

Mapping from generic IDSR COVID-19 data to OMOP 6.0

Section: 07 Vaccination

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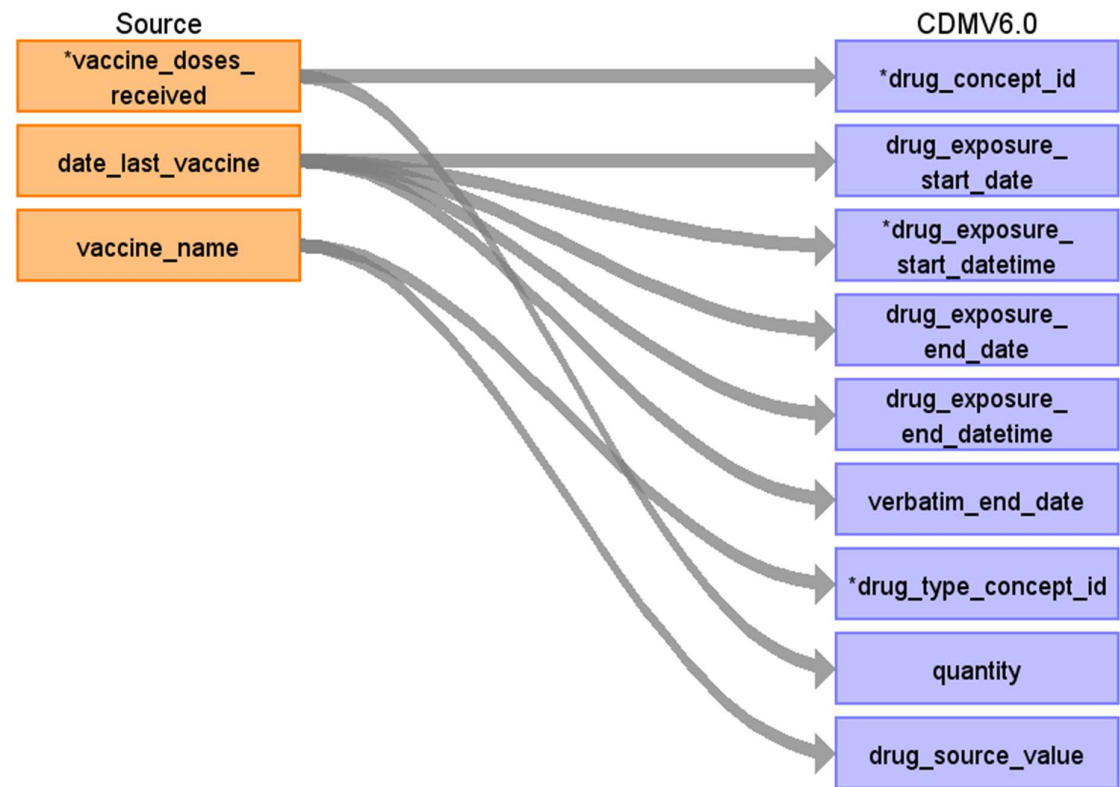
Source Data Mapping Approach to CDMV6.0



Table name: drug_exposure

This table captures records about the exposure to a Drug ingested or otherwise introduced into the body. A Drug is a biochemical substance formulated in such a way that when administered to a Person it will exert a certain biochemical effect on the metabolism. Drugs include prescription and over-the-counter medicines, vaccines, and large-molecule biologic therapies. Radiological devices ingested or applied locally do not count as Drugs.

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
drug_exposure_id			<p>The unique key given to records of drug dispensings or administrations for a person. Each instance of a drug dispensing or administration present in the source data should be assigned this unique key.</p> <p>This is to be an auto generated number (integer) for every recorded inserted.</p>

person_id			<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> <p>The PERSON_ID of the Person for whom the drug has been administered (vaccinated with coronavirus vaccine) is 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>
drug_concept_id	vaccine_doses_received	<p>If number of doses is 1 or 2 then concept_id -> Coronavirus vaccination -> 4236188</p> <p>If number of doses is 0 then concept_id -> None -></p>	<p>The CONCEPT_ID that the DRUG_SOURCE_VALUE maps to. The concept id should be derived either from mapping from the source concept id or by picking the drug concept representing the most amount of detail you have.</p> <p>Data type: bigint</p> <p>Required: no</p>

