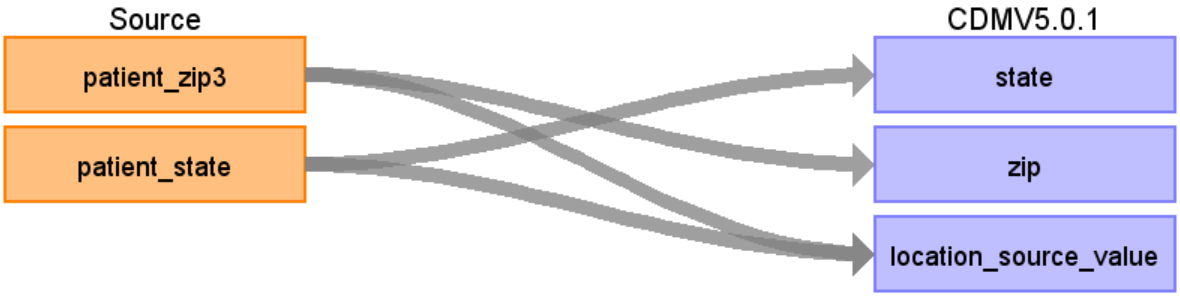
Pull all values from all described source tables and only keep distinct record of them.

Reading from sample_medical_claims_20170502.csv



Destination Field	Source Field	Logic	Comment
location_id			
address_1			
address_2			
city			
state	patient_state		
zip	patient_zip3		
county			
location_source_value	patient_zip3		patient_state + '_' + patient_zip3
	patient_state		

Reading from sample_pharmacy_claims_20170502.csv



Destination Field	Source Field	Logic	Comment
location_id			
address_1			
address_2			
city			
state	patient_state		
zip	patient_zip3		
county			
location_source_value	patient_state		patient_state + '_' + patient_zip3
	patient_zip3		

Table name: care_site

Reading from sample_medical_claims_20170502.csv

Destination Field	Source Field	Logic	Comment
care_site_id			Autogenerate
care_site_name			NULL
place_of_service_concept_id			0
location_id			NULL
care_site_source_value	prov_facility_npi		
place_of_service_source_value			NULL

Reading from sample_pharmacy_claims_20170502.csv

Destination Field	Source Field	Logic	Comment
care_site_id			Autogenerate
care_site_name			NULL
place_of_service_concept_id			0
location_id			NULL
care_site_source_value	pharmacy_npi		
place_of_service_source_value			NULL

Table name: provider

Take the distinct NPI values from across MEDICAL_CLAIMS and PHARMACY_CLAIMS.

Reading from sample_medical_claims_20170502.csv

Destination Field	Source Field	Logic	Comment
provider_id			Autogenerate.
provider_name			NULL
npi	prov_rendering_npi		
dea			NULL
specialty_concept_id			0
care_site_id			NULL
year_of_birth			NULL
gender_concept_id			0
provider_source_value	prov_rendering_npi		
specialty_source_value			NULL
specialty_source_concept_id			0
gender_source_value			NULL
gender_source_concept_id			0

Reading from sample_pharmacy_claims_20170502.csv

Destination Field	Source Field	Logic	Comment
provider_id			Autogenerate.
provider_name			NULL
npi	prov_dispensing_npi		
dea			NULL
specialty_concept_id			0
care_site_id			NULL
year_of_birth			NULL
gender_concept_id			0
provider_source_value	prov_dispensing_npi		
specialty_source_value			NULL
specialty_source_concept_id			0
gender_source_value			NULL
gender_source_concept_id			0

Table name: cdm_source

CDM_SOURCE_NAME

==========

HealthVerity WebMD and Pharmacy Section 17 Database

CDM_SOURCE_ABBREVIATION

==========

WEBMD_PBM

CDM_HOLDER

==========

Janssen R&D

SOURCE_DESCRIPTION

==========

NULL

SOURCE_DOCUMENTATION_REFERENCE

==========

NULL

CDM_ETL_REFERENCE

==========

NULL

SOURCE_RELEASE_DATE

==========

2017.05.26

CDM_RELEASE_DATE

==========

SELECT CONVERT(VARCHAR(10), GETDATE(),102)

CDM_VERSION

==========

5.0.1

VOCABULARY_VERSION

==========

SELECT VOCABULARY_VERSION

FROM vocabulary

WHERE VOCABULARY_ID = 'None'

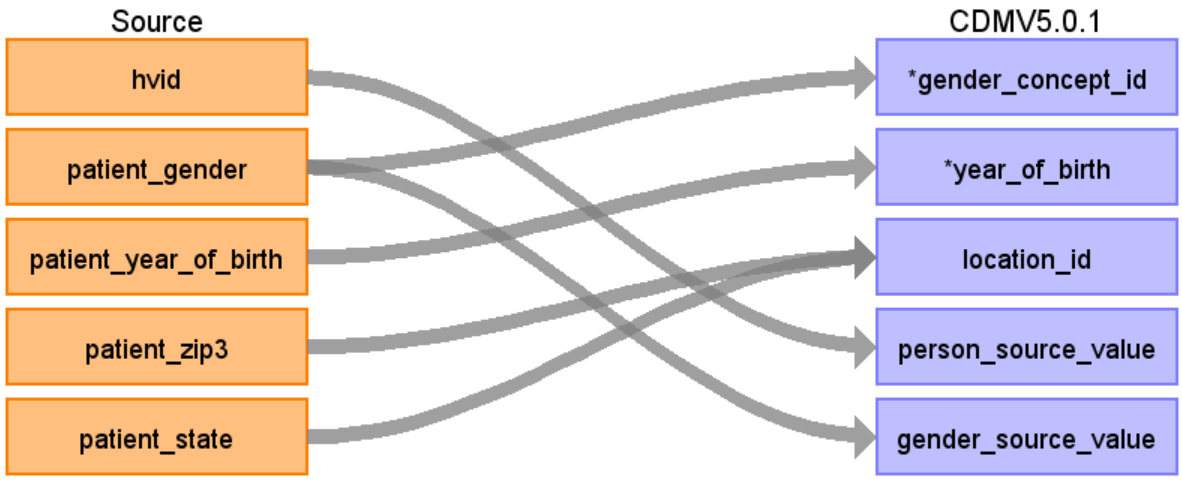
Table name: person

Data about people comes from both PHARMACY_CLAIMS and MEDICAL_CLAIMS. There are multiple rows per person, so we will select one to populate the PERSON table.

row_number() over (PARTITION BY hvid order by date_service_end desc, record_id desc) as row_num

take row_num = 1

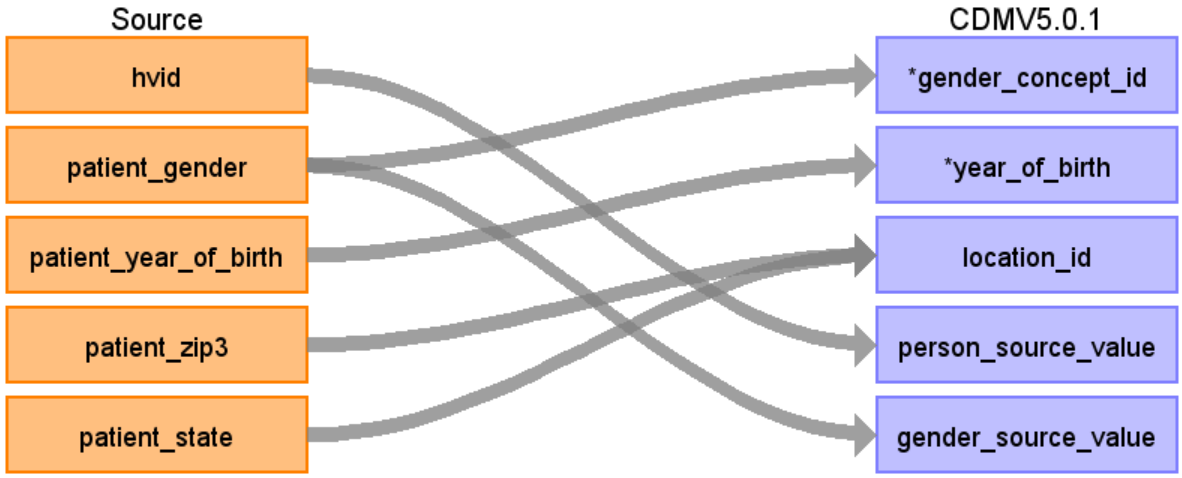
Reading from sample_medical_claims_20170502.csv



Destination Field	Source Field	Logic	Comment
person_id			Autogenerate.
gender_concept_id	patient_gender		if patient_gender in ('F','M') case when 'F' then 8532 when 'M' then 8507 end as gender_concept_id If gender is unknown exclude.
year_of_birth	patient_year_of_birth		Only take the first 4 digits of the as the data sometimes comes as YYYYMMDD. When year of birth is NULL or YEAR <= 0 exclude patient.

month_of_birth			NULL
day_of_birth			NULL
time_of_birth			NULL
race_concept_id			0
ethnicity_concept_id			0
location_id	patient_zip3 patient_state		Look up location_id by patient_zip3 and patient_state
provider_id			NULL
care_site_id			NULL
person_source_value	hvid	Exclude where HVID is NULL	
gender_source_value	patient_gender		
gender_source_concept_id			0
race_source_value			NULL
race_source_concept_id			0
ethnicity_source_value			NULL
ethnicity_source_concept_id			0

