SQL Script

```sql
CREATE SCHEMA cdm;



CREATE SCHEMA vocabularies;



CREATE TABLE cdm.care_site (
    care_site_id bigint NOT NULL,
    location_id bigint,
    place_of_service_concept_id integer,
    care_site_name text,
    care_site_source_value text,
    place_of_service_source_value text,
    CONSTRAINT chk_care_site_care_site_name CHECK ((length(care_site_name) <= 255))
);


ALTER TABLE cdm.care_site OWNER TO postgres;


COMMENT ON TABLE cdm.care_site IS 'The CARE_SITE table contains a list of uniquely identified instituti


COMMENT ON COLUMN cdm.care_site.care_site_id IS 'A unique identifier for each Care Site.';



COMMENT ON COLUMN cdm.care_site.location_id IS 'A foreign key to the geographic Location in the LOCATIO



COMMENT ON COLUMN cdm.care_site.place_of_service_concept_id IS 'A foreign key that refers to a Place of



COMMENT ON COLUMN cdm.care_site.care_site_name IS 'The verbatim description or name of the Care Site as



COMMENT ON COLUMN cdm.care_site.care_site_source_value IS 'The identifier for the Care Site in the sour



COMMENT ON COLUMN cdm.care_site.place_of_service_source_value IS 'The source code for the Place of Serv


CREATE TABLE cdm.cdm_source (
    cdm_version_concept_id integer,
    source_release_date date NOT NULL,
    cdm_release_date date,
    cdm_source_name text NOT NULL,
    cdm_source_abbreviation text NOT NULL,
    cdm_holder text NOT NULL,
    source_description text,
    source_documentation_reference text,
    cdm_etl_reference text,
    cdm_version text,
    vocabulary_version text,
    CONSTRAINT chk_cdm_source_cdm_etl_reference CHECK ((COALESCE(length(cdm_etl_reference), 0) <= 255))
    CONSTRAINT chk_cdm_source_cdm_holder CHECK ((length(cdm_holder) <= 255)),
    CONSTRAINT chk_cdm_source_cdm_source_abbreviation CHECK ((length(cdm_source_abbreviation) <= 25)),
    CONSTRAINT chk_cdm_source_cdm_source_name CHECK ((length(cdm_source_name) <= 255)),
    CONSTRAINT chk_cdm_source_cdm_version CHECK ((COALESCE(length(cdm_version), 0) <= 10)),
    CONSTRAINT chk_cdm_source_source_documentation_reference CHECK ((COALESCE(length(source_documentati
    CONSTRAINT chk_cdm_source_vocabulary_version CHECK ((COALESCE(length(vocabulary_version), 0) <= 20)
);


ALTER TABLE cdm.cdm_source OWNER TO postgres;


COMMENT ON TABLE cdm.cdm_source IS 'The CDM_SOURCE table contains detail about the source database and



COMMENT ON COLUMN cdm.cdm_source.source_release_date IS 'The date for which the source data are most cu



COMMENT ON COLUMN cdm.cdm_source.cdm_release_date IS 'The date when the CDM was instantiated';



COMMENT ON COLUMN cdm.cdm_source.cdm_source_name IS 'The full name of the source';



COMMENT ON COLUMN cdm.cdm_source.cdm_source_abbreviation IS 'An abbreviation of the name';



COMMENT ON COLUMN cdm.cdm_source.cdm_holder IS 'The name of the organization responsible for the develo



COMMENT ON COLUMN cdm.cdm_source.source_description IS 'A description of the source data origin and pur



COMMENT ON COLUMN cdm.cdm_source.source_documentation_reference IS 'URL or other external reference to
COMMENT ON COLUMN cdm.cdm_source.cdm_etl_reference IS 'URL or other external reference to location of ET


COMMENT ON COLUMN cdm.cdm_source.cdm_version IS 'The version of CDM used';


COMMENT ON COLUMN cdm.cdm_source.vocabulary_version IS 'The version of the vocabulary used';


CREATE TABLE cdm.cohort (
    cohort_definition_id bigint NOT NULL,
    subject_id bigint NOT NULL,
    cohort_start_date date NOT NULL,
    cohort_end_date date NOT NULL
);


ALTER TABLE cdm.cohort OWNER TO postgres;


COMMENT ON TABLE cdm.cohort IS 'The COHORT table contains records of subjects that satisfy a given set


COMMENT ON COLUMN cdm.cohort.cohort_definition_id IS 'A foreign key to a record in the COHORT_DEFINITIO


COMMENT ON COLUMN cdm.cohort.subject_id IS 'A foreign key to the subject in the cohort. These could be


COMMENT ON COLUMN cdm.cohort.cohort_start_date IS 'The date when the Cohort Definition criteria for the


COMMENT ON COLUMN cdm.cohort.cohort_end_date IS 'The date when the Cohort Definition criteria for the P


CREATE TABLE cdm.cohort_definition (
    cohort_definition_id integer NOT NULL,
    definition_type_concept_id integer NOT NULL,
    subject_concept_id integer NOT NULL,
    cohort_initiation_date date,
    cohort_definition_name text NOT NULL,
    cohort_definition_description text,
    cohort_definition_syntax text,
    CONSTRAINT chk_cohort_definition_cohort_definition_name CHECK ((length(cohort_definition_name) <= 25
);


ALTER TABLE cdm.cohort_definition OWNER TO postgres;


COMMENT ON TABLE cdm.cohort_definition IS 'The COHORT_DEFINITION table contains records defining a Coho


COMMENT ON COLUMN cdm.cohort_definition.cohort_definition_id IS 'This is the identifier given to the co


COMMENT ON COLUMN cdm.cohort_definition.definition_type_concept_id IS 'Type defining what kind of Cohor


COMMENT ON COLUMN cdm.cohort_definition.subject_concept_id IS 'This field contains a Concept that repre


COMMENT ON COLUMN cdm.cohort_definition.cohort_initiation_date IS 'A date to indicate when the Cohort w


COMMENT ON COLUMN cdm.cohort_definition.cohort_definition_name IS 'A short description of the cohort.';


COMMENT ON COLUMN cdm.cohort_definition.cohort_definition_description IS 'A complete description of the


COMMENT ON COLUMN cdm.cohort_definition.cohort_definition_syntax IS 'Syntax or code to operationalize t


CREATE TABLE cdm.condition_era (
    condition_era_id bigint NOT NULL,
    person_id bigint NOT NULL,
    condition_concept_id integer NOT NULL,
    condition_occurrence_count integer,
    condition_era_start_date date,
    condition_era_end_date date
);


ALTER TABLE cdm.condition_era OWNER TO postgres;


COMMENT ON TABLE cdm.condition_era IS 'A Condition Era is defined as a span of time when the Person is
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COMMENT ON COLUMN cdm.condition_era.condition_era_id IS 'A unique identifier for each Condition Era.';


COMMENT ON COLUMN cdm.condition_era.person_id IS 'A foreign key identifier to the Person who is experien


COMMENT ON COLUMN cdm.condition_era.condition_concept_id IS 'A foreign key that refers to a standard Con


COMMENT ON COLUMN cdm.condition_era.condition_occurrence_count IS 'The number of individual Condition Oc


COMMENT ON COLUMN cdm.condition_era.condition_era_start_date IS 'The start date for the Condition Era co


COMMENT ON COLUMN cdm.condition_era.condition_era_end_date IS 'The end date for the Condition Era constr


CREATE TABLE cdm.condition_occurrence (
    condition_occurrence_id bigint NOT NULL,
    person_id bigint,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    condition_start_datetime timestamp without time zone,
    condition_end_datetime timestamp without time zone,
    condition_concept_id integer,
    condition_type_concept_id integer,
    condition_status_concept_id integer,
    condition_source_concept_id integer,
    condition_start_date date,
    condition_end_date date,
    stop_reason text,
    condition_source_value text,
    condition_status_source_value text,
    CONSTRAINT chk_condition_occurrence_stop_reason CHECK ((COALESCE(length(stop_reason), 0) <= 20))
);


ALTER TABLE cdm.condition_occurrence OWNER TO postgres;


COMMENT ON TABLE cdm.condition_occurrence IS 'Conditions are records of a Person suggesting the presence


COMMENT ON COLUMN cdm.condition_occurrence.condition_occurrence_id IS 'A unique identifier for each Cond
COMMENT ON COLUMN cdm.condition_occurrence.person_id IS 'A foreign key identifier to the Person who is

COMMENT ON COLUMN cdm.condition_occurrence.provider_id IS 'A foreign key to the Provider in the PROVIDE

COMMENT ON COLUMN cdm.condition_occurrence.visit_occurrence_id IS 'A foreign key to the visit in the VI

COMMENT ON COLUMN cdm.condition_occurrence.visit_detail_id IS 'A foreign key to the visit in the VISIT_

COMMENT ON COLUMN cdm.condition_occurrence.condition_start_datetime IS 'The date and time when the inst

COMMENT ON COLUMN cdm.condition_occurrence.condition_end_datetime IS 'The date when the instance of the

COMMENT ON COLUMN cdm.condition_occurrence.condition_concept_id IS 'A foreign key that refers to a Stan

COMMENT ON COLUMN cdm.condition_occurrence.condition_type_concept_id IS 'A foreign key to the predefine

COMMENT ON COLUMN cdm.condition_occurrence.condition_status_concept_id IS 'A foreign key that refers to

COMMENT ON COLUMN cdm.condition_occurrence.condition_source_concept_id IS 'A foreign key to a Condition

COMMENT ON COLUMN cdm.condition_occurrence.condition_start_date IS 'The date when the instance of the C

COMMENT ON COLUMN cdm.condition_occurrence.condition_end_date IS 'The date when the instance of the Con

COMMENT ON COLUMN cdm.condition_occurrence.stop_reason IS 'The reason that the Condition was no longer
COMMENT ON COLUMN cdm.condition_occurrence.condition_source_value IS 'The source code for the Condition


COMMENT ON COLUMN cdm.condition_occurrence.condition_status_source_value IS 'The source code for the co


CREATE TABLE cdm.cost (
    cost_id bigint NOT NULL,
    cost_event_id bigint NOT NULL,
    cost_domain_id text NOT NULL,
    payer_plan_period_id bigint,
    cost_type_concept_id integer NOT NULL,
    currency_concept_id integer,
    revenue_code_concept_id integer,
    drg_concept_id integer,
    total_charge double precision,
    total_cost double precision,
    total_paid double precision,
    paid_by_payer double precision,
    paid_by_patient double precision,
    paid_patient_copay double precision,
    paid_patient_coinsurance double precision,
    paid_patient_deductible double precision,
    paid_by_primary double precision,
    paid_ingredient_cost double precision,
    paid_dispensing_fee double precision,
    amount_allowed double precision,
    revenue_code_source_value text,
    drg_source_value text
);


ALTER TABLE cdm.cost OWNER TO postgres;


CREATE TABLE cdm.death (
    person_id bigint NOT NULL,
    death_datetime timestamp without time zone,
    death_date date NOT NULL,
    death_type_concept_id integer NOT NULL,
    cause_concept_id integer,
    cause_source_concept_id integer,
    cause_source_value text,
    CONSTRAINT chk_death_cause_source_value CHECK ((COALESCE(length(cause_source_value), 0) <= 256))
);


ALTER TABLE cdm.death OWNER TO postgres;


COMMENT ON TABLE cdm.death IS 'The death domain contains the clinical event for how and when a Person d
COMMENT ON COLUMN cdm.death.person_id IS 'A foreign key identifier to the deceased person. The demograp


COMMENT ON COLUMN cdm.death.death_datetime IS 'The date and time the person was deceased.';


COMMENT ON COLUMN cdm.death.death_date IS 'The date the person was deceased.';


COMMENT ON COLUMN cdm.death.death_type_concept_id IS 'A foreign key referring to the predefined concept


COMMENT ON COLUMN cdm.death.cause_concept_id IS 'A foreign key referring to a standard concept identifi


COMMENT ON COLUMN cdm.death.cause_source_concept_id IS 'A foreign key to the concept that refers to the


CREATE TABLE cdm.device_exposure (
    device_exposure_id bigint NOT NULL,
    person_id bigint NOT NULL,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    device_exposure_start_datetime timestamp without time zone NOT NULL,
    device_exposure_end_datetime timestamp without time zone,
    device_concept_id integer NOT NULL,
    device_type_concept_id integer NOT NULL,
    quantity integer,
    device_source_concept_id integer NOT NULL,
    unit_concept_id integer,
    unit_source_concept_id integer,
    device_exposure_start_date date,
    device_exposure_end_date date,
    unique_device_id text,
    device_source_value text,
    production_id text,
    unit_source_value text
);


ALTER TABLE cdm.device_exposure OWNER TO postgres;


COMMENT ON TABLE cdm.device_exposure IS 'The ''Device'' domain captures information about a person''s e
COMMENT ON COLUMN cdm.device_exposure.device_exposure_id IS 'A system-generated unique identifier for ea

COMMENT ON COLUMN cdm.device_exposure.person_id IS 'A foreign key identifier to the Person who is subje

COMMENT ON COLUMN cdm.device_exposure.provider_id IS 'A foreign key to the provider in the PROVIDER tab

COMMENT ON COLUMN cdm.device_exposure.visit_occurrence_id IS 'A foreign key to the visit in the VISIT_O

COMMENT ON COLUMN cdm.device_exposure.visit_detail_id IS 'A foreign key to the visit detail record in th

COMMENT ON COLUMN cdm.device_exposure.device_exposure_start_datetime IS 'The date and time the Device o

COMMENT ON COLUMN cdm.device_exposure.device_exposure_end_datetime IS 'The date and time use of the Devi

COMMENT ON COLUMN cdm.device_exposure.device_concept_id IS 'A foreign key that refers to a Standard Con

COMMENT ON COLUMN cdm.device_exposure.device_type_concept_id IS 'A foreign key to the predefined Concep

