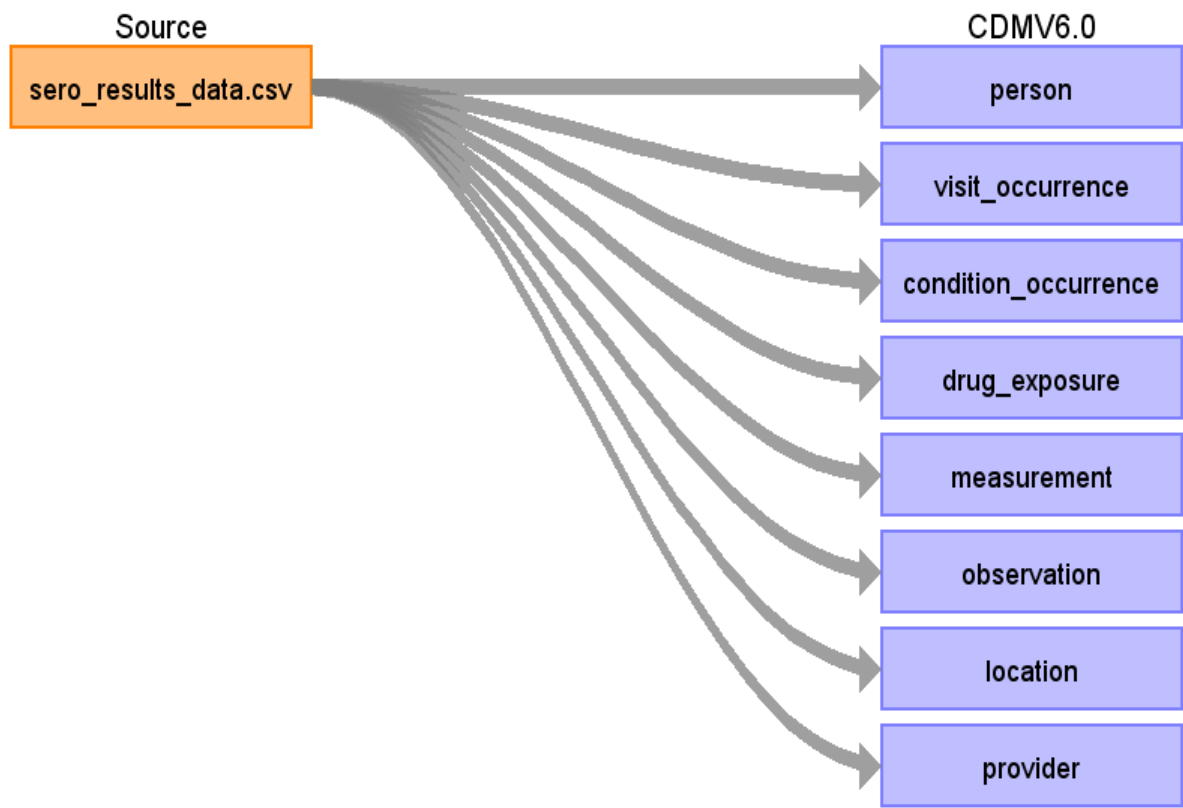


# Source Data Mapping Approach to CDMV6.0

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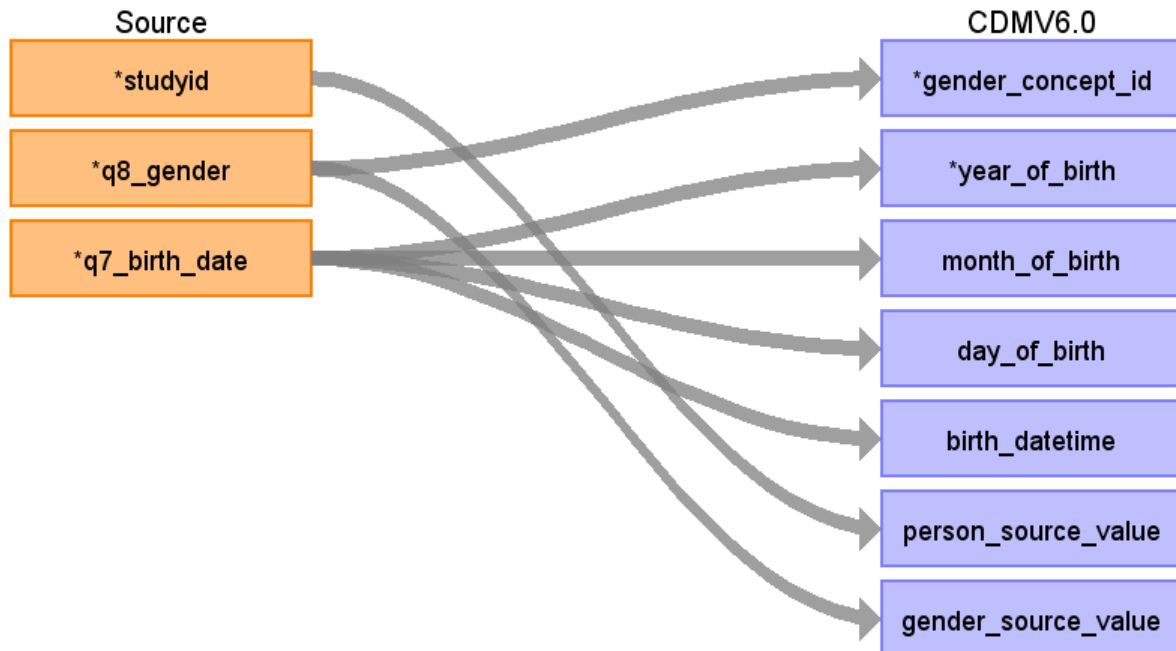
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## Table name: person

This table will contain unique persons in the database.

