

Mapping from generic IDSR COVID-19 data to OMOP 6.0

Section: 02 Disease Condition

Contents

Source Data Mapping Approach to CDMV6.0	2
Table name: visit_detail	3
Table name: condition_occurrence	12
Appendix: source tables	20

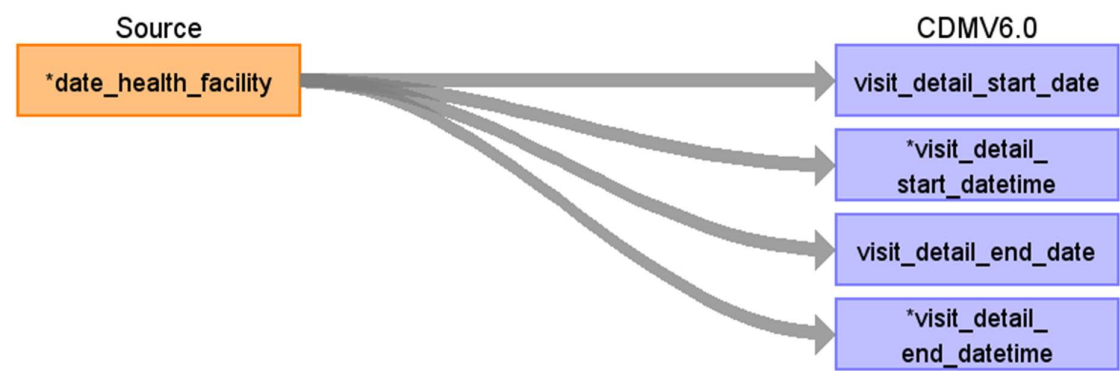
Source Data Mapping Approach to CDMV6.0



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			<p>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.</p> <p>This is to be an auto generated number (integer) for every recorded inserted.</p> <p>Data type: bigint</p> <p>Required: yes</p> <p>Primary key: yes</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
person_id			<p>The person ID of the person whome the visit has been made.</p>

			<p>Data type: bigint</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: PERSON</p> <p>Foreign key domain: n/a</p> <p>Important note for ETL: This is a foreign key referencing to the person_id in the PERSON table</p>
visit_detail_concept_id			<p>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.</p> <p>Health center from Visit Domain = 4139501</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: Visit</p> <p>Important note for ETL: If no code is found, set it to 0.</p>
visit_detail_start_date	date_health_facility	Store the date of visit to health center to populate this field.	<p>Store in YYYY-MM-DD format.</p> <p>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.</p>

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)	<p>Data type: date</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p> <p>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.</p> <p>This is a mandatory field, if no date is available, set it to 9999-01-01.</p> <p>Data type: datetime (without time zone)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
visit_detail_end_date	date_health_facility	Store the date of visit to health center to populate this field.	<p>Store in YYYY-MM-DD format. Since the reporting is on same day, so the start and end will be the same reporting date.</p> <p>This the end date of the patient-provider interaction.</p> <p>Data type: date</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p>

			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)	<p>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.</p> <p>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).</p> <p>This is a mandatory field, if no date is available, set it to 9999-01-01 00:00:0000</p> <p>Data type: datetime (datetime without timezone)</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
visit_detail_type_concept_id			<p>Visit type concept id: 32809 for case report form</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: Type concept</p> <p>Important note for ETL: If no code</p>

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

			Foreign key domain: n/a
visit_detail_source_concept_id			<p>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.</p> <p>This is a mandatory field, no value is available from the source dataset(s) for this, so set it to 0.</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: Concept</p> <p>Foreign key domain: n/a</p>
admitted_from_source_value			<p>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.</p> <p>Set it to NULL</p> <p>Data type: varchar(50)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
admitted_from_concept_id			This is a mandatory field, no value

		<p>is available from the source dataset(s) for this, so set it to 0.</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: Concept</p> <p>Foreign key domain: Visit</p>
discharge_to_source_value		<p>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.</p> <p>Set it to NULL.</p> <p>Data type: varchar(50)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
discharge_to_concept_id		<p>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.</p> <p>This is a mandatory field, no value is available from the source</p>

