Mapping from generic IDSR COVID-19 data to OMOP 6.0

Section: 02 Disease Condition

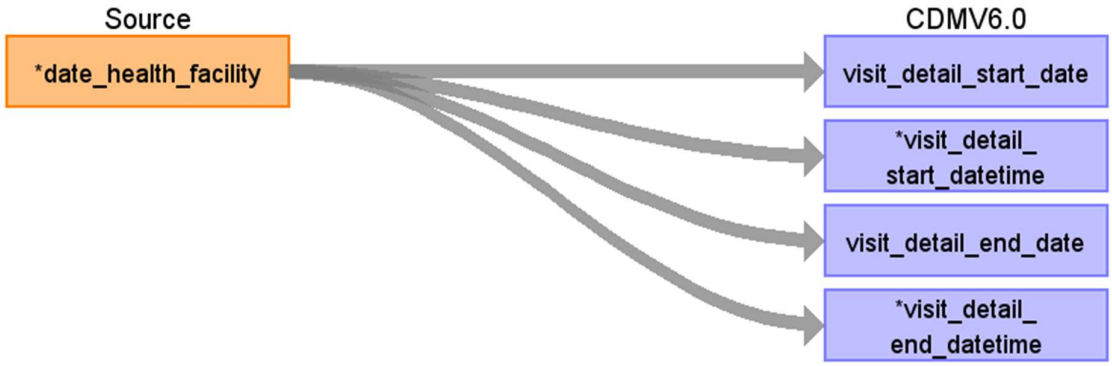
Contents

Source Data Mapping Approach to CDMV6.0

Table name: visit_detail

The VISIT_DETAIL table is an optional table used to represents details of each record in the parent VISIT_OCCURRENCE table. A good example of this would be the movement between units in a hospital during an inpatient stay or claim lines associated with a one insurance claim. For every record in the VISIT_OCCURRENCE table there may be 0 or more records in the VISIT_DETAIL table with a 1:n relationship where n may be 0. The VISIT_DETAIL table is structurally very similar to VISIT_OCCURRENCE table and belongs to the visit domain.

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
visit_detail_id			Use this to identify unique interactions between a person and the health care system. This identifier links across the other CDM event tables to associate events with a visit detail. This is to be an auto generated number (integer) for every recorded inserted. Data type: bigint Required: yes Primary key: yes Foreign key: no Foreign key table: n/a Foreign key domain: n/a
person_id			The person ID of the person whome the visit has been made.

			Data type: bigint Required: yes Primary key: no Foreign key: yes Foreign key table: PERSON Foreign key domain: n/a Important note for ETL: This is a foreign key referencing to the person_id in the PERSON table
visit_detail_concept_id			This field contains a concept id representing the kind of visit detail, like inpatient or outpatient. All concepts in this field should be standard and belong to the Visit domain. Health center from Visit Domain = 4139501 Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Visit Important note for ETL: If no code is found, set it to 0.
visit_detail_start_date	date_health_facility	Store the date of visit to health center to populate this field.	Store in YYYY-MM-DD format. This is the date of the start of the encounter. This may or may not be equal to the date of the Visit the Visit Detail is associated with.

			Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
visit_detail_start_datetime	date_health_facility	Store the date of visit to health center to populate this field. Since the time is not available so set it to midnight (00:00:0000)	Store in YYYY-MM-DD HH:MM:ss format. Since the source dataset does not store the date in TIMESTAMP format, so set the time to midnight 00:00:00. This is a mandatory field, if no date is available, set it to 9999-01-01. Data type: datetime (without time zone) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
visit_detail_end_date	date_health_facility	Store the date of visit to health center to populate this field.	Store in YYYY-MM-DD format. Since the reporting is on same day, so the start and end will be the same reporting date. This the end date of the patient-provider interaction. Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a

			Foreign key domain: n/a
visit_detail_end_datetime	date_health_facility	Store the date of visit to health center to populate this field. Since the time is not available so set it to midnight (00:00:0000)	Store in YYYY-MM-DD HH:MM:ss format. Since the source dataset does not store the date in TIMESTAMP format, so set the time to midnight 00:00:00. Since the reporting is on same day, so the start and end will be the same reporting date. This the end date of the patient-provider interaction. If no time is given for the end date of a visit, set it to midnight (00:00:0000). This is a mandatory field, if no date is available, set it to 9999-01-01 00:00:0000 Data type: datetime (datetime without timezone) Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
visit_detail_type_concept_id			Visit type concept id: 32809 for case report form Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Type concept Important note for ETL: If no code

			is found, set it to 0.
provider_id			This is a foreign key referencing to the provider_id in the PROVIDER table. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: Provider Foreign key domain: n/a
care_site_id			This is a foreign key referencing to the care_site_id in the CARE_SITE table. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: care_site Foreign key domain: n/a
visit_detail_source_value			This field houses the verbatim value from the source data representing the kind of visit that took place (inpatient, outpatient, emergency, etc.) set it to NULL Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a