Reading from sero\_results\_data.csv



	Source Field	Logic	Comment
person_id			A unique identifier for every person. The person id will be an auto generated number.  Data type: bigint Required: yes Foreign key: no
gender_concept_id	q8_gender	Map the sex values to gender_concept_id as follows: Male -> 8507 Female -> 8532	This field is meant to capture the biological sex at birth of the Person.

			<p>This field should not be used to study gender identity issues.</p> <p>Data type: integer Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain: Gender</p>
year_of_birth	q7_birth_date	Extract the year from birth_date field.	<p>If no information is available, then populate with a default value of 9999.</p> <p>Data type: integer Required: yes</p> <p>Primary key: no</p> <p>Foreign key: no</p>
month_of_birth	q7_birth_date	Extract the month from birth_date field.	<p>The month of birth of the person.</p> <p>Data type: integer Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p>
day_of_birth	q7_birth_date	Extract the day part from dob to populate this field.	<p>The day of the month of birth of the person.</p> <p>Data type: integer Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p>
birth_datetime	q7_birth_date	Stores the date of birth	<p>For this use midnight (00:00:0000) as the time, so that the value becomes YYYY-MM-DD 00:00:0000.</p>

			Data type: datetime Required: no Primary key: no Foreign key: no
death_datetime			Data not available in source dataset. Set to NULL
race_concept_id			This is a mandatory field and must be populated.  Race_Concept_Id: 38003600 - African  Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: race
ethnicity_concept_id			This is a mandatory field and must be populated. Set it to Ethnicity / related nationality data 4087925 [observation_concept_id] Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: ethnicity  Important note for ETL: Here we are using the

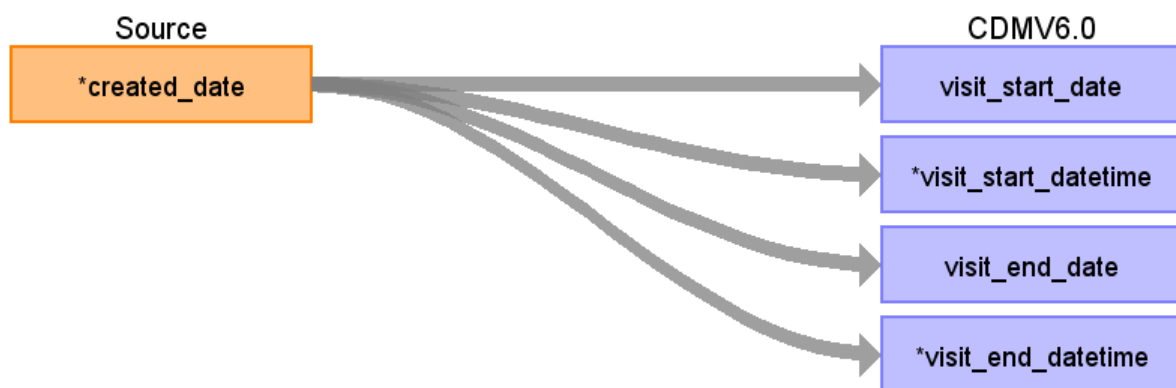
			<p>Ethnicity / related nationality concept.</p> <p>Otherwise, only use this field if you have US-based data and a source of this information. Do not attempt to infer Ethnicity from the race or ethnic background of the Person.</p>
location_id			<p>Populate this with a foreign key to the LOCATION table where the location details of the person's residence is stored.</p> <p>Data type: integer Required: no Primary key: no Foreign key: yes Foreign key table: LOCATION</p>
provider_id			<p>person who filled the form</p> <p>Set to NUHDSS</p>
care_site_id			<p>Set to NULL (to which site they belong)</p> <p>Since this is a survey there is no clinic or health center associated</p>
person_source_value	studyid	Encrypt and store the record identifier value	<p>The purpose of this field is to link back to persons in the source data.</p> <p>This is typically used for error checking of ETL logic.</p> <p>Data type: varchar (50) Required: no Primary key: no</p>

			Foreign key: no
gender_source_value	q8_gender	Store the sex value as verbatim to populate this field.	Data type: varchar (50) Required: no Primary key: no Foreign key: no Important note for ETL: Put the biological sex of the person as it appears in the source data.
gender_source_concept_id			This is a mandatory field and must be populated. Set it to 0 (zero). Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: none
race_source_value			Set to NULL
race_source_concept_id			This is a mandatory field and must be populated. Set it to 0 (zero). Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a
ethnicity_source_value			Set to NULL
ethnicity_source_concept_id			Set to NULL

## Table name: visit\_occurrence

This table contains Events where Persons engage with the healthcare system for a duration of time. They are often also called "Encounters". Visits are defined by a configuration of circumstances under which they occur, such as (i) whether the patient comes to a healthcare institution, the other way around, or the interaction is remote, (ii) whether and what kind of trained medical staff is delivering the service during the Visit, and (iii) whether the Visit is transient or for a longer period involving a stay in bed.

Reading from sero\_results\_data.csv



Destination Field	Source Field	Logic	Comment
visit_occurrence_id			<p>Populate this field by creating a unique identifier for each unique interaction between a person and the healthcare system where the person receives a medical good or service over a span of time.</p> <p>This is an auto generated number unique to each visit.</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>
person_id			<p>The PERSON_ID of the Person who made the visit to the healthcare facility. Data type: bigint</p>



			<p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: PERSON</p>
visit_concept_id			<p>This field contains a concept id representing the kind of visit.</p> <p>Visit concept id:4259432 for home visit</p> <p>Data type: integer</p> <p>Required: yes</p> <p>key: no Foreign key: yes</p> <p>Foreign key table: CONCEPT</p>
visit_start_date	created_date		<p>Since the visit is on same day, so the start and end will be the same visit date.</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 Foreign key domain: n/a</p>
visit_start_datetime	created_date	Store the health facility visit date to populate this field.	<p>Data type: datetime (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>
visit_end_date	created_date		
visit_end_datetime	created_date	Store the health facility visit date to	<p>Data type: datetime (datetime without timezone)</p>