COMMENT ON COLUMN cdm.device_exposure.quantity IS 'The number of individual Devices used in the exposur

COMMENT ON COLUMN cdm.device_exposure.device_source_concept_id IS 'A foreign key to a Device Concept tha

COMMENT ON COLUMN cdm.device_exposure.device_exposure_start_date IS 'The date the Device or supply was

COMMENT ON COLUMN cdm.device_exposure.device_exposure_end_date IS 'The date use of the Device or supply
COMMENT ON COLUMN cdm.device_exposure.unique_device_id IS 'A UDI or equivalent identifying the instance


COMMENT ON COLUMN cdm.device_exposure.device_source_value IS 'The source code for the Device as it appea


CREATE TABLE cdm.dose_era (
    dose_era_id bigint NOT NULL,
    person_id bigint NOT NULL,
    dose_era_start_datetime timestamp without time zone NOT NULL,
    dose_era_end_datetime timestamp without time zone NOT NULL,
    drug_concept_id integer NOT NULL,
    unit_concept_id integer NOT NULL,
    dose_value numeric NOT NULL
);


ALTER TABLE cdm.dose_era OWNER TO postgres;


COMMENT ON TABLE cdm.dose_era IS 'A Dose Era is defined as a span of time when the Person is assumed to


COMMENT ON COLUMN cdm.dose_era.dose_era_id IS 'A unique identifier for each Dose Era.';


COMMENT ON COLUMN cdm.dose_era.person_id IS 'A foreign key identifier to the Person who is subjected to


COMMENT ON COLUMN cdm.dose_era.dose_era_start_datetime IS 'The start date for the drug era constructed 


COMMENT ON COLUMN cdm.dose_era.dose_era_end_datetime IS 'The end date for the drug era constructed from


COMMENT ON COLUMN cdm.dose_era.drug_concept_id IS 'A foreign key that refers to a Standard Concept iden


COMMENT ON COLUMN cdm.dose_era.unit_concept_id IS 'A foreign key that refers to a Standard Concept iden


COMMENT ON COLUMN cdm.dose_era.dose_value IS 'The numeric value of the dose.';
```

```
CREATE TABLE cdm.drug_era (
    drug_era_id bigint NOT NULL,
    person_id bigint NOT NULL,
    drug_concept_id integer NOT NULL,
    drug_exposure_count integer,
    gap_days integer,
    drug_era_start_date date,
    drug_era_end_date date
);


ALTER TABLE cdm.drug_era OWNER TO postgres;


COMMENT ON TABLE cdm.drug_era IS 'A Drug Era is defined as a span of time when the Person is assumed to



COMMENT ON COLUMN cdm.drug_era.drug_era_id IS 'A unique identifier for each Drug Era.';



COMMENT ON COLUMN cdm.drug_era.person_id IS 'A foreign key identifier to the Person who is subjected to



COMMENT ON COLUMN cdm.drug_era.drug_concept_id IS 'A foreign key that refers to a Standard Concept iden



COMMENT ON COLUMN cdm.drug_era.drug_exposure_count IS 'The number of individual Drug Exposure occurrenc



COMMENT ON COLUMN cdm.drug_era.gap_days IS 'The number of days that are not covered by DRUG_EXPOSURE re



COMMENT ON COLUMN cdm.drug_era.drug_era_start_date IS 'The start date for the Drug Era constructed from



COMMENT ON COLUMN cdm.drug_era.drug_era_end_date IS 'The end date for the drug era constructed from the



CREATE TABLE cdm.drug_exposure (
    drug_exposure_id bigint NOT NULL,
    person_id bigint NOT NULL,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    drug_exposure_start_datetime timestamp without time zone,
    drug_exposure_end_datetime timestamp without time zone,
    drug_concept_id integer NOT NULL,
    drug_type_concept_id integer NOT NULL,
    drug_source_concept_id integer NOT NULL,
    route_concept_id integer NOT NULL,
    refills integer,
    days_supply integer,
    drug_exposure_start_date date,
    drug_exposure_end_date date,
    verbatim_end_date date,
    quantity numeric,
    sig text,
    lot_number text,
    drug_source_value text,
    route_source_value text,
    dose_unit_source_value text,
    stop_reason text,
    CONSTRAINT chk_drug_exposure_lot_number CHECK ((COALESCE(length(lot_number), 0) <= 50)),
    CONSTRAINT chk_drug_exposure_stop_reason CHECK ((COALESCE(length(stop_reason), 0) <= 256))
);


ALTER TABLE cdm.drug_exposure OWNER TO postgres;


COMMENT ON TABLE cdm.drug_exposure IS 'The ''Drug'' domain captures records about the utilization of a


COMMENT ON COLUMN cdm.drug_exposure.drug_exposure_id IS 'A system-generated unique identifier for each


COMMENT ON COLUMN cdm.drug_exposure.person_id IS 'A foreign key identifier to the Person who is subjecte


COMMENT ON COLUMN cdm.drug_exposure.provider_id IS 'A foreign key to the provider in the PROVIDER table


COMMENT ON COLUMN cdm.drug_exposure.visit_occurrence_id IS 'A foreign key to the Visit in the VISIT_OCCU


COMMENT ON COLUMN cdm.drug_exposure.visit_detail_id IS 'A foreign key to the Visit Detail in the VISIT_


COMMENT ON COLUMN cdm.drug_exposure.drug_exposure_start_datetime IS 'The start date and time for the cu


COMMENT ON COLUMN cdm.drug_exposure.drug_exposure_end_datetime IS 'The end date and time for the curren
COMMENT ON COLUMN cdm.drug_exposure.drug_concept_id IS 'A foreign key that refers to a Standard Concept

COMMENT ON COLUMN cdm.drug_exposure.drug_type_concept_id IS 'A foreign key to the predefined Concept id

COMMENT ON COLUMN cdm.drug_exposure.drug_source_concept_id IS 'A foreign key to a Drug Concept that refe

COMMENT ON COLUMN cdm.drug_exposure.route_concept_id IS 'A foreign key that refers to a Standard Concept

COMMENT ON COLUMN cdm.drug_exposure.refills IS 'The number of refills after the initial prescription. Th

COMMENT ON COLUMN cdm.drug_exposure.days_supply IS 'The number of days of supply of the medication as pr

COMMENT ON COLUMN cdm.drug_exposure.drug_exposure_start_date IS 'The start date for the current instance

COMMENT ON COLUMN cdm.drug_exposure.drug_exposure_end_date IS 'The end date for the current instance of

COMMENT ON COLUMN cdm.drug_exposure.verbatim_end_date IS 'The known end date of a drug_exposure as provi

COMMENT ON COLUMN cdm.drug_exposure.quantity IS 'The quantity of drug as recorded in the original presc

COMMENT ON COLUMN cdm.drug_exposure.sig IS 'The directions (''signetur'') on the Drug prescription as re

COMMENT ON COLUMN cdm.drug_exposure.lot_number IS 'An identifier assigned to a particular quantity or lo

COMMENT ON COLUMN cdm.drug_exposure.drug_source_value IS 'The source code for the Drug as it appears in
COMMENT ON COLUMN cdm.drug_exposure.route_source_value IS 'The information about the route of administra


COMMENT ON COLUMN cdm.drug_exposure.dose_unit_source_value IS 'The information about the dose unit as d



CREATE TABLE cdm.episode (
    episode_id bigint NOT NULL,
    person_id bigint NOT NULL,
    episode_parent_id bigint,
    episode_start_datetime timestamp without time zone,
    episode_end_datetime timestamp without time zone,
    episode_start_date date NOT NULL,
    episode_end_date date,
    episode_concept_id integer NOT NULL,
    episode_number integer,
    episode_object_concept_id integer NOT NULL,
    episode_type_concept_id integer NOT NULL,
    episode_source_concept_id integer,
    episode_source_value text,
    CONSTRAINT chk_episode_episode_source_value CHECK ((COALESCE(length(episode_source_value), 0) <= 50
);


ALTER TABLE cdm.episode OWNER TO postgres;


CREATE TABLE cdm.episode_event (
    episode_id bigint NOT NULL,
    event_id bigint NOT NULL,
    episode_event_field_concept_id integer NOT NULL
);


ALTER TABLE cdm.episode_event OWNER TO postgres;


CREATE TABLE cdm.fact_relationship (
    fact_id_1 bigint NOT NULL,
    fact_id_2 bigint NOT NULL,
    domain_concept_id_1 integer NOT NULL,
    domain_concept_id_2 integer NOT NULL,
    relationship_concept_id integer NOT NULL
);


ALTER TABLE cdm.fact_relationship OWNER TO postgres;


COMMENT ON TABLE cdm.fact_relationship IS 'The FACT_RELATIONSHIP table contains records about the relat
COMMENT ON COLUMN cdm.fact_relationship.fact_id_1 IS 'The unique identifier in the table corresponding


COMMENT ON COLUMN cdm.fact_relationship.fact_id_2 IS 'The unique identifier in the table corresponding


COMMENT ON COLUMN cdm.fact_relationship.domain_concept_id_1 IS 'The concept representing the domain of


COMMENT ON COLUMN cdm.fact_relationship.domain_concept_id_2 IS 'The concept representing the domain of


COMMENT ON COLUMN cdm.fact_relationship.relationship_concept_id IS 'A foreign key to a Standard Concept


CREATE TABLE cdm.location (
    location_id bigint NOT NULL,
    country_concept_id integer,
    latitude numeric,
    longitude numeric,
    address_1 character varying(50),
    address_2 character varying(50),
    city character varying(50),
    state character varying(2),
    zip character varying(9),
    county character varying(20),
    location_source_value text,
    country_source_value character varying(100)
);


ALTER TABLE cdm.location OWNER TO postgres;


COMMENT ON TABLE cdm.location IS 'The LOCATION table represents a generic way to capture physical locat


COMMENT ON COLUMN cdm.location.location_id IS 'A unique identifier for each geographic location.';


COMMENT ON COLUMN cdm.location.latitude IS 'The geocoded latitude';


COMMENT ON COLUMN cdm.location.longitude IS 'The geocoded longitude';
COMMENT ON COLUMN cdm.location.address_1 IS 'The address field 1, typically used for the street address


COMMENT ON COLUMN cdm.location.address_2 IS 'The address field 2, typically used for additional detail s


COMMENT ON COLUMN cdm.location.city IS 'The city field as it appears in the source data.';


COMMENT ON COLUMN cdm.location.state IS 'The state field as it appears in the source data.';


COMMENT ON COLUMN cdm.location.zip IS 'The zip or postal code.';


COMMENT ON COLUMN cdm.location.county IS 'The county.';


COMMENT ON COLUMN cdm.location.location_source_value IS 'The verbatim information that is used to unique


COMMENT ON COLUMN cdm.location.country_source_value IS 'The country';


CREATE TABLE cdm.location_history (
    location_history_id bigint NOT NULL,
    location_id bigint NOT NULL,
    entity_id bigint NOT NULL,
    relationship_type_concept_id integer NOT NULL,
    start_date date NOT NULL,
    end_date date,
    domain_id text NOT NULL,
    CONSTRAINT chk_location_history_domain_id CHECK ((length(domain_id) <= 50))
);


ALTER TABLE cdm.location_history OWNER TO postgres;


COMMENT ON TABLE cdm.location_history IS 'The LOCATION HISTORY table stores relationships between Person
COMMENT ON COLUMN cdm.location_history.location_history_id IS 'A unique identifier for each location hi


COMMENT ON COLUMN cdm.location_history.location_id IS 'A foreign key to the location table.';


COMMENT ON COLUMN cdm.location_history.entity_id IS 'The unique identifier for the entity. References e


COMMENT ON COLUMN cdm.location_history.relationship_type_concept_id IS 'The type of relationship betwee


COMMENT ON COLUMN cdm.location_history.start_date IS 'The date the relationship started.';


COMMENT ON COLUMN cdm.location_history.end_date IS 'The date the relationship ended.';


COMMENT ON COLUMN cdm.location_history.domain_id IS 'The domain of the entity that is related to the lo


CREATE TABLE cdm.measurement (
    measurement_id bigint NOT NULL,
    person_id bigint NOT NULL,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    measurement_event_id bigint,
    measurement_datetime timestamp without time zone NOT NULL,
    measurement_concept_id integer NOT NULL,
    measurement_type_concept_id integer NOT NULL,
    measurement_source_concept_id integer NOT NULL,
    measurement_date date,
    operator_concept_id integer,
    value_as_concept_id integer,
    unit_concept_id integer,
    unit_source_concept_id integer,
    meas_event_field_concept_id integer,
    value_as_number numeric,
    range_low numeric,
    range_high numeric,
    measurement_time text,
    measurement_source_value text,
    unit_source_value text,
    value_source_value text,
    CONSTRAINT chk_measurement_measurement_time CHECK ((COALESCE(length(measurement_time), 0) <= 10))
);
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```
ALTER TABLE cdm.measurement OWNER TO postgres;

COMMENT ON TABLE cdm.measurement IS 'The MEASUREMENT table contains records of Measurement, i.e. structu

COMMENT ON COLUMN cdm.measurement.measurement_id IS 'A unique identifier for each Measurement.';

COMMENT ON COLUMN cdm.measurement.person_id IS 'A foreign key identifier to the Person about whom the me

COMMENT ON COLUMN cdm.measurement.provider_id IS 'A foreign key to the provider in the PROVIDER table wh

COMMENT ON COLUMN cdm.measurement.visit_occurrence_id IS 'A foreign key to the Visit in the VISIT_OCCURR

COMMENT ON COLUMN cdm.measurement.visit_detail_id IS 'A foreign key to the Visit Detail in the VISIT_DET

COMMENT ON COLUMN cdm.measurement.measurement_datetime IS 'The date and time of the Measurement. Some da

COMMENT ON COLUMN cdm.measurement.measurement_concept_id IS 'A foreign key to the standard measurement c

COMMENT ON COLUMN cdm.measurement.measurement_type_concept_id IS 'A foreign key to the predefined Concep