Reading from sample_pharmacy_claims_20170502.csv



Destination Field	Source Field	Logic	Comment

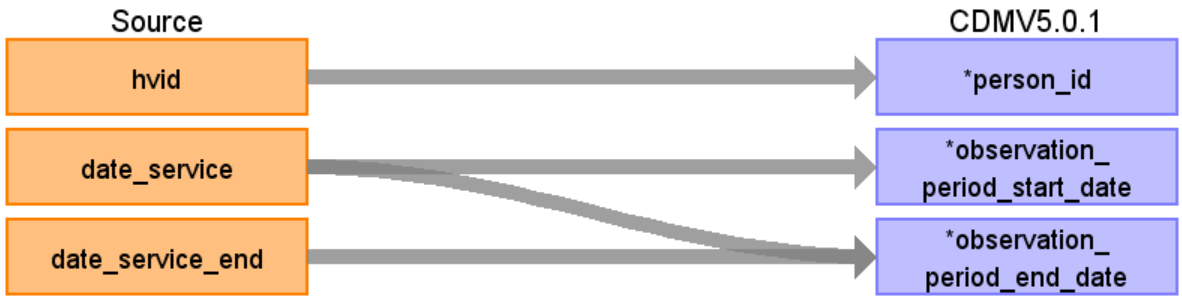
person_id		Autogenerate.
gender_concept_id	patient_gender	if patient_gender in ('F','M') case when 'F' then 8532 when 'M' then 8507 end as gender_concept_id If gender is unknown exclude.
year_of_birth	patient_year_of_birth	Only take the first 4 digits of the as the data sometimes comes as YYYYMMDD. When year of birth is NULL or YEAR <= 0 exclude patient.
month_of_birth		NULL
day_of_birth		NULL
time_of_birth		NULL
race_concept_id		0
ethnicity_concept_id		0
location_id	patient_zip3 patient_state	Look up location_id by patient_zip3 and patient_state
provider_id		NULL
care_site_id		NULL
person_source_value	hvid	
gender_source_value	patient_gender	
gender_source_concept_id		0
race_source_value		NULL
race_source_concept_id		0
ethnicity_source_value		NULL
ethnicity_source_concept_id		0

Table name: observation_period

OBSERVATION_PERIOD_START_DATE = MIN(MIN_MEDICAL_CLAIMS_DATE, MIN_PHARMACY_CLAIMS_DATE,MIN_ENROLL_DATE)

OBSERVATION_PERIOD_END_DATE = MAX(MAX_MEDICAL_CLAIMS_DATE, MAX_PHARMACY_CLAIMS_DATE,MAX_ENROLL_DATE)

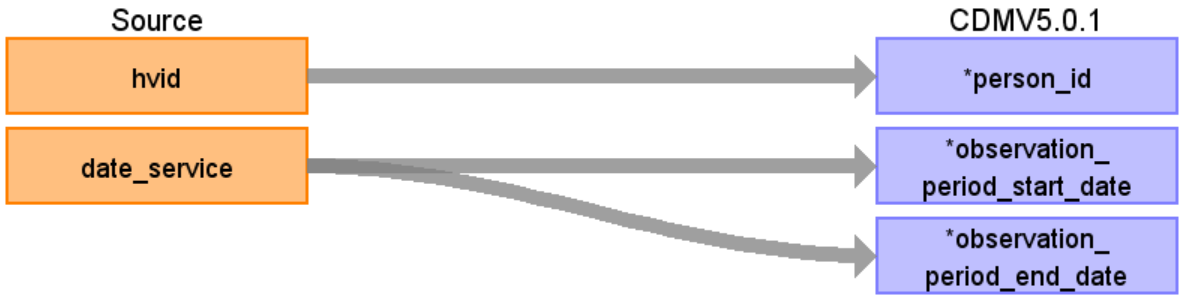
Reading from sample_medical_claims_20170502.csv



Destination Field	Source Field	Logic	Comment
observation_period_id			Autogenerate
person_id	hvid		Lookup in PERSON based on
observation_period_start_date	date_service		=====MEDICAL_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MIN(DATE) AS MIN_ENROLL_DATE

observation_period_end_date	date_service_end date_service	=====MEDICAL_CLAIMS===== ========== MAX(DATE_SERVICE, DATE_SERVICE_END) AS MAX_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MAX(DATE_SERVICE) AS MAX_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MAX(DATE) AS MAX_ENROLL_DATE
period_type_concept_id		44814724-Period covering healthcare encounters

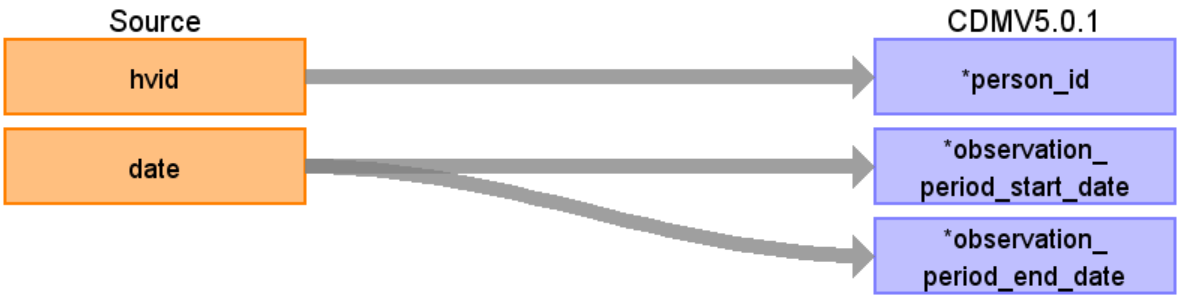
Reading from sample_pharmacy_claims_20170502.csv



Destination Field	Source Field	Logic	Comment
observation_period_id			Autogenerate
person_id	hvid		Lookup in PERSON based on

observation_period_start_date	date_service	WHERE DATA_VENDOR = 'WEBMD'	=====MEDICAL_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MIN(DATE) AS MIN_ENROLL_DATE
observation_period_end_date	date_service	WHERE DATA_VENDOR = 'WEBMD'	=====MEDICAL_CLAIMS===== ========== MAX(DATE_SERVICE, DATE_SERVICE_END) AS MAX_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MAX(DATE_SERVICE) AS MAX_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MAX(DATE) AS MAX_ENROLL_DATE
period_type_concept_id			44814724-Period covering healthcare encounters

Reading from sample_enroll_20170502.csv



Destination Field	Source Field	Logic	Comment
observation_period_id			Autogenerate
person_id	hvid		Lookup in PERSON based on
observation_period_start_date	date		=====MEDICAL_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MIN(DATE_SERVICE) AS MIN_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MIN(DATE) AS MIN_ENROLL_DATE

observation_period_end_date	date	=====MEDICAL_CLAIMS===== ========== MAX(DATE_SERVICE, DATE_SERVICE_END) AS MAX_MEDICAL_CLAIMS_DATE =====PHARMACY_CLAIMS===== ========== MAX(DATE_SERVICE) AS MAX_PHARMACY_CLAIMS_DATE =====ENROLL===== ========== MAX(DATE) AS MAX_ENROLL_DATE
period_type_concept_id		44814724-Period covering healthcare encounters

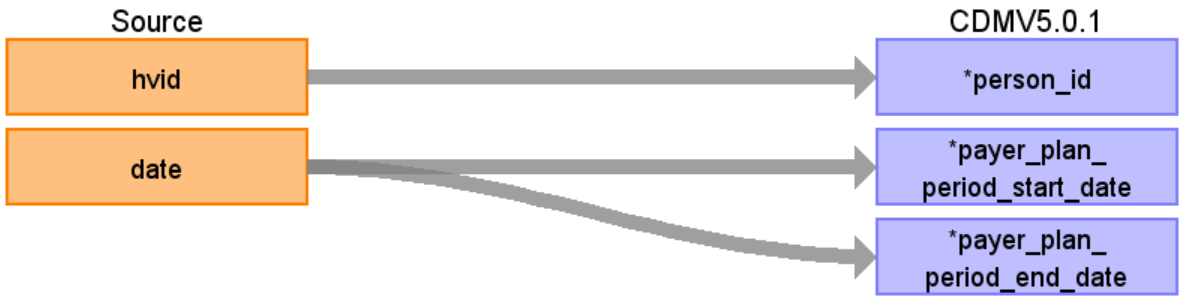
Table name: payer_plan_period

Enrollment entries are consolidated by combining records that indicate continuous enrollment over a period. Consolidation is done through the following steps:

[1] ENROLL records for each person are sorted in ascending order by DATE.

[2] Periods of continuous enrollment are consolidated by combining daily records as long as the time between the end of one enrollment period and the start of the next is 32 days or less (<=32).

Reading from sample_enroll_20170502.csv



Destination Field	Source Field	Logic	Comment
payer_plan_period_id			Autogenerate
person_id	hvid		Lookup in PERSON based on
payer_plan_period_start_date	date		
payer_plan_period_end_date	date		
payer_source_value			Private Source 17
plan_source_value			
family_source_value			

Table name: visit_occurrence

Reading from sample_medical_claims_20170502.csv

Note: This work will be process along with the STEM table

PART 1 - Assign IP, OP, ER, or LTC to claim lines based on REVENUE_CODE, PROCEDURE_CODE, and PLACE_OF_SERVICE_STD_ID.

