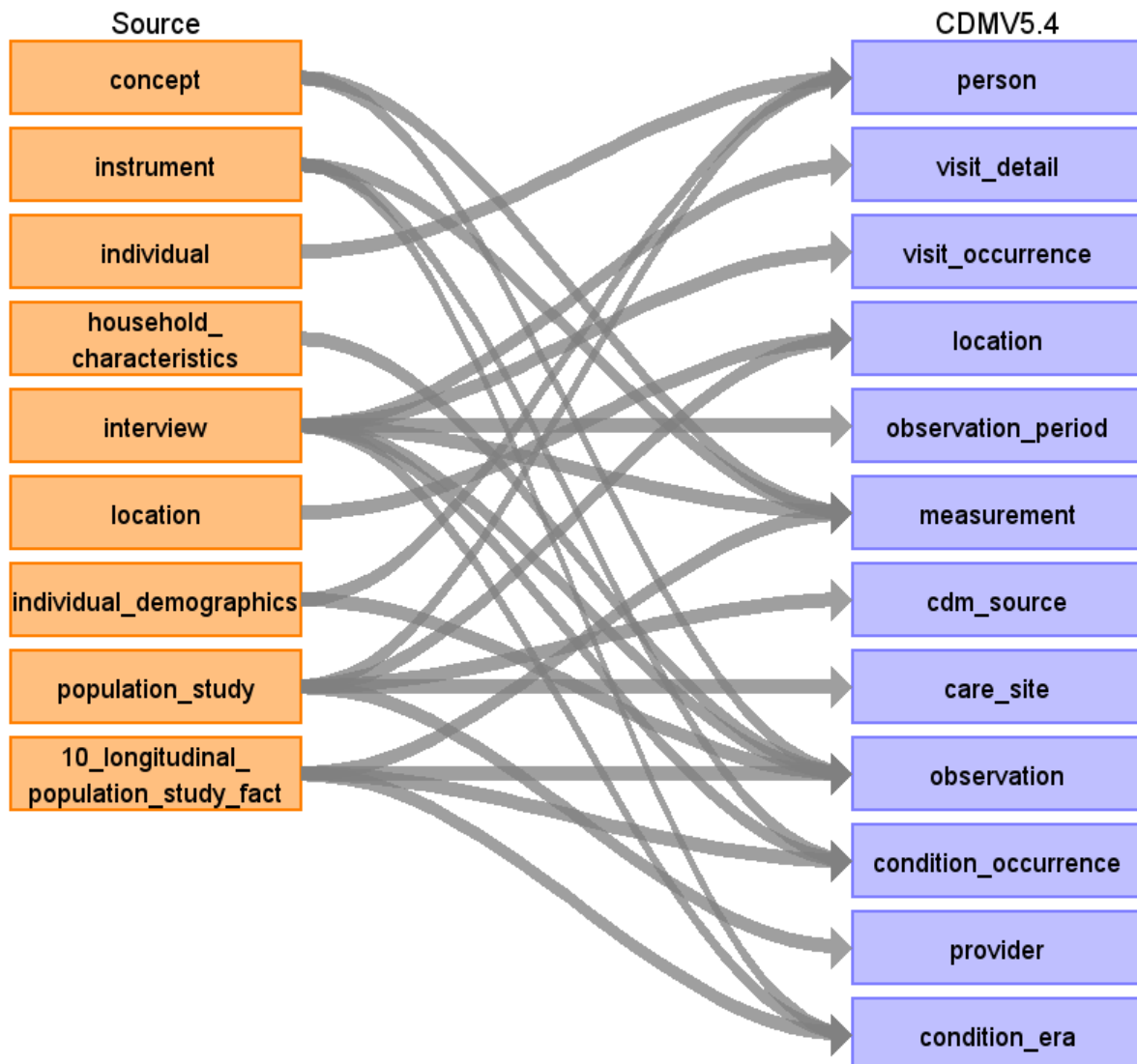


## Source Data Mapping Approach to CDMV5.4

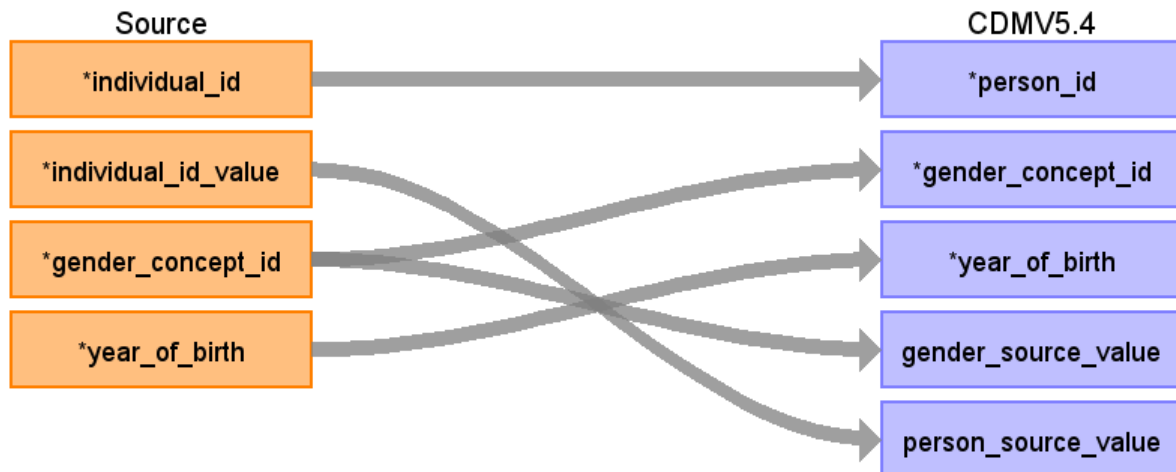


## Table name: person

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.

All records in this table are independent Persons.

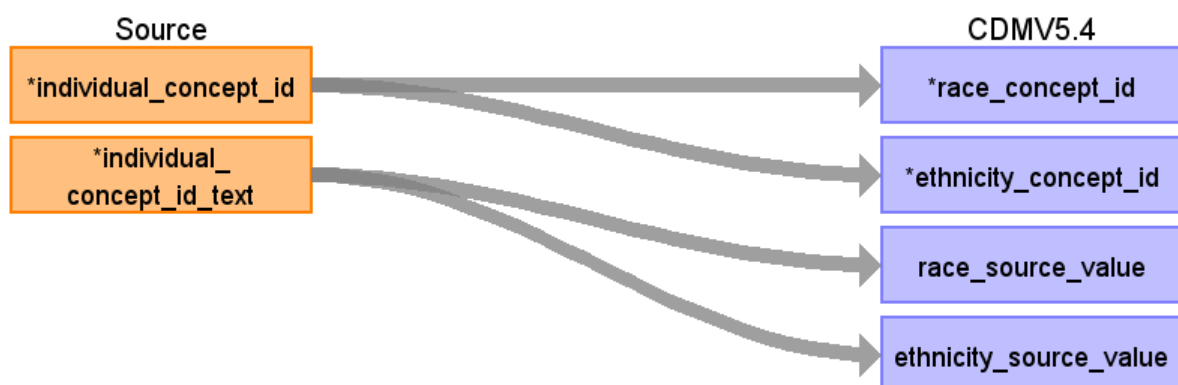
### Reading from individual



Destination Field	Source Field	Logic	Comment
person_id	individual_id		Unique individual id as is in staging database
gender_concept_id	gender_concept_id		If gender is missing, set to 0
year_of_birth	year_of_birth		If no year of birth is available all the person's data should be dropped from the CDM instance.
month_of_birth			Not available in the source data.  If only year of birth is given, use the 15th of June of that year.
day_of_birth			Not available in the source data.  If only year of birth is given, use the 15th of June of that year.
birth_datetime			Not available in the source data. Set to NULL
race_concept_id			
location_id			Populate this with a foreign key from the LOCATION table
ethnicity_concept_id			
provider_id			Populate this with a foreign key from the