COMMENT ON COLUMN cdm.measurement.measurement_source_concept_id IS 'A foreign key to a Concept in the St

COMMENT ON COLUMN cdm.measurement.measurement_date IS 'The date of the Measurement.';

COMMENT ON COLUMN cdm.measurement.operator_concept_id IS 'A foreign key identifier to the predefined Con

COMMENT ON COLUMN cdm.measurement.value_as_concept_id IS 'A foreign key to a Measurement result represen
COMMENT ON COLUMN cdm.measurement.unit_concept_id IS 'A foreign key to a Standard Concept ID of Measurem


COMMENT ON COLUMN cdm.measurement.value_as_number IS 'A Measurement result where the result is expresse


COMMENT ON COLUMN cdm.measurement.range_low IS 'The lower limit of the normal range of the Measurement 


COMMENT ON COLUMN cdm.measurement.range_high IS 'The upper limit of the normal range of the Measurement


COMMENT ON COLUMN cdm.measurement.measurement_time IS 'The time of the Measurement. This is present for


COMMENT ON COLUMN cdm.measurement.measurement_source_value IS 'The Measurement name as it appears in th


COMMENT ON COLUMN cdm.measurement.unit_source_value IS 'The source code for the unit as it appears in t


COMMENT ON COLUMN cdm.measurement.value_source_value IS 'The source value associated with the content o


CREATE TABLE cdm.metadata (
    metadata_datetime timestamp without time zone,
    metadata_concept_id integer NOT NULL,
    metadata_type_concept_id integer NOT NULL,
    value_as_concept_id integer,
    metadata_date date,
    name text NOT NULL,
    value_as_string text,
    CONSTRAINT chk_metadata_name CHECK ((length(name) <= 250))
);



COMMENT ON TABLE cdm.metadata IS 'The METADATA table contains metadata information about a dataset that


COMMENT ON COLUMN cdm.metadata.metadata_datetime IS 'The date and time associated with the metadata';
COMMENT ON COLUMN cdm.metadata.metadata_concept_id IS 'A foreign key that refers to a Standard Metadata


COMMENT ON COLUMN cdm.metadata.metadata_type_concept_id IS 'A foreign key that refers to a Standard Typ


COMMENT ON COLUMN cdm.metadata.value_as_concept_id IS 'A foreign key to a metadata value stored as a Co


COMMENT ON COLUMN cdm.metadata.metadata_date IS 'The date associated with the metadata';


COMMENT ON COLUMN cdm.metadata.name IS 'The name of the Concept stored in metadata_concept_id or a desc


COMMENT ON COLUMN cdm.metadata.value_as_string IS 'The metadata value stored as a string.';


CREATE TABLE cdm.note (
    note_id bigint NOT NULL,
    person_id bigint NOT NULL,
    note_event_id bigint,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    note_datetime timestamp without time zone NOT NULL,
    note_event_field_concept_id integer NOT NULL,
    note_type_concept_id integer NOT NULL,
    note_class_concept_id integer NOT NULL,
    encoding_concept_id integer NOT NULL,
    language_concept_id integer NOT NULL,
    note_date date,
    note_title text,
    note_text text,
    note_source_value text,
    CONSTRAINT chk_note_note_title CHECK ((COALESCE(length(note_title), 0) <= 250))
);


COMMENT ON TABLE cdm.note IS 'The NOTE table captures unstructured information that was recorded by a p


COMMENT ON COLUMN cdm.note.note_id IS 'A unique identifier for each note.';
COMMENT ON COLUMN cdm.note.person_id IS 'A foreign key identifier to the Person about whom the Note was

COMMENT ON COLUMN cdm.note.note_event_id IS 'A foreign key identifier to the event (e.g. Measurement, Pr

COMMENT ON COLUMN cdm.note.provider_id IS 'A foreign key to the Provider in the PROVIDER table who took

COMMENT ON COLUMN cdm.note.visit_occurrence_id IS 'A foreign key to the Visit in the VISIT_OCCURRENCE ta

COMMENT ON COLUMN cdm.note.visit_detail_id IS 'A foreign key to the Visit in the VISIT_DETAIL table wher

COMMENT ON COLUMN cdm.note.note_datetime IS 'The date and time the note was recorded.';

COMMENT ON COLUMN cdm.note.note_event_field_concept_id IS 'A foreign key to the predefined Concept in th

COMMENT ON COLUMN cdm.note.note_type_concept_id IS 'A foreign key to the predefined Concept in the Stand

COMMENT ON COLUMN cdm.note.note_class_concept_id IS 'A foreign key to the predefined Concept in the Stan

COMMENT ON COLUMN cdm.note.encoding_concept_id IS 'A foreign key to the predefined Concept in the Standa

COMMENT ON COLUMN cdm.note.language_concept_id IS 'A foreign key to the predefined Concept in the Standa

COMMENT ON COLUMN cdm.note.note_date IS 'The date the note was recorded.';

COMMENT ON COLUMN cdm.note.note_title IS 'The title of the Note as it appears in the source.';
COMMENT ON COLUMN cdm.note.note_text IS 'The content of the Note.';


COMMENT ON COLUMN cdm.note.note_source_value IS 'The source value associated with the origin of the Not


CREATE TABLE cdm.note_nlp (
    note_nlp_id bigint NOT NULL,
    note_id bigint NOT NULL,
    section_concept_id integer NOT NULL,
    snippet text,
    "offset" text,
    lexical_variant text NOT NULL,
    note_nlp_concept_id integer NOT NULL,
    nlp_system text,
    nlp_date date NOT NULL,
    nlp_datetime timestamp without time zone,
    term_exists text,
    term_temporal text,
    term_modifiers text,
    note_nlp_source_concept_id integer NOT NULL
);



COMMENT ON TABLE cdm.note_nlp IS 'The NOTE_NLP table will encode all output of NLP on clinical notes. E


COMMENT ON COLUMN cdm.note_nlp.note_nlp_id IS 'A unique identifier for each term extracted from a note.


COMMENT ON COLUMN cdm.note_nlp.note_id IS 'A foreign key to the Note table note the term was';


COMMENT ON COLUMN cdm.note_nlp.section_concept_id IS 'A foreign key to the predefined Concept in the St


COMMENT ON COLUMN cdm.note_nlp.snippet IS 'A small window of text surrounding the term.';


COMMENT ON COLUMN cdm.note_nlp."offset" IS 'Character offset of the extracted term in the input note.';


COMMENT ON COLUMN cdm.note_nlp.lexical_variant IS 'Raw text extracted from the NLP tool.';
COMMENT ON COLUMN cdm.note_nlp.note_nlp_concept_id IS 'A foreign key to the predefined Concept in the St


COMMENT ON COLUMN cdm.note_nlp.nlp_system IS 'Name and version of the NLP system that extracted the term


COMMENT ON COLUMN cdm.note_nlp.nlp_date IS 'The date of the note processing.Useful for data provenance.


COMMENT ON COLUMN cdm.note_nlp.nlp_datetime IS 'The date and time of the note processing. Useful for da


COMMENT ON COLUMN cdm.note_nlp.term_exists IS 'A summary modifier that signifies presence or absence of


COMMENT ON COLUMN cdm.note_nlp.term_temporal IS 'An optional time modifier associated with the extracted


COMMENT ON COLUMN cdm.note_nlp.term_modifiers IS 'A compact description of all the modifiers of the spec


COMMENT ON COLUMN cdm.note_nlp.note_nlp_source_concept_id IS 'A foreign key to a Concept that refers to


CREATE TABLE cdm.observation (
    observation_id bigint NOT NULL,
    person_id bigint NOT NULL,
    observation_datetime timestamp without time zone NOT NULL,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    observation_event_id bigint,
    observation_date date,
    observation_concept_id integer NOT NULL,
    observation_type_concept_id integer NOT NULL,
    qualifier_concept_id integer NOT NULL,
    observation_source_concept_id integer NOT NULL,
    obs_event_field_concept_id integer,
    value_as_concept_id integer,
    unit_concept_id integer,
    value_as_number numeric,
    value_as_string text,
    observation_source_value text,
    unit_source_value text,
    qualifier_source_value text,
    value_source_value text
);



COMMENT ON TABLE cdm.observation IS 'The OBSERVATION table captures clinical facts about a Person obtai

COMMENT ON COLUMN cdm.observation.observation_id IS 'A unique identifier for each observation.';

COMMENT ON COLUMN cdm.observation.person_id IS 'A foreign key identifier to the Person about whom the o

COMMENT ON COLUMN cdm.observation.observation_datetime IS 'The date and time of the observation.';

COMMENT ON COLUMN cdm.observation.provider_id IS 'A foreign key to the provider in the PROVIDER table w

COMMENT ON COLUMN cdm.observation.visit_occurrence_id IS 'A foreign key to the visit in the VISIT_OCCUR

COMMENT ON COLUMN cdm.observation.visit_detail_id IS 'A foreign key to the visit in the VISIT_DETAIL ta

COMMENT ON COLUMN cdm.observation.observation_event_id IS 'A foreign key to an event table (e.g., PROCE

COMMENT ON COLUMN cdm.observation.observation_date IS 'The date of the observation.';

COMMENT ON COLUMN cdm.observation.observation_concept_id IS 'A foreign key to the standard observation

COMMENT ON COLUMN cdm.observation.observation_type_concept_id IS 'A foreign key to the predefined conce

COMMENT ON COLUMN cdm.observation.qualifier_concept_id IS 'A foreign key to a Standard Concept ID for a
COMMENT ON COLUMN cdm.observation.observation_source_concept_id IS 'A foreign key to a Concept that refe


COMMENT ON COLUMN cdm.observation.obs_event_field_concept_id IS 'A foreign key that refers to a Standard


COMMENT ON COLUMN cdm.observation.value_as_concept_id IS 'A foreign key to an observation result stored


COMMENT ON COLUMN cdm.observation.unit_concept_id IS 'A foreign key to a Standard Concept ID of measurem


COMMENT ON COLUMN cdm.observation.value_as_number IS 'The observation result stored as a number. This is


COMMENT ON COLUMN cdm.observation.value_as_string IS 'The observation result stored as a string. This is


COMMENT ON COLUMN cdm.observation.observation_source_value IS 'The observation code as it appears in the


COMMENT ON COLUMN cdm.observation.unit_source_value IS 'The source code for the unit as it appears in th


COMMENT ON COLUMN cdm.observation.qualifier_source_value IS 'The source value associated with a qualifie


CREATE TABLE cdm.observation_period (
    observation_period_id bigint NOT NULL,
    person_id bigint NOT NULL,
    observation_period_start_date date NOT NULL,
    observation_period_end_date date NOT NULL,
    period_type_concept_id integer NOT NULL
);


COMMENT ON TABLE cdm.observation_period IS 'The OBSERVATION_PERIOD table contains records which uniquely


COMMENT ON COLUMN cdm.observation_period.observation_period_id IS 'A unique identifier for each observat
COMMENT ON COLUMN cdm.observation_period.person_id IS 'A foreign key identifier to the person for whom

COMMENT ON COLUMN cdm.observation_period.observation_period_start_date IS 'The start date of the observa

COMMENT ON COLUMN cdm.observation_period.observation_period_end_date IS 'The end date of the observatio

COMMENT ON COLUMN cdm.observation_period.period_type_concept_id IS 'A foreign key identifier to the pre

CREATE TABLE cdm.payer_plan_period (
    payer_plan_period_id bigint NOT NULL,
    person_id bigint NOT NULL,
    contract_person_id bigint,
    payer_plan_period_start_date date NOT NULL,
    payer_plan_period_end_date date NOT NULL,
    payer_concept_id integer NOT NULL,
    plan_concept_id integer NOT NULL,
    contract_concept_id integer,
    sponsor_concept_id integer,
    stop_reason_concept_id integer NOT NULL,
    payer_source_concept_id integer NOT NULL,
    plan_source_concept_id integer NOT NULL,
    contract_source_concept_id integer,
    sponsor_source_concept_id integer NOT NULL,
    stop_reason_source_concept_id integer NOT NULL,
    payer_source_value text,
    plan_source_value text,
    contract_source_value text,
    sponsor_source_value text,
    family_source_value text,
    stop_reason_source_value text
);

COMMENT ON TABLE cdm.payer_plan_period IS 'The PAYER_PLAN_PERIOD table captures details of the period o

COMMENT ON COLUMN cdm.payer_plan_period.payer_plan_period_id IS 'A identifier for each unique combinati

COMMENT ON COLUMN cdm.payer_plan_period.person_id IS 'A foreign key identifier to the Person covered by
COMMENT ON COLUMN cdm.payer_plan_period.contract_person_id IS 'A foreign key identifier to the person_i

COMMENT ON COLUMN cdm.payer_plan_period.payer_plan_period_start_date IS 'The start date of the payer pl

COMMENT ON COLUMN cdm.payer_plan_period.payer_plan_period_end_date IS 'The end date of the payer plan p

COMMENT ON COLUMN cdm.payer_plan_period.payer_concept_id IS 'A foreign key that refers to a standard Pa

COMMENT ON COLUMN cdm.payer_plan_period.plan_concept_id IS 'A foreign key that refers to a standard pla

COMMENT ON COLUMN cdm.payer_plan_period.contract_concept_id IS 'A foreign key to a standard concept rep

COMMENT ON COLUMN cdm.payer_plan_period.sponsor_concept_id IS 'A foreign key that refers to a concept i

COMMENT ON COLUMN cdm.payer_plan_period.stop_reason_concept_id IS 'A foreign key that refers to a stand

COMMENT ON COLUMN cdm.payer_plan_period.payer_source_concept_id IS 'A foreign key to a payer concept tha

COMMENT ON COLUMN cdm.payer_plan_period.plan_source_concept_id IS 'A foreign key to a plan concept that