- Start with PLACE_OF_SERVICE_STD_ID -> 13,31,32,34 claim line is LTC
- If PLACE_OF_SERVICE_STD_ID = 21 OR
    - REVENUE_CODE between 0100 and 0219
    - REVENUE_CODE between 0720 and 0729
    - REVENUE_CODE between 0800 and 0809
    - Then claim line is IP
- Otherwise, if PLACE_OF_SERVICE_STD_ID = 23 OR
    - REVENUE_CODE between 0450 and 0459
    - REVENUE_CODE = 0981
    - PROCEDURE_CODE = 99281, 99282, 99283, 99284, 99285
    - Then claim line is ER
- All else are OP

PART 2 - Generate visits by:

-For claim type = ‘LTCP’:

---Sort data in ascending order by PERSON_ID, VISIT_START_DATE, VISIT_END_DATE, STEM.ID

---Then by PERSON_ID, collapse lines of claim as long as the time between the VISIT_END_DATE of one line and the VISIT_START_DATE of the next is <=32. Each consolidated long term care claim is considered as one long term care visit, set

------MIN(VISIT_START_DATE) as VISIT_START_DATE

------MAX(VISIT_END_DATE) as VISIT_END_DATE

------‘LTCP’ as PLACE_OF_SERVICE_SOURCE_VALUE

---As you are collapsing records take the PROV_RENDERING_NPI from the first claim line of each visit as VISIT_PROV_RENDERING_NPI, this will be used later to assign providers associated to a visit.

-For claim type = ‘IP’:

---Sort data in ascending order by PERSON_ID, VISIT_START_DATE, VISIT_END_DATE, STEM.ID.

---Then by PERSON_ID, collapse lines of claim as long as the time between the VISIT_END_DATE of one line and the VISIT_START_DATE of the next is <=1.

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

------MIN(VISIT_START_DATE) as VISIT_START_DATE

------MAX(VISIT_END_DATE) as VISIT_END_DATE

------‘IP’ as PLACE_OF_SERVICE_SOURCE_VALUE

---As you are collapsing records take the PROV_RENDERING_NPI from the first claim line of each visit as VISIT_PROV_RENDERING_NPI, this will be used later to assign providers associated to a visit.

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

-For claim type = ‘ER’

---Sort data in ascending order by PERSON_ID, VISIT_START_DATE, VISIT_END_DATE, STEM.ID.

---Then by PERSON_ID, collapse all ‘ER’ claims that start on the same day as one ER visit, then take VISIT_START_DATE as VISIT_START_DATE, MAX (VISIT_END_DATE) as VISIT_END_DATE, and ‘ER’ as PLACE_OF_SERVICE_SOURCE_VALUE.

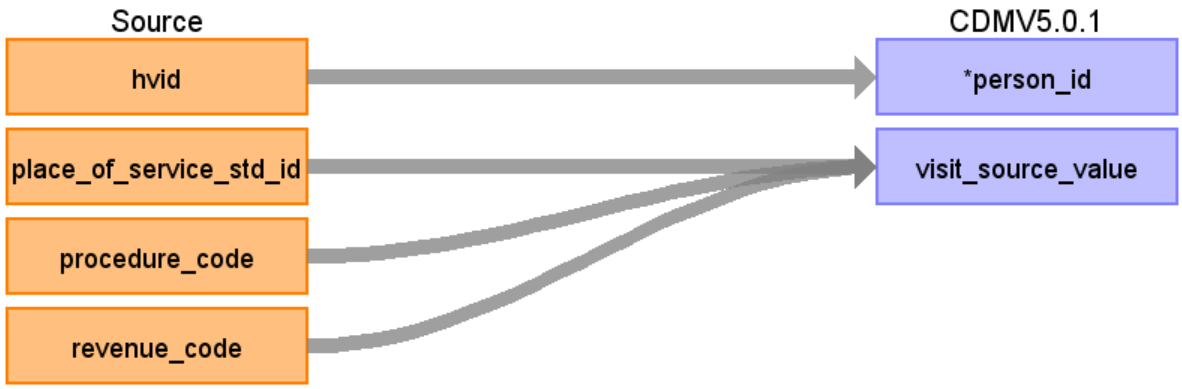
---As you are collapsing records take the PROV_RENDERING_NPI from the first claim line of each visit as VISIT_PROV_RENDERING_NPI, this will be used later to assign providers associated to a visit.

-For claim type = ‘OP’

---Sort data in ascending order by PERSON_ID, VISIT_START_DATE, VISIT_END_DATE, STEM.ID.

---Then by PERSON_ID and VISIT_START_DATE, collapse all ‘OP’ claims that have the same PROV_RENDERING_NPI as one OP visit, then take VISIT_START_DATE as VISIT_START_DATE, MAX (VISIT_END_DATE) as VISIT_END_DATE, and ‘OP’ as PLACE_OF_SERVICE_SOURCE_VALUE.

---As you are collapsing records take the PROV_RENDERING_NPI from the first claim line of each visit as VISIT_PROV_RENDERING_NPI, this will be used later to assign providers associated to a visit.

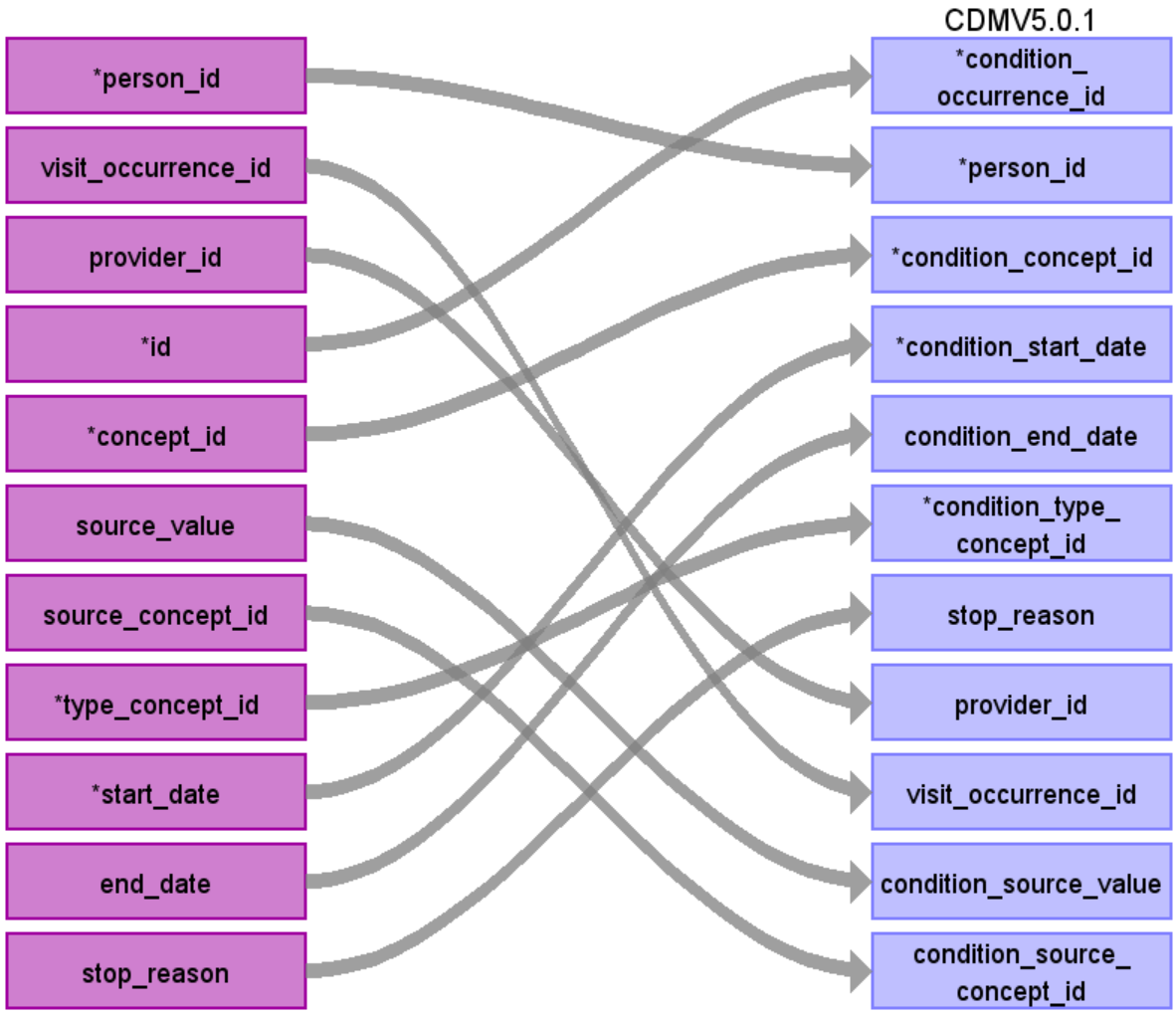


Destination Field	Source Field	Logic	Comment
visit_occurrence_id			Autogenerate
person_id	hvid		Lookup in PERSON based on
visit_concept_id			
visit_start_date			
visit_start_time			
visit_end_date			
visit_end_time			
visit_type_concept_id			
provider_id			
care_site_id			

visit_source_value	revenue_code place_of_service_std_id procedure_code	IF (REVENUE_CODE >= '0100' AND REVENUE_CODE <= '0219') /* Room and Board Charges */ OR (REVENUE_CODE >= '0720' AND REVENUE_CODE <= '0729') /* Labor Room and Delivery */ OR (REVENUE_CODE >= '0800' AND REVENUE_CODE <= '0809') /* Inpatient Renal Dialysis */ THEN IF PLACE_OF_SERVICE_STD_ID IN (13,31,32,34) THEN CLAIM_TYPE = 'LTC' ELSE CLAIM_TYPE = 'IP'; ELSE IF PLACE_OF_SERVICE_STD_ID IN (23) OR (REVENUE_CODE >= '0450' AND REVENUE_CODE <= '0459') OR REVENUE_CODE ='0981' OR PROCEDURE_CODE IN ('99281','99282','99283','99284','99285') THEN CLAIM_TYPE= 'ER'; ELSE CLAIM_TYPE = 'OP';
visit_source_concept_id		