			PROVIDER table
care_site_id			Populate this with a foreign key from the CARE SITE table
gender_source_value	gender_concept_id		8507 = Male 8532 = Female 0 = NULL
gender_source_concept_id			Set to NULL
race_source_value			
race_source_concept_id			Set to Zero
ethnicity_source_value			
person_source_value	individual_id_value		
ethnicity_source_concept_id			

### Reading from individual\_demographics



Destination Field	Source Field	Logic	Comment
person_id			
gender_concept_id			
year_of_birth			
month_of_birth			Not available in the source data. If only year of birth is given, use the 15th of June of that year.
day_of_birth			Not available in the source data. If only year of birth is given, use the 15th of June of that year.
birth_datetime			Not available in the source data. Set to NULL

race_concept_id	individual_concept_id		African - 38003600 Coloured - 0 Asian/Indian - 8515/38003574 White - 8527 If race is missing, set to 0
location_id			Populate this with a foreign key from the LOCATION table
ethnicity_concept_id	individual_concept_id		use 38003564 for Not Hispanic or Latino
provider_id			Populate this with a foreign key from the PROVIDER table
care_site_id			Populate this with a foreign key from the CARE SITE table
gender_source_value			
gender_source_concept_id			Set to NULL
race_source_value	individual_concept_id_text		African Coloured Asian/Indian White NULL
race_source_concept_id			Set to Zero
ethnicity_source_value	individual_concept_id_text		Not Hispanic or Latino
person_source_value			
ethnicity_source_concept_id			

Reading from population\_study



Destination Field	Source Field	Logic	Comment
person_id			
gender_concept_id			
year_of_birth			

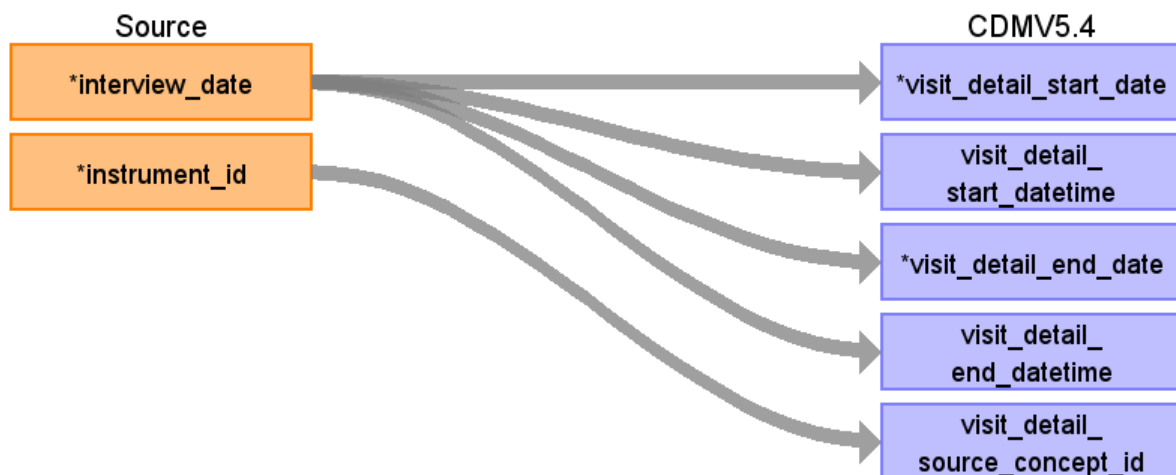
month_of_birth			Not available in the source data.  If only year of birth is given, use the 15th of June of that year.
day_of_birth			Not available in the source data.  If only year of birth is given, use the 15th of June of that year.
birth_datetime			Not available in the source data. Set to NULL
race_concept_id			
location_id			Populate this with a foreign key from the LOCATION table
ethnicity_concept_id			
provider_id			Populate this with a foreign key from the PROVIDER table
care_site_id			Populate this with a foreign key from the CARE SITE table
gender_source_value			
gender_source_concept_id			Set to NULL
race_source_value			
race_source_concept_id			Set to Zero
ethnicity_source_value			
person_source_value			
ethnicity_source_concept_id	universe_spatial_coverage_concept_id		The concept id for the African country

## 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.

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 interview



Destination Field	Source Field	Logic	Comment
visit_detail_id			A unique identifier for every visit detail. The visit_detail_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
visit_detail_concept_id			581476 = Home visit
visit_detail_start_date	interview_date		
visit_detail_start_datetime	interview_date		
visit_detail_end_date	interview_date		
visit_detail_end_datetime	interview_date		
visit_detail_type_concept_id			32883 for survey
care_site_id			Populate this with a foreign key from the CARE SITE table
provider_id			Populate this with a foreign key from the

			PROVIDER table
visit_detail_source_value			'Home visit'
visit_detail_source_concept_id	instrument_id	if instrument_id == 1, 44804610, #measurementdomain  if instrument_id == 2, 45772733, #measurementdomain  if instrument_id == 3, 300000219, #INSPIREconcept  if instrument_id == 4, 4164838, #measurementdomain  if instrument_id == 5, 37310582, #measurementdomain  if instrument_id == 6, 1761569, #observationdomain  if instrument_id == 7, 300000223, #INSPIREconcept  if instrument_id == 8, 36714019, #measurementdomain  if instrument_id == 9, 1988691, #observationdomain  if instrument_id == 10, 300000226, #INSPIREconcept  if instrument_id == 11, 300000227, #INSPIREconcept  if instrument_id == 12, 300000228, #INSPIREconcept  if instrument_id == 13, 300000229,	Drop Basis 24 tool (instrument_id 7)

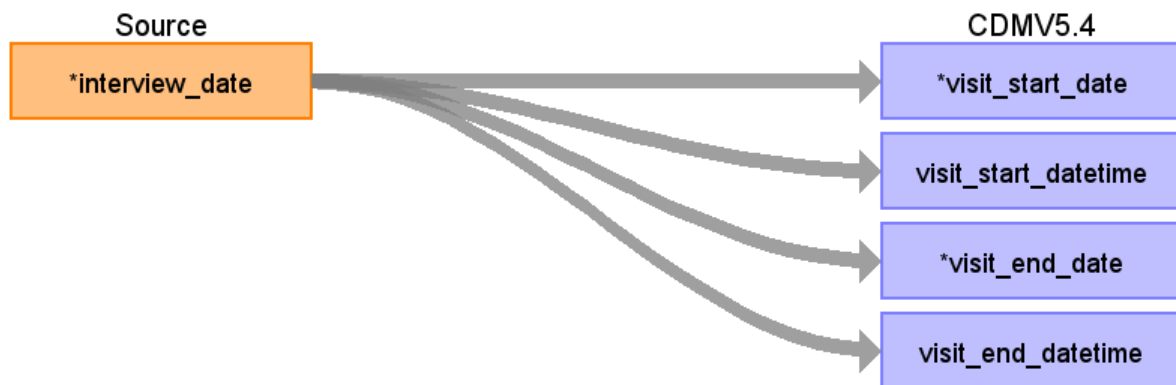
		#INSPIREconcept  if instrument_id == 14, 3000000230, #INSPIREconcept  if instrument_id == 15, 44783153, #measurementdomain  if instrument_id == 16, 3000000266, #INSPIREconcept  Else 0	
admitted_from_concept_id			581476 = home visit
admitted_from_source_value			'Home visit'
discharged_to_source_value			'Home visit'
discharged_to_concept_id			581476 = home visit
preceding_visit_detail_id			Populate this field by finding the visit_detail_id that occurred for the person prior to the given visit.
parent_visit_detail_id			Set to NULL
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table



