Mapping from generic IDSR COVID-19 data to OMOP 6.0

Section: 01 Demographics

Contents

Source Data Mapping Approach to CDMV6.0 2

Table name: person 3

Table name: visit_occurrence 13

Table name: visit_detail 20

Table name: observation 29

Table name: location 41

Table name: provider 45

Table name: care_site 52

Appendix: source tables 55

Source Data Mapping Approach to CDMV6.0

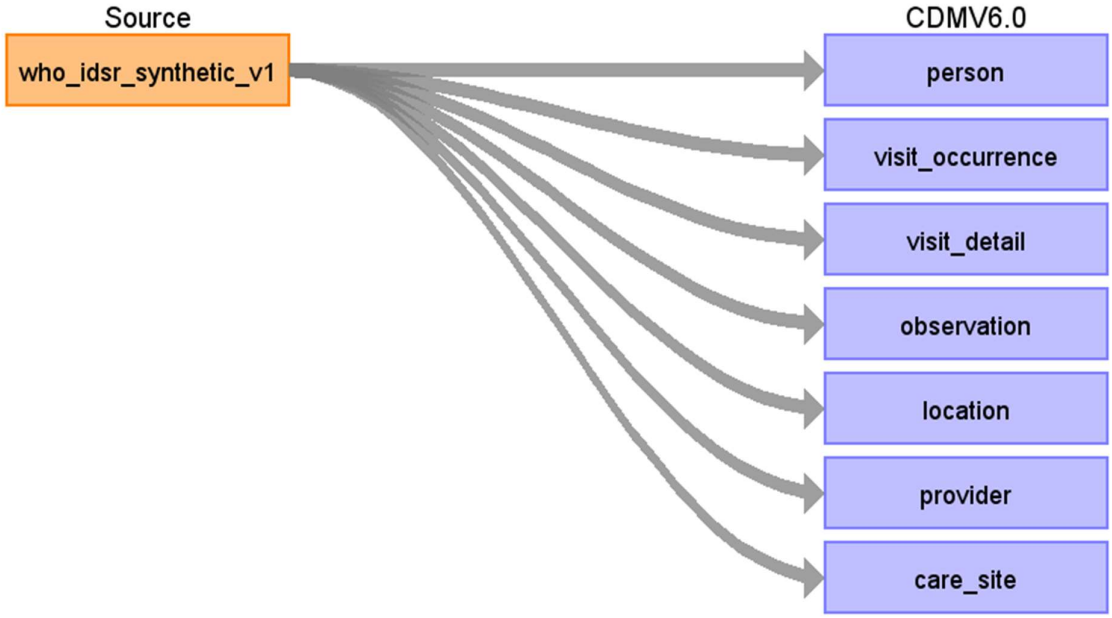
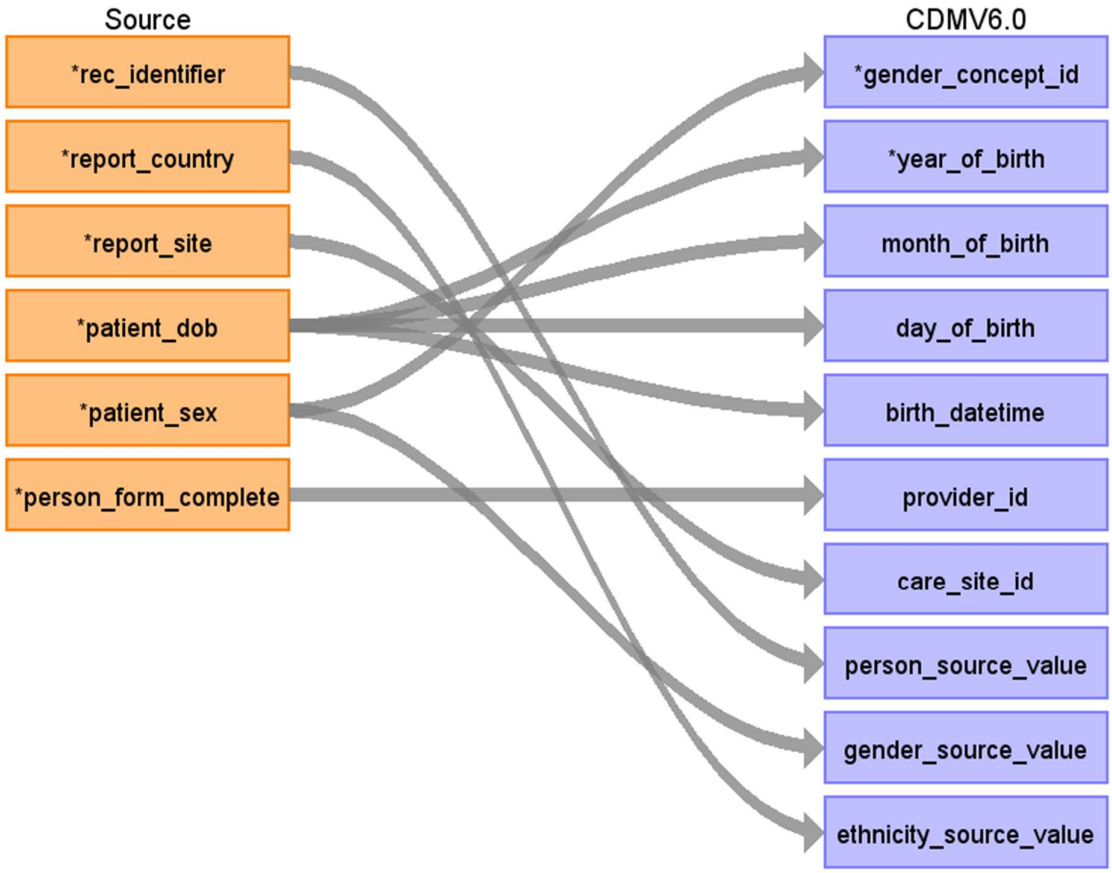