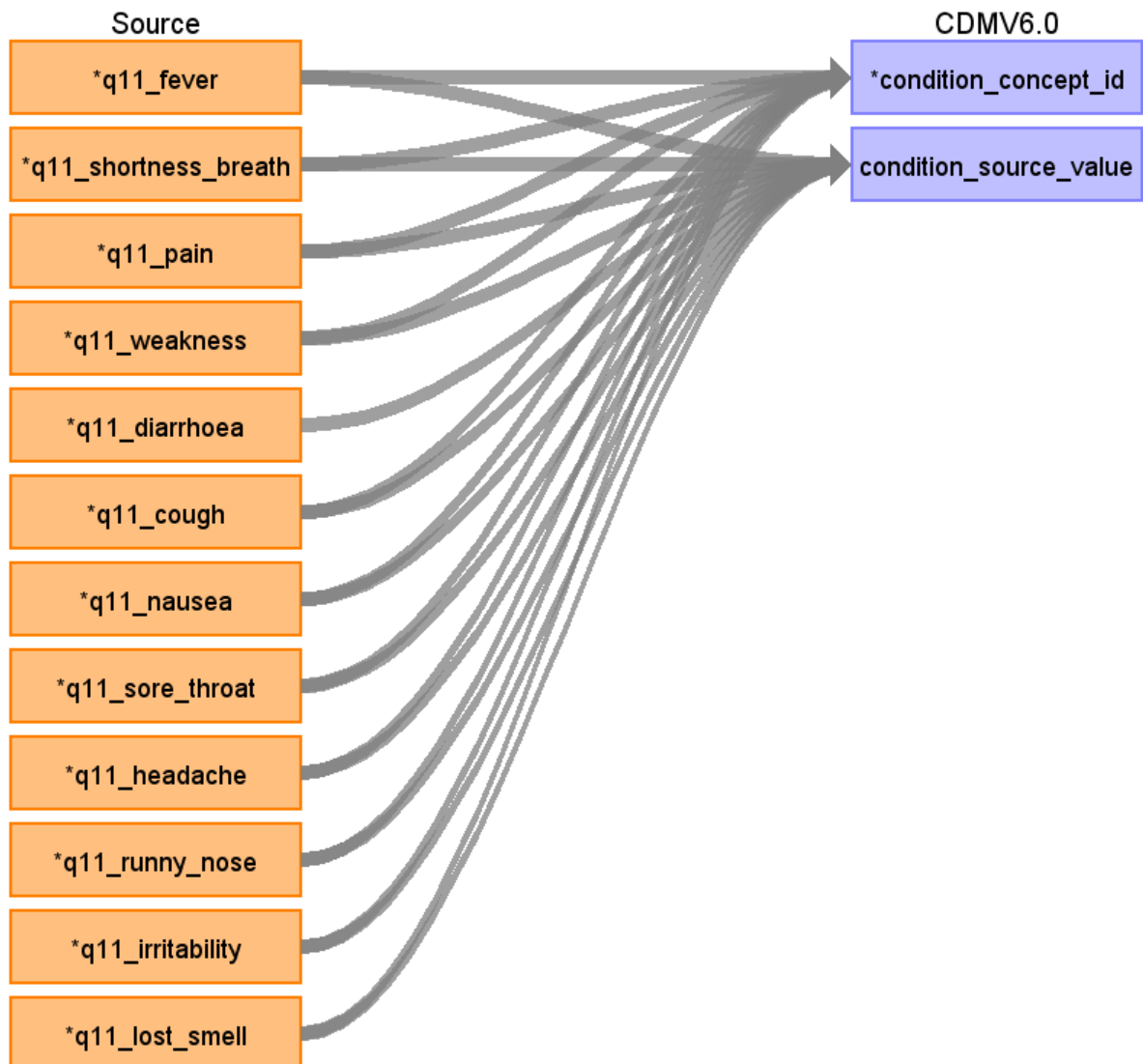
		populate this field.  Since the time is not available so set it to midnight (00:00:0000)	Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
visit_type_concept_id			Use this field to understand the provenance of the visit record, or where the record comes from.  Visit type concept id: 44804317 - Survey case report form.  Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Type concept
provider_id			Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: PROVIDER Foreign key domain: n/a (A foreign key to be filled)
care_site_id			Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: care_site Foreign key domain: n/a

			Set to Null (TBD)
visit_source_value			Data type: varchar (50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a  Set to NULL
visit_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.  Demographic history 4201841 [visit_detail_source_concept_id] Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a Set to 0
admitted_from_source_value			Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Visit  Set to 0

discharge_to_concept_id			<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.</p> <p>Data type: varchar (50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a</p> <p>Set to NULL</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.</p> <p>Set to NULL</p>
preceding_visit_occurrence_id			<p>The preceding_visit_id can be used to link a visit immediately preceding the current visit.</p> <p>Extract the immediate previous visit_occurrence_id.</p> <p>Set to NULL</p>

## Table name: condition\_occurrence

Reading from sero\_results\_data.csv



The wide format data is converted to a long format here.