COMMENT ON COLUMN cdm.payer_plan_period.contract_source_concept_id IS 'A foreign key to a concept that

COMMENT ON COLUMN cdm.payer_plan_period.sponsor_source_concept_id IS 'A foreign key to a sponsor concep

COMMENT ON COLUMN cdm.payer_plan_period.stop_reason_source_concept_id IS 'A foreign key to a stop-cover
COMMENT ON COLUMN cdm.payer_plan_period.payer_source_value IS 'The source code for the payer as it appea


COMMENT ON COLUMN cdm.payer_plan_period.plan_source_value IS 'The source code for the Person''s health p


COMMENT ON COLUMN cdm.payer_plan_period.contract_source_value IS 'The source code representing the reaso


COMMENT ON COLUMN cdm.payer_plan_period.sponsor_source_value IS 'The source code for the Person''s spons


COMMENT ON COLUMN cdm.payer_plan_period.family_source_value IS 'The source code for the Person''s family


COMMENT ON COLUMN cdm.payer_plan_period.stop_reason_source_value IS 'The reason for stop-coverage as it


CREATE TABLE cdm.person (
    person_id bigint NOT NULL,
    location_id bigint,
    provider_id bigint,
    care_site_id bigint,
    birth_datetime timestamp without time zone,
    year_of_birth integer NOT NULL,
    gender_source_concept_id integer NOT NULL,
    gender_concept_id integer NOT NULL,
    ethnicity_concept_id integer NOT NULL,
    ethnicity_source_concept_id integer NOT NULL,
    race_concept_id integer NOT NULL,
    race_source_concept_id integer NOT NULL,
    month_of_birth integer,
    day_of_birth integer,
    person_source_value text,
    gender_source_value text,
    race_source_value text,
    ethnicity_source_value text
);


COMMENT ON TABLE cdm.person IS 'The Person Domain contains records that uniquely identify each patient i


COMMENT ON COLUMN cdm.person.person_id IS 'A unique identifier for each person.';
COMMENT ON COLUMN cdm.person.location_id IS 'A foreign key to the place of residency for the person in t

COMMENT ON COLUMN cdm.person.provider_id IS 'A foreign key to the primary care provider the person is so

COMMENT ON COLUMN cdm.person.care_site_id IS 'A foreign key to the site of primary care in the care_site

COMMENT ON COLUMN cdm.person.birth_datetime IS 'The date and time of birth of the person.';

COMMENT ON COLUMN cdm.person.year_of_birth IS 'The year of birth of the person. For data sources with da

COMMENT ON COLUMN cdm.person.gender_source_concept_id IS 'A foreign key to the gender concept that refer

COMMENT ON COLUMN cdm.person.gender_concept_id IS 'A foreign key that refers to an identifier in the CON

COMMENT ON COLUMN cdm.person.ethnicity_concept_id IS 'A foreign key that refers to the standard concept

COMMENT ON COLUMN cdm.person.ethnicity_source_concept_id IS 'A foreign key to the ethnicity concept that

COMMENT ON COLUMN cdm.person.race_concept_id IS 'A foreign key that refers to an identifier in the CONC

COMMENT ON COLUMN cdm.person.race_source_concept_id IS 'A foreign key to the race concept that refers to

COMMENT ON COLUMN cdm.person.month_of_birth IS 'The month of birth of the person. For data sources that

COMMENT ON COLUMN cdm.person.day_of_birth IS 'The day of the month of birth of the person. For data sour

COMMENT ON COLUMN cdm.person.person_source_value IS 'An (encrypted) key derived from the person identifi
COMMENT ON COLUMN cdm.person.gender_source_value IS 'The source code for the gender of the person as it

COMMENT ON COLUMN cdm.person.race_source_value IS 'The source code for the race of the person as it appe

COMMENT ON COLUMN cdm.person.ethnicity_source_value IS 'The source code for the ethnicity of the person

CREATE TABLE cdm.procedure_occurrence (
    procedure_occurrence_id bigint NOT NULL,
    person_id bigint NOT NULL,
    procedure_datetime timestamp without time zone NOT NULL,
    provider_id bigint,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    procedure_end_datetime timestamp without time zone,
    procedure_concept_id integer NOT NULL,
    procedure_source_concept_id integer NOT NULL,
    procedure_type_concept_id integer NOT NULL,
    modifier_concept_id integer NOT NULL,
    quantity integer,
    procedure_date date,
    procedure_end_date date,
    procedure_source_value text,
    modifier_source_value text
);

COMMENT ON TABLE cdm.procedure_occurrence IS 'The PROCEDURE_OCCURRENCE table contains records of activit

COMMENT ON COLUMN cdm.procedure_occurrence.procedure_occurrence_id IS 'A system-generated unique identi

COMMENT ON COLUMN cdm.procedure_occurrence.person_id IS 'A foreign key identifier to the Person who is s

COMMENT ON COLUMN cdm.procedure_occurrence.procedure_datetime IS 'The date and time on which the Procedu

COMMENT ON COLUMN cdm.procedure_occurrence.provider_id IS 'A foreign key to the provider in the PROVIDER
COMMENT ON COLUMN cdm.procedure_occurrence.visit_occurrence_id IS 'A foreign key to the Visit in the VI


COMMENT ON COLUMN cdm.procedure_occurrence.visit_detail_id IS 'A foreign key to the Visit Detail in the


COMMENT ON COLUMN cdm.procedure_occurrence.procedure_concept_id IS 'A foreign key that refers to a stan


COMMENT ON COLUMN cdm.procedure_occurrence.procedure_source_concept_id IS 'A foreign key to a Procedure


COMMENT ON COLUMN cdm.procedure_occurrence.procedure_type_concept_id IS 'A foreign key to the predefine


COMMENT ON COLUMN cdm.procedure_occurrence.modifier_concept_id IS 'A foreign key to a Standard Concept


COMMENT ON COLUMN cdm.procedure_occurrence.quantity IS 'The quantity of procedures ordered or administe


COMMENT ON COLUMN cdm.procedure_occurrence.procedure_date IS 'The date on which the Procedure was perfo


COMMENT ON COLUMN cdm.procedure_occurrence.procedure_source_value IS 'The source code for the Procedure


COMMENT ON COLUMN cdm.procedure_occurrence.modifier_source_value IS 'The source code for the qualifier


CREATE TABLE cdm.provider (
    provider_id bigint NOT NULL,
    care_site_id bigint,
    specialty_concept_id integer NOT NULL,
    gender_concept_id integer NOT NULL,
    specialty_source_concept_id integer DEFAULT 0 NOT NULL,
    gender_source_concept_id integer NOT NULL,
    year_of_birth integer,
    gender_source_value text,
    provider_source_value text,
    specialty_source_value text,
    provider_name text,
    npi text,
    dea text,
    CONSTRAINT chk_provider_dea CHECK ((COALESCE(length(dea), 0) <= 20)),
    CONSTRAINT chk_provider_npi CHECK ((COALESCE(length(npi), 0) <= 20)),
    CONSTRAINT chk_provider_provider_name CHECK ((COALESCE(length(provider_name), 0) <= 255))
);


COMMENT ON TABLE cdm.provider IS 'The PROVIDER table contains a list of uniquely identified healthcare p


COMMENT ON COLUMN cdm.provider.provider_id IS 'A unique identifier for each Provider.';


COMMENT ON COLUMN cdm.provider.care_site_id IS 'A foreign key to the main Care Site where the provider i


COMMENT ON COLUMN cdm.provider.specialty_concept_id IS 'A foreign key to a Standard Specialty Concept ID


COMMENT ON COLUMN cdm.provider.gender_concept_id IS 'The gender of the Provider.';


COMMENT ON COLUMN cdm.provider.specialty_source_concept_id IS 'A foreign key to a Concept that refers to


COMMENT ON COLUMN cdm.provider.gender_source_concept_id IS 'A foreign key to a Concept that refers to th


COMMENT ON COLUMN cdm.provider.year_of_birth IS 'The year of birth of the Provider.';


COMMENT ON COLUMN cdm.provider.gender_source_value IS 'The gender code for the Provider as it appears in


COMMENT ON COLUMN cdm.provider.provider_source_value IS 'The identifier used for the Provider in the sou


COMMENT ON COLUMN cdm.provider.specialty_source_value IS 'The source code for the Provider specialty as


COMMENT ON COLUMN cdm.provider.provider_name IS 'A description of the Provider.';
COMMENT ON COLUMN cdm.provider.npi IS 'The National Provider Identifier (NPI) of the provider.';



COMMENT ON COLUMN cdm.provider.dea IS 'The Drug Enforcement Administration (DEA) number of the provider



CREATE TABLE cdm.source_to_source_vocab_map (
    source_code text,
    source_concept_id integer,
    source_code_description text,
    source_vocabulary_id text,
    source_domain_id text,
    source_concept_class_id text,
    source_valid_start_date date,
    source_valid_end_date date,
    source_invalid_reason text,
    target_concept_id integer,
    target_concept_name text,
    target_vocabulary_id text,
    target_domain_id text,
    target_concept_class_id text,
    target_invalid_reason text,
    target_standard_concept text
);



CREATE TABLE cdm.source_to_standard_vocab_map (
    source_code text,
    source_concept_id integer,
    source_code_description text,
    source_vocabulary_id text,
    source_domain_id text,
    source_concept_class_id text,
    source_valid_start_date date,
    source_valid_end_date date,
    source_invalid_reason text,
    target_concept_id integer,
    target_concept_name text,
    target_vocabulary_id text,
    target_domain_id text,
    target_concept_class_id text,
    target_invalid_reason text,
    target_standard_concept text
);


ALTER TABLE cdm.source_to_standard_vocab_map OWNER TO postgres;
```

```
CREATE TABLE cdm.specimen (
    specimen_id bigint NOT NULL,
    person_id bigint NOT NULL,
    specimen_datetime timestamp without time zone NOT NULL,
    specimen_concept_id integer NOT NULL,
    specimen_type_concept_id integer NOT NULL,
    anatomic_site_concept_id integer NOT NULL,
    disease_status_concept_id integer NOT NULL,
    unit_concept_id integer,
    specimen_date date,
    quantity numeric,
    specimen_source_id text,
    specimen_source_value text,
    unit_source_value text,
    anatomic_site_source_value text,
    disease_status_source_value text,
    CONSTRAINT chk_specimen_specimen_source_id CHECK ((COALESCE(length(specimen_source_id), 0) <= 50))
);


ALTER TABLE cdm.specimen OWNER TO postgres;


COMMENT ON TABLE cdm.specimen IS 'The specimen domain contains the records identifying biological sampl


COMMENT ON COLUMN cdm.specimen.specimen_id IS 'A unique identifier for each specimen.';


COMMENT ON COLUMN cdm.specimen.person_id IS 'A foreign key identifier to the Person for whom the Specim


COMMENT ON COLUMN cdm.specimen.specimen_datetime IS 'The date and time on the date when the Specimen wa


COMMENT ON COLUMN cdm.specimen.specimen_concept_id IS 'A foreign key referring to a Standard Concept id


COMMENT ON COLUMN cdm.specimen.specimen_type_concept_id IS 'A foreign key referring to the Concept iden


COMMENT ON COLUMN cdm.specimen.anatomic_site_concept_id IS 'A foreign key to a Standard Concept identif


COMMENT ON COLUMN cdm.specimen.disease_status_concept_id IS 'A foreign key to a Standard Concept identi
COMMENT ON COLUMN cdm.specimen.unit_concept_id IS 'A foreign key to a Standard Concept identifier for th

COMMENT ON COLUMN cdm.specimen.specimen_date IS 'The date the specimen was obtained from the Person.';

COMMENT ON COLUMN cdm.specimen.quantity IS 'The amount of specimen collection from the person during the

COMMENT ON COLUMN cdm.specimen.specimen_source_id IS 'The Specimen identifier as it appears in the sourc

COMMENT ON COLUMN cdm.specimen.specimen_source_value IS 'The Specimen value as it appears in the source

COMMENT ON COLUMN cdm.specimen.unit_source_value IS 'The information about the Unit as detailed in the s

COMMENT ON COLUMN cdm.specimen.anatomic_site_source_value IS 'The information about the anatomic site as

COMMENT ON COLUMN cdm.specimen.disease_status_source_value IS 'The information about the disease status

CREATE TABLE cdm.survey_conduct (
    survey_conduct_id bigint NOT NULL,
    person_id bigint NOT NULL,
    survey_end_datetime timestamp without time zone NOT NULL,
    survey_start_datetime timestamp without time zone,
    visit_occurrence_id bigint,
    visit_detail_id bigint,
    response_visit_occurrence_id bigint,
    provider_id bigint,
    survey_concept_id integer NOT NULL,
    assisted_concept_id integer NOT NULL,
    respondent_type_concept_id integer NOT NULL,
    timing_concept_id integer NOT NULL,
    collection_method_concept_id integer NOT NULL,
    survey_source_concept_id integer NOT NULL,
    validated_survey_concept_id integer NOT NULL,
    survey_start_date date,
    survey_end_date date,
    assisted_source_value text,
    respondent_type_source_value text,
    timing_source_value text,
    collection_method_source_value text,
    survey_source_value text,
    survey_source_identifier text,
    validated_survey_source_value text,
    survey_version_number text,
    CONSTRAINT survey_source_identifier_length CHECK ((COALESCE(length(survey_source_identifier), 0) <=
    CONSTRAINT survey_version_number_length CHECK ((COALESCE(length(survey_version_number), 0) <= 20))
);



COMMENT ON TABLE cdm.survey_conduct IS 'The SURVEY_CONDUCT table is used to store an instance of a comp


COMMENT ON COLUMN cdm.survey_conduct.survey_conduct_id IS 'Unique identifier for each completed survey.