Table name: person

This table serves as the central identity management for all Persons in the database. It contains records that uniquely identify each person or patient, and some demographic information.

Reading from who_idsr_synthetic_v1

Identify all persons in the source dataset uniquely with their demographics



Destination Field	Source Field	Logic	Comment
person_id			A unique identifier for each person. The purpose of this field is to provide a unique identifying number (integer) to each person (individual) and thus this field is to be populated with auto generated integer, unique for each person (individual) identified in the source dataset(s). Identifying a person

			uniquely within the source dataset(s) must be worked out prior to writing the ETL code so as to ensure to avoid any duplicates or identifying a person multiple time. Data type: bigint Required: yes Primary key: yes Foreign key: no Important note: It is assumed that every person with a different unique identifier is in fact a different person and should be treated independently.
gender_concept_id	patient_sex	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. This field should not be used to study gender identity issues. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Gender Important note for ETL: Use the gender or sex value present in the data under the assumption that it is the biological sex at

			birth.
year_of_birth	patient_dob	Extract the year part from dob to populate this field.	Important note for ETL: From data sources with date of birth, the year should be extracted. For data sources where the year of birth is not available, the approximate year of birth could be derived based on age group categorization, if available. If no information is available, then populate with a default value of 9999. Data type: integer Required: yes Primary key: no Foreign key: no
month_of_birth	patient_dob	Extract the month part from dob to populate this field.	The month of birth of the person. Data type: integer Required: no Primary key: no Foreign key: no Important note for ETL: For data sources that provide the precise date of birth, the month should be extracted and stored in this field.
day_of_birth	patient_dob	Extract the day part from dob to populate this field.	Here day means the day of the month part of dob. The day of the month of birth of the person. Data type: integer

			Required: no Primary key: no Foreign key: no Important note for ETL: For data sources that provide the precise date of birth, the day should be extracted and stored in this field.
birth_datetime	patient_dob	Store the date of birth (dob) in full to populate this field. The target OMOP database Person table has the data type as TIMESTAMP, so use the midnight time (00:00:0000). Note: the date will automatically get converted with midnight time 00:00:0000 in PostgreSQL database field.	The source dataset stores the date of birth in DD-MM-YYYY format and the time part isn't available, i.e., the time of birth is not available. Thus use midnight (00:00:0000) as the time, so that the value becomes YYYY-MM-DD 00:00:0000. Data type: datetime Required: no Primary key: no Foreign key: no Important note for ETL: This field is not required but highly encouraged. For data sources that provide the precise datetime of birth, that value should be stored in this field. If birth_datetime is not provided in the source, use the following logic to infer the date: If day_of_birth is null and month_of_birth is not null then use the first of the month in that year. If month_of_birth is null or if

			day_of_birth AND month_of_birth are both null and the person has records during their year of birth then use the date of the earliest record, otherwise use the 15th of June of that year. If time of birth is not given use midnight (00:00:0000).
death_datetime			Data not available in source dataset(s), set it to NULL
race_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: race Important note for ETL: Only use this field if you have information about race or ethnic background. The Vocabulary contains Concepts about the main races and ethnic backgrounds in a hierarchical system. Due to the imprecise nature of human races and ethnic backgrounds, this is not a perfect system. Mixed races are not supported. If a clear race or ethnic background cannot be established, use