## 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 interview



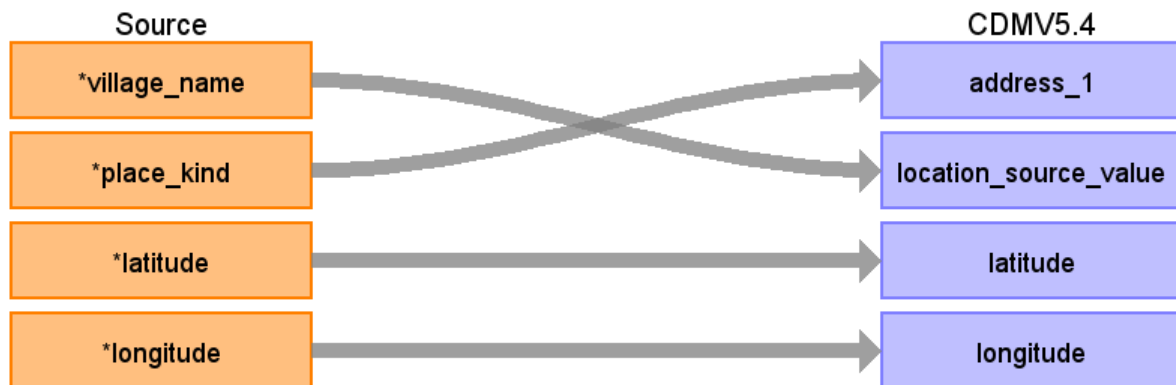
Destination Field	Source Field	Logic	Comment
visit_occurrence_id			A unique identifier for every visit occurrence. The visit_occurrence_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
visit_concept_id			581476 = Concept id for the home visit
visit_start_date	interview_date		
visit_start_datetime	interview_date		
visit_end_date	interview_date		
visit_end_datetime	interview_date		
visit_type_concept_id			32883 for survey
provider_id			Populate this with a foreign key from the PROVIDER table
care_site_id			Populate this with a foreign key from the CARE SITE table
visit_source_value			Set to NULL
admitted_from_concept_id			581476 = home visit

admitted_from_source_value			'Home visit'
discharged_to_concept_id			581476 = home visit
visit_source_concept_id			Set to 0
preceding_visit_occurrence_id			Populate this field by finding the visit_occurrence_id that occurred for the person prior to the given visit.
discharged_to_source_value			'Home visit'

## Table name: location

The LOCATION table represents a generic way to capture physical location or address information of Persons and Care Sites.

### Reading from location



Destination Field	Source Field	Logic	Comment
location_id			A unique identifier for every location. The location_id will be an auto generated number.
address_1	place_kind		
address_2			Set to NULL
city			Set to NULL
state			Set to NULL
zip			Set to NULL
country_concept_id			
county			Set to NULL
location_source_value	village_name		
country_source_value			
latitude	latitude		
longitude	longitude		

### Reading from population\_study



Destination Field	Source Field	Logic	Comment
location_id			A unique identifier for every location. The location_id will be an auto generated number.
address_1			
address_2			Set to NULL
city			Set to NULL
state			Set to NULL
zip			Set to NULL
country_concept_id	universe_spatial_coverage_concept_id		The concept id of the country from which the study originates
county			Set to NULL
location_source_value			
country_source_value	country		Name of the country from which the study originates
latitude			
longitude			

## Table name: observation\_period

This table contains records which define spans of time during which two conditions are expected to hold: (i) Clinical Events that happened to the Person are recorded in the Event tables, and (ii) absence of records indicate such Events did not occur during this span of time.

### Reading from interview



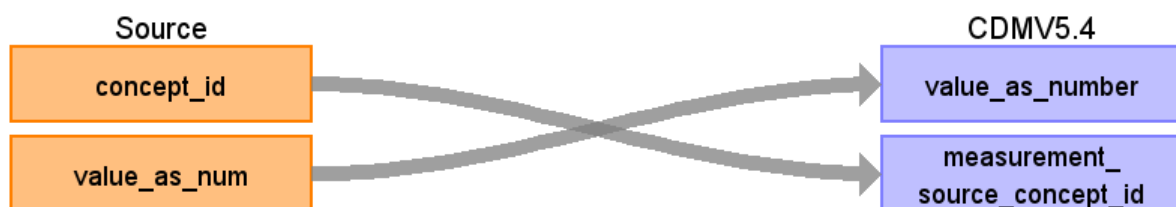
Destination Field	Source Field	Logic	Comment
observation_period_id			A unique identifier for every observation period. The observation_period_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
observation_period_start_date	interview_date		start date of wave 1 of the study
observation_period_end_date	interview_date		The end date of the final wave of the study
period_type_concept_id			32883 for survey

## Table name: measurement

The MEASUREMENT table contains records of Measurements, i.e. structured values (numerical or categorical) obtained through systematic and standardized examination or testing of a Person or Person's sample. The MEASUREMENT table contains both orders and results of such Measurements as laboratory tests, vital signs, quantitative findings from pathology reports, etc. Measurements are stored as attribute value pairs, with the attribute as the Measurement Concept and the value representing the result. The value can be a Concept (stored in VALUE\_AS\_CONCEPT), or a numerical value (VALUE\_AS\_NUMBER) with a Unit (UNIT\_CONCEPT\_ID).

Measurements are total scores for the Tools

Reading from 10\_longitudinal\_population\_study\_fact



Destination Field	Source Field	Logic	Comment
measurement_id			A unique identifier for every measurement. The measurement_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
measurement_concept_id			
measurement_date			
measurement_datetime			
measurement_time			'00:00:00'
measurement_type_concept_id			Type Concept 32883 - Survey
operator_concept_id			Set to NULL
value_as_concept_id			4112438 - The concept_id to represent Total
value_as_number	value_as_num		Total score of the tool questions
unit_concept_id			Set to NULL
range_low			Set to NULL
range_high			Set to NULL

provider_id			Populate this with a foreign key from the PROVIDER table
measurement_source_value			
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
measurement_source_concept_id	concept_id		Concept ID for the Tool Total score
unit_source_value			Set to NULL
unit_source_concept_id			Set to NULL
value_source_value			Set to NULL
measurement_event_id			Set to NULL
meas_event_field_concept_id			Set to NULL

### Reading from concept



Destination Field	Source Field	Logic	Comment
measurement_id			A unique identifier for every measurement. The measurement_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
measurement_concept_id			
measurement_date			
measurement_datetime			
measurement_time			'00:00:00'
measurement_type_concept_id			Type Concept 32883 - Survey
operator_concept_id			Set to NULL
value_as_concept_id			4112438 - The concept_id to represent Total
value_as_number			
unit_concept_id			Set to NULL

range_low			Set to NULL
range_high			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
measurement_source_value	concept_text		Text description for the Tool total score
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
measurement_source_concept_id			Concept ID for the Tool Total score
unit_source_value			Set to NULL
unit_source_concept_id			Set to NULL
value_source_value			Set to NULL
measurement_event_id			Set to NULL
meas_event_field_concept_id			Set to NULL

### Reading from interview



Destination Field	Source Field	Logic	Comment
measurement_id			A unique identifier for every measurement. The measurement_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
measurement_concept_id			
measurement_date	interview_date		
measurement_datetime	interview_date	Convert Date to Datetime type	
measurement_time			'00:00:00'
measurement_type_concept_id			Type Concept



			32883 - Survey
operator_concept_id			Set to NULL
value_as_concept_id			4112438 - The concept_id to represent Total
value_as_number			
unit_concept_id			Set to NULL
range_low			Set to NULL
range_high			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
measurement_source_value			
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
measurement_source_concept_id			Concept ID for the Tool Total score
unit_source_value			Set to NULL
unit_source_concept_id			Set to NULL
value_source_value			Set to NULL
measurement_event_id			Set to NULL
meas_event_field_concept_id			Set to NULL