Destination Field	Source Field	Logic	Comment
condition_occurrence_id			Primary key, Autogenerated to uniquely identify entries in this table
person_id			A foreign key to be filled

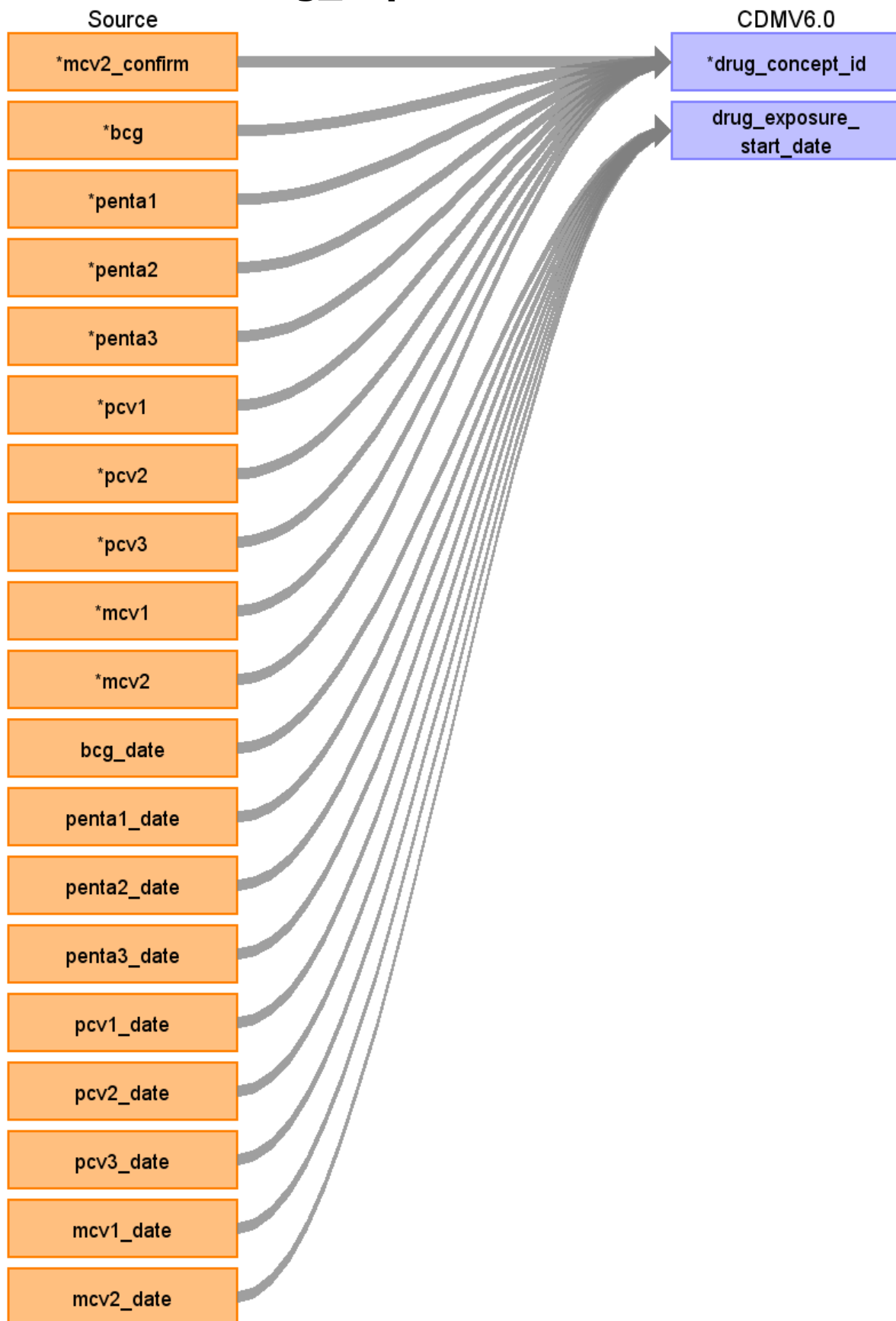
condition_concept_id		This column will be used to convert the wide to long.
	q11_fever	437663 fever
	q11_shortness_breath	4308377 -short of breath dressing/undressing
	q11_cough	254761 -cough
	q11_pain	4329041 -pain
	q11_nausea	31967 - nausea
	q11_weakness	4012382 -weakness present
	q11_sore_throat	4147326 -sore throat symptom
	q11_headache	378253 -Headache
	q11_runny_nose	Set to 0 (Not clear from Athena)
	q11_irritability	Set to 0 (Not clear from Athena)
	q11_lost_smell	Set to 0 (Not clear from Athena)
condition_start_date	Created_at	Use created_at which is the date of interview
condition_start_datetime		Use created_at with 00:00:0000 for time

condition_end_date			Use created_at  or 01/01/2099 for mandatory fields
condition_end_datetime			Use created_at with 00:00:0000 for time  or 01/01/2099 for mandatory fields
condition_type_concept_id			4303401 - Finding reported by subject or history provider
condition_status_concept_id			603082 - Self reported
stop_reason			Set to NULL
provider_id			A foreign to be filled, Person filling the interview
visit_occurrence_id			Foreign key linked to the visit occurrence table
visit_detail_id			Set to 0

condition_source_value	q11_fever q11_shortness_breath q11_cough q11_pain q11_weakness q11_diarrhoea q11_nausea q11_sore_throat q11_headache q11_runny_nose q11_irritability q11_lost_smell		Yes, No
condition_source_concept_id			Set to 0
condition_status_source_value			Set to NULL