			Concept_Id 0.
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 Ethnicity / related nationality concept. 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.
location_id			Populate this with a foreign key to the LOCATION table where the location details of the person's residence is stored. Data type: integer Required: no Primary key: no Foreign key: yes Foreign key table:

			LOCATION Important note for ETL: Put the location_id from the LOCATION table here that represents the most granular location information for the person. This could represent anything from postal code or parts thereof, state, or county for example. Since many databases contain deidentified data, it is common that the precision of the location is reduced to prevent re-identification. This field should capture the last known location. Any prior locations are captured in the LOCATION_HISTORY table.
provider_id	person_form_complete	A foreign key to the primary provider, i.e., the PROVIDER table. The person conducting the survey is taken to be the provider here.	Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: PROVIDER Important note for ETL: Put the provider_id from the PROVIDER table of the last known general practitioner of the person. If there are multiple providers, it is up to the ETL to decide which to put here. Here we will use the name of the facilities from which the case has been reported last.

care_site_id	report_site	A foreign key to the primary reporting facility, i.e., the CARE_SITE table.	Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: CARE_SITE Important note for ETL: Put the care_site_id from the CARE_SITE table of the last known general practitioner of the person. If there are multiple providers, it is up to the ETL to decide which to put here. Here we will use the name of the facilities from which the case has been reported last.
person_source_value	rec_identifier	Encrypt and store the record identifier value to populate this field.	The purpose of this field is to link back to persons in the source data. This is typically used for error checking of ETL logic. Data type: varchar(50) Required: no Primary key: no Foreign key: no Important note for ETL: Some use cases require the ability to link back to persons in the source data. This field allows for the storing of the person value as it appears in the source. This field is not required but strongly recommended.

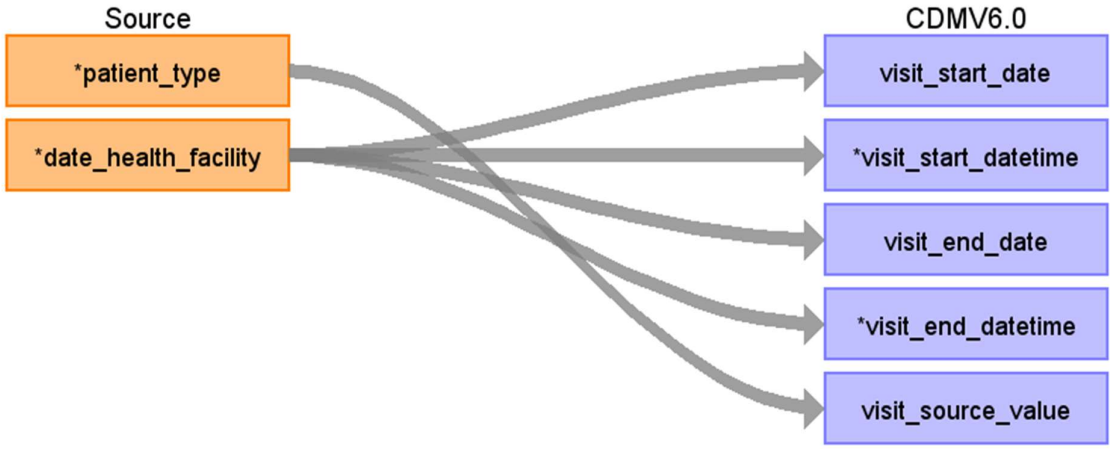
gender_source_value	patient_sex	Store the sex value as verbatim to populate this field. Optionally you may choose to encrypt and store.	This field is used to store the biological sex of the person from the source data. It is not intended for use in standard analytics but for reference only. Data type: 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 Important note for ETL: If the source data codes biological sex in a non-standard vocabulary, store the concept_id here, otherwise set to 0.
race_source_value			Data not available in source dataset(s), set it 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 Important note for ETL: If the source data codes race in an OMOP supported vocabulary store the concept_id here, otherwise set to 0.
ethnicity_source_value	report_country		
ethnicity_source_concept_id			Data type: varchar Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

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 who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
visit_occurrence_id			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. This is an auto generated number unique to each visit. Data type: bigint Required: yes Primary key: yes Foreign key: no Foreign key table: n/a
person_id			The PERSON_ID of the Person who made the visit to the healthcare facility.