### Reading from instrument



Destination Field	Source Field	Logic	Comment
measurement_id			A unique identifier for every measurement. The measurement_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
measurement_concept_id	instrument_type_concept_id		instrument_1 - 44804610 #measurementdomain

		instrument_2, 45772733, #measurementdomain  instrument_3, 3000000219, #INSPIREconcept  instrument_4, 4164838, #measurementdomain  instrument_5, 37310582, #measurementdomain  instrument_6, 1761569, #observationdomain  instrument_7, 3000000223, #INSPIREconcept  instrument_8, 36714019, #measurementdomain  instrument_9, 1988691, #observationdomain  instrument_10, 3000000226, #INSPIREconcept  instrument_11, 3000000227, #INSPIREconcept  instrument_12, 3000000228, #INSPIREconcept  instrument_13, 3000000229, #INSPIREconcept  instrument_14, 3000000230, #INSPIREconcept  instrument_15, 44783153, #measurementdomain  instrument_16, 3000000266, #INSPIREconcept
measurement_date		
measurement_datetime		
measurement_time		'00:00:00'
measurement_type_concept_id		Type Concept  32883 - Survey
operator_concept_id		Set to NULL

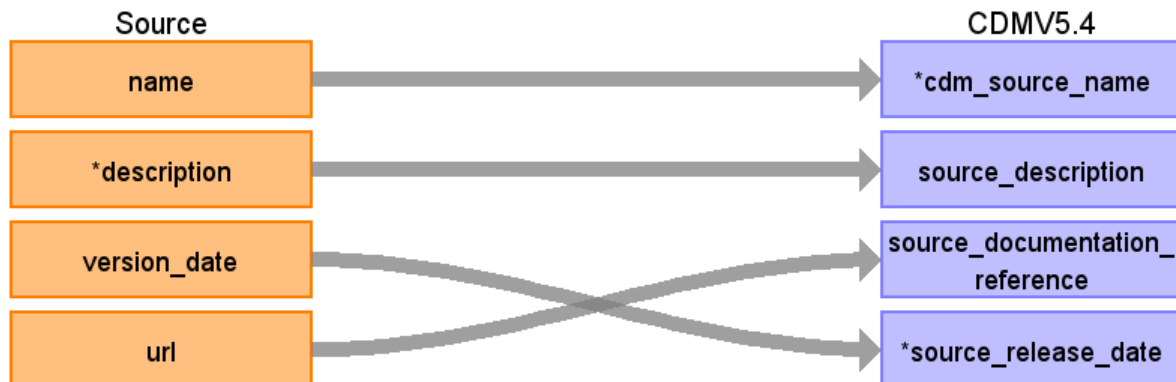
value_as_concept_id			4112438 - The concept_id to represent Total
value_as_number			
unit_concept_id			Set to NULL
range_low			Set to NULL
range_high			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
measurement_source_value			
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
measurement_source_concept_id			Concept ID for the Tool Total score
unit_source_value			Set to NULL
unit_source_concept_id			Set to NULL
value_source_value			Set to NULL
measurement_event_id			Set to NULL
meas_event_field_concept_id			Set to NULL

## Table name: cdm\_source

The CDM\_SOURCE table contains detail about the source database and the process used to transform the data into the OMOP Common Data Model.

Each study will have its own record

Reading from population\_study



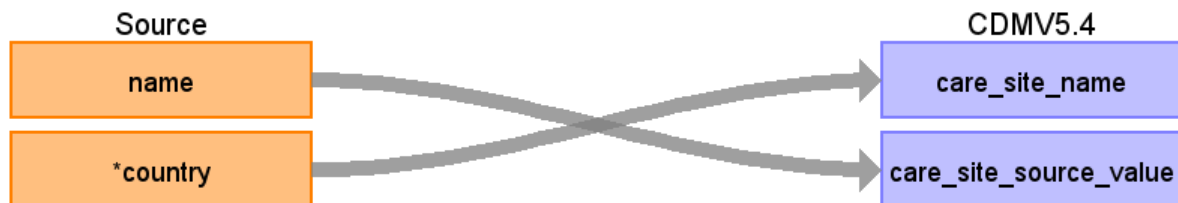
Destination Field	Source Field	Logic	Comment
cdm_source_name	name		
cdm_source_abbreviation			Set to NULL
cdm_holder			'APHRC'
source_description	description		
source_documentation_reference	url		
cdm_etl_reference			Link to Mental Health repository in DSP github  <a href="https://github.com/APHRC-DSE/INSPIRE-Mental-Health-Project-Integrating-and-Harmonizing-Longitudinal-Data">https://github.com/APHRC-DSE/INSPIRE-Mental-Health-Project-Integrating-and-Harmonizing-Longitudinal-Data</a>
cdm_release_date			Current date which the ETL has been performed.
cdm_version			Version of CDM - '5.4'
cdm_version_concept_id			756265 - OMOP CDM Version 5.4.0
source_release_date	version_date		
vocabulary_version			Vocabulary version used.  "v5.0 30-AUG-24"

## 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.).

Care site is a unique combination of location\_id and nature of the site - the latter could be the place of service, name, or another characteristic in your source data.

### Reading from population\_study



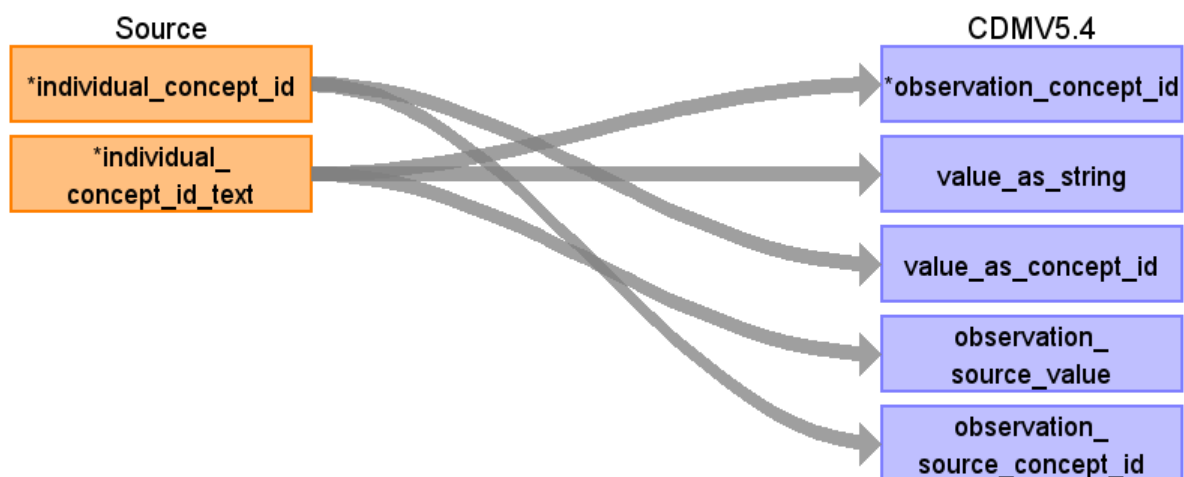
Destination Field	Source Field	Logic	Comment
care_site_id			A unique identifier for every caresite. The care_site_id will be an auto generated number.
care_site_name	country		Country name
place_of_service_concept_id			581476 =Home visit
location_id			Populate this with a foreign key from the LOCATION table
care_site_source_value	name		LIMIT 49 characters
place_of_service_source_value			Home visit

## 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.

For the household characteristics , it will be the same information repeated for all members of the same household. For example the household size is the same for all the members of a household.