COMMENT ON COLUMN cdm.survey_conduct.person_id IS 'A foreign key identifier to the Person in the PERSON


COMMENT ON COLUMN cdm.survey_conduct.survey_end_datetime IS 'Date and time the survey was completed.';


COMMENT ON COLUMN cdm.survey_conduct.survey_start_datetime IS 'Date and time the survey was started.';


COMMENT ON COLUMN cdm.survey_conduct.visit_occurrence_id IS 'A foreign key to the VISIT_OCCURRENCE tabl


COMMENT ON COLUMN cdm.survey_conduct.visit_detail_id IS 'A foreign key to the Visit in the VISIT_DETAIL


COMMENT ON COLUMN cdm.survey_conduct.response_visit_occurrence_id IS 'A foreign key to the visit in the


COMMENT ON COLUMN cdm.survey_conduct.provider_id IS 'A foreign key to the provider in the provider tabl


COMMENT ON COLUMN cdm.survey_conduct.survey_concept_id IS 'A foreign key to the predefined Concept iden


COMMENT ON COLUMN cdm.survey_conduct.assisted_concept_id IS 'A foreign key to the predefined Concept id
COMMENT ON COLUMN cdm.survey_conduct.respondent_type_concept_id IS 'A foreign key to the predefined Conc

COMMENT ON COLUMN cdm.survey_conduct.timing_concept_id IS 'A foreign key to the predefined Concept iden

COMMENT ON COLUMN cdm.survey_conduct.collection_method_concept_id IS 'A foreign key to the predefined Co

COMMENT ON COLUMN cdm.survey_conduct.survey_source_concept_id IS 'A foreign key to a predefined Concept

COMMENT ON COLUMN cdm.survey_conduct.validated_survey_concept_id IS 'A foreign key to the predefined Con

COMMENT ON COLUMN cdm.survey_conduct.survey_start_date IS 'Date on which the survey was started.';

COMMENT ON COLUMN cdm.survey_conduct.survey_end_date IS 'Date on which the survey was completed.';

COMMENT ON COLUMN cdm.survey_conduct.assisted_source_value IS 'Source value representing whether patien

COMMENT ON COLUMN cdm.survey_conduct.respondent_type_source_value IS 'Source code representing role of p

COMMENT ON COLUMN cdm.survey_conduct.timing_source_value IS 'Text string representing the timing of the

COMMENT ON COLUMN cdm.survey_conduct.collection_method_source_value IS 'The collection method as it appe

COMMENT ON COLUMN cdm.survey_conduct.survey_source_value IS 'The survey name/title as it appears in the

COMMENT ON COLUMN cdm.survey_conduct.survey_source_identifier IS 'Unique identifier for each completed s
```

```sql
COMMENT ON COLUMN cdm.survey_conduct.validated_survey_source_value IS 'Source value representing the val


COMMENT ON COLUMN cdm.survey_conduct.survey_version_number IS 'Version number of the questionnaire or su


CREATE TABLE cdm.visit_detail (
    visit_detail_id bigint NOT NULL,
    visit_detail_start_datetime timestamp without time zone,
    visit_detail_end_datetime timestamp without time zone,
    person_id bigint NOT NULL,
    visit_occurrence_id bigint NOT NULL,
    provider_id bigint,
    care_site_id bigint,
    preceding_visit_detail_id bigint,
    parent_visit_detail_id bigint,
    visit_detail_concept_id integer NOT NULL,
    visit_detail_type_concept_id integer NOT NULL,
    discharged_to_concept_id integer,
    admitted_from_concept_id integer,
    visit_detail_source_concept_id integer,
    visit_detail_start_date date,
    visit_detail_end_date date,
    admitted_from_source_value text,
    visit_detail_source_value text,
    discharged_to_source_value text
);


COMMENT ON TABLE cdm.visit_detail IS 'The VISIT_DETAIL table is an optional table used to represents de


COMMENT ON COLUMN cdm.visit_detail.visit_detail_id IS 'A unique identifier for each Person''s visit or 


COMMENT ON COLUMN cdm.visit_detail.visit_detail_start_datetime IS 'The date and time of the visit start


COMMENT ON COLUMN cdm.visit_detail.visit_detail_end_datetime IS 'The date and time of the visit end.';


COMMENT ON COLUMN cdm.visit_detail.person_id IS 'A foreign key identifier to the Person for whom the vi


COMMENT ON COLUMN cdm.visit_detail.visit_occurrence_id IS 'A foreign key that refers to the record in t
COMMENT ON COLUMN cdm.visit_detail.provider_id IS 'A foreign key to the provider in the provider table w

COMMENT ON COLUMN cdm.visit_detail.care_site_id IS 'A foreign key to the care site in the care site tabl

COMMENT ON COLUMN cdm.visit_detail.preceding_visit_detail_id IS 'A foreign key to the VISIT_DETAIL table

COMMENT ON COLUMN cdm.visit_detail.parent_visit_detail_id IS 'A foreign key to the VISIT_DETAIL table re

COMMENT ON COLUMN cdm.visit_detail.visit_detail_concept_id IS 'A foreign key that refers to a visit Conc

COMMENT ON COLUMN cdm.visit_detail.visit_detail_type_concept_id IS 'A foreign key to the predefined Conc

COMMENT ON COLUMN cdm.visit_detail.discharged_to_concept_id IS 'A foreign key to the predefined concept

COMMENT ON COLUMN cdm.visit_detail.admitted_from_concept_id IS 'A foreign key to the predefined concept

COMMENT ON COLUMN cdm.visit_detail.visit_detail_source_concept_id IS 'A foreign key to a Concept that re

COMMENT ON COLUMN cdm.visit_detail.visit_detail_start_date IS 'The start date of the visit.';

COMMENT ON COLUMN cdm.visit_detail.visit_detail_end_date IS 'The end date of the visit. If this is a one

COMMENT ON COLUMN cdm.visit_detail.admitted_from_source_value IS 'The source code for the admitting sour

COMMENT ON COLUMN cdm.visit_detail.visit_detail_source_value IS 'The source code for the visit as it app
COMMENT ON COLUMN cdm.visit_detail.discharged_to_source_value IS 'The source code for the discharge disp


CREATE TABLE cdm.visit_occurrence (
    visit_occurrence_id bigint NOT NULL,
    person_id bigint NOT NULL,
    visit_start_datetime timestamp without time zone NOT NULL,
    visit_end_datetime timestamp without time zone NOT NULL,
    provider_id bigint,
    care_site_id bigint,
    preceding_visit_occurrence_id bigint,
    visit_concept_id integer NOT NULL,
    visit_type_concept_id integer NOT NULL,
    visit_source_concept_id integer NOT NULL,
    admitted_from_concept_id integer NOT NULL,
    discharged_to_concept_id integer NOT NULL,
    visit_start_date date,
    visit_end_date date,
    visit_source_value text,
    admitted_from_source_value text,
    discharged_to_source_value text
);



COMMENT ON TABLE cdm.visit_occurrence IS 'The VISIT_OCCURRENCE table contains the spans of time a Perso



COMMENT ON COLUMN cdm.visit_occurrence.visit_occurrence_id IS 'A unique identifier for each Person''s v



COMMENT ON COLUMN cdm.visit_occurrence.person_id IS 'A foreign key identifier to the Person for whom th



COMMENT ON COLUMN cdm.visit_occurrence.visit_start_datetime IS 'The date and time of the visit started.