Table name: condition_occurrence

Reading from stem_table

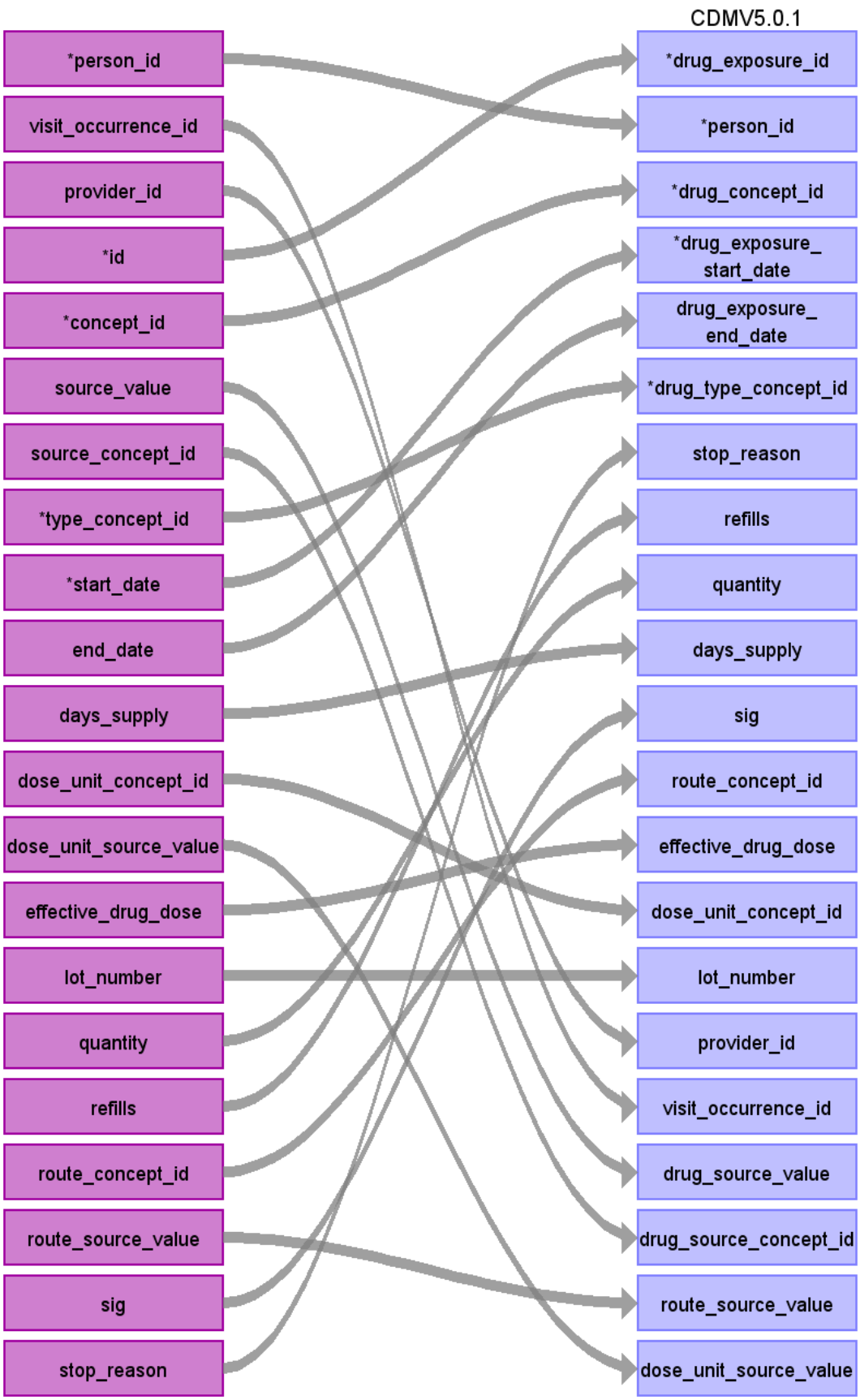


Destination Field	Source Field	Logic	Comment
condition_occurrence_id	id		
person_id	person_id		
condition_concept_id	concept_id		
condition_start_date	start_date		
condition_end_date	end_date		
condition_type_concept_id	type_concept_id		
stop_reason	stop_reason		

provider_id	provider_id
visit_occurrence_id	visit_occurrence_id
condition_source_value	source_value
condition_source_concept_id	source_concept_id

Table name: drug_exposure

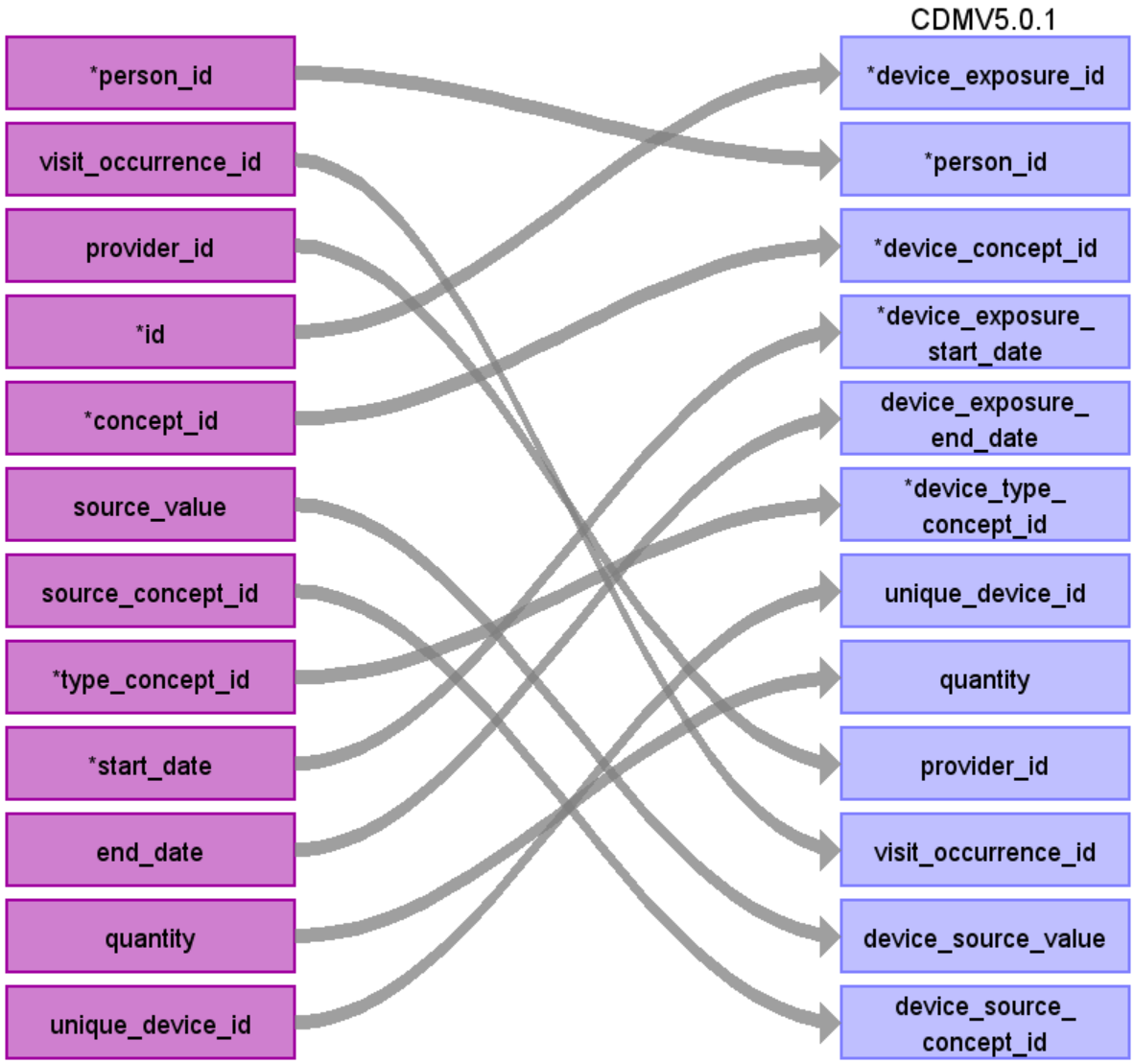
Reading from stem_table


CDMV5.0.1
*person_id
visit_occurrence_id
provider_id
*id
*concept_id
source_value
source_concept_id
*type_concept_id
*start_date
end_date
days_supply
dose_unit_concept_id
dose_unit_source_value
effective_drug_dose
lot_number
quantity
refills
route_concept_id
route_source_value
sig
stop_reason
*drug_exposure_id
*person_id
*drug_concept_id
*drug_exposure_ start_date
drug_exposure_ end_date
*drug_type_concept_id
stop_reason
refills
quantity
days_supply
sig
route_concept_id
effective_drug_dose
dose_unit_concept_id
lot_number
provider_id
visit_occurrence_id
drug_source_value
drug_source_concept_id
route_source_value
dose_unit_source_value