			Data type: bigint Required: yes Primary key: no Foreign key: yes Foreign key table: PERSON Important note for ETL: This is a foreign key referencing to the person_id in Person Table.
visit_concept_id			This field contains a concept id representing the kind of visit. Visit concept id: 4318944 for hospital Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Important note for ETL: If no code is found, set it to 0.
visit_start_date	date_health_facility	Store the health facility visit date to populate this field	Since the visit is on same day, so the start and end will be the same visit date. Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

visit_start_datetime	date_health_facility	Store the health facility visit date to populate this field. Since the time is not available so set it to midnight (00:00:0000)	Since the reporting is on same day, so the start and end will be the same reporting date. 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_end_date	date_health_facility	Store the health facility visit date to populate this field	Since the reporting is on same day, so the start and end will be the same reporting date. Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
visit_end_datetime	date_health_facility	Store the health facility visit date to populate this field. Since the time is not available so set it to midnight (00:00:0000).	Since the reporting is on same day, so the start and end will be the same reporting date. 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_type_concept_id			Use this field to understand the provenance of the visit record, or

			where the record comes from. 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
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_source_value	patient_type	Store the type of case	This field houses the verbatim value from the source data

		(patient_type) to populate this variable.	representing the kind of visit that took place (inpatient, outpatient, emergency, etc.) Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
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
admitting_source_concept_id			If available, map the admitted_from_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
admitting_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. Set it to blank (NULL). Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign ket domain: n/a
discharge_to_concept_id			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. 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

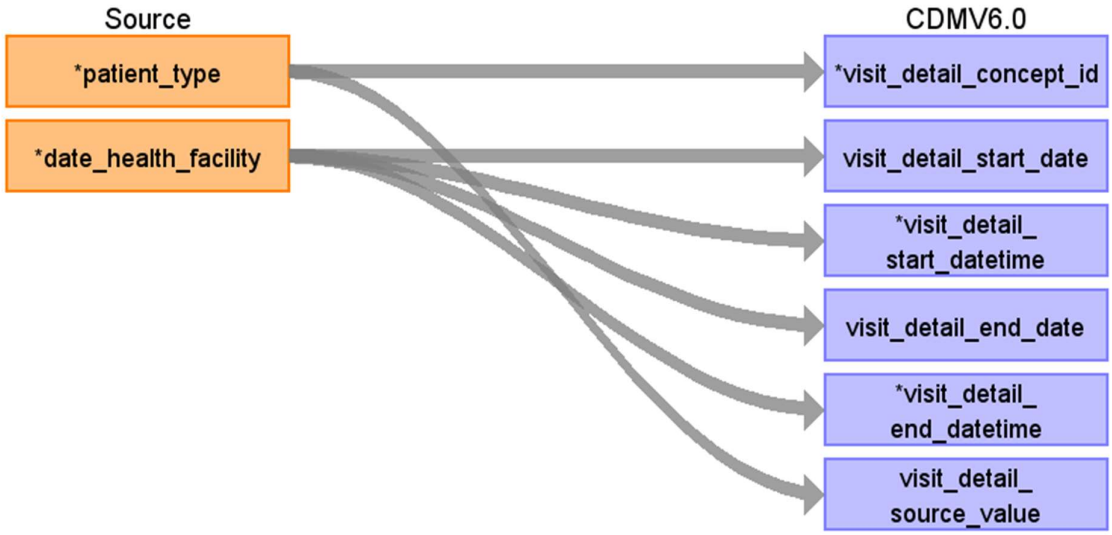
			Foreign key domain: Visit
discharge_to_source_value			This information may be called something different in the source data but the field is meant to contain a value indicating where a person was discharged to after a visit, as in they went home or were moved to long-term care. Set it to blank (NULL). Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
preceding_visit_occurrence_id			The preceding_visit_id can be used to link a visit immediately preceding the current visit. Extract the immediate previous visit occurance id. For first visit, set it to NULL. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_occurrence Foreign key domain: n/a

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

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.



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	patient_type	Map the Type of case (typ_case) to populate this variable. In-Patient (IPD) -> 4212055 Out-Patient (OPD) -> 4191643 Point of Entry (POE) -> 4135990 (Site of Entry)	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. Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key table: Observation 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 the health facility 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 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 the health facility 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 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. If no time is given for the start date of a visit, set it to midnight (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_end_date	date_health_facility	Store the date of visit to the health facility 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 the health facility 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). 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
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	patient_type	Store the Type of patient (patient_type) as verbatim to	This field houses the verbatim value from the source data representing the kind of visit that took place (inpatient, outpatient, emergency, etc.)

		populate this variable.	Data type: varchar(50) Required: no Primary key: no Foreign key: yes 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. Leave this variable as blank (NULL) Data type: varchar(50)

			Required: no Primary key: no Foreign key: yes 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 blank (NULL) Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