COMMENT ON COLUMN cdm.visit_occurrence.visit_end_datetime IS 'The date and time of the visit end.';



COMMENT ON COLUMN cdm.visit_occurrence.provider_id IS 'A foreign key to the provider in the provider ta



COMMENT ON COLUMN cdm.visit_occurrence.care_site_id IS 'A foreign key to the care site in the care site
COMMENT ON COLUMN cdm.visit_occurrence.preceding_visit_occurrence_id IS 'A foreign key to the VISIT_OCCU

COMMENT ON COLUMN cdm.visit_occurrence.visit_concept_id IS 'A foreign key that refers to a visit Concep

COMMENT ON COLUMN cdm.visit_occurrence.visit_type_concept_id IS 'A foreign key to the predefined Concep

COMMENT ON COLUMN cdm.visit_occurrence.visit_source_concept_id IS 'A foreign key to a Concept that refe

COMMENT ON COLUMN cdm.visit_occurrence.admitted_from_concept_id IS 'A foreign key to the predefined con

COMMENT ON COLUMN cdm.visit_occurrence.discharged_to_concept_id IS 'A foreign key to the predefined con

COMMENT ON COLUMN cdm.visit_occurrence.visit_start_date IS 'The start date of the visit.';

COMMENT ON COLUMN cdm.visit_occurrence.visit_end_date IS 'The end date of the visit. If this is a one-da

COMMENT ON COLUMN cdm.visit_occurrence.visit_source_value IS 'The source code for the visit as it appea

COMMENT ON COLUMN cdm.visit_occurrence.admitted_from_source_value IS 'The source code for where the pati

COMMENT ON COLUMN cdm.visit_occurrence.discharged_to_source_value IS 'The source code for the discharge


CREATE TABLE vocabularies.concept (
    concept_id integer NOT NULL,
    valid_start_date date NOT NULL,
    valid_end_date date NOT NULL,
    concept_name text NOT NULL,
    domain_id text NOT NULL,
    vocabulary_id text NOT NULL,
    concept_class_id text NOT NULL,
    concept_code text NOT NULL,
    standard_concept text,
    invalid_reason text,
    CONSTRAINT chk_concept_concept_code CHECK ((concept_code <> ''::text)),
    CONSTRAINT chk_concept_concept_name CHECK ((concept_name <> ''::text)),
    CONSTRAINT chk_concept_invalid_reason CHECK ((COALESCE(invalid_reason, ('D'::character varying)::te
    CONSTRAINT chk_concept_standard_concept CHECK ((COALESCE(standard_concept, ('C'::character varying)
);



COMMENT ON TABLE vocabularies.concept IS 'The Standardized Vocabularies contains records, or Concepts,



COMMENT ON COLUMN vocabularies.concept.concept_id IS 'A unique identifier for each Concept across all d



COMMENT ON COLUMN vocabularies.concept.valid_start_date IS 'The date when the Concept was first recorde



COMMENT ON COLUMN vocabularies.concept.valid_end_date IS 'The date when the Concept became invalid beca



COMMENT ON COLUMN vocabularies.concept.concept_name IS 'An unambiguous, meaningful and descriptive name



COMMENT ON COLUMN vocabularies.concept.domain_id IS 'A foreign key to the [DOMAIN](https://github.com/O



COMMENT ON COLUMN vocabularies.concept.vocabulary_id IS 'A foreign key to the [VOCABULARY](https://githu



COMMENT ON COLUMN vocabularies.concept.concept_class_id IS 'The attribute or concept class of the Conce



COMMENT ON COLUMN vocabularies.concept.concept_code IS 'The concept code represents the identifier of t



COMMENT ON COLUMN vocabularies.concept.standard_concept IS 'This flag determines where a Concept is a S



COMMENT ON COLUMN vocabularies.concept.invalid_reason IS 'Reason the Concept was invalidated. Possible
```

```
CREATE TABLE vocabularies.concept_ancestor (
    ancestor_concept_id integer NOT NULL,
    descendant_concept_id integer NOT NULL,
    min_levels_of_separation integer NOT NULL,
    max_levels_of_separation integer NOT NULL
);


COMMENT ON TABLE vocabularies.concept_ancestor IS 'The CONCEPT_ANCESTOR table is designed to simplify o



COMMENT ON COLUMN vocabularies.concept_ancestor.ancestor_concept_id IS 'A foreign key to the concept in



COMMENT ON COLUMN vocabularies.concept_ancestor.descendant_concept_id IS 'A foreign key to the concept



COMMENT ON COLUMN vocabularies.concept_ancestor.min_levels_of_separation IS 'The minimum separation in



COMMENT ON COLUMN vocabularies.concept_ancestor.max_levels_of_separation IS 'The maximum separation in



CREATE TABLE vocabularies.concept_class (
    concept_class_concept_id integer NOT NULL,
    concept_class_id text NOT NULL,
    concept_class_name text NOT NULL,
    CONSTRAINT chk_concept_class_concept_class_id CHECK ((length(concept_class_id) <= 20)),
    CONSTRAINT chk_concept_class_concept_class_name CHECK ((length(concept_class_name) <= 255))
);



COMMENT ON TABLE vocabularies.concept_class IS 'The CONCEPT_CLASS table is a reference table, which inc



COMMENT ON COLUMN vocabularies.concept_class.concept_class_concept_id IS 'A foreign key that refers to



COMMENT ON COLUMN vocabularies.concept_class.concept_class_id IS 'A unique key for each class.';



COMMENT ON COLUMN vocabularies.concept_class.concept_class_name IS 'The name describing the Concept Cla
```

```
CREATE TABLE vocabularies.concept_relationship (
    concept_id_1 integer NOT NULL,
    concept_id_2 integer NOT NULL,
    valid_start_date date NOT NULL,
    valid_end_date date NOT NULL,
    relationship_id text NOT NULL,
    invalid_reason text,
    CONSTRAINT chk_concept_relationship_relationship_id CHECK ((length(relationship_id) <= 20)),
    CONSTRAINT chk_invalid_reason CHECK ((COALESCE(invalid_reason, ('D'::character varying)::text) = 'D
);


ALTER TABLE vocabularies.concept_relationship OWNER TO postgres;


COMMENT ON TABLE vocabularies.concept_relationship IS 'The CONCEPT_RELATIONSHIP table contains records


COMMENT ON COLUMN vocabularies.concept_relationship.concept_id_1 IS 'A foreign key to a Concept in the


COMMENT ON COLUMN vocabularies.concept_relationship.concept_id_2 IS 'A foreign key to a Concept in the


COMMENT ON COLUMN vocabularies.concept_relationship.valid_start_date IS 'The date when the instance of


COMMENT ON COLUMN vocabularies.concept_relationship.valid_end_date IS 'The date when the Concept Relati


COMMENT ON COLUMN vocabularies.concept_relationship.relationship_id IS 'A unique identifier to the type


COMMENT ON COLUMN vocabularies.concept_relationship.invalid_reason IS 'Reason the relationship was inval


CREATE TABLE vocabularies.concept_synonym (
    concept_id integer NOT NULL,
    language_concept_id integer NOT NULL,
    concept_synonym_name text NOT NULL,
    CONSTRAINT chk_csyn_concept_synonym_name CHECK ((concept_synonym_name <> ''::text))
);


ALTER TABLE vocabularies.concept_synonym OWNER TO postgres;
```

```
COMMENT ON TABLE vocabularies.concept_synonym IS 'The CONCEPT_SYNONYM table is used to store alternate r


COMMENT ON COLUMN vocabularies.concept_synonym.concept_id IS 'A foreign key to the Concept in the CONCEP


COMMENT ON COLUMN vocabularies.concept_synonym.language_concept_id IS 'A foreign key to a Concept repres


COMMENT ON COLUMN vocabularies.concept_synonym.concept_synonym_name IS 'The alternative name for the Con


CREATE TABLE vocabularies.domain (
    domain_concept_id integer,
    domain_id text NOT NULL,
    domain_name text NOT NULL,
    CONSTRAINT chk_domain_domain_id CHECK ((length(domain_id) <= 20)),
    CONSTRAINT chk_domain_domain_name CHECK ((length(domain_name) <= 255))
);


ALTER TABLE vocabularies.domain OWNER TO postgres;


COMMENT ON TABLE vocabularies.domain IS 'The DOMAIN table includes a list of OMOP-defined Domains the Co


COMMENT ON COLUMN vocabularies.domain.domain_concept_id IS 'A foreign key that refers to an identifier i


COMMENT ON COLUMN vocabularies.domain.domain_id IS 'A unique key for each domain.';


COMMENT ON COLUMN vocabularies.domain.domain_name IS 'The name describing the Domain, e.g. "Condition",


CREATE TABLE vocabularies.drug_strength (
    drug_concept_id integer NOT NULL,
    ingredient_concept_id integer NOT NULL,
    valid_start_date date NOT NULL,
    valid_end_date date NOT NULL,
    amount_unit_concept_id integer,
    numerator_unit_concept_id integer,
    denominator_unit_concept_id integer,
    box_size integer,
    amount_value numeric,
    numerator_value numeric,
    denominator_value numeric,
    invalid_reason text,
    CONSTRAINT chk_drug_strength_invalid_reason CHECK ((COALESCE(length(invalid_reason), 0) <= 1))
);


ALTER TABLE vocabularies.drug_strength OWNER TO postgres;


COMMENT ON TABLE vocabularies.drug_strength IS 'The DRUG_STRENGTH table contains structured content abou



COMMENT ON COLUMN vocabularies.drug_strength.drug_concept_id IS 'A foreign key to the Concept in the CO



COMMENT ON COLUMN vocabularies.drug_strength.ingredient_concept_id IS 'A foreign key to the Concept in



COMMENT ON COLUMN vocabularies.drug_strength.valid_start_date IS 'The date when the Concept was first r



COMMENT ON COLUMN vocabularies.drug_strength.valid_end_date IS 'The date when the concept became invali



COMMENT ON COLUMN vocabularies.drug_strength.amount_unit_concept_id IS 'A foreign key to the Concept in



COMMENT ON COLUMN vocabularies.drug_strength.numerator_unit_concept_id IS 'A foreign key to the Concept



COMMENT ON COLUMN vocabularies.drug_strength.denominator_unit_concept_id IS 'A foreign key to the Conce



COMMENT ON COLUMN vocabularies.drug_strength.box_size IS 'The number of units of Clinical of Branded Dr



COMMENT ON COLUMN vocabularies.drug_strength.amount_value IS 'The numeric value associated with the amo



COMMENT ON COLUMN vocabularies.drug_strength.numerator_value IS 'The numeric value associated with the
COMMENT ON COLUMN vocabularies.drug_strength.denominator_value IS 'The amount of total liquid (or other



COMMENT ON COLUMN vocabularies.drug_strength.invalid_reason IS 'Reason the concept was invalidated. Pos



CREATE TABLE vocabularies.relationship (
    relationship_concept_id integer NOT NULL,
    relationship_id text NOT NULL,
    relationship_name text NOT NULL,
    is_hierarchical text NOT NULL,
    defines_ancestry text NOT NULL,
    reverse_relationship_id text NOT NULL,
    CONSTRAINT chk_relationship_defines_ancestry CHECK ((length(defines_ancestry) <= 1)),
    CONSTRAINT chk_relationship_is_hierachical CHECK ((length(is_hierarchical) <= 1)),
    CONSTRAINT chk_relationship_relationship_id CHECK ((length(relationship_id) <= 20)),
    CONSTRAINT chk_relationship_relationship_name CHECK ((length(relationship_name) <= 255)),
    CONSTRAINT chk_relationship_reverse_relationship_id CHECK ((length(reverse_relationship_id) <= 20))
);


ALTER TABLE vocabularies.relationship OWNER TO postgres;


COMMENT ON TABLE vocabularies.relationship IS 'The RELATIONSHIP table provides a reference list of all



COMMENT ON COLUMN vocabularies.relationship.relationship_concept_id IS 'A foreign key that refers to an



COMMENT ON COLUMN vocabularies.relationship.relationship_id IS 'The type of relationship captured by th



COMMENT ON COLUMN vocabularies.relationship.relationship_name IS 'The text that describes the relations



COMMENT ON COLUMN vocabularies.relationship.is_hierarchical IS 'Defines whether a relationship defines



COMMENT ON COLUMN vocabularies.relationship.defines_ancestry IS 'Defines whether a hierarchical relatio



COMMENT ON COLUMN vocabularies.relationship.reverse_relationship_id IS 'The identifier for the relation
```

```
CREATE TABLE vocabularies.source_to_concept_map (
    source_concept_id integer NOT NULL,
    target_concept_id integer NOT NULL,
    valid_start_date date NOT NULL,
    valid_end_date date NOT NULL,
    source_code text NOT NULL,
    source_vocabulary_id text NOT NULL,
    target_vocabulary_id text NOT NULL,
    source_code_description text,
    invalid_reason text,
    CONSTRAINT chk_source_to_concept_map_invalid_reason CHECK ((COALESCE(length(invalid_reason), 0) <=
    CONSTRAINT chk_source_to_concept_map_source_code CHECK ((length(source_code) <= 50)),
    CONSTRAINT chk_source_to_concept_map_source_code_description CHECK ((COALESCE(length(source_code_des
    CONSTRAINT chk_source_to_concept_map_source_vocabulary_id CHECK ((length(source_vocabulary_id) <= 20
    CONSTRAINT chk_source_to_concept_map_target_vocabulary_id CHECK ((length(target_vocabulary_id) <= 20
);


ALTER TABLE vocabularies.source_to_concept_map OWNER TO postgres;


COMMENT ON TABLE vocabularies.source_to_concept_map IS 'The source to concept map table is a legacy dat



COMMENT ON COLUMN vocabularies.source_to_concept_map.source_concept_id IS 'A foreign key to the Source



COMMENT ON COLUMN vocabularies.source_to_concept_map.target_concept_id IS 'A foreign key to the target



COMMENT ON COLUMN vocabularies.source_to_concept_map.valid_start_date IS 'The date when the mapping ins



COMMENT ON COLUMN vocabularies.source_to_concept_map.valid_end_date IS 'The date when the mapping instan



COMMENT ON COLUMN vocabularies.source_to_concept_map.source_code IS 'The source code being translated i



COMMENT ON COLUMN vocabularies.source_to_concept_map.source_vocabulary_id IS 'A foreign key to the VOCA



COMMENT ON COLUMN vocabularies.source_to_concept_map.target_vocabulary_id IS 'A foreign key to the VOCA
COMMENT ON COLUMN vocabularies.source_to_concept_map.source_code_description IS 'An optional descriptio



COMMENT ON COLUMN vocabularies.source_to_concept_map.invalid_reason IS 'Reason the mapping instance was