Destination Field	Source Field	Logic	Comment
drug_exposure_id	id		
person_id	person_id		
drug_concept_id	concept_id		
drug_exposure_start_date	start_date		
drug_exposure_end_date	end_date		
drug_type_concept_id	type_concept_id		
stop_reason	stop_reason		
refills	refills		
quantity	quantity		
days_supply	days_supply		
sig	sig		
route_concept_id	route_concept_id		
effective_drug_dose	effective_drug_dose		
dose_unit_concept_id	dose_unit_concept_id		
lot_number	lot_number		
provider_id	provider_id		
visit_occurrence_id	visit_occurrence_id		
drug_source_value	source_value		
drug_source_concept_id	source_concept_id		
route_source_value	route_source_value		
dose_unit_source_value	dose_unit_source_value		

Table name: device_exposure

Reading from stem_table

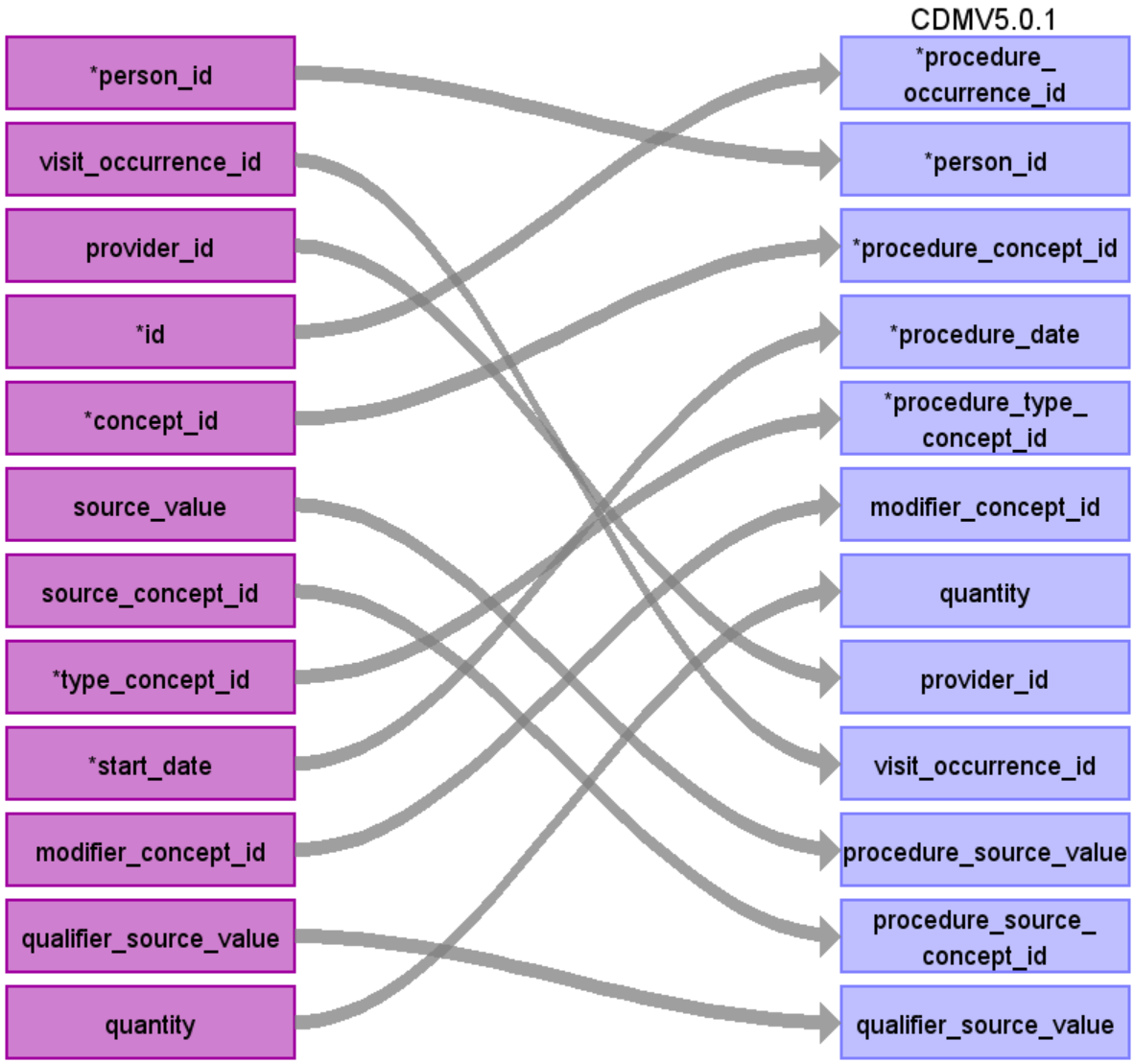


Destination Field	Source Field	Logic	Comment
device_exposure_id	id		
person_id	person_id		
device_concept_id	concept_id		
device_exposure_start_date	start_date		

device_exposure_end_date	end_date
device_type_concept_id	type_concept_id
unique_device_id	unique_device_id
quantity	quantity
provider_id	provider_id
visit_occurrence_id	visit_occurrence_id
device_source_value	source_value
device_source_concept_id	source_concept_id

Table name: procedure_occurrence

Reading from stem_table

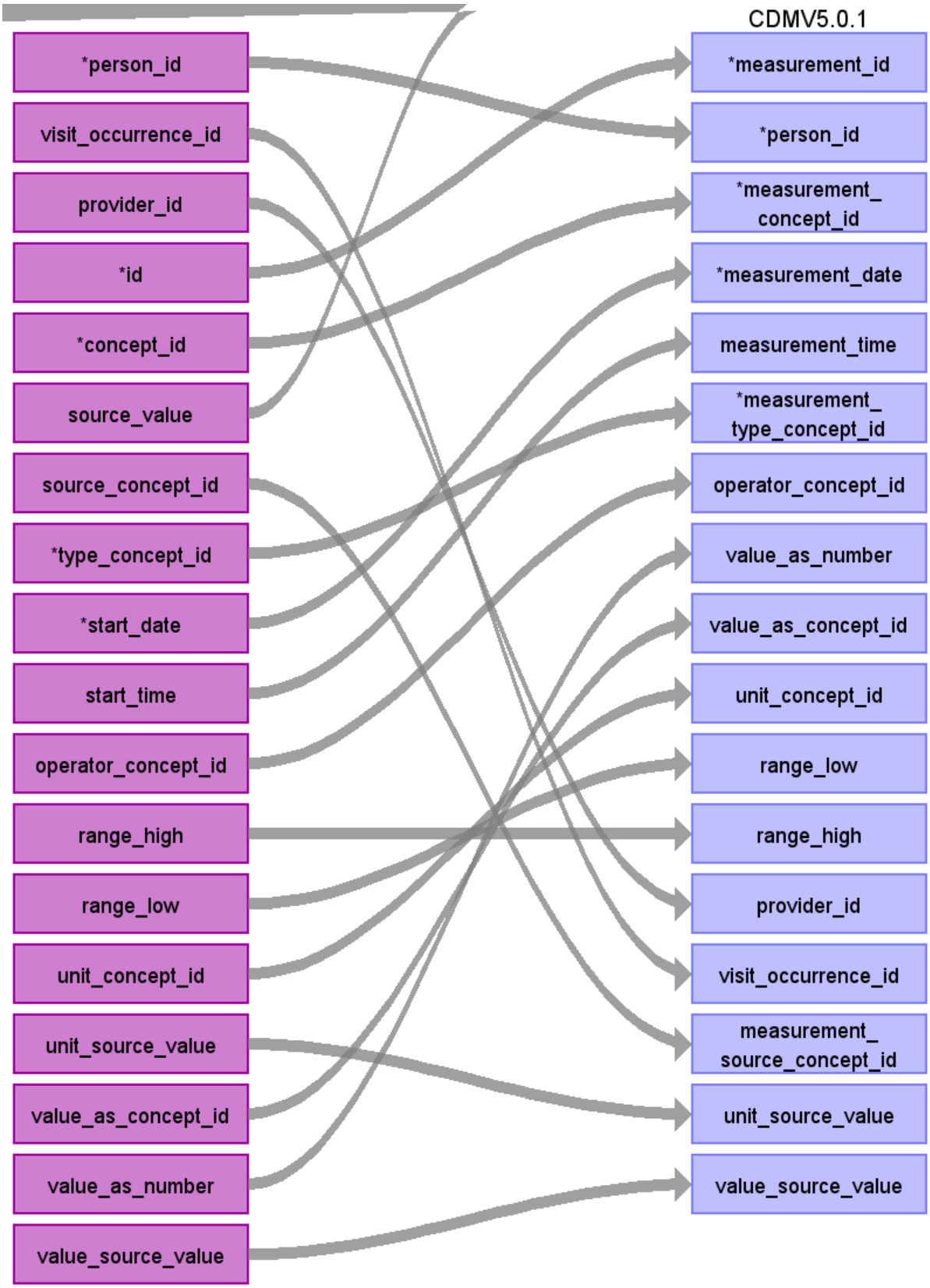


Destination Field	Source Field	Logic	Comment
procedure_occurrence_id	id		
person_id	person_id		
procedure_concept_id	concept_id		
procedure_date	start_date		
procedure_type_concept_id	type_concept_id		
modifier_concept_id	modifier_concept_id		

quantity	quantity
provider_id	provider_id
visit_occurrence_id	visit_occurrence_id
procedure_source_value	source_value
procedure_source_concept_id	source_concept_id
qualifier_source_value	qualifier_source_value