### Reading from individual\_demographics

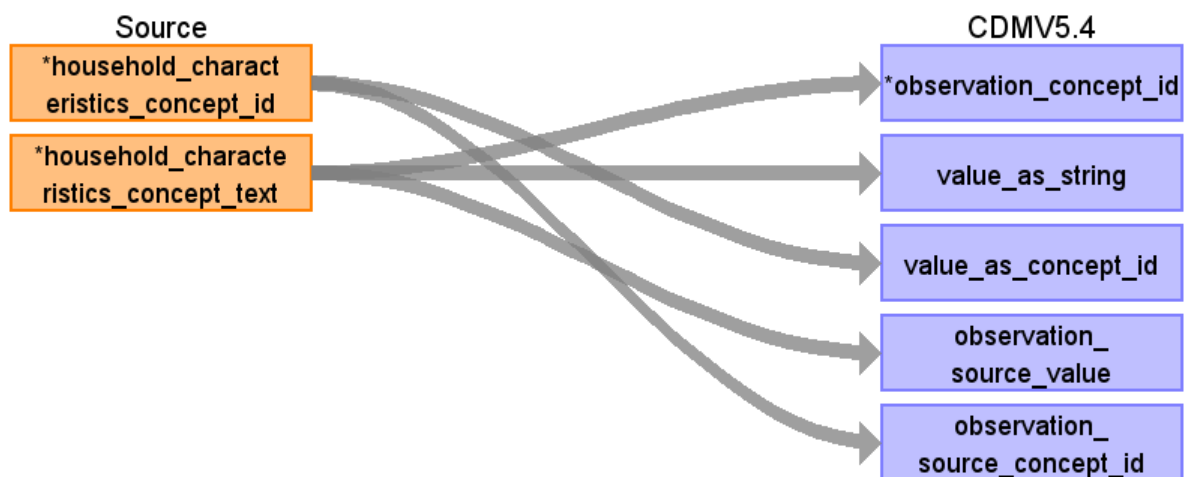


Destination Field	Source Field	Logic	Comment
observation_id			A unique identifier for every observation. The observation_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
observation_concept_id	individual_concept_id_text		concept id for individual demographic, household demographic and tool questions being observed  4052017 - Religion  42528763 - Highest level of Education  44804285 - Employment  4053609 - Marital Status  4128030 - Delivery Procedure  4264823 - Birth outcome  4245997 - Body Mass Index

		4060186 - Gravida 4264419 - Parity 4075500 - household size 0 - source of income, Socioeconomic status
observation_date		
observation_datetime		
observation_type_concept_id		32883 = survey
value_as_number		Set to NULL
value_as_string	individual_concept_id_text	The actual response/answer e.g married , High school etc.  OR /AND Household size of one, very poor  OR/AND Answers to tool questions i.e Not at all, Occasionally, Never..etc
value_as_concept_id	individual_concept_id	Some are inspire concepts and will not show in Atlas
qualifier_concept_id		Set to NULL
unit_concept_id		Set to NULL
provider_id		Populate this with a foreign key from the PROVIDER table
visit_occurrence_id		Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id		Populate this with a foreign key from the VISIT_DETAIL table
observation_source_value	individual_concept_id_text	Map individual_demographics_concept_text, household_characteristics_concept_text and value_as_char (for tool question answers) to the observation_source_value because some are inspire concepts
observation_source_concept_id	individual_concept_id	Map individual_demographics_concept_id, household_characteristics_concept_id and concept_id (tool questions

		answers) to the observation_source_concept_id since some are inspire concepts
qualifier_source_value		Set to NULL
unit_source_value		Set to NULL
value_source_value		Map concept_text (for tool questions) to the value_source_value  else Set to NULL for other demographics
observation_event_id		For questions and answers observations, Set measurement_id from Measurement table) to link with total scores  else Set NULL
obs_event_field_concept_id		For questions and answers observations Set 1147138 (concept id for measurement.measurement_id for CDM v5) to link with total scores  else Set NULL

Reading from household\_characteristics



Destination Field	Source Field	Logic	Comment
observation_id			A unique identifier for every observation. The observation_id

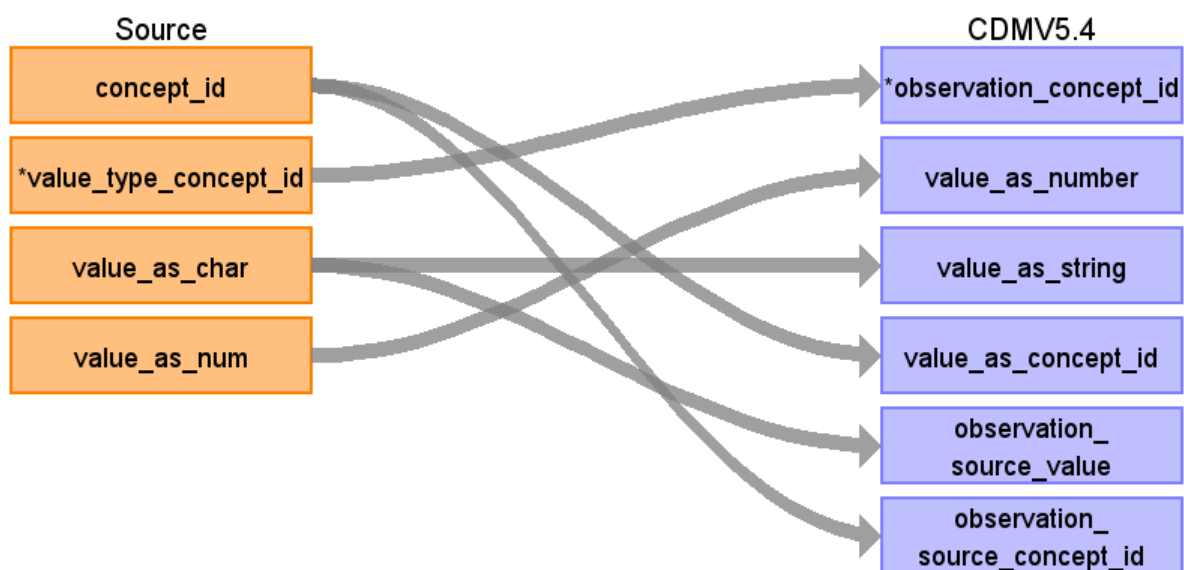


		will be an auto generated number.
person_id		Populate this with a foreign key from the PERSON table
observation_concept_id	household_characteristics_concept_text	<p>concept id for individual demographic, household demographic and tool questions being observed</p> <p>4052017 - Religion</p> <p>42528763 - Highest level of Education</p> <p>44804285 - Employment</p> <p>4053609 - Marital Status</p> <p>4128030 - Delivery Procedure</p> <p>4264823 - Birth outcome</p> <p>4245997 - Body Mass Index</p> <p>4060186 - Gravida</p> <p>4264419 - Parity</p> <p>4075500 - household size</p> <p>0 - source of income, Socioeconomic status</p>
observation_date		
observation_datetime		
observation_type_concept_id		32883 = survey
value_as_number		Set to NULL
value_as_string	household_characteristics_concept_text	<p>The actual response/answer e.g married , High school etc.</p> <p>OR /AND</p> <p>Household size of one, very poor</p> <p>OR/AND</p> <p>Answers to tool questions i.e Not at all, Occasionally, Never..etc</p>
value_as_concept_id	household_characteristics_concept	Some are inspire concepts and

	pt_id	will not show in Atlas
qualifier_concept_id		Set to NULL
unit_concept_id		Set to NULL
provider_id		Populate this with a foreign key from the PROVIDER table
visit_occurrence_id		Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id		Populate this with a foreign key from the VISIT_DETAIL table
observation_source_value	household_characteristics_concept_text	Map individual _demographics_concept_text, household_characteristics_concept_text and value_as_char (for tool question answers) to the observation_source_value because some are inspire concepts
observation_source_concept_id	household_characteristics_concept_id	Map individual _demographics_concept_id, household_characteristics_concept_id and concept_id (tool questions answers) to the observation_source_concept_id since some are inspire concepts
qualifier_source_value		Set to NULL
unit_source_value		Set to NULL
value_source_value		Map concept_text (for tool questions) to the value_source_value  else  Set to NULL for other demographics
observation_event_id		For questions and answers observations, Set measurement_id from Measurement table) to link with total scores  else Set NULL

obs_event_field_concept_id		For questions and answers observations Set 1147138 (concept id for measurement.measurement_id for CDM v5) to link with total scores  else Set NULL
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Reading from 10\_longitudinal\_population\_study\_fact



Destination Field	Source Field	Logic	Comment
observation_id			A unique identifier for every observation. The observation_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
observation_concept_id	value_type_concept_id		concept id for individual demographic, household demographic and tool questions being observed  4052017 - Religion  42528763 - Highest level of Education  44804285 - Employment  4053609 - Marital Status  4128030 - Delivery Procedure