## Table name: drug\_exposure

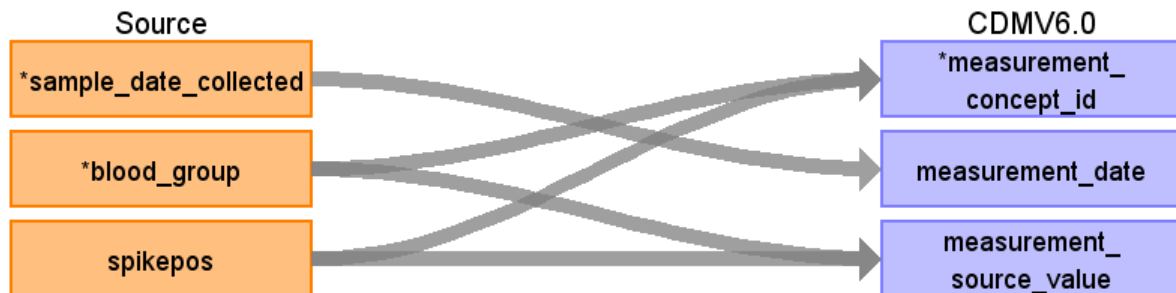


Destination Field	Source Field	Logic	Comment
drug_exposure_id			To be autogenerated Primary key: yes
person_id			A foreign key to be filled
drug_concept_id	mcv2_confirm bcg penta1 penta2 penta3 pcv1 pcv2 pcv3 mcv1 mcv2		602396 - COVID-19 vaccine  Set this to 0 except for Covid-19
drug_exposure_start_date	bcg_date penta1_date penta2_date penta3_date pcv1_date pcv2_date pcv3_date mcv1_date mcv2_date		Use this date to determine the start date of the drug record.  If the vaccination took place then set vaccination date as entered
drug_exposure_start_datetime			Add 00:00:0000 to vaccination date
drug_exposure_end_date			Add end-date as the value for start date since this is allowed in case of no end date
drug_exposure_end_datetime			Add 00:00:0000

verbatim_end_date			Set to NULL
drug_type_concept_id			603082 - Self reported
stop_reason			Set to NULL
refills			Set to NULL
quantity			Set to NULL
days_supply			Set to NULL
sig			Set to NULL
route_concept_id			Set to NULL
lot_number			Set to NULL
provider_id			A foreign key to provider table
visit_occurrence_id			A foreign key to visit_occurrence table
visit_detail_id			Set to NULL
drug_source_value			For Covid-19: Pfizer-BIONTech  For others : None
drug_source_concept_id			If unavailable, Set to 0.
route_source_value			Set to NULL
dose_unit_source_value			Set to NULL

## Table name: measurement

Reading from sero\_results\_data.csv

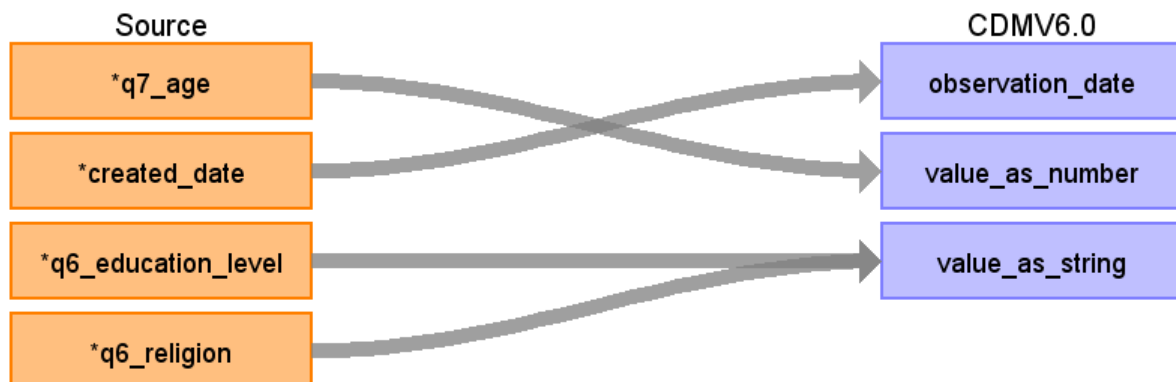


Destination Field	Source Field	Logic	Comment
measurement_id			The unique key given to a Measurement record for a Person  Required: yes Primary key: yes
person_id			Foreign key to be added
measurement_concept_id	blood_group spikepos		4258677 -- Blood group typing 4149355 - Antibody measurement
measurement_date	sample_date_collected		Use this date to determine the date of the measurement.
measurement_datetime			Add 00:00:0000 to the measurement date
measurement_time			Set to NULL
measurement_type_concept_id			4303401 - Finding reported by subject or history provider
operator_concept_id			4172703 Equals to
value_as_number			Set to NULL
value_as_concept_id			45930334 - Blood Type A+ 45910926 - Blood Type A- 45934055 - Blood Type AB+

		<p>45930337 - Blood Type AB-</p> <p>45930336 - Blood Type B+</p> <p>45917006 - Blood Type B-</p> <p>45917005 - Blood Type O-</p> <p>45930335 - Blood Type O+</p> <p>For the antibody test</p> <p>604442 - SARS-CoV-2 antibody test negative</p> <p>604441 - SARS-CoV-2 antibody test positive</p>
unit_concept_id		Set to NULL
range_low		Set to NULL
range_high		Set to NULL
provider_id		Foreign key to be filled
visit_occurrence_id		<p>The visit during which the Measurement occurred.</p> <p>Foreign key to be filled</p>
visit_detail_id		Set to NULL
measurement_source_value	<p>blood_group</p> <p>spikepos</p>	This field houses the verbatim value from the source data
measurement_source_concept_id		<p>If the MEASUREMENT_SOURCE_VALUE is coded in the source data using an OMOP supported vocabulary put the concept id representing the source value here.</p> <p>If not available, set to 0.</p>
unit_source_value		Set to NULL
value_source_value		Set to NULL