			Foreign key domain: n/a
visit_detail_source_concept_id			If the visit source value is coded in the source data using an OMOP supported vocabulary put the concept id representing the source value here. If not available set to 0. This is a mandatory field, no value is available from the source dataset(s) for this, so set it to 0. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: Concept Foreign key domain: n/a
admitted_from_source_value			This information may be called something different in the source data but the field is meant to contain a value indicating where a person was admitted from. Typically this applies only to visits that have a length of stay, like inpatient visits or long-term care visits. Set it to NULL Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
admitted_from_concept_id			This is a mandatory field, no value

			is available from the source dataset(s) for this, so set it to 0. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: Concept Foreign key domain: Visit
discharge_to_source_value			This information may be called something different in the source data but the field is meant to contain a value indicating where a person was discharged to after a visit, as in they went home or were moved to long-term care. Typically this applies only to visits that have a length of stay of a day or more. Set it to NULL. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
discharge_to_concept_id			Use this field to determine where the patient was discharged to after a visit. If available, map the discharge_to_source_value to a standard concept in the visit domain. If not available set to 0. This is a mandatory field, no value is available from the source

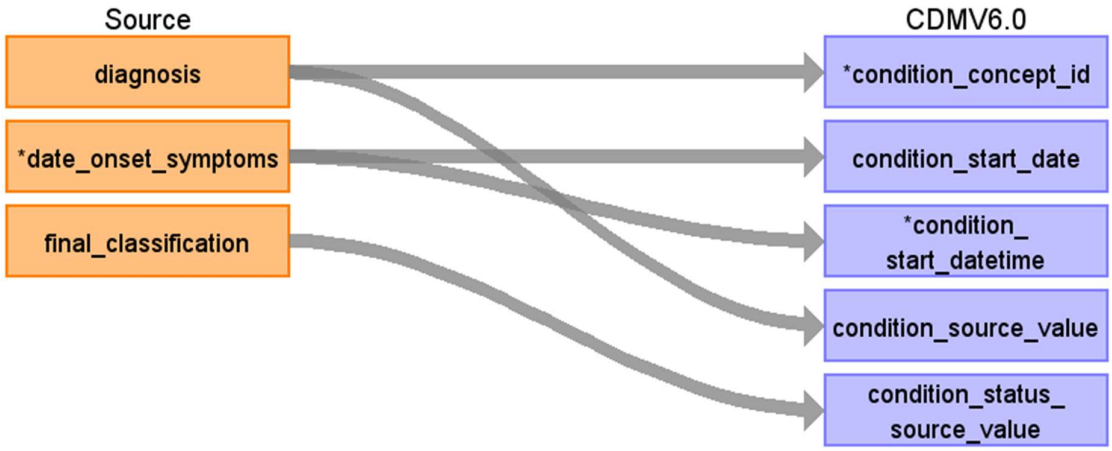
			dataset(s) for this, so set it to 0. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: Concept Foreign key domain: Visit
preceding_visit_detail_id			Use this field to find the visit that occurred for the person prior to the given visit. A foreign key to the visit_detail table to get the immediate preceding visit detail. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_detail Foreign key domain: n/a
visit_detail_parent_id			This is used in the case that a visit detail record needs to be nested beyond the VISIT_OCCURRENCE/VISIT_DETAIL relationship. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_detail Foreign key domain: n/a
visit_occurrence_id			Use this field to link the VISIT_DETAIL record to its

			VISIT_OCCURRENCE. This is foreign key to link to the visit_occurrence table. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_occurrence Foreign key domain: n/a

Table name: condition_occurrence

This table contains records of Events of a Person suggesting the presence of a disease or medical condition stated as a diagnosis, a sign, or a symptom, which is either observed by a Provider or reported by the patient.

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
condition_occurrence_id			A unique key given to a condition record for a person. Each instance of a condition present in the source data should be assigned this unique key. In some cases, a person can have multiple records of the same condition within the same visit. It is valid to keep these duplicates and assign them individual, unique, CONDITION_OCCURRENCE_IDs This is to be generated using an auto generated number sequence unique to each condition record for a person. Data type: bigint Required: yes Primary key: yes Foreign key: no

person_id			Foreign key table: n/a Foreign key domain: n/a The person ID of the person whose condition is being recorded. Data type: bigint Required: yes Primary key: no Foreign key: yes Foreign key table: PERSON Foreign key domain: n/a Important note for ETL: This is a foreign key referencing to the person_id in the PERSON table.
condition_concept_id	diagnosis	COVID-19 -> 37311061	The CONDITION_CONCEPT_ID field is recommended for primary use in analyses, and must be used for network studies. This is the standard concept mapped from the source value which represents a condition. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Condition
condition_start_date	date_onset_symptoms	Store the date in YYYY-MM-DD format.	Use this date to determine the start date of the condition Data type: date

			Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
condition_start_datetime	date_onset_symptoms	Store the date in YYYY-MM-DD HH:MM:ss format.	Use this date to determine the start date of the condition. The source does not specify datetime so as per the convention set the time to midnight (00:00:0000) Note: the date will automatically get converted with midnight time 00:00:0000 in PostgreSQL database field. Datetime to determine the start datetime of the condition. Data type: datetime (without time zone) Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
condition_end_date			Date to determine the end date of the condition. By definition it is suggested that if a source only has one date associated with a condition record it is acceptable to use that date for both the CONDITION_START_DATE and the CONDITION_END_DATE. Contradicting the definition, since this is not a mandatory field, we would leave it as

		NULL. Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
condition_end_datetime		Datetime to determine the end date and time of the condition. By definition it is suggested that if a source only has one date associated with a condition record it is acceptable to use that date for both the CONDITION_START_DATETIME and the CONDITION_END_DATETIME. Contradicting the definition, since this is not a mandatory field, we would leave it as NULL. Data type: datetime (timestamp without time zone) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
condition_type_concept_id		Dy definition, this field can be used to determine the provenance of the Condition record, as in whether the condition was from an EHR system, insurance claim,

		registry, or other sources. Here, we will map it to Case Report Form -> 32809 Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Type concept
condition_status_concept_id		This concept represents the point during the visit the diagnosis was given. Preliminary diagnosis -> 32899 Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a
stop_reason		The Stop Reason indicates why a Condition is no longer valid with respect to the purpose within the source data. This information is not populated in source data i.e., the information does not exist, so leave it blank (NULL) Data type: varchar(20)

		Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
provider_id		The provider associated with condition record, e.g. the provider who made the diagnosis or the provider who recorded the symptom. This is a foreign key referencing to the provider_id in the PROVIDER table. Data type: bigint Required: no Primary key: no Foreign key: Yes Foreign key table: PROVIDER Foreign key domain: n/a
visit_occurrence_id		The visit during which the condition occurred or has been reported. This is a foreign key referencing to the visit_occurrence_id in the VISIT_OCCURRENCE table. Data type: bigint Required: no Primary key: no Foreign key: Yes Foreign key table: VISIT_OCCURRENCE Foreign key domain: n/a

visit_detail_id			The VISIT_DETAIL record during which the condition occurred or has been reported. This is a foreign key referencing to the visit_detail_id in the VISIT_DETAIL table. Data type: bigint Required: no Primary key: no Foreign key: Yes Foreign key table: VISIT_DETAIL Foreign key domain: n/a
condition_source_value	diagnosis	Store the diagnosis verbatim value to populate this field.	This field houses the verbatim value from the source data representing the condition that occurred. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
condition_source_concept_id			This is the concept representing the condition source value and may not necessarily be standard. By definition, if the CONDITION_SOURCE_VALUE is coded in the source data using an OMOP supported vocabulary put the concept id representing the source value here. If not available, set to 0. Here set the value to 0 (zero). Data type: integer

			Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a
condition_status_source_value	final_classification	Store the Case Final Classification (final_classification) to populate this variable	This information may be called something different in the source data but the field is meant to contain a value indicating when and how a diagnosis was given to a patient. This source value is mapped to a standard concept which is stored in the CONDITION_STATUS_CONCEPT_ID field. This field houses the verbatim value from the source data representing the condition status. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

Appendix: source tables

Table: who_idsr_synthetic_v1

Field	Type	Most freq. value	Comment
recnr	bigint		
rec_identifier	text		
report_country	character varying	Wakanda	
report_province	character varying	Northern	
report_district	character varying	Mena Ngai	
report_site	character varying	Public Healthcare Services Center	
diagnosis	character varying		
patient_type	character varying	Out-Patient	
date_health_facility	date	2022-03-25	
patient_name	character varying	Baba P	
patient_dob	date	2003-12-29	
age_years	integer	21	
age_months	integer	0	
age_days	integer	15	
patient_sex	character varying	Male	
patient_residence	character varying	Lion cult	
patient_town_city	character varying		
patient_district	character varying	Mena Ngai	
patient_area_type	character varying	Urban	
patient_address	character varying		
patient_occupation	character varying		
date_onset_symptoms	date	2021-01-08	
travel_history	character varying	No	
travel_destination	character varying		
vaccine_doses_received	integer	99	
date_last_vaccine	date		
vaccine_name	character varying		

date_specimen_collected	date	2020-08-15	
date_specimen_sent_lab	date	2021-07-03	
lab_result	character varying	Negative	
outcome	character varying	Transferred out	
final_classification	character varying		
date_form_sent_district	date	2022-05-18	
date_facility_notified_district	date	2022-08-19	
person_form_complete	character varying	Everett Ross	