		4264823 - Birth outcome 4245997 - Body Mass Index 4060186 - Gravida 4264419 - Parity 4075500 - household size 0 - source of income, Socioeconomic status
observation_date		
observation_datetime		
observation_type_concept_id		32883 = survey
value_as_number	value_as_num	Set to NULL
value_as_string	value_as_char	The actual response/answer e.g married , High school etc.  OR /AND  Household size of one, very poor  OR/AND  Answers to tool questions i.e Not at all, Occasionally, Never..etc
value_as_concept_id	concept_id	Some are inspire concepts and will not show in Atlas
qualifier_concept_id		Set to NULL
unit_concept_id		Set to NULL
provider_id		Populate this with a foreign key from the PROVIDER table
visit_occurrence_id		Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id		Populate this with a foreign key from the VISIT_DETAIL table
observation_source_value	value_as_char	Map individual _demographics_concept_text, household_characteristics_concept_text and value_as_char (for tool question answers) to the observation_source_value because some are inspire concepts

observation_source_concept_id	concept_id	Map individual _demographics_concept_id, household_characteristics_concept_id and concept_id (tool questions answers) to the observation_source_concept_id since some are inspire concepts
qualifier_source_value		Set to NULL
unit_source_value		Set to NULL
value_source_value		Map concept_text (for tool questions) to the value_source_value  else Set to NULL for other demographics
observation_event_id		For questions and answers observations, Set measurement_id from Measurement table) to link with total scores  else Set NULL
obs_event_field_concept_id		For questions and answers observations Set 1147138 (concept id for measurement.measurement_id for CDM v5) to link with total scores  else Set NULL

Reading from concept



Destination Field	Source Field	Logic	Comment
observation_id			A unique identifier for every observation. The observation_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
observation_concept_id			concept id for individual demographic, household demographic and tool questions being observed

		4052017 - Religion 42528763 - Highest level of Education 44804285 - Employment 4053609 - Marital Status 4128030 - Delivery Procedure 4264823 - Birth outcome 4245997 - Body Mass Index 4060186 - Gravida 4264419 - Parity 4075500 - household size 0 - source of income, Socioeconomic status
observation_date		
observation_datetime		
observation_type_concept_id		32883 = survey
value_as_number		Set to NULL
value_as_string		The actual response/answer e.g married , High school etc.  OR /AND  Household size of one, very poor  OR/AND  Answers to tool questions i.e Not at all, Occasionally, Never..etc
value_as_concept_id		Some are inspire concepts and will not show in Atlas
qualifier_concept_id		Set to NULL
unit_concept_id		Set to NULL
provider_id		Populate this with a foreign key from the PROVIDER table
visit_occurrence_id		Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id		Populate this with a foreign key from the VISIT_DETAIL table
observation_source_value		Map individual _demographics_concept_text,

		household_characteristics_concept_text and value_as_char (for tool question answers) to the observation_source_value because some are inspire concepts
observation_source_concept_id		Map individual_demographics_concept_id, household_characteristics_concept_id and concept_id (tool questions answers) to the observation_source_concept_id since some are inspire concepts
qualifier_source_value		Set to NULL
unit_source_value		Set to NULL
value_source_value	concept_text	Map concept_text (for tool questions) to the value_source_value  else  Set to NULL for other demographics
observation_event_id		For questions and answers observations, Set measurement_id from Measurement table) to link with total scores    else Set NULL
obs_event_field_concept_id		For questions and answers observations Set 1147138 (concept id for measurement.measurement_id for CDM v5) to link with total scores    else Set NULL

### Reading from interview



Destination Field	Source Field	Logic	Comment
observation_id			A unique identifier for every observation. The observation_id will be an auto generated number.
person_id			Populate this with a foreign key from the

			PERSON table
observation_concept_id			<p>concept id for individual demographic, household demographic and tool questions being observed</p> <p>4052017 - Religion</p> <p>42528763 - Highest level of Education</p> <p>44804285 - Employment</p> <p>4053609 - Marital Status</p> <p>4128030 - Delivery Procedure</p> <p>4264823 - Birth outcome</p> <p>4245997 - Body Mass Index</p> <p>4060186 - Gravida</p> <p>4264419 - Parity</p> <p>4075500 - household size</p> <p>0 - source of income, Socioeconomic status</p>
observation_date	interview_date		
observation_datetime	interview_date	Convert Date to Datetime type	
observation_type_concept_id			32883 = survey
value_as_number			Set to NULL
value_as_string			<p>The actual response/answer e.g married , High school etc.</p> <p>OR /AND</p> <p>Household size of one, very poor</p> <p>OR/AND</p> <p>Answers to tool questions i.e Not at all, Occasionally, Never..etc</p>
value_as_concept_id			Some are inspire concepts and will not show in Atlas
qualifier_concept_id			Set to NULL
unit_concept_id			Set to NULL



provider_id			Populate this with a foreign key from the PROVIDER table
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
observation_source_value			Map individual _demographics_concept_text, household_characteristics_concept_text and value_as_char (for tool question answers) to the observation_source_value because some are inspire concepts
observation_source_concept_id			Map individual _demographics_concept_id, household_characteristics_concept_id and concept_id (tool questions answers) to the observation_source_concept_id since some are inspire concepts
qualifier_source_value			Set to NULL
unit_source_value			Set to NULL
value_source_value			Map concept_text (for tool questions) to the value_source_value  else  Set to NULL for other demographics
observation_event_id			For questions and answers observations, Set measurement_id from Measurement table) to link with total scores   else Set NULL
obs_event_field_concept_id			For questions and answers observations Set 1147138 (concept id for measurement.measurement_id for CDM v5) to link with total scores   else Set NULL

## Table name: condition\_occurrence

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

Reading from 10\_longitudinal\_population\_study\_fact



Destination Field	Source Field	Logic	Comment
condition_occurrence_id			A unique identifier for every condition occurrence. The condition_occurrence_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id	instrument_item_id	PHQ9	Depression - 440383
	value_as_num	instrument_item_id = 10 &	Antenatal depression - 37312479
		value_as_num < 5 , "No depression",	Postpartum depression - 4239471
		value_as_num < 10 , "Mild depression",	PTSD - 436676
		value_as_num < 15 , "Moderate depression",	Poor sleep hygiene - 40481897
		value_as_num < 20 , "Moderate Severe depression",	Psychosis - 436073
		value_as_num >19 , "Severe depression"	Anxiety - 442077
			Severe anxiety - 4214746
			Moderate anxiety - 4263429
			Mild anxiety - 4322025

		<p>GAD7</p> <p>instrument_item_id = 18 &amp;</p> <p>value_as_num &lt; 5 , "No anxiety",</p> <p>value_as_num &lt; 10 , "Mild anxiety",</p> <p>value_as_num &lt; 15 , "Moderate anxiety",</p> <p>value_as_num &gt;14 , "Severe anxiety"</p> <p>PSQI</p> <p>instrument_item_id = 134 &amp;</p> <p>value_as_num &lt;5 , "Good sleep hygiene,</p> <p>value_as_num &gt;4 , "Poor sleep hygiene</p> <p>PSQ</p> <p>instrument_item_id = 109 &amp;</p> <p>value_as_num &lt;3 , "No Psychosis",</p> <p>value_as_num &gt;2 , "Psychosis"</p> <p>DASS-21 Depression</p> <p>instrument_item_id = 21 &amp;</p> <p>value_as_num &lt;10 , "No Depression",</p> <p>value_as_num &gt;9 , "Depression"</p>	<p>Severe depression - 4149321</p> <p>Moderate Severe depression - 36717092</p> <p>Moderate depression - 4151170</p> <p>Mild depression - 4149320</p> <p>Else 0</p>
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		<p>DASS-21 Anxiety</p> <p>instrument_item_id = 19 &amp;</p> <p>value_as_num &lt;8 , "No Anxiety",</p> <p>value_as_num &gt;7 , "Anxiety"</p>	
		<p>DASS-21 Stress</p> <p>instrument_item_id = 20 &amp;</p> <p>value_as_num &lt;15 , "No PTSD",</p> <p>value_as_num &gt;14 , "PTSD"</p>	
		<p>EPDS during pregnancy</p> <p>instrument_item_id = 32 &amp; wave_id = 1</p> <p>value_as_num &lt;10 , "No antenatal depression",</p> <p>value_as_num &gt;9 , "Antenatal depression"</p>	
		<p>EPDS after pregnancy</p> <p>instrument_item_id = 32 &amp; wave_id = 2</p> <p>value_as_num &lt;10 , "No postpartum depression",</p> <p>value_as_num &gt;9 , "Postpartum depression"</p>	