## Table name: observation

Reading from sero\_results\_data.csv



Destination Field	Source Field	Logic	Comment
observation_id			<p>The unique key given to an Observation record for a Person.</p> <p>Data type: bigint</p> <p>Required: yes</p> <p>Primary key: yes</p> <p>Foreign key: no</p> <p>Important note for ETL: Each instance of an observation present in the source data should be assigned this unique key</p>
person_id			<p>The PERSON_ID of the Person for whom the Observation 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 Person Table</p>
observation_concept_id		<p>4131226 - Education surveillance</p> <p>45458164 - Religion</p>	<p>A foreign key to the standard observation concept.</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: Map observation_concept_id as separate instances of occurrence referenced to the same person_id</p>
observation_date	created_date		<p>The date of the Observation. This is the date when the current incident/ case was observed (form completed / filled).</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>Important note for ETL: Do the necessary formatting changes to store the data in the database.</p>
observation_datetime		Store in YYYY-MM-DD 00:00:00 format.	<p>Format using created date</p> <p>Add 00:00:00</p>
observation_type_concept_id		32883 – Survey	<p>This field can be used to determine the provenance of the Observation record, as in whether the measurement was from an EHR system, insurance claim, registry, or other sources.</p> <p>Data type: integer Required: yes</p> <p>Primary key: no</p> <p>Foreign key: yes</p> <p>Foreign key table: CONCEPT Foreign key domain: Observation</p>
value_as_number	q7_age	(concept = 4265453)	<p>It is not expected that all Observations will have numeric results, rather, this field is here to house values should they exist.</p> <p>Data type: integer 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  Important note for ETL:  Map value_as_number as separate instances of occurrence referenced to the same person_id linked to the observation_concept_id
value_as_string	q6_education_level  q6_religion	Education:  Primary  Secondary  Tertiary  No formal education    Religion:  Muslim  Catholic  Protestant  other Christians	This is the categorical value of the Result of the Observation, if applicable and available.  Data type: varchar (60)  Required: no  Primary key: no  Foreign key: no
value_as_concept_id		4072733 - Only received primary school education    45947840 - Secondary school education completed	Data type: integer Required: no  Primary key: no  Foreign key: yes  Foreign key table: CONCEPT  Foreign key domain: Observation'

		<p>45929463 - Tertiary education complete</p> <p>45942223 - No formal education</p> <p>45461575 - Muslim</p> <p>4175384 - Catholic religion 4183092 - Protestant religion 4206261 -- African religion</p> <p>For no religion: Set to 0</p>	<p>Important note for ETL: If no code is found, set it to 0.</p> <p>Data type: integer Required: no Primary key: no Foreign key: yes</p> <p>Foreign key table: CONCEPT</p> <p>Foreign key domain:</p> <p>Observation Important note for ETL: If no code is found, set it to 0.</p>
Qualifier_concept_id			Set it to NULL
unit_concept_id			Set it to NULL
provider_id			<p>This is a foreign key referencing to the provider id in the PROVIDER table.</p> <p>Data type: bigint Required: no Primary key: no Foreign key: yes</p> <p>Foreign key table: Provider</p> <p>Foreign key domain: n/a</p>
visit_occurrence_id			Use this field to link the VISIT_OCCURRENCE

			<p>record to its VISIT_OCCURRENCE.</p> <p>This is foreign key to link to the visit_occurrence table.</p> <p>Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_occurrence Foreign key domain: n/a</p>
visit_detail_id			Set to NULL
observation_source_value			<p>This field houses the verbatim value from the source data representing the Observation that occurred. For example, this could be an ICD10 or Read code.</p> <p>Store the source value for every observation if available</p> <p>Data type: varchar (50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a</p>
observation_source_concept_id			<p>This is the concept representing the OBSERVATION_SOURCE_VALUE and may not necessarily be standard.</p> <p>This field is discouraged from use in analysis because it is not required to contain Standard</p>

			<p>Concepts that are used across the OHDSI community, and should only be used when Standard Concepts do not adequately represent the source detail for the Observation necessary for a given analytic use case.</p> <p>Consider using OBSERVATION_CONCEPT_ID instead to enable standardized analytics that can be consistent across the network.</p> <p>This is a mandatory field in OMOP,</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: no</p> <p>Foreign key: no Foreign key table: n/a</p> <p>Foreign key domain: n/a set it to 0.</p>
Unit_source_value			<p>This field houses the verbatim value from the source data representing the unit of the Observation that occurred.</p> <p>This code is to be 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>
Qualifier_source_value			<p>This field houses the verbatim value from the source data representing</p>

			<p>the qualifier of the Observation that occurred.</p> <p>Set it to NULL.</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 to NULL</p>
obs_event_field_concept_id			<p>If the Observation record is related to another record in the database,</p> <p>this field is the CONCEPT_ID that identifies which table the primary key of the linked record came from.</p> <p>This is a mandatory field, set it to 0.</p>
Value_as_datetime			<p>It is possible that some Observation records might store a result as a date value.</p> <p>Set it to NULL.</p>

## Table name: specimen

Reading from sero\_results\_data.csv

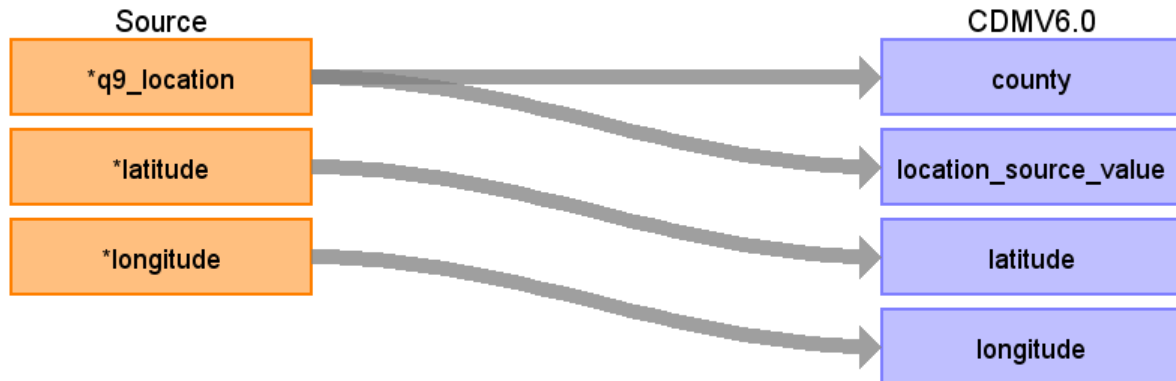


Destination Field	Source Field	Logic	Comment
specimen_id			Unique identifier for each specimen.  Required: yes  Primary key: yes
person_id			The person from whom the specimen is collected  Required: yes  Foreign key: yes
specimen_concept_id			4122283 -Whole blood sample
specimen_type_concept_id			603082 - Self reported
specimen_date	sample_date_collected		The date the specimen was collected.
specimen_datetime			Add 00:00:0000 to the specimen date