		4124462 If number of doses is 99 then concept_id -> 0	Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Drug
drug_exposure_start_date	date_last_vaccine	Populate this with the date of the last vaccination.	Format: YYYY-MM-DD Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
drug_exposure_start_datetime	date_last_vaccine	Populate this with the date of the last vaccination.	Format: YYYY-MM-DD 00:00:00 Data type: datetime (datetime without timezone) Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
drug_exposure_end_date	date_last_vaccine	Populate this with the date of the last vaccination.	Format: YYYY-MM-DD Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a

			Foreign key domain: n/a
drug_exposure_end_datetime	date_last_vaccine	Populate this with the date of the last vaccination.	Format: YYYY-MM-DD 00:00:00 Data type: datetime (datetime without timezone) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
verbatim_end_date	date_last_vaccine	Populate this with the verbatim date of last vaccination.	This is the end date of the drug exposure as it appears in the source data, if it is given Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
drug_type_concept_id	vaccine_name	Map the vaccine name to the following concept ids. Gamaleya - Gam-Covid-Vac -> 0 Anhui ZL - Zifivax -> 778260 IMB - Covidful -> 0	Data type: bigint Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: TYPE CONCEPT

		<p>SII - Covovax -> 0</p> <p>RIBSP - QazVac -> 0</p> <p>AstraZeneca - AZD1222 -> 43132746</p> <p>Turkovac -> 0</p> <p>Novavax- NUVAXOVID -> 759735</p> <p>Bharat - Covaxin -> 702666</p> <p>Finlay - Soberana-02 -> 0</p> <p>Moderna - Spikevax -> 600892</p> <p>CIGB - CIGB-66 -> 0</p> <p>SII - Covishield -> 0</p> <p>Gamaleya - Sputnik-Light - > 702667</p> <p>Beijing CNBG - BBIBP-CorV -> 36843396</p> <p>Janssen - Ad26.COV 2-S - > 602383</p> <p>CanSino - Convidecia -> 0</p> <p>Moderna - mRNA-1273 -> 602394</p> <p>Julphar - Hayat-</p>	
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		<p>Vax -> 0</p> <p>AstraZeneca - Vaxzevria -> 0</p> <p>Pfizer BioNTech - Comirnaty -> 600893</p> <p>Sinovac - CoronaVac -> 0</p>	
stop_reason			<p>The reason a person stopped a medication as it is represented in the source.</p> <p>Set it to 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>
refills			<p>This is only filled in when the record is coming from a prescription written this field is meant to represent intended refills at time of the prescription.</p> <p>Set it to NULL.</p> <p>Data type: integer</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
quantity	vaccine_doses_received	Populate this with the value from the number of doses, the number of covid-19 vaccine doses received	<p>To fill the dose form of the drug (vaccination)</p> <p>Data type: float</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>Days supply of the drug.</p> <p>Set it to NULL.</p> <p>Data type: bigint</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>
days_supply			
sig			<p>Put the written out instructions for the drug as it is verbatim in the source, if available.</p> <p>Set it to NULL.</p> <p>Data type: bigint</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
route_concept_id			<p>If vaccine has been administered then the route would be:</p> <p>Injection (Dose form) = 46234469</p> <p>Data type: bigint</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>
lot_number			<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>
provider_id			<p>The Provider associated with drug record, e.g. the provider who wrote the prescription or the provider who administered the drug.</p> <p>Set it to NULL.</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 drug was prescribed, administered or dispensed.</p> <p>Set it to NULL.</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 drug exposure occurred.</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>
drug_source_value	vaccine_name	Populate this with the value from vaccine name, the vaccination administered.	<p>The verbatim value from the source data representing the drug exposure that occurred. This code is mapped to a Standard Drug Concept in the Standardized Vocabularies and the</p>

			<p>original code is stored here for reference.</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: NA</p> <p>Foreign key domain: NA</p>
drug_source_concept_id			<p>If the DRUG_SOURCE_VALUE is coded in the source data using an OMOP supported vocabulary put the concept id representing the source value here. If unavailable, set to 0.</p> <p>Set to to 0 (zero).</p> <p>Data type: bigint</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>
route_source_value			<p>This field houses the verbatim value from the source data representing the drug route.</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>
dose_unit_source_value			<p>This field houses the verbatim value from the source data representing the dose unit of the drug given.</p> <p>Set it to blank 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>

Table name: observation

The OBSERVATION table captures clinical facts about a Person obtained in the context of examination, questioning or a procedure. Any data that cannot be represented by any other domains, such as social and lifestyle facts, medical history, family history, etc. are recorded here. New to CDM v6.0 An Observation can now be linked to other records in the CDM instance using the fields OBSERVATION_EVENT_ID and OBS_EVENT_FIELD_CONCEPT_ID. To link another record to an Observation, the primary key goes in OBSERVATION_EVENT_ID (CONDITION_OCCURRENCE_ID, DRUG_EXPOSURE_ID, etc.) and the Concept representing the field where the OBSERVATION_EVENT_ID was taken from go in the OBS_EVENT_FIELD_CONCEPT_ID.