		<p>PCL-5 short form</p> <p>instrument_item_id = 53 &amp; wave_id = c(9,11)</p> <p>value_as_num &lt;4 , "No PTSD",</p> <p>value_as_num &gt;3 , "PTSD"</p>	
		<p>PCL-5</p> <p>instrument_item_id = 53 &amp; wave_id = c(3, 4, 5, 6, 7, 8)</p> <p>value_as_num &lt;31 , "No PTSD",</p> <p>value_as_num &gt;30 , "PTSD"</p>	
		<p>CES-D20</p> <p>instrument_item_id = 74 &amp; wave_id = 10</p> <p>value_as_num &lt;16 , "No Depression",</p> <p>value_as_num &gt;15 , "Depression"</p>	
		<p>CES-D8 binary response</p> <p>instrument_item_id = 74 &amp; wave_id = c(9, 11)</p> <p>value_as_num &lt;3 , "No Depression",</p> <p>value_as_num &gt;2 , "Depression"</p>	

		<p>CES-D10</p> <p>instrument_item_id = 74 &amp; wave_id = c(12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32)</p> <p>value_as_num &lt;10 , "No Depression",</p> <p>value_as_num &gt;9 , "Depression"</p>	
condition_start_date			
condition_start_datetime			
condition_end_date			Set to NULL
condition_type_concept_id			32883= Survey
condition_status_concept_id			The concept id for condition to be diagnosed, 32892/32899
condition_end_datetime			Set to NULL
stop_reason			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
condition_source_value	value_as_num		Threshold Total scores which determine condition
condition_source_concept_id	concept_id		Concept ID representing Tool total score
condition_status_source_value			Name of Tool from which condition has been determined

## Reading from interview



Destination Field	Source Field	Logic	Comment
condition_occurrence_id			A unique identifier for every condition occurrence. The condition_occurrence_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id			
condition_start_date	interview_date		
condition_start_datetime	interview_date	Convert Date to Datetime type	
condition_end_date			Set to NULL
condition_type_concept_id			32883= Survey
condition_status_concept_id			The concept id for condition to be diagnosed, 32892/32899
condition_end_datetime			Set to NULL
stop_reason			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
condition_source_value			
condition_source_concept_id			
condition_status_source_value			Name of Tool from which condition has been determined

## Reading from instrument



Destination Field	Source Field	Logic	Comment
condition_occurrence_id			A unique identifier for every condition occurrence. The condition_occurrence_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id			
condition_start_date			
condition_start_datetime			
condition_end_date			Set to NULL
condition_type_concept_id			32883= Survey
condition_status_concept_id			The concept id for condition to be diagnosed, 32892/32899
condition_end_datetime			Set to NULL
stop_reason			Set to NULL
provider_id			Populate this with a foreign key from the PROVIDER table
visit_occurrence_id			Populate this with a foreign key from the VISIT_OCCURENCE table
visit_detail_id			Populate this with a foreign key from the VISIT_DETAIL table
condition_source_value			
condition_source_concept_id			
condition_status_source_value	name		Name of Tool from which condition has been determined



## Table name: provider

The PROVIDER table contains a list of uniquely identified healthcare providers; duplication is not allowed. These are individuals providing hands-on healthcare to patients, such as physicians, nurses, midwives, physical therapists etc.

### Reading from population\_study

Source		CDMV5.4	
Destination Field	Source Field	Logic	Comment
provider_id			A unique identifier for every provider. The provider_id will be an auto generated number.
specialty_concept_id			Set to 0
provider_name			Set to NULL
npi			Set to NULL
dea			Set to NULL
care_site_id			Populate this with a foreign key from the CARE SITE table
year_of_birth			Set to NULL
gender_concept_id			Set to 0
provider_source_value			Set to NULL
specialty_source_value			Set to NULL
specialty_source_concept_id			Set to 0
gender_source_value			Set to NULL
gender_source_concept_id			Set to 0

## Table name: death

The death domain contains the clinical event for how and when a Person dies. A person can have up to one record if the source system contains evidence about the Death, such as: Condition in an administrative claim, status of enrollment into a health plan, or explicit record in EHR data.

No Mapping to this table from source data

## Table name: cohort

The subject of a cohort can have multiple, discrete records in the cohort table per cohort\_definition\_id, subject\_id, and non-overlapping time periods. The definition of the cohort is contained within the COHORT\_DEFINITION table.

It is listed as part of the RESULTS schema because it is a table that users of the database as well as tools such as ATLAS need to be able to write to. The CDM and Vocabulary tables are all read-only so it is suggested that the COHORT and COHORT\_DEFINITION tables are kept in a separate schema to alleviate confusion.

## Table name: note

The NOTE table captures unstructured information that was recorded by a provider about a patient in free text (in ASCII, or preferably in UTF8 format) notes on a given date. The type of note\_text is CLOB or varchar(MAX) depending on RDBMS.

No Mapping to this table from source data

## Table name: specimen

The specimen domain contains the records identifying biological samples from a person.

No Mapping to this table from source data

Table name: fact\_relationship

## 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.

No Mapping to this table from source data

## Table name: note\_nlp

The NOTE\_NLP table encodes all output of NLP on clinical notes. Each row represents a single extracted term from a note.

No Mapping to this table from source data



## Table name: procedure\_occurrence

This table contains records of activities or processes ordered by, or carried out by, a healthcare provider on the patient with a diagnostic or therapeutic purpose.

No Mapping to this table from source data

## Table name: payer\_plan\_period

The PAYER\_PLAN\_PERIOD table captures details of the period of time that a Person is continuously enrolled under a specific health Plan benefit structure from a given Payer. Each Person receiving healthcare is typically covered by a health benefit plan, which pays for (fully or partially), or directly provides, the care. These benefit plans are provided by payers, such as health insurances or state or government agencies.

No Mapping to this table from source data

## Table name: cost

The COST table captures records containing the cost of any medical event recorded in one of the OMOP clinical event tables such as DRUG\_EXPOSURE, PROCEDURE\_OCCURRENCE, VISIT\_OCCURRENCE, VISIT\_DETAIL, DEVICE\_OCCURRENCE, OBSERVATION or MEASUREMENT.

No Mapping to this table from source data

## Table name: drug\_era

A Drug Era is defined as a span of time when the Person is assumed to be exposed to a particular active ingredient. A Drug Era is not the same as a Drug Exposure: Exposures are individual records corresponding to the source when Drug was delivered to the Person, while successive periods of Drug Exposures are combined under certain rules to produce continuous Drug Eras. Every record in the DRUG\_EXPOSURE table should be part of a drug era based on the dates of exposure.

No Mapping to this table from source data

## Table name: episode\_event

The EPISODE\_EVENT table connects qualifying clinical events (such as CONDITION\_OCCURRENCE, DRUG\_EXPOSURE, PROCEDURE\_OCCURRENCE, MEASUREMENT) to the appropriate EPISODE entry.

No Mapping to this table from source data

## Table name: dose\_era

A Dose Era is defined as a span of time when the Person is assumed to be exposed to a constant dose of a specific active ingredient.

No Mapping to this table from source data

## Table name: condition\_era

A Condition Era is defined as a span of time when the Person is assumed to have a given condition. Condition Eras are chronological periods of Condition Occurrence and every Condition Occurrence record should be part of a Condition Era.