quantity			The amount of specimen collected from the person.  Set to NULL
unit_concept_id			The unit for the quantity of the specimen  Set to NULL
anatomic_site_concept_id			This is the site on the body where the specimen is from.  Set to NULL
disease_status_concept_id			Set to NULL
specimen_source_id			This is the identifier for the specimen from the source system
specimen_source_value			Set to NULL
unit_source_value			Set to NULL
anatomic_site_source_value			Set To NULL
disease_status_source_value			Set to NULL

## Table name: location

Reading from sero\_results\_data.csv



Destination Field	Source Field	Logic	Comment
location_id			The unique key given to a unique Location Required: yes Primary key: yes
address_1			This is the first line of the address.
address_2			This is the second line of the address 4072110 East African country
city			Set to Nairobi
state			Set to NULL
zip			Set to NULL



county	q9_location		Set to Nairobi
country			Set to Kenya
location_source_value	q9_location		Put the verbatim value for the location here, as it shows up in the source.
latitude	latitude		The geocoded latitude
longitude	longitude		The geocoded longitude

## Table name: provider

Reading from sero\_results\_data.csv



Destination Field	Source Field	Logic	Comment
provider_id			<p>It is assumed that every provider with a different unique identifier is in fact a different person and should be treated independently</p> <p>Data type: integer</p> <p>Required: yes</p> <p>Primary key: yes</p> <p>Foreign key: no</p> <p>FK table: none</p> <p>Auto generate this</p>
provider_name			<p>It is assumed that every provider with a different unique identifier is in fact a different person and should be treated independently</p> <p>Data type: varchar (255)</p> <p>Required: no</p> <p>Primary key: no</p> <p>Foreign key: no</p> <p>FK table: none</p> <p>Set this to APHRC</p>
npi			Set to NULL

dea			Set to NULL
specialty_concept_id			32883 - Survey
care_site_id		There is no care_site since this was a survey within a household	This is the CARE_SITE_ID for the location that the provider primarily practices in. Required: integer Primary key: no Foreign key: yes FK table: CARE_SITE Set to NULL
year_of_birth			Set to NULL
gender_concept_id			Required: integer Primary key: no Foreign key: yes FK table: CONCEPT Set to NULL
provider_source_value	studyid		Use this field to link back to providers in the source data. This is typically used for error checking of ETL logic. Required: no Primary key: no Foreign key: no FK table: none
specialty_source_value			This includes physician specialties such as internal medicine, emergency medicine, etc. and allied health professionals such as nurses, midwives, and pharmacists. Set to NULL

specialty_source_concept_id			<p>This is often zero as many sites use proprietary codes to store physician speciality.</p> <p>Set to 0</p>
gender_source_value			<p>This is provider's gender as it appears in the source data.</p> <p>Set to NULL</p>
gender_source_concept_id			<p>This is often zero as many sites use proprietary codes to store provider gender</p> <p>Set to 0</p>

## Appendix: source tables

Table: sero\_results\_data.csv

Field	Type	Most freq. value	Comment
studyid	INT		
q8_gender	VARCHAR	male	
q7_birth_date	VARCHAR	15/07/1957	
today_date	VARCHAR	12/06/2021	
q7_age	INT	4	
age_group	VARCHAR	5-9 years	
age_strata	VARCHAR	10-14 years	
sample_type	VARCHAR	backup	
q9_location	VARCHAR	viwandani	
q5_status	VARCHAR	present	
consent	VARCHAR	yes	
reason_no_consent	VARCHAR	NIU (not in universe)	
date_updated	VARCHAR	18/05/2021	
created_date	VARCHAR	18/05/2021	
week	INT	17	
replace	VARCHAR	no	
q6_education_level	VARCHAR	primary	
q6_religion	VARCHAR	protestant	
q10_covid_contact	VARCHAR	no	
q10_contact_month	VARCHAR	NIU (not in universe)	
q10_contact_year	VARCHAR	NIU (not in universe)	
q11_fever	VARCHAR	no	
q11_shortness_breath	VARCHAR	no	
q11_pain	VARCHAR	no	

q11_weakness	VARCHAR	no	
q11_diarrhoea	VARCHAR	no	
q11_cough	VARCHAR	no	
q11_nausea	VARCHAR	no	
q11_sore_throat	VARCHAR	no	
q11_headache	VARCHAR	no	
q11_runny_nose	VARCHAR	no	
q11_irritability	VARCHAR	no	
q11_lost_smell	VARCHAR	no	
q11_other_symptom	VARCHAR	no	
q11_symptom_specified	VARCHAR		
q11_unknown	VARCHAR	no	
q11_no_symptoms	VARCHAR	no	
q11_muscular_pain	VARCHAR	NIU (not in universe)	
q11_chest_pain	VARCHAR	NIU (not in universe)	
q11_abdominal_pain	VARCHAR	NIU (not in universe)	
q11_joint_pain	VARCHAR	NIU (not in universe)	
q12_medical_attention	VARCHAR	yes	
q12_miss_work	VARCHAR	no	
q12_hospitalized	VARCHAR	no	
q21_bcg_scar	VARCHAR	yes	
q23_sampling	VARCHAR	yes	
q16_info_edu	VARCHAR	highly	
q16_hand_wash	VARCHAR	highly	
q16_face_masks	VARCHAR	highly	
q16_sanitizers	VARCHAR	rarely	
q16_own_risk	VARCHAR	moderate	
q13_hhmember_sick	VARCHAR	no	
q13_hhm_fever	VARCHAR	NIU (not in universe)	
q13_hhm_shortness_breath	VARCHAR	NIU (not in universe)	