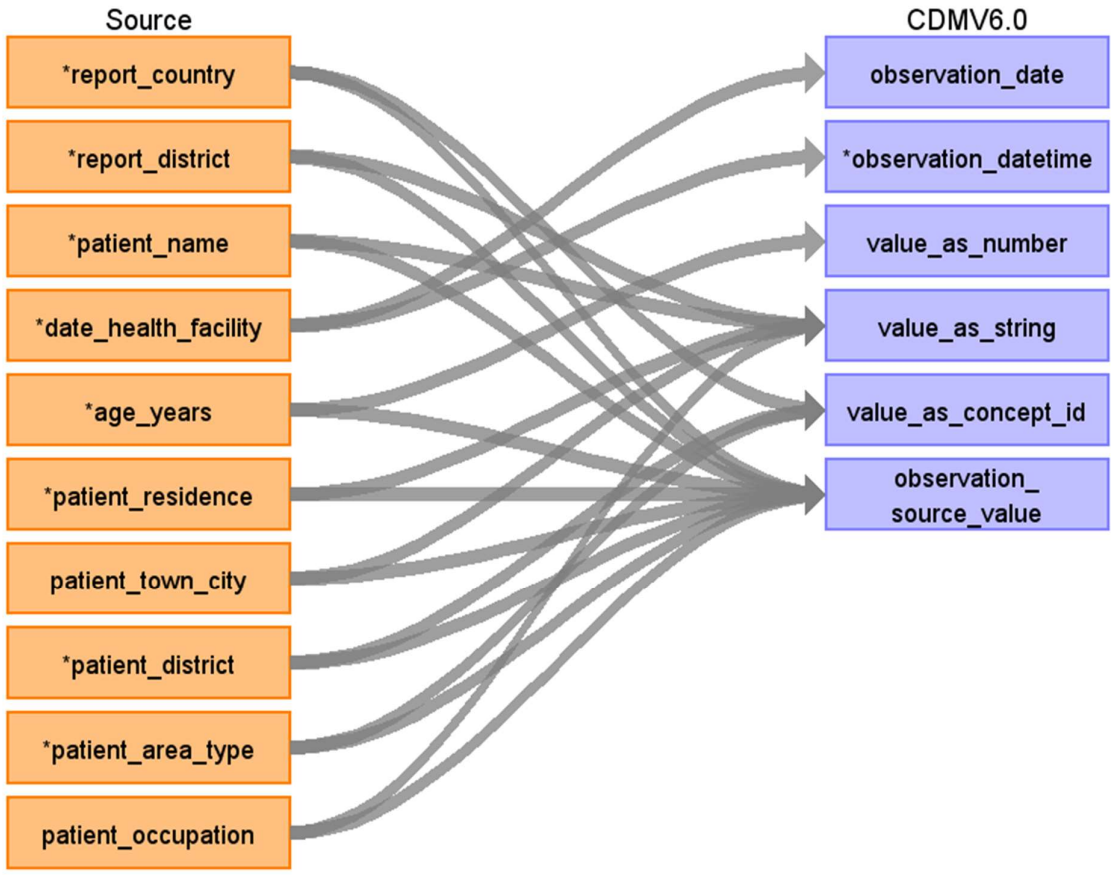
discharge_to_concept_id			Use this field to determine where the patient was discharged to after a visit. If available, map the discharge_to_source_value to a standard concept in the visit domain. If not available set to 0. This is a mandatory field, no value is available from the source dataset(s) for 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: 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. For example, a CONDITION_OCCURRENCE of Asthma might be linked to an Observation of a family history of Asthma. In this case the CONDITION_OCCURRENCE_ID of the Asthma record would go in OBSERVATION_EVENT_ID of the family history record and the CONCEPT_ID 1147127 would go in OBS_EVENT_FIELD_CONCEPT_ID to denote that the OBSERVATION_EVENT_ID represents a CONDITION_OCCURRENCE_ID.

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
observation_id			The unique key given to an Observation record for a Person.

			Data type: bigint Required: yes Primary key: yes Foreign key: no Important note for ETL: Each instance of an observation present in the source data should be assigned this unique key.
person_id			The PERSON_ID of the Person for whom the Observation is 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 Person Table.
observation_concept_id			A foreign key to the standard observation concept. The following observation_concepts_id is to be used: - Observation -> 40285617 Data type: integer

			Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Observation Important note for ETL: Map observation_concept_id as separate instances of occurance referenced to the same person_id
observation_date	date_health_facility	Store the reporting date of visit to health facility to populate this field. Store in YYYY-MM-DD format.	The date of the Observation. This is the date when the current incident/ case was observed (form completed / filled). Data type: date Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a Important note for ETL: Do the necessary formatting changes to store the data in the database.
observation_datetime	date_health_facility	Store the reporting date of visit to health facility to populate this field. Store in YYYY-MM-DD 00:00:00 format.	The date of the Observation. This is the date when the current incident/ case was observed (form completed / filled).