### Reading from interview

Source		CDMV5.4	
Destination Field	Source Field	Logic	Comment
condition_era_id			A unique identifier for every condition era. The condition_era_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id			Populate this with a foreign key from the CONDITION OCCURRENCE table
condition_era_start_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find minimum condition_start_date
condition_era_end_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find maximum condition_start_date
condition_occurrence_count			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find count of person_id

### Reading from 10\_longitudinal\_population\_study\_fact

Source		CDMV5.4	
Destination Field	Source Field	Logic	Comment
condition_era_id			A unique identifier for every condition era. The condition_era_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id			Populate this with a foreign key from the CONDITION OCCURRENCE table
condition_era_start_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find minimum condition_start_date
condition_era_end_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE

		table then find maximum condition_start_date
condition_occurrence_count		Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find count of person_id

## Reading from instrument

Source		CDMV5.4	
Destination Field	Source Field	Logic	Comment
condition_era_id			A unique identifier for every condition era. The condition_era_id will be an auto generated number.
person_id			Populate this with a foreign key from the PERSON table
condition_concept_id			Populate this with a foreign key from the CONDITION OCCURRENCE table
condition_era_start_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find minimum condition_start_date
condition_era_end_date			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find maximum condition_start_date
condition_occurrence_count			Populate this by grouping person_id and condition_concept_id from CONDITION OCCURRENCE table then find count of person_id



## Table name: episode

The EPISODE table aggregates lower-level clinical events (VISIT\_OCCURRENCE, DRUG\_EXPOSURE, PROCEDURE\_OCCURRENCE, DEVICE\_EXPOSURE) into a higher-level abstraction representing clinically and analytically relevant disease phases, outcomes and treatments.

No Mapping to this table from source data

## Table name: metadata

The METADATA table contains metadata information about a dataset that has been transformed to the OMOP Common Data Model.

No Mapping to this table from source data

## Table name: device\_exposure

The Device domain captures information about a person's exposure to a foreign physical object or instrument which is used for diagnostic or therapeutic purposes through a mechanism beyond chemical action. Devices include implantable objects (e.g. pacemakers, stents, artificial joints), medical equipment and supplies (e.g. bandages, crutches, syringes), other instruments used in medical procedures (e.g. sutures, defibrillators) and material used in clinical care (e.g. adhesives, body material, dental material, surgical material).

No Mapping to this table from source data

## Table name: cohort\_definition

The COHORT\_DEFINITION table contains records defining a Cohort derived from the data through the associated description and syntax and upon instantiation (execution of the algorithm) placed into the COHORT table. Cohorts are a set of subjects that satisfy a given combination of inclusion criteria for a duration of time. The COHORT\_DEFINITION table provides a standardized structure for maintaining the rules governing the inclusion of a subject into a cohort, and can store operational programming code to instantiate the cohort within the OMOP Common Data Model.

## Appendix: source tables

Table: concept

Field	Type	Most freq. value	Comment
concept_vocabulary	text	INSPIRE	
concept_code	text		
concept_text	text		
score	integer		
start_date	date	1970-01-01	
end_date	date	2099-12-31	
inspire_concept_id	bigint		
concept_id	bigint		

Table: data\_capture\_event

Field	Type	Most freq. value	Comment
data_capture_id	integer		
wave_id	integer		
instrument_id	integer		
completion_status	character varying		
data_quality_indicator	character varying		
mode_of_collection_description	character varying		
mode_of_collection_type	character varying	computer-assisted personal interviewing (CAPI)	
data_capture_collector	character varying		
data_source_description	character varying		
data_source_type	character varying	Population group	
data_capture_event_date	date		

Table: household

Field	Type	Most freq. value	Comment
household_id	integer		
household_id_value	text		
location_id	integer		
household_head_id	integer	0	

Table: instrument

Field	Type	Most freq. value	Comment
instrument_id	integer		
name	text		
description	text		
instrument_type_concept_id	integer		
version	double precision		
version_date	date		
language_concept_id	integer		

Table: individual

Field	Type	Most freq. value	Comment
individual_id	integer		
individual_id_value	text		
household_id	integer		
gender_concept_id	integer	8532	
first_wave_id	integer	1	
age_at_first_wave	integer	64	
year_of_birth	integer	1950	
is_household_head	boolean	f	

Table: instrument\_item

Field	Type	Most freq. value	Comment
instrument_item_id	integer		
instrument_id	integer	15	
name	character varying		
description	text		

instrument_item_type_concept_id	integer		
instrument_item_concept_vocabulary	character varying	INSPIRE	
instrument_item_concept_vocabulary_id	integer	1	
alternative_instrument_item_concept_vocabulary	character varying	LOINC	
alternative_instrument_item_concept_vocabulary_id	integer	37079395	
result_not_null_answer_list_concept_vocabulary	character varying		

Table: household\_characteristics

Field	Type	Most freq. value	Comment
household_characteristics_id	bigint		
household_id	integer	9741	
wave_id	integer	1	
household_characteristics_concept_id	bigint	45877709	
household_characteristics_concept_text	character varying	Unemployed	

Table: interview

Field	Type	Most freq. value	Comment
interview_id	integer		
individual_id	integer		
interview_date	date	2015-05-01	
wave_id	integer	1	
instrument_id	integer	15	

Table: location

Field	Type	Most freq. value	Comment
location_id	integer		
village_name	character varying	GDLER	
place_kind	character varying	rural	
latitude	double precision	0	
longitude	double precision	0	

Table: methodology

Field	Type	Most freq. value	Comment
methodology_id	integer		

data_collection_methodology_description	character varying	structured questionnaire	
data_collection_methodology_type	character varying	Secondary, quantitative	
time_method_description	character varying		
time_method_type	character varying	longitudinal	
sampling_procedure_description	character varying		
sampling_procedure_type	character varying	simple random sampling	
data_collection_software_name	character varying		
data_collection_software_version	character varying		
data_collection_software_package_type	character varying	computer-assisted personal interviewing (CAPI)	
quality_statement_standard_name	character varying		
quality_statement_standard_description	character varying		
population_study_id	integer		

Table: individual\_demographics

Field	Type	Most freq. value	Comment
individual_demographics_id	bigint		
individual_id	integer	9189	
individual_concept_id	bigint	38003600	
individual_concept_id_text	character varying	African	

Table: population\_study

Field	Type	Most freq. value	Comment
name	character varying		
description	text		
country	text	South Africa	



abstract	text		
phenotype_description	text		
outcome_phenotype_description	text		
covariates_description	text		
analyses_supported_text	text		
version	double precision		
version_date	date		
citation_creators	text		
citation_contributors	text		
universe_spatial_coverage_text text	text		
population_study_id	integer		
doi_registry	text		
doi_value	text		
url	text		
citation_title	text		
citation_publisher	text		
citation_language_concept_id	double precision	45882691	
keywords	text		
universe_spatial_coverage_concept_id	text		
universe_temporal_coverage	text		
analyses_supported_concept_id	double precision		

Table: 10\_longitudinal\_population\_study\_fact

Field	Type	Most freq. value	Comment
fact_id	bigint		
individual_id	bigint	9843	
interview_id	bigint	29809	
resident_episode_id	bigint	12073	
population_study_id	bigint	5	
instrument_id	bigint		
instrument_item_id	bigint	34	

concept_id	bigint	3000000561	
value_type_concept_id	bigint	3965341	
value_as_char	character varying	No	
value_as_num	double precision		
is_indv_level	boolean		
value_as_concept	bigint	3000000062	

Table: resident\_episode

Field	Type	Most freq. value	Comment
resident_episode_id	integer		
location_id	integer		
household_id	integer		
wave_id	integer	1	

Table: wave

Field	Type	Most freq. value	Comment
wave_id	integer		
name	character varying	wave 1	
description	text	First wave	
instrument_model_type_concept_id	bigint	3000000198	
start_date	date	2008-02-15	
end_date	date	2012-12-15	
kind_of_data_concept_id	integer		
authorizing_agency_concept_id	integer		
authorizing_statement	text		
population_study_id	integer	11	