q13_hhm_pain	VARCHAR	NIU (not in universe)	
q13_hhm_weakness	VARCHAR	NIU (not in universe)	
q13_hhm_diarrhoea	VARCHAR	NIU (not in universe)	
q13_hhm_cough	VARCHAR	NIU (not in universe)	
q13_hhm_nausea	VARCHAR	NIU (not in universe)	
q13_hhm_sore_throat	VARCHAR	NIU (not in universe)	
q13_hhm_headache	VARCHAR	NIU (not in universe)	
q13_hhm_runny_nose	VARCHAR	NIU (not in universe)	
q13_hhm_irritability	VARCHAR	NIU (not in universe)	
q13_hhm_lost_smell	VARCHAR	NIU (not in universe)	
q13_hhm_other_symptom	VARCHAR	NIU (not in universe)	
q13_hhm_no_symptoms	VARCHAR	NIU (not in universe)	
q13_hhm_unknown	VARCHAR	NIU (not in universe)	
q13_hhm_symptom_specified	VARCHAR		
q13_hhm_muscular_pain	VARCHAR	NIU (not in universe)	
q13_hhm_chest_pain	VARCHAR	NIU (not in universe)	
q13_hhm_abdominal_pain	VARCHAR	NIU (not in universe)	
q13_hhm_joint_pain	VARCHAR	NIU (not in universe)	
q13_hhm_symptoms_cause	VARCHAR	NIU (not in universe)	
q14_hhm_medical_attention	VARCHAR	NIU (not in universe)	
q14_hhm_miss_work	VARCHAR	NIU (not in universe)	
q14_hhm_hospitalized	VARCHAR	NIU (not in universe)	
q15_hhm_died	VARCHAR	no	
q17_electricity	VARCHAR	yes	
q17_television	VARCHAR	yes	
q17_sofa	VARCHAR	no	
q17_cupboard	VARCHAR	no	
q17_dvd_player	VARCHAR	no	
q17_radio	VARCHAR	yes	
q17_tables	VARCHAR	yes	

q17_clock	VARCHAR	no	
q17_none	VARCHAR	no	
q17_floor_type	VARCHAR	cement	
q17_wall_type	VARCHAR	mabati	
q17_roof_type	VARCHAR	iron sheet	
q17_fuel_type	VARCHAR	charcoal	
q17_toilet_type	VARCHAR	pit latrine	
q18_outmigrant_member	VARCHAR	no	
q18_outmigrant_dest	VARCHAR	NIU (not in universe)	
q18_outmigration_reason	VARCHAR	NIU (not in universe)	
q18_inmigrant_member	VARCHAR	no	
q18_inmigrant_origin	VARCHAR	NIU (not in universe)	
q18_inmigration_reason	VARCHAR	NIU (not in universe)	
q19_lost_job	VARCHAR	no	
q19_reason_joblost	VARCHAR	NIU (not in universe)	
q20_healthcare_access	VARCHAR	no	
q20_missed_service_reason	VARCHAR	NIU (not in universe)	
q20_services_missed	VARCHAR	NIU (not in universe)	
q22_vaccine_records	VARCHAR	NIU (not in universe)	
q22_reason_nocard	VARCHAR	NIU (not in universe)	
q24_sample_collected	VARCHAR	yes	
fk_study	VARCHAR		
reason_not_collected	VARCHAR	NIU (not in universe)	
sample_date_collected	VARCHAR	28/04/2021	
blood_group	VARCHAR	O+	
covid_vaccine	VARCHAR	no	
covid_vac_type	VARCHAR	NIU (not in universe)	
covid_vac_type_spy	EMPTY		
bcg_confirm	VARCHAR	NIU (not in universe)	
penta1_confirm	VARCHAR	NIU (not in universe)	



penta2_confirm	VARCHAR	NIU (not in universe)	
penta3_confirm	VARCHAR	NIU (not in universe)	
pcv1_confirm	VARCHAR	NIU (not in universe)	
pcv2_confirm	VARCHAR	NIU (not in universe)	
pcv3_confirm	VARCHAR	NIU (not in universe)	
mcv1_confirm	VARCHAR	NIU (not in universe)	
mcv2_confirm	VARCHAR	NIU (not in universe)	
bcg	VARCHAR	NIU (not in universe)	
penta1	VARCHAR	NIU (not in universe)	
penta2	VARCHAR	NIU (not in universe)	
penta3	VARCHAR	NIU (not in universe)	
pcv1	VARCHAR	NIU (not in universe)	
pcv2	VARCHAR	NIU (not in universe)	
pcv3	VARCHAR	NIU (not in universe)	
mcv1	VARCHAR	NIU (not in universe)	
mcv2	VARCHAR	NIU (not in universe)	
bcg_date	VARCHAR	NIU (not in universe)	
penta1_date	VARCHAR	NIU (not in universe)	
penta2_date	VARCHAR	NIU (not in universe)	
penta3_date	VARCHAR	NIU (not in universe)	
pcv1_date	VARCHAR	NIU (not in universe)	
pcv2_date	VARCHAR	NIU (not in universe)	
pcv3_date	VARCHAR	NIU (not in universe)	
mcv1_date	VARCHAR	NIU (not in universe)	
mcv2_date	VARCHAR	NIU (not in universe)	
spike_negod	REAL	0.134000003	
spikeodratio	REAL		
spikepos	VARCHAR	Negative	
latitude	REAL	-1.311285	
longitude	REAL	36.874131	