			Data type: datetime Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a Important note for ETL: Do the necessary formatting changes to store the data in the database. If no time is given set to midnight (00:00:00).
observation_type_concept_id			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. Patient encounter procedure 4203722 Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Observation Important note for ETL: Impute the

			observation_type_concept_id value statically.
value_as_number	age_years	Store the age in years verbatim as it occurs in the source data.	This is the numerical value of the Result of the Observation, if applicable and available. It is not expected that all Observations will have numeric results, rather, this field is here to house values should they exist. Data type: integer Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a Important note for ETL: Map value_as_number as separate instances of occurance referenced to the same person_id linked to the observation_concept_id
value_as_string	patient_name report_district patient_residence patient_town_city patient_occupation	Store the patient name verbatim as it occurs in the source data. Store the reporting district verbatim as it occurs in the source data. Store the patient's residence verbatim as it occurs in the source data.	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 Important note for ETL:

			Map value_as_string as separate instances of occurance referenced to the same person_id linked to the observation_concept_id 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 Important note for ETL: Map value_as_string as separate instances of occurance referenced to the same person_id linked to the observation_concept_id 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 Important note for ETL: Map value_as_string as separate instances of occurance referenced to the same person_id linked to the

			observation_concept_id
value_as_concept_id	report_country patient_district patient_area_type	Country concept id: 4329169 and then use the Subsumes. Reference URL: https://athena.ohdsi.org/search-terms/terms/4329169 Store the patient's area type with the following mapping Urban - > 4117956 Rural -> 4119867 Store the patient's area type verbatim as it occurs in the source data. Urban - > 4117956 Rural -> 4119867	Build a lookup table for this information. Data type: integer Required: no Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Observation Important note for ETL: If no code is found, set it to 0. Data type: integer Required: no Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: Observation Important note for ETL: If no code is found, set it to 0.
qualifier_concept_id			Set it to NULL
unit_concept_id			Set it to NULL
provider_id			This is a foreign key referencing to the provider_id in the PROVIDER table.

visit_occurrence_id			Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: Provider Foreign key domain: n/a Use this field to link the VISIT_OCCURRENCE 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
visit_detail_id			Use this field to link the VISIT_DETAIL record to its VISIT_DETAIL. This is foreign key to link to the visit_detail table. Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: visit_occurrence Foreign key domain: n/a
observation_source_value	patient_residenc e	Store verbatim from source value.	This field houses the verbatim value from the source data representing

	patient_town_city patient_district patient_area_type patient_occupation age_years patient_name report_district report_country	Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made. Store verbatim from source value. Do it for every observation made.	the Observation that occurred. For example, this could be an ICD10 or Read code. Store the source value for every observation. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
observation_source_concept_id			This is the concept representing the OBSERVATION_SOURCE_VALUE and may not

			necessarily be standard. This field is discouraged from use in analysis because it is not required to contain Standard 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. Consider using OBSERVATION_CONCEPT_ID instead to enable standardized analytics that can be consistent across the network. This is a mandatory field in OMOP, set it to 0. Data type:integer Required: yes Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
unit_source_value			This field houses the verbatim value from the source data representing the unit of the Observation that occurred. This code is to be mapped to a Standard Condition Concept in the Standardized Vocabularies and the original code is stored here for reference.