CREATE TABLE vocabularies.source_to_standard_vocab_map (
    source_concept_id integer,
    target_concept_id integer,
    source_valid_start_date date,
    source_valid_end_date date,
    source_code text,
    source_code_description text,
    source_vocabulary_id text,
    source_domain_id text,
    source_concept_class_id text,
    source_invalid_reason text,
    target_concept_name text,
    target_vocabulary_id text,
    target_domain_id text,
    target_concept_class_id text,
    target_invalid_reason text,
    target_standard_concept text
);


ALTER TABLE vocabularies.source_to_standard_vocab_map OWNER TO postgres;


CREATE TABLE vocabularies.vocabulary (
    vocabulary_concept_id integer NOT NULL,
    vocabulary_id text NOT NULL,
    vocabulary_name text NOT NULL,
    vocabulary_reference text,
    vocabulary_version text,
    CONSTRAINT chk_vocabulary_vocabulary_id CHECK ((length(vocabulary_id) <= 20)),
    CONSTRAINT chk_vocabulary_vocabulary_name CHECK ((length(vocabulary_name) <= 255)),
    CONSTRAINT chk_vocabulary_vocabulary_reference CHECK ((length(vocabulary_reference) <= 255)),
    CONSTRAINT chk_vocabulary_vocabulary_version CHECK ((length(vocabulary_version) <= 255))
);


ALTER TABLE vocabularies.vocabulary OWNER TO postgres;


COMMENT ON TABLE vocabularies.vocabulary IS 'The VOCABULARY table includes a list of the Vocabularies c



COMMENT ON COLUMN vocabularies.vocabulary.vocabulary_concept_id IS 'A foreign key that refers to a stan
COMMENT ON COLUMN vocabularies.vocabulary.vocabulary_id IS 'A unique identifier for each Vocabulary, suc


COMMENT ON COLUMN vocabularies.vocabulary.vocabulary_name IS 'The name describing the vocabulary, for ex


COMMENT ON COLUMN vocabularies.vocabulary.vocabulary_reference IS 'External reference to documentation o


COMMENT ON COLUMN vocabularies.vocabulary.vocabulary_version IS 'Version of the Vocabulary as indicated


ALTER TABLE ONLY cdm.note_nlp ALTER COLUMN note_nlp_id SET DEFAULT nextval('cdm.note_nlp_note_nlp_id_seq


ALTER TABLE ONLY cdm.artifactdeployment
    ADD CONSTRAINT artdefpk PRIMARY KEY (artifactpath, objectname);


ALTER TABLE ONLY cdm.artifactexecution
    ADD CONSTRAINT depl_exec_pk PRIMARY KEY (id);


ALTER TABLE ONLY cdm.care_site
    ADD CONSTRAINT xpk_care_site_id PRIMARY KEY (care_site_id);


ALTER TABLE ONLY cdm.care_site_specialty
    ADD CONSTRAINT xpk_care_site_specialty_id PRIMARY KEY (care_site_id);


ALTER TABLE ONLY cdm.cohort_definition
    ADD CONSTRAINT xpk_cohort_definition_id PRIMARY KEY (cohort_definition_id);


ALTER TABLE ONLY cdm.cohort
    ADD CONSTRAINT xpk_cohort_id PRIMARY KEY (cohort_definition_id, subject_id, cohort_start_date, coho


ALTER TABLE ONLY cdm.condition_era
    ADD CONSTRAINT xpk_condition_era_id PRIMARY KEY (condition_era_id);
```

```
ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT xpk_condition_occurrence_id PRIMARY KEY (condition_occurrence_id);


ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT xpk_cost_id PRIMARY KEY (cost_id);


ALTER TABLE ONLY cdm.death
    ADD CONSTRAINT xpk_death_id PRIMARY KEY (person_id);


ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT xpk_device_exposure_id PRIMARY KEY (device_exposure_id);


ALTER TABLE ONLY cdm.dose_era
    ADD CONSTRAINT xpk_dose_era_id PRIMARY KEY (dose_era_id);


ALTER TABLE ONLY cdm.drug_era
    ADD CONSTRAINT xpk_drug_era_id PRIMARY KEY (drug_era_id);


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT xpk_drug_exposure_id PRIMARY KEY (drug_exposure_id);


ALTER TABLE ONLY cdm.location_history
    ADD CONSTRAINT xpk_location_history_id PRIMARY KEY (location_history_id);


ALTER TABLE ONLY cdm.location
    ADD CONSTRAINT xpk_location_id PRIMARY KEY (location_id);


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT xpk_measurement_id PRIMARY KEY (measurement_id);


ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT xpk_note_id PRIMARY KEY (note_id);
```

```
ALTER TABLE ONLY cdm.note_nlp
    ADD CONSTRAINT xpk_note_nlp PRIMARY KEY (note_nlp_id);



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT xpk_observation_id PRIMARY KEY (observation_id);



ALTER TABLE ONLY cdm.observation_period
    ADD CONSTRAINT xpk_observation_period_id PRIMARY KEY (observation_period_id);



ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT xpk_payer_plan_period_id PRIMARY KEY (payer_plan_period_id);



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT xpk_person_id PRIMARY KEY (person_id);



ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT xpk_procedure_occurrence_id PRIMARY KEY (procedure_occurrence_id);



ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT xpk_provider_id PRIMARY KEY (provider_id);



ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT xpk_specimen PRIMARY KEY (specimen_id);



ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT xpk_survey_conduct_id PRIMARY KEY (survey_conduct_id);



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT xpk_visit_detail_id PRIMARY KEY (visit_detail_id);



ALTER TABLE ONLY cdm.visit_occurrence
```

```
    ADD CONSTRAINT xpk_visit_occurrence_id PRIMARY KEY (visit_occurrence_id);



ALTER TABLE ONLY vocabularies.artifactdeployment
    ADD CONSTRAINT artdefpk PRIMARY KEY (artifactpath, objectname);



ALTER TABLE ONLY vocabularies.artifactexecution
    ADD CONSTRAINT depl_exec_pk PRIMARY KEY (id);



ALTER TABLE ONLY vocabularies.concept_synonym
    ADD CONSTRAINT uq_concept_synonym UNIQUE (concept_id, concept_synonym_name, language_concept_id);



ALTER TABLE ONLY vocabularies.concept_ancestor
    ADD CONSTRAINT xpk_concept_ancestor PRIMARY KEY (ancestor_concept_id, descendant_concept_id);



ALTER TABLE ONLY vocabularies.concept_class
    ADD CONSTRAINT xpk_concept_class PRIMARY KEY (concept_class_id);



ALTER TABLE ONLY vocabularies.concept
    ADD CONSTRAINT xpk_concept_id PRIMARY KEY (concept_id);



ALTER TABLE ONLY vocabularies.concept_relationship
    ADD CONSTRAINT xpk_concept_relationship_id PRIMARY KEY (concept_id_1, concept_id_2, relationship_id



ALTER TABLE ONLY vocabularies.domain
    ADD CONSTRAINT xpk_domain_id PRIMARY KEY (domain_id);



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT xpk_drug_strength PRIMARY KEY (drug_concept_id, ingredient_concept_id);



ALTER TABLE ONLY vocabularies.relationship
    ADD CONSTRAINT xpk_relationship_id PRIMARY KEY (relationship_id);
```

```
ALTER TABLE ONLY vocabularies.source_to_concept_map
    ADD CONSTRAINT xpk_source_to_concept_map_id PRIMARY KEY (source_vocabulary_id, target_concept_id, s


ALTER TABLE ONLY vocabularies.vocabulary
    ADD CONSTRAINT xpk_vocabulary_id PRIMARY KEY (vocabulary_id);


CREATE INDEX idx_cohort_cohort_definition_id ON cdm.cohort USING btree (cohort_definition_id);


CREATE INDEX idx_cohort_subject_id ON cdm.cohort USING btree (subject_id);


CREATE INDEX idx_condition_era_condition_concept_id ON cdm.condition_era USING btree (condition_concept_


CREATE INDEX idx_condition_era_person_id ON cdm.condition_era USING btree (person_id);


CREATE INDEX idx_condition_occurrence_condition_concept_id ON cdm.condition_occurrence USING btree (conc


CREATE INDEX idx_condition_occurrence_condition_source_concept_id ON cdm.condition_occurrence USING btre


CREATE INDEX idx_condition_occurrence_condition_start_datetime ON cdm.condition_occurrence USING btree


CREATE INDEX idx_condition_occurrence_condition_status_concept_id ON cdm.condition_occurrence USING btre


CREATE INDEX idx_condition_occurrence_condition_type_concept_id ON cdm.condition_occurrence USING btree


CREATE INDEX idx_condition_occurrence_person_id ON cdm.condition_occurrence USING btree (person_id);


CREATE INDEX idx_condition_occurrence_visit_detail_id ON cdm.condition_occurrence USING btree (visit_de
CREATE INDEX idx_condition_occurrence_visit_occurrence_id ON cdm.condition_occurrence USING btree (visi

CREATE INDEX idx_device_exposure_device_concept_id ON cdm.device_exposure USING btree (device_concept_i

CREATE INDEX idx_device_exposure_device_exposure_start_datetime ON cdm.device_exposure USING btree (dev

CREATE INDEX idx_device_exposure_person_id ON cdm.device_exposure USING btree (person_id);

CREATE INDEX idx_device_exposure_visit_detail_id ON cdm.device_exposure USING btree (visit_detail_id);

CREATE INDEX idx_device_exposure_visit_occurrence_id ON cdm.device_exposure USING btree (visit_occurren

CREATE INDEX idx_dose_era_dose_era_start_datetime ON cdm.dose_era USING btree (dose_era_start_datetime)

CREATE INDEX idx_dose_era_drug_concept_id ON cdm.dose_era USING btree (drug_concept_id);

CREATE INDEX idx_dose_era_person_id ON cdm.dose_era USING btree (person_id);

CREATE INDEX idx_drug_era_drug_concept_id ON cdm.drug_era USING btree (drug_concept_id);

CREATE INDEX idx_drug_era_person_id ON cdm.drug_era USING btree (person_id);

CREATE INDEX idx_drug_exposure_drug_concept_id ON cdm.drug_exposure USING btree (drug_concept_id);

CREATE INDEX idx_drug_exposure_drug_exposure_start_datetime ON cdm.drug_exposure USING btree (drug_expo

CREATE INDEX idx_drug_exposure_drug_source_concept_id ON cdm.drug_exposure USING btree (drug_source_con
CREATE INDEX idx_drug_exposure_person_id ON cdm.drug_exposure USING btree (person_id);

CREATE INDEX idx_drug_exposure_route_concept_id ON cdm.drug_exposure USING btree (route_concept_id);

CREATE INDEX idx_drug_exposure_visit_occurrence_id ON cdm.drug_exposure USING btree (visit_occurrence_i

CREATE INDEX idx_episode_episode_start_datetime ON cdm.episode USING btree (episode_start_datetime);

CREATE INDEX idx_fact_relationship_domain_concept_id_1 ON cdm.fact_relationship USING btree (domain_con

CREATE INDEX idx_fact_relationship_domain_concept_id_2 ON cdm.fact_relationship USING btree (domain_con

CREATE INDEX idx_fact_relationship_relationship_concept_id ON cdm.fact_relationship USING btree (relati

CREATE INDEX idx_measurement_measurement_concept_id ON cdm.measurement USING btree (measurement_concept_

CREATE INDEX idx_measurement_measurement_date ON cdm.measurement USING btree (measurement_date);

CREATE INDEX idx_measurement_measurement_datetime ON cdm.measurement USING btree (measurement_datetime)

CREATE INDEX idx_measurement_measurement_source_concept_id ON cdm.measurement USING btree (measurement_

CREATE INDEX idx_measurement_person_id ON cdm.measurement USING btree (person_id);

CREATE INDEX idx_measurement_unit_concept_id ON cdm.measurement USING btree (unit_concept_id);
CREATE INDEX idx_measurement_value_as_concept_id ON cdm.measurement USING btree (value_as_concept_id);

CREATE INDEX idx_measurement_visit_occurrence_id ON cdm.measurement USING btree (visit_occurrence_id);

CREATE INDEX idx_note_encoding_concept_id ON cdm.note USING btree (encoding_concept_id);

CREATE INDEX idx_note_language_concept_id ON cdm.note USING btree (language_concept_id);

CREATE INDEX idx_note_nlp_concept_id ON cdm.note_nlp USING btree (note_nlp_concept_id);

CREATE INDEX idx_note_nlp_note_id ON cdm.note_nlp USING btree (note_id);

CREATE INDEX idx_note_note_class_concept_id ON cdm.note USING btree (note_class_concept_id);

CREATE INDEX idx_note_note_datetime ON cdm.note USING btree (note_datetime);

CREATE INDEX idx_note_note_event_field_concept_id ON cdm.note USING btree (note_event_field_concept_id)

CREATE INDEX idx_note_note_event_id ON cdm.note USING btree (note_event_id);

CREATE INDEX idx_note_note_type_concept_id ON cdm.note USING btree (note_type_concept_id);

CREATE INDEX idx_note_person_id ON cdm.note USING btree (person_id);

CREATE INDEX idx_note_visit_detail_id ON cdm.note USING btree (visit_detail_id);

CREATE INDEX idx_note_visit_occurrence_id ON cdm.note USING btree (visit_occurrence_id);
CREATE INDEX idx_observation_obs_event_field_concept_id ON cdm.observation USING btree (obs_event_field_

CREATE INDEX idx_observation_observation_concept_id ON cdm.observation USING btree (observation_concept_

CREATE INDEX idx_observation_observation_datetime ON cdm.observation USING btree (observation_datetime)

CREATE INDEX idx_observation_observation_type_concept_id ON cdm.observation USING btree (observation_ty

CREATE INDEX idx_observation_period_person_id ON cdm.observation_period USING btree (person_id);

CREATE INDEX idx_observation_period_start_date_person_id ON cdm.observation_period USING btree (observa

CREATE INDEX idx_observation_person_id ON cdm.observation USING btree (person_id);

CREATE INDEX idx_observation_qualifier_concept_id ON cdm.observation USING btree (qualifier_concept_id)

CREATE INDEX idx_observation_unit_concept_id ON cdm.observation USING btree (unit_concept_id);

CREATE INDEX idx_observation_value_as_concept_id ON cdm.observation USING btree (value_as_concept_id);

CREATE INDEX idx_observation_visit_detail_id ON cdm.observation USING btree (visit_detail_id);

CREATE INDEX idx_observation_visit_occurrence_id ON cdm.observation USING btree (visit_occurrence_id);

CREATE INDEX idx_person_birth_datetime ON cdm.person USING btree (birth_datetime);
CREATE INDEX idx_person_ethnicity_concept_id ON cdm.person USING btree (ethnicity_concept_id);

CREATE INDEX idx_person_ethnicity_source_concept_id ON cdm.person USING btree (ethnicity_source_concept_