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
observation_id			<p>A unique key given to an Observation record for a Person. Each instance of an observation present in the source data should be assigned this unique key.</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 for whom the Observation is recorded in case of vaccination.</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>
observation_concept_id			<p>The CONCEPT_ID that the OBSERVATION_SOURCE_CONCEPT_ID maps to. There is no specified domain that the Concepts in this table must adhere to. The only rule is that records with Concepts in the Condition, Procedure, Drug, Measurement, or Device domains MUST go to the corresponding table.</p> <p>History of vaccination = 4137222</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: Observation</p> <p>Important note for ETL: If no code is found, set it to 0.</p>
observation_date	date_health_facility	Populate it with the date of visit to the health	<p>Store it in YYYY-MM-DD format.</p> <p>The date of the Observation.</p>

observation_datetime	date_health_facility	Populate it with the date of visit to the health facility.	<p>facility.</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> <p>Store it in YYYY-MM-DD HH:MM:ss format. Since no time is specified in the source data so set it to midnight (00:00:00).</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>
observation_type_concept_id			<p>Observation 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 is found, set it to 0.</p>
value_as_number			<p>This is the numerical value of the Result of the Observation. It is not expected that all Observations will have numeric results, rather, this field</p>

		<p>is here to house values should they exist.</p> <p>Set it to NULL.</p> <p>Data type: float</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>
value_as_string		<p>This is the categorical value of the Result of the Observation, if applicable and available.</p> <p>Set it to NULL.</p> <p>Data type: varchar(60)</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>
value_as_concept_id		<p>The value of VALUE_AS_CONCEPT_ID may be provided through mapping from a source Concept which contains the content of the Observation.</p> <p>Set it to NULL.</p> <p>Data type: integer</p> <p>Required: no</p> <p>Primary key: no</p>

		<p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: n/a</p>
qualifier_concept_id		<p>This field contains all attributes specifying the clinical fact further, such as as degrees, severities, drug-drug interaction alerts etc. Here we are using it to specify the adequacy of the specimen collected.</p> <p>Set it to NULL.</p> <p>Data type: integer</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: n/a</p>
unit_concept_id		<p>There is no standardization requirement for units associated with OBSERVATION_CONCEPT_IDs.</p> <p>Set it to blank NULL.</p> <p>Data type: integer</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: n/a</p>
provider_id		<p>This is a foreign key referencing to the provider_id in the PROVIDER table.</p>

visit_occurrence_id		<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> <p>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.</p> <p>Set it to NULL.</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. 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>
observation_source_value		<p>This field houses the verbatim value from the source data representing the</p>

		<p>Observation 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>
observation_source_concept_id		<p>If the OBSERVATION_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>Set it 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>
unit_source_value		<p>This field houses the verbatim value from the source data representing the unit of the Observation that occurred. This code is mapped to a Standard Condition Concept in the Standardized Vocabularies and the original code is stored here for reference.</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>
qualifier_source_value		<p>This field houses the verbatim value from the source data representing the qualifier of the Observation that occurred. This code is mapped to a Standard Condition Concept in the Standardized Vocabularies and the original code is stored here for reference.</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>
observation_event_id		<p>If the Observation record is related to another record in the database, this field is the primary key of the linked record.</p> <p>Set it to NULL</p> <p>Data type: bigint</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>

obs_event_field_concept_id		<p>If the Observation record is related to another record in the database, this field is the CONCEPT_ID that identifies which table the primary key of the linked record came from.</p> <p>Set it to 0 (zero).</p> <p>Data type: bigint</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: Yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: n/a</p>
value_as_datetime		<p>Store it in YYYY-MM-DD HH:MM:ss format. Since no time is specified in the source data so set it to midnight (00:00:00).</p> <p>It is possible that some Observation records might store a result as a date value.</p> <p>Data type: datetime (datetime without timezone)</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	