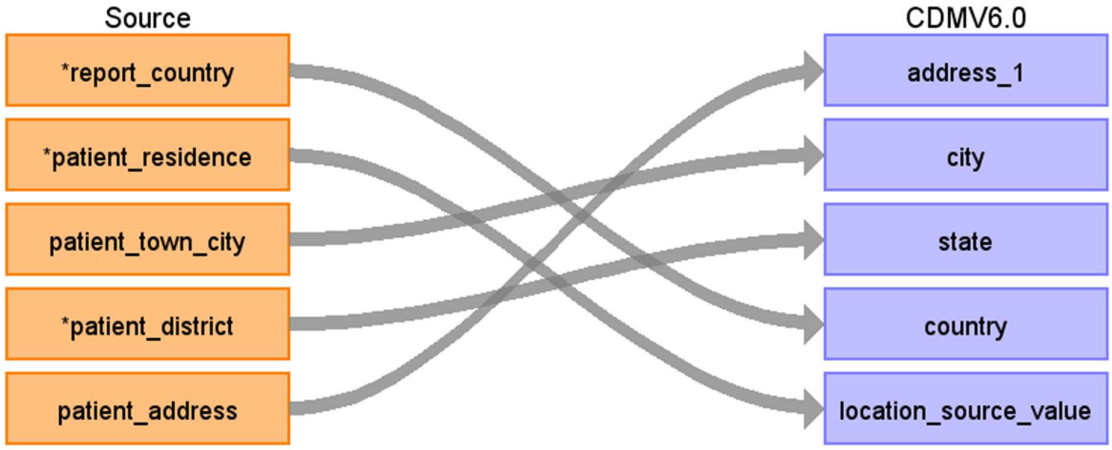
			Set it to NULL. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
qualifier_source_value			This field houses the verbatim value from the source data representing the qualifier of the Observation that occurred. Set it to NULL. Data type: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
observation_event_id			If the Observation record is related to another record in the database, this field is the primary key of the linked record. Data type: bigint Required: no Primary key: no Foreign key: no

obs_event_field_concept_id			Foreign key table: n/a Foreign key domain: n/a 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. This is a mandatory field, set it to 0. Data type: integer Required: no Primary key: no Foreign key: no Foreign key table: CONCEPT Foreign key domain: n/a
value_as_datetime			It is possible that some Observation records might store a result as a date value. Set it to NULL. Data type: datetime Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

Table name: location

The LOCATION table represents a generic way to capture physical location or address information of Persons and Care Sites. New to CDM v6.0 The LOCATION table now includes latitude and longitude

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
location_id			A unique key given to a unique Location. Note: Here the location of the patient is recorded. Data type: bigint Required: yes Primary key: yes Foreign key: no Important note for ETL: Each instance of a Location in the source data should be assigned this unique key. Auto generate integer for each unique location.
address_1	patient_address	Store the first 50 alpha numeric characters of the physical address to populate this field	This is the first line of the address.

			Data type: varchar(50) Required: no Primary key: no Foreign key: no Important note for ETL: Fill up to first 50 alpha numeric characters of the physical address
address_2			This is the second line of the address Set it to NULL Data type: varchar(50) Required: no Primary key: no Foreign key: no
city	patient_town_city	patient_town_city => city	Data type: varchar(50) Required: no Primary key: no Foreign key: no
state	patient_district	patient_district => state	Here the US states are not used and thus store only the first two characters of district name from the source. Data type: varchar(2) Required: no Primary key: no Foreign key: no
zip			Set it to NULL

			Data type: varchar(9) Required: no Primary key: no Foreign key: no
county			Set it to NULL Data type: varchar(20) Required: no Primary key: no Foreign key: no
country	report_country	report_country => country	Data type: varchar(20) Required: no Primary key: no Foreign key: no
location_source_value	patient_residence	patient_residence => location_source_value	Put the verbatim value for the location here, as it shows up in the source. Data type: varchar(50) Required: no Primary key: no Foreign key: no
latitude			The geocoded latitude. Set it to NULL. Data type: float Required: no Primary key: no Foreign key: no

longitude			The geocoded longitude. Set it to NULL. Data type: float Required: no Primary key: no Foreign key: no

Table name: provider

The PROVIDER table contains a list of uniquely identified healthcare providers. These are individuals providing hands-on healthcare to patients, such as physicians, nurses, midwives, physical therapists etc.

Reading from who_idsr_synthetic_v1

Destination Field	Source Field	Logic	Comment
provider_id			This is an autogenerated number for every unique reporter identified in the dataset(s) Datatype: bigint Required: yes Primary key: yes Foreign key: no Important note for ETL: Generate unique integer for each reporter
provider_name	person_form_complete	person_form_complete => provider	Here the person who completed the form filling is considered to be the provider. Datatype: varchar(255) Required: no Primary key: no Foreign key: no

			Foreign key table: n/a Foreign key domain: n/a
npi			This is the National Provider Number issued to health care providers in the US by the Centers for Medicare and Medicaid Services (CMS). Set it to NULL Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
dea			This is the identifier issued by the DEA, a US federal agency, that allows a provider to write prescriptions for controlled substances. Set it to NULL Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain:

			n/a
specialty_concept_id			This field either represents the most common specialty that occurs in the data or the most specific concept that represents all specialties listed, should the provider have more than one. This includes physician specialties such as internal medicine, emergency medicine, etc. and allied health professionals such as nurses, midwives, and pharmacists. Set it to Surveyor -> 4023458. Datatype: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a
care_site_id			This is the CARE_SITE_ID for the location that the provider primarily practices in. This is a foreign key linking the reporter to a single or multiple reporting facility