Table name: measurement

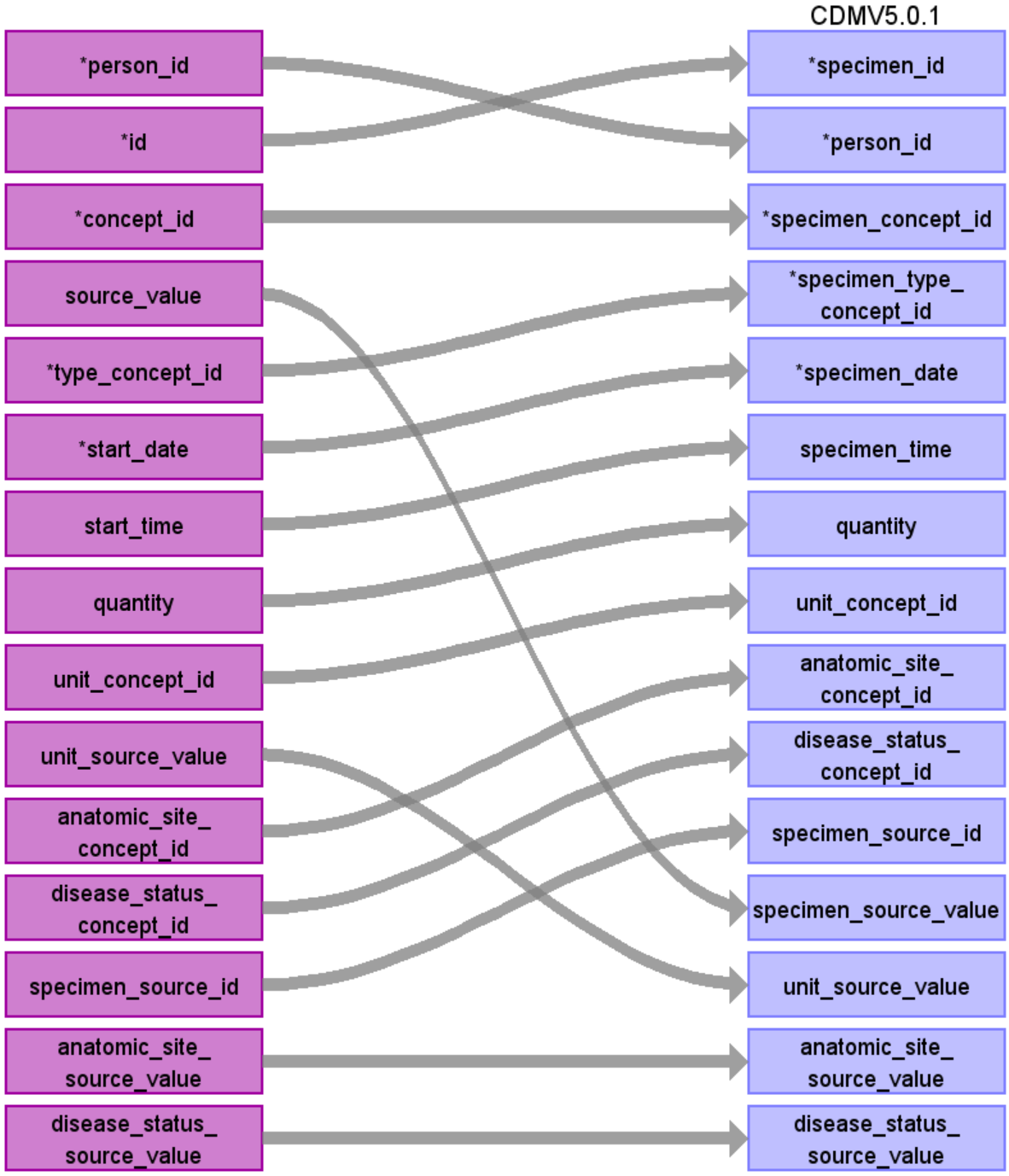
Reading from stem_table


CDMV5.0.1
*person_id
visit_occurrence_id
provider_id
*id
*concept_id
source_value
source_concept_id
*type_concept_id
*start_date
start_time
operator_concept_id
range_high
range_low
unit_concept_id
unit_source_value
value_as_concept_id
value_as_number
value_source_value
*measurement_id
*person_id
*measurement_ concept_id
*measurement_date
measurement_time
*measurement_ type_concept_id
operator_concept_id
value_as_number
value_as_concept_id
unit_concept_id
range_low
range_high
provider_id
visit_occurrence_id
measurement_ source_concept_id
unit_source_value
value_source_value

Destination Field	Source Field	Logic	Comment
measurement_id	id		
person_id	person_id		
measurement_concept_id	concept_id		
measurement_date	start_date		
measurement_time	start_time		
measurement_type_concept_id	type_concept_id		
operator_concept_id	operator_concept_id		
value_as_number	value_as_number		
value_as_concept_id	value_as_concept_id		
unit_concept_id	unit_concept_id		
range_low	range_low		
range_high	range_high		
provider_id	provider_id		
visit_occurrence_id	visit_occurrence_id		
measurement_source_value			
measurement_source_concept_id	source_concept_id		
unit_source_value	unit_source_value		
value_source_value	value_source_value		

Table name: specimen

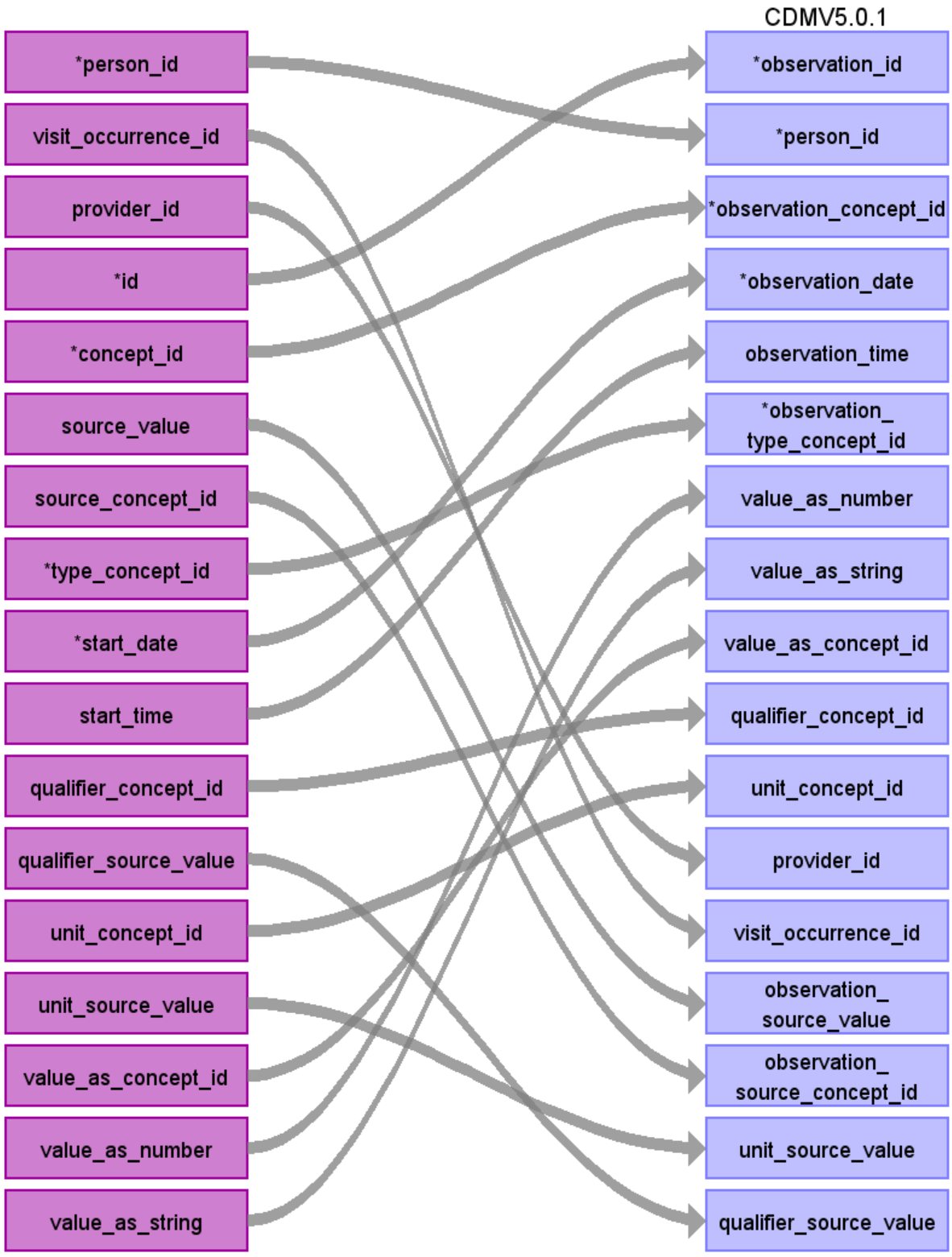
Reading from stem_table



Destination Field	Source Field	Logic	Comment
specimen_id	id		
person_id	person_id		
specimen_concept_id	concept_id		
specimen_type_concept_id	type_concept_id		
specimen_date	start_date		
specimen_time	start_time		
quantity	quantity		
unit_concept_id	unit_concept_id		
anatomic_site_concept_id	anatomic_site_concept_id		
disease_status_concept_id	disease_status_concept_id		
specimen_source_id	specimen_source_id		
specimen_source_value	source_value		
unit_source_value	unit_source_value		
anatomic_site_source_value	anatomic_site_source_value		
disease_status_source_value	disease_status_source_value		