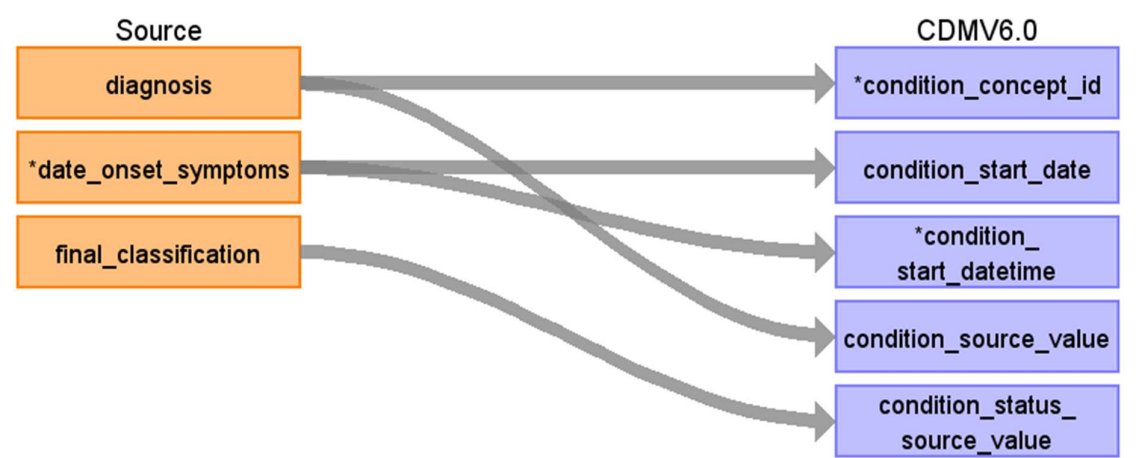
			<p>dataset(s) for this, so set it to 0.</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: Concept</p> <p>Foreign key domain: Visit</p>
preceding_visit_detail_id			<p>Use this field to find the visit that occurred for the person prior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

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

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			<p>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.</p> <p>Data type: bigint</p> <p>Required: yes</p> <p>Primary key: yes</p> <p>Foreign key: no</p>

person_id			<p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p> <p>The person ID of the person whose condition is being recorded.</p> <p>Data type: bigint</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: PERSON</p> <p>Foreign key domain: n/a</p> <p>Important note for ETL: This is a foreign key referencing to the person_id in the PERSON table.</p>
condition_concept_id	diagnosis	COVID-19 -> 37311061	<p>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.</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: Condition</p>
condition_start_date	date_onset_sympto ms	Store the date in YYYY-MM-DD format.	<p>Use this date to determine the start date of the condition</p> <p>Data type: date</p>

		<p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
condition_start_datetime	<p>date_onset_sympto</p> <p>ms</p> <p>Store the date in YYYY-MM-DD HH:MM:ss format.</p>	<p>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)</p> <p>Note: the date will automatically get converted with midnight time 00:00:0000 in PostgreSQL database field.</p> <p>Datetime to determine the start datetime of the condition.</p> <p>Data type: datetime (without time zone)</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
condition_end_date		<p>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.</p> <p>Contradicting the definition, since this is not a mandatory field, we would leave it as</p>

		<p>NULL.</p> <p>Data type: date</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
condition_end_datetime		<p>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.</p> <p>Contradicting the definition, since this is not a mandatory field, we would leave it as NULL.</p> <p>Data type: datetime (timestamp without time zone)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
condition_type_concept_id		<p>By 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,</p>

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

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

visit_detail_id			<p>The VISIT_DETAIL record during which the condition occurred or has been reported.</p> <p>This is a foreign key referencing to the visit_detail_id in the VISIT_DETAIL table.</p> <p>Data type: bigint</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: Yes</p> <p>Foreign key table: VISIT_DETAIL</p> <p>Foreign key domain: n/a</p>
condition_source_value	diagnosis	Store the diagnosis verbatim value to populate this field.	<p>This field houses the verbatim value from the source data representing the condition that occurred.</p> <p>Data type: varchar(50)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>
condition_source_concept_id			<p>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.</p> <p>Here set the value to 0 (zero).</p> <p>Data type: integer</p>

			<p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: n/a</p>
condition_status_source_value	final_classification	Store the Case Final Classification (final_classification) to populate this variable	<p>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.</p> <p>This field houses the verbatim value from the source data representing the condition status.</p> <p>Data type: varchar(50)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>Foreign key table: n/a</p> <p>Foreign key domain: n/a</p>

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	