			Data type: bigint Required: no Primary key: no Foreign key: yes Foreign key table: CARE_SITE Important note for ETL: Populate the care_site table first and then this table.
year_of_birth			Not available in the source dataset, set it to NULL Datatype: integer Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
gender_concept_id			This field represents the recorded gender of the provider in the source data. This is a mandatory field, so set it to 0. Datatype: integer Required: no Primary key: no

			Foreign key: yes Foreign key table: CONCEPT Foreign key domain: n/a
provider_source_value	person_form_complete		Use this field to link back to providers in the source data. This is typically used for error checking of ETL logic. Datatype: varchar(50) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
specialty_source_value			Set it to NULL This is the kind of provider or specialty as it appears in the source data. This includes physician specialties such as internal medicine, emergency medicine, etc. and allied health professionals such as nurses, midwives, and pharmacists. Set it to NULL. Datatype: varchar(50) Required: no

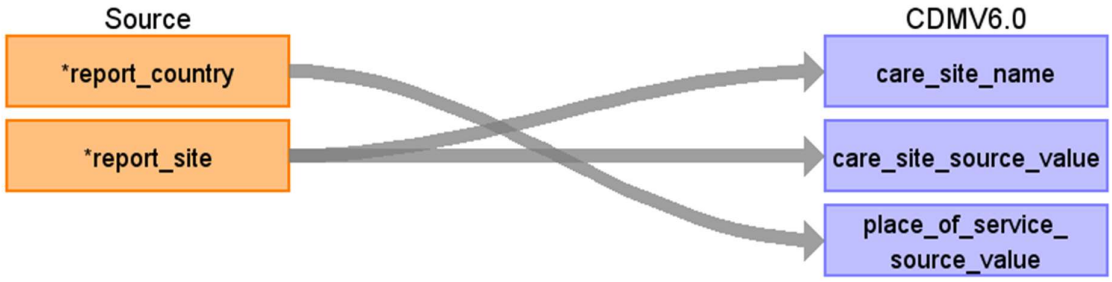
			Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
specialty_source_concept_id			This is often zero as many sites use proprietary codes to store physician speciality. This is a mandatory field, set it to 0. Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a
gender_source_value			This is provider's gender as it appears in the source data. Set it to NULL Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

gender_source_concept_id			This is often zero as many sites use proprietary codes to store provider gender. This is a mandatory field, set it to 0. Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign key table: n/a Foreign key domain: n/a

Table name: care_site

The CARE_SITE table contains a list of uniquely identified institutional (physical or organizational) units where healthcare delivery is practiced (offices, wards, hospitals, clinics, etc.).

Reading from who_idsr_synthetic_v1



Destination Field	Source Field	Logic	Comment
care_site_id			This is an autogenerated number for every unique health care facility identified in the dataset(s) Datatype: bigint Required: yes Primary key: yes Foreign key: no Foreign table: n/a Foreign key domain: n/a Important note for ETL: Generate unique integer for each health care facility
care_site_name	report_site	report_site => care_site_name The source data form does not contain the facility details but only stores the reporting details.	

place_of_service_concept_id			This is a high-level way of characterizing a Care Site. Place of service concept id: 4139501 for Health center Data type: integer Required: yes Primary key: no Foreign key: yes Foreign key table: CONCEPT Foreign key domain: VISIT
location_id			Foreign key linking the location table for care site location. Datatype: bigint Required: no Primary key: no Foreign key: yes Foreign table: Location Foreign key domain: n/a
care_site_source_value	report_site	The name of the report_site as it appears in the source data.	Datatype: varchar(50) Required: no Primary key: no Foreign key: no Foreign table: n/a Foreign key domain: n/a
place_of_service_source_value	report_country		The name of the country as it appears in the source

			data. Datatype: varchar(20) Required: no Primary key: no Foreign key: no Foreign table: n/a Foreign key domain: n/a Not available in the source dataset, set it to NULL

Appendix: source tables

Table: who_idsr_synthetic_v1

This generic synthetic dataset is based on the World Health Organisation's (WHO) Integrated Disease Surveillance and Response (IDSR) in the WHO African Region Case Based Reporting Form.

Refer to the Annex 2F: IDSR immediate case-based reporting form of the IDSR's WHO African Region, Third Edition.

This synthetic data has the following characteristics:

Table Name: who_idsr_synthetic_v1 (Postgres database table)

Number for fields: 35

Number of records: 51299

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	
patient_name	character varying	Baba P	
patient_dob	date	2003-12-29	
date_health_facility	date	2022-03-25	
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	