Table name: observation

Reading from stem_table



Destination Field	Source Field	Logic	Comment

observation_id	id
person_id	person_id
observation_concept_id	concept_id
observation_date	start_date
observation_time	start_time
observation_type_concept_id	type_concept_id
value_as_number	value_as_number
value_as_string	value_as_string
value_as_concept_id	value_as_concept_id
qualifier_concept_id	qualifier_concept_id
unit_concept_id	unit_concept_id
provider_id	provider_id
visit_occurrence_id	visit_occurrence_id
observation_source_value	source_value
observation_source_concept_id	source_concept_id
unit_source_value	unit_source_value
qualifier_source_value	qualifier_source_value

Table name: note

Table name: death

Table name: fact_relationship

Table name: drug_era

https://github.com/OHDSI/Era-Constructor/tree/master/v5/PostgreSQL

https://gist.github.com/chrisknoll/64da3ee06b271763d1be

https://gist.github.com/chrisknoll/c820cc12d833db2e3d1e

Table name: dose_era

Table name: condition_era

Table name: cohort

Table name: cohort_definition

Table name: cohort_attribute

Table name: attribute_definition

Table name: cost

Appendix: source tables

Table: sample_enroll_20170502.csv

Field	Type	Most freq. value	Comment
data_feed	int	16	
hvid	int	List truncated...	
date	varchar	List truncated...	
coverage_ind	varchar	List truncated...	

Table: sample_medical_claims_20170502.csv

Field	Type	Most freq. value	Comment
record_id	int		
claim_id	varchar		
hvid	int		
created	varchar		
model_version	int		
data_set	varchar		
data_feed	int		
data_vendor	varchar		
source_version	varchar		
patient_gender	varchar		
patient_age	varchar		
patient_year_of_birth	int		
patient_zip3	int		

patient_state	varchar
claim_type	varchar
date_received	varchar
date_service	varchar
date_service_end	varchar
inst_date_admitted	varchar
inst_date_discharged	varchar
inst_admit_type_std_id	varchar
inst_admit_type_vendor_id	varchar
inst_admit_type_vendor_desc	varchar
inst_admit_source_std_id	varchar
inst_admit_source_vendor_id	varchar
inst_admit_source_vendor_desc	varchar
inst_discharge_status_std_id	varchar
inst_discharge_status_vendor_id	varchar
inst_discharge_status_vendor_desc	varchar
inst_type_of_bill_std_id	varchar
inst_type_of_bill_vendor_id	varchar
inst_type_of_bill_vendor_desc	varchar

inst_drg_std_id	varchar	
inst_drg_vendor_id	varchar	
inst_drg_vendor_desc	varchar	
place_of_service_std_id	int	
place_of_service_vendor_id	varchar	
place_of_service_vendor_desc	varchar	
service_line_number	int	
diagnosis_code	varchar	
diagnosis_code_qual	int	
diagnosis_priority	int	
admit_diagnosis_ind	varchar	Not currently in 5.0.1.
procedure_code	varchar	
procedure_code_qual	varchar	
principal_proc_ind	varchar	
procedure_units	int	
procedure_modifier_1	varchar	
procedure_modifier_2	varchar	Not pulling in.
procedure_modifier_3	varchar	Not pulling in.
procedure_modifier_4	varchar	Not pulling in.
revenue_code	varchar	Will be used to determine visit type.
ndc_code	varchar	Will just use PROCEDURE_CODE mapping instead this helper.

medical_coverage_type	varchar	We don't have a key for this data so will not use.
line_charge	varchar	
line_allowed	varchar	
total_charge	varchar	
total_allowed	varchar	
prov_rendering_npi	varchar	
prov_billing_npi	varchar	
prov_referring_npi	varchar	
prov_facility_npi	varchar	
payer_vendor_id	varchar	
payer_name	varchar	
payer_parent_name	varchar	
payer_org_name	varchar	
payer_plan_id	varchar	
payer_plan_name	varchar	
payer_type	varchar	
prov_rendering_vendor_id	varchar	
prov_rendering_tax_id	varchar	
prov_rendering_dea_id	varchar	

prov_rendering_ssn	varchar
prov_rendering_state_license	varchar
prov_rendering_upin	varchar
prov_rendering_commercial_id	varchar
prov_rendering_name_1	varchar
prov_rendering_name_2	varchar
prov_rendering_address_1	varchar
prov_rendering_address_2	varchar
prov_rendering_city	varchar
prov_rendering_state	varchar
prov_rendering_zip	varchar
prov_rendering_std_taxonomy	varchar
prov_rendering_vendor_specialty	varchar
prov_billing_vendor_id	varchar
prov_billing_tax_id	varchar
prov_billing_dea_id	varchar
prov_billing_ssn	varchar
prov_billing_state_license	varchar
prov_billing_upin	varchar

prov_billing_commercial_id	varchar
prov_billing_name_1	varchar
prov_billing_name_2	varchar
prov_billing_address_1	varchar
prov_billing_address_2	varchar
prov_billing_city	varchar
prov_billing_state	varchar
prov_billing_zip	varchar
prov_billing_std_taxonomy	varchar
prov_billing_vendor_specialty	varchar
prov_referring_vendor_id	varchar
prov_referring_tax_id	varchar
prov_referring_dea_id	varchar
prov_referring_ssn	varchar
prov_referring_state_license	varchar
prov_referring_upin	varchar
prov_referring_commercial_id	varchar
prov_referring_name_1	varchar
prov_referring_name_2	varchar

prov_referring_address_1	varchar
prov_referring_address_2	varchar
prov_referring_city	varchar
prov_referring_state	varchar
prov_referring_zip	varchar
prov_referring_std_taxonomy	varchar
prov_referring_vendor_specialty	varchar
prov_facility_vendor_id	varchar
prov_facility_tax_id	varchar
prov_facility_dea_id	varchar
prov_facility_ssn	varchar
prov_facility_state_license	varchar
prov_facility_upin	varchar
prov_facility_commercial_id	varchar
prov_facility_name_1	varchar
prov_facility_name_2	varchar
prov_facility_address_1	varchar
prov_facility_address_2	varchar
prov_facility_city	varchar

prov_facility_state	varchar
prov_facility_zip	varchar
prov_facility_std_taxonomy	varchar
prov_facility_vendor_specialty	varchar
cob_payer_vendor_id_1	varchar
cob_payer_seq_code_1	varchar
cob_payer_hpid_1	varchar
cob_payer_claim_filing_ind_code_1	varchar
cob_ins_type_code_1	varchar
cob_payer_vendor_id_2	varchar
cob_payer_seq_code_2	varchar
cob_payer_hpid_2	varchar
cob_payer_claim_filing_ind_code_2	varchar
cob_ins_type_code_2	varchar

Table: sample_pharmacy_claims_20170502.csv

Field	Type	Most freq. value	Comment
record_id	int		
claim_id	varchar		
hvid	varchar		

created	varchar
model_version	int
data_set	varchar
data_feed	int
data_vendor	varchar
source_version	varchar
patient_gender	varchar
patient_age	varchar
patient_year_of_birth	varchar
patient_zip3	varchar
patient_state	varchar
date_service	varchar
date_written	varchar
date_injury	varchar
date_authorized	varchar
time_authorized	varchar
transaction_code_std	varchar
transaction_code_vendor	varchar
response_code_std	varchar
response_code_vendor	varchar

reject_reason_code_1	varchar
reject_reason_code_2	varchar
reject_reason_code_3	varchar
reject_reason_code_4	varchar
reject_reason_code_5	varchar
diagnosis_code_qual	varchar
procedure_code	varchar
procedure_code_qual	varchar
ndc_code	int
product_service_id	varchar
product_service_id_qual	varchar
rx_number	varchar
rx_number_qual	varchar
bin_number	varchar
processor_control_number	varchar
fill_number	int
refill_auth_amount	int
dispensed_quantity	real
unit_of_measure	varchar
days_supply	int
pharmacy_npi	int

prov_dispensing_npi	varchar
payer_id	varchar
payer_id_qual	varchar
payer_name	varchar
payer_parent_name	varchar
payer_org_name	varchar
payer_plan_id	varchar
payer_plan_name	varchar
payer_type	varchar
compound_code	varchar
unit_dose_indicator	varchar
dispensed_as_written	varchar
prescription_origin	varchar
submission_clarification	varchar
orig_prescribed_product_service_code	varchar
orig_prescribed_product_service_code_qual	varchar
orig_prescribed_quantity	varchar
prior_auth_type_code	varchar
level_of_service	int

reason_for_service	varchar
professional_service_code	varchar
result_of_service_code	varchar
prov_prescribing_npi	varchar
prov_primary_care_npi	varchar
cob_count	varchar
usual_and_customary_charge	varchar
sales_tax	varchar
product_selection_attributed	varchar
other_payer_recognized	varchar
periodic_deductible_applied	varchar
periodic_benefit_exceed	varchar
accumulated_deductible	varchar
remaining_deductible	varchar
remaining_benefit	varchar
copay_coinsurance	varchar
basis_of_cost_determination	varchar
submitted_ingredient_code	varchar
submitted_dispensing_fee	varchar

submitted_incentive	varchar
submitted_gross_due	varchar
submitted_professional_service_fee	varchar
submitted_flat_sales_tax	varchar
submitted_percent_sales_tax_basis	varchar
submitted_percent_sales_tax_amount	varchar
submitted_patient_pay	varchar
submitted_other_claimed_qual	varchar
submitted_other_claimed	varchar
basis_of_reimbursement_determination	varchar
paid_ingredient_cost	varchar
paid_dispensing_fee	varchar
paid_incentive	varchar
paid_gross_due	varchar
paid_professional_service_fee	varchar
paid_flat_sales_tax	varchar
paid_percent_sales_tax_basis	varchar
paid_percent_sales_tax_rate	varchar
paid_percent_sales_tax	varchar

paid_patient_pay	varchar
paid_other_claimed_qual	varchar
paid_other_claimed	varchar
tax_exempt_indicator	varchar
coupon_type	varchar
coupon_number	varchar
coupon_value	varchar
pharmacy_other_id	varchar
pharmacy_other_qual	varchar
pharmacy_postal_code	varchar
prov_dispensing_id	varchar
prov_dispensing_qual	varchar
prov_prescribing_id	varchar
prov_prescribing_qual	varchar
prov_primary_care_id	varchar
prov_primary_care_qual	varchar
other_payer_coverage_type	varchar
other_payer_coverage_id	varchar
other_payer_coverage_qual	varchar

other_payer_date	varchar
other_payer_coverage_code	varchar
logical_delete_reason	varchar

Table: sample_stable_panel_med_claims_20170502.csv

Field	Type	Most freq. value	Comment
data_feed	int		
prov_rendering_npi	int		
claim_type	varchar		
svcmonth	varchar		
specialty	varchar		
pct_matched	real		
total_days	int		
avg_daily_claims	real		
stddev_daily_claims	real		
total_below_pctile1	varchar		
total_below_pctile5	varchar		
total_below_pctile10	varchar		
total_above_pctile90	varchar		
total_above_pctile95	varchar		
total_above_pctile99	varchar		

spec_below_pctile1	varchar
spec_below_pctile5	varchar
spec_below_pctile10	varchar
spec_above_pctile90	varchar
spec_above_pctile95	varchar
spec_above_pctile99	varchar

Table: sample_stable_panel_pharm_claims_20170502.csv

Field	Type	Most freq. value	Comment
data_feed	int		
prov_pharmacy_npi	int		
svcmonth	varchar		
specialty	varchar		
pct_matched	real		
total_days	int		
avg_daily_claims	real		
stddev_daily_claims	real		
total_below_pctile1	varchar		
total_below_pctile5	varchar		
total_below_pctile10	varchar		
total_above_pctile90	varchar		

total_above_pctile95	varchar
total_above_pctile99	varchar
spec_below_pctile1	varchar
spec_below_pctile5	varchar
spec_below_pctile10	varchar
spec_above_pctile90	varchar
spec_above_pctile95	varchar
spec_above_pctile99	varchar

Table: stem_table

Field	Type	Most freq. value	Comment

domain_id	CHARACTER VARYING	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Default domain = CONDITION from unless udpated by a Vocabulary mapping from CONCEPT_ID PROCEDURE_CODE: ========== Default domain = PROCEDURE from unless updated by a Vocabulary mapping from CONCEPT_ID =====PHARMACY_CLAIMS===== ========== Default domain = DRUG from unless updated by a Vocabulary mapping from CONCEPT_ID
person_id	INTEGER	Lookup in PERSON based on
visit_occurrence_id	INTEGER	TBD

provider_id	INTEGER	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE & PROCEDURE_CODE: ========== Lookup in the PROVIDER table leveraging NPI =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========== Lookup in the PROVIDER table leveraging NPI
id	INTEGER	Autogenerate

concept_id	INTEGER	If no map, map to 0. =====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== 01 = ICD9 02 = ICD10 Use the code in Section 3.1.2. If diagnosis_code_qual=01 use the filter WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM') AND TARGET_STANDARD_CONCEPT IS NOT NULL AND TARGET_INVALID_REASON IS NULL If diagnosis_code_qual=02 use the filter WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM') AND TARGET_STANDARD_CONCEPT IS NOT NULL AND TARGET_INVALID_REASON IS NULL PROCEDURE_CODE: ========== Use the code in Section 3.1.2. WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_STANDARD_CONCEPT IS NOT NULL AND TARGET_INVALID_REASON IS NULL AND TARGET_CONCEPT_CLASS_ID NOT IN ('HCPCS Modifier','CPT4 Modifier','CPT4 Hierarchy', 'ICD10PCS Hierarchy')

source_value	CHARACTER VARYING	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== DIAGNOSIS_CODE PROCEDURE_CODE: ========== PROCEDURE_CODE =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========== NDC_CODE Do not change source value if a 9 digit NDC is used over 11 digit.

source_concept_id	INTEGER	If no map, map to 0. =====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Use the code in Section 3.1.1. If diagnosis_code_qual=01 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD9CM') AND TARGET_VOCABULARY_ID IN ('ICD9CM') If diagnosis_code_qual=02 use the filter: WHERE SOURCE_VOCABULARY_ID IN ('ICD10CM') AND TARGET_VOCABULARY_ID IN ('ICD10CM') PROCEDURE_CODE: ========== Use the code in Section 3.1.1. WHERE SOURCE_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_VOCABULARY_ID IN ('ICD9Proc','HCPCS','CPT4', 'ICD10PCS') AND TARGET_CONCEPT_CLASS_ID NOT IN ('HCPCS Modifier','CPT4 Modifier', 'CPT4 Hierarchy', 'ICD10PCS Hierarchy') =====PHARMACY_CLAIMS===== ========== NDC_CODE =========

type_concept_id	INTEGER	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== Using DIAGNOSIS_PRIORITY: 1 = 44786627 - Primary Condition 2+ = 44786629 - Secondary Condition PROCEDURE_CODE: ========== Using PRINCIPAL_PROC_IND 1= 44786630 Primary Procedure NULL/'' = 44786631-Secondary Procedure =====PHARMACY_CLAIMS===== ========== NDC_CODE ========== When DATA_VENDOR = "WebMD" then 38000175 /*Prescription dispensed in pharmacy*/ When DATA_VENDOR = "Private Source 17" then 38000177 /*Prescription written*/ ELSE 0 For "Private Source 17" we are requesting a new data type of "Drug from Claim"
start_date	DATE	
end_date	DATE	
start_time	TIME	NULL

days_supply	INTEGER	=====MEDICAL_CLAIMS===== ========== NULL =====PHARMACY_CLAIMS===== ========== NDC_CODE ========= DAYS_SUPPLY
dose_unit_concept_id	INTEGER	0
dose_unit_source_value	CHARACTER VARYING	NULL
effective_drug_dose	FLOAT	NULL
lot_number	CHARACTER VARYING	NULL

modifier_concept_id	INTEGER	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== 0 PROCEDURE_CODE: ========== Using PROCEDURE_MODIFIER_1 Use the code in Section 3.1.1. When mapping PROCEDURE_CODE determine what the VOCABULARY_ID is, then you'll need to use the "Modifier" vocabulary for that same VOCABULARY. Example, if you the PROCEDURE_CODE's VOCABULARY_ID is CPT4 then the MODIFIER_CONCEPT_ID should use the following map: WHERE SOURCE_CONCEPT_CLASS_ID IN ('CPT4 Modifier') AND TARGET_CONCEPT_CLASS_ID IN ('CPT4 Modifier') The list of modifiers are: --CPT4 Modifier --HCPC modifier It is limitation that we are not pulling over PROCEDURE_MODIFIER_2-4 however they are only used about 3% of the time. =====PHARMACY_CLAIMS=====

operator_concept_id	INTEGER	0
qualifier_concept_id	INTEGER	0
qualifier_source_value	CHARACTER VARYING	NULL
quantity	INTEGER	=====MEDICAL_CLAIMS===== ========== DIAGNOSIS_CODE: ========== NULL PROCEDURE_CODE: ========== Use PROCEDURE_UNITS as is =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========= DISPENSED_QUANTITY
range_high	FLOAT	NULL
range_low	FLOAT	NULL

refills	INTEGER	=====MEDICAL_CLAIMS===== ========== NULL =====PHARMACY_CLAIMS===== ========== NDC_CODE: ========= REFILL_AUTH_AMOUNT
route_concept_id	INTEGER	0
route_source_value	CHARACTER VARYING	NULL
sig	CHARACTER VARYING	NULL
stop_reason	CHARACTER VARYING	NULL
unique_device_id	CHARACTER VARYING	NULL
unit_concept_id	INTEGER	0
unit_source_value	CHARACTER VARYING	NULL
value_as_concept_id	INTEGER	0
value_as_number	DECIMAL	NULL
value_as_string	CHARACTER VARYING	NULL
value_source_value	CHARACTER VARYING	NULL
anatomic_site_concept_id	INTEGER	0
disease_status_concept_id	INTEGER	0
specimen_source_id	INTEGER	NULL
anatomic_site_source_value	CHARACTER VARYING	NULL

disease_status_source_value	CHARACTER VARYING	NULL