CREATE INDEX idx_person_gender_concept_id ON cdm.person USING btree (gender_concept_id);

CREATE INDEX idx_person_gender_source_concept_id ON cdm.person USING btree (gender_source_concept_id);

CREATE INDEX idx_person_race_concept_id ON cdm.person USING btree (race_concept_id);

CREATE INDEX idx_person_race_source_concept_id ON cdm.person USING btree (race_source_concept_id);

CREATE INDEX idx_procedure_occurrence_modifier_concept_id ON cdm.procedure_occurrence USING btree (modi

CREATE INDEX idx_procedure_occurrence_person_id ON cdm.procedure_occurrence USING btree (person_id);

CREATE INDEX idx_procedure_occurrence_procedure_concept_id ON cdm.procedure_occurrence USING btree (proc

CREATE INDEX idx_procedure_occurrence_procedure_datetime ON cdm.procedure_occurrence USING btree (proce

CREATE INDEX idx_procedure_occurrence_procedure_source_concept_id ON cdm.procedure_occurrence USING btre

CREATE INDEX idx_procedure_occurrence_procedure_type_concept_id ON cdm.procedure_occurrence USING btree

CREATE INDEX idx_procedure_occurrence_visit_detail_id ON cdm.procedure_occurrence USING btree (visit_de

CREATE INDEX idx_procedure_occurrence_visit_occurrence_id ON cdm.procedure_occurrence USING btree (visi
CREATE INDEX idx_source_vocab_map_source_code ON cdm.source_to_source_vocab_map USING btree (source_cod

CREATE INDEX idx_source_vocab_map_source_vocab_id ON cdm.source_to_source_vocab_map USING btree (source_

CREATE INDEX idx_specimen_specimen_datetime ON cdm.specimen USING btree (specimen_datetime);

CREATE INDEX idx_visit_detail_care_site_id ON cdm.visit_detail USING btree (care_site_id);

CREATE INDEX idx_visit_detail_discharged_to_concept_id ON cdm.visit_detail USING btree (discharged_to_c

CREATE INDEX idx_visit_detail_parent_visit_detail_id ON cdm.visit_detail USING btree (parent_visit_deta

CREATE INDEX idx_visit_detail_person_id ON cdm.visit_detail USING btree (person_id);

CREATE INDEX idx_visit_detail_preceding_visit_detail_id ON cdm.visit_detail USING btree (preceding_visi

CREATE INDEX idx_visit_detail_visit_detail_concept_id ON cdm.visit_detail USING btree (visit_detail_con

CREATE INDEX idx_visit_detail_visit_detail_source_concept_id ON cdm.visit_detail USING btree (visit_det

CREATE INDEX idx_visit_detail_visit_detail_start_datetime ON cdm.visit_detail USING btree (visit_detail_

CREATE INDEX idx_visit_detail_visit_detail_type_concept_id ON cdm.visit_detail USING btree (visit_detail

CREATE INDEX idx_visit_detail_visit_occurrence_id ON cdm.visit_detail USING btree (visit_occurrence_id)
CREATE INDEX idx_visit_occurrence_care_site_id ON cdm.visit_occurrence USING btree (care_site_id);

CREATE INDEX idx_visit_occurrence_discharged_to_concept_id ON cdm.visit_occurrence USING btree (discharg

CREATE INDEX idx_visit_occurrence_person_id ON cdm.visit_occurrence USING btree (person_id);

CREATE INDEX idx_visit_occurrence_preceding_visit_occurrence_id ON cdm.visit_occurrence USING btree (pr

CREATE INDEX idx_visit_occurrence_visit_concept_id ON cdm.visit_occurrence USING btree (visit_concept_i

CREATE INDEX idx_visit_occurrence_visit_source_concept_id ON cdm.visit_occurrence USING btree (visit_so

CREATE INDEX idx_visit_occurrence_visit_start_datetime ON cdm.visit_occurrence USING btree (visit_start_

CREATE INDEX idx_visit_occurrence_visit_type_concept_id ON cdm.visit_occurrence USING btree (visit_type_

CREATE INDEX idx_vocab_map_source_code ON cdm.source_to_standard_vocab_map USING btree (source_code);

CREATE INDEX idx_vocab_map_source_vocab_id ON cdm.source_to_standard_vocab_map USING btree (source_voca

CREATE INDEX trgm_note_note_text ON cdm.note USING gin (note_text public.gin_trgm_ops);

CREATE INDEX idx_ar_aid ON results.achilles_results USING btree (analysis_id);

CREATE INDEX idx_ar_aid_s1 ON results.achilles_results USING btree (analysis_id, stratum_1);

CREATE INDEX idx_ar_aid_s1234 ON results.achilles_results USING btree (analysis_id, stratum_1, stratum_
CREATE INDEX idx_ar_s1 ON results.achilles_results USING btree (stratum_1);

CREATE INDEX idx_ar_s2 ON results.achilles_results USING btree (stratum_2);

CREATE INDEX idx_ard_aid ON results.achilles_results_dist USING btree (analysis_id);

CREATE INDEX idx_ard_s1 ON results.achilles_results_dist USING btree (stratum_1);

CREATE INDEX idx_ard_s2 ON results.achilles_results_dist USING btree (stratum_2);

CREATE INDEX idx_concept_ancestor_descendant_concept_id ON vocabularies.concept_ancestor USING btree (de

CREATE INDEX idx_concept_concept_code ON vocabularies.concept USING btree (concept_code);

CREATE INDEX idx_concept_concept_name ON vocabularies.concept USING btree (concept_name);

CREATE INDEX idx_concept_relationship_concept_id_2 ON vocabularies.concept_relationship USING btree (con

CREATE INDEX idx_concept_synonym_concept_id ON vocabularies.concept_synonym USING btree (concept_id);

CREATE INDEX idx_drug_strength_amount_unit_concept_id ON vocabularies.drug_strength USING btree (amount_

CREATE INDEX idx_drug_strength_denominator_unit_concept_id ON vocabularies.drug_strength USING btree (de

CREATE INDEX idx_drug_strength_ingredient_concept_id ON vocabularies.drug_strength USING btree (ingredi
CREATE INDEX idx_drug_strength_numerator_unit_concept_id ON vocabularies.drug_strength USING btree (nume


CREATE INDEX source_to_standard_vocab_map_source_code_idx ON vocabularies.source_to_standard_vocab_map U


CREATE INDEX source_to_standard_vocab_map_target_concept_id_idx ON vocabularies.source_to_standard_vocab


CREATE INDEX trgm_concept_concept_name ON vocabularies.concept USING gin (concept_name public.gin_trgm_


ALTER TABLE ONLY cdm.care_site_specialty
    ADD CONSTRAINT care_site_specialty_care_site_id_fkey FOREIGN KEY (care_site_id) REFERENCES cdm.care_


ALTER TABLE ONLY cdm.care_site_specialty
    ADD CONSTRAINT care_site_specialty_specialty_concept_id_fkey FOREIGN KEY (specialty_concept_id) REFE


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT drug_exposure_visit_detail_id_fkey FOREIGN KEY (visit_detail_id) REFERENCES cdm.visit


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT drug_exposure_visit_occurrence_id_fkey FOREIGN KEY (visit_occurrence_id) REFERENCES c


ALTER TABLE ONLY cdm.cohort
    ADD CONSTRAINT fpk_cohort_cohort_definition_id FOREIGN KEY (cohort_definition_id) REFERENCES cdm.coh


ALTER TABLE ONLY cdm.cohort_definition
    ADD CONSTRAINT fpk_cohort_definition_definition_type_concept_id FOREIGN KEY (definition_type_concept


ALTER TABLE ONLY cdm.cohort_definition
    ADD CONSTRAINT fpk_cohort_definition_subject_concept_id FOREIGN KEY (subject_concept_id) REFERENCES


ALTER TABLE ONLY cdm.condition_era
    ADD CONSTRAINT fpk_condition_era_condition_concept_id FOREIGN KEY (condition_concept_id) REFERENCES
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ALTER TABLE ONLY cdm.condition_era
    ADD CONSTRAINT fpk_condition_era_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id)


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_condition_concept_id FOREIGN KEY (condition_concept_id) REFE


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_condition_source_concept_id FOREIGN KEY (condition_source_co


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_condition_status_concept_id FOREIGN KEY (condition_status_co


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_condition_type_concept_id FOREIGN KEY (condition_type_concep


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(pers


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provide


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_visit_detail_id FOREIGN KEY (visit_detail_id) REFERENCES cdm


ALTER TABLE ONLY cdm.condition_occurrence
    ADD CONSTRAINT fpk_condition_occurrence_visit_occurrence_id FOREIGN KEY (visit_occurrence_id) REFER


ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT fpk_cost_cost_type_concept_id FOREIGN KEY (cost_type_concept_id) REFERENCES vocabula


ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT fpk_cost_currency_concept_id FOREIGN KEY (currency_concept_id) REFERENCES vocabulari
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ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT fpk_cost_drg_concept_id FOREIGN KEY (drg_concept_id) REFERENCES vocabularies.concept



ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT fpk_cost_payer_plan_period_id FOREIGN KEY (payer_plan_period_id) REFERENCES cdm.payer



ALTER TABLE ONLY cdm.cost
    ADD CONSTRAINT fpk_cost_revenue_code_concept_id FOREIGN KEY (revenue_code_concept_id) REFERENCES voc



ALTER TABLE ONLY cdm.death
    ADD CONSTRAINT fpk_death_cause_concept_id FOREIGN KEY (cause_concept_id) REFERENCES vocabularies.con



ALTER TABLE ONLY cdm.death
    ADD CONSTRAINT fpk_death_cause_source_concept_id FOREIGN KEY (cause_source_concept_id) REFERENCES vo



ALTER TABLE ONLY cdm.death
    ADD CONSTRAINT fpk_death_death_type_concept FOREIGN KEY (death_type_concept_id) REFERENCES vocabula



ALTER TABLE ONLY cdm.death
    ADD CONSTRAINT fpk_death_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) ON UPDA



ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_device_concept_id FOREIGN KEY (device_concept_id) REFERENCES voca



ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_device_source_concept_id FOREIGN KEY (device_source_concept_id) 



ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_device_type_concept_id FOREIGN KEY (device_type_concept_id) REFE



ALTER TABLE ONLY cdm.device_exposure
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    ADD CONSTRAINT fpk_device_exposure_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_i


ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(pr


ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_visit_detail_id FOREIGN KEY (visit_detail_id) REFERENCES cdm.vis


ALTER TABLE ONLY cdm.device_exposure
    ADD CONSTRAINT fpk_device_exposure_visit_occurrence_id FOREIGN KEY (visit_occurrence_id) REFERENCES


ALTER TABLE ONLY cdm.dose_era
    ADD CONSTRAINT fpk_dose_era_drug_concept_id FOREIGN KEY (drug_concept_id) REFERENCES vocabularies.c


ALTER TABLE ONLY cdm.dose_era
    ADD CONSTRAINT fpk_dose_era_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) ON U


ALTER TABLE ONLY cdm.dose_era
    ADD CONSTRAINT fpk_dose_era_unit_concept_id FOREIGN KEY (unit_concept_id) REFERENCES vocabularies.c


ALTER TABLE ONLY cdm.drug_era
    ADD CONSTRAINT fpk_drug_era_drug_concept_id FOREIGN KEY (drug_concept_id) REFERENCES vocabularies.c


ALTER TABLE ONLY cdm.drug_era
    ADD CONSTRAINT fpk_drug_era_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) ON U


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_drug_concept_id FOREIGN KEY (drug_concept_id) REFERENCES vocabular


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_drug_source_concept_id FOREIGN KEY (drug_source_concept_id) REFERE
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ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_drug_type_concept_id FOREIGN KEY (drug_type_concept_id) REFERENCES


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id)


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provi


ALTER TABLE ONLY cdm.drug_exposure
    ADD CONSTRAINT fpk_drug_exposure_route_concept_id FOREIGN KEY (route_concept_id) REFERENCES vocabula


ALTER TABLE ONLY cdm.fact_relationship
    ADD CONSTRAINT fpk_fact_relationship_domain_concept_id_1 FOREIGN KEY (domain_concept_id_1) REFERENC


ALTER TABLE ONLY cdm.fact_relationship
    ADD CONSTRAINT fpk_fact_relationship_domain_concept_id_2 FOREIGN KEY (domain_concept_id_2) REFERENC


ALTER TABLE ONLY cdm.fact_relationship
    ADD CONSTRAINT fpk_fact_relationship_relationship_concept_id FOREIGN KEY (relationship_concept_id) R


ALTER TABLE ONLY cdm.location_history
    ADD CONSTRAINT fpk_location_history_relationship_type_concept_id FOREIGN KEY (relationship_type_conc


ALTER TABLE ONLY cdm.care_site
    ADD CONSTRAINT fpk_location_id FOREIGN KEY (location_id) REFERENCES cdm.location(location_id) ON UPD


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_measurement_concept_id FOREIGN KEY (measurement_concept_id) REFERENC


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_measurement_source_concept_id FOREIGN KEY (measurement_source_concept
ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_measurement_type_concept_id FOREIGN KEY (measurement_type_concept_id


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_operator_concept_id FOREIGN KEY (operator_concept_id) REFERENCES voca


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) O


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provide


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_unit_concept_id FOREIGN KEY (unit_concept_id) REFERENCES vocabularies


ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT fpk_measurement_value_as_concept_id FOREIGN KEY (value_as_concept_id) REFERENCES voca


ALTER TABLE ONLY cdm.metadata
    ADD CONSTRAINT fpk_metadata_metadata_concept_id FOREIGN KEY (metadata_concept_id) REFERENCES vocabul


ALTER TABLE ONLY cdm.metadata
    ADD CONSTRAINT fpk_metadata_metadata_type_concept FOREIGN KEY (metadata_type_concept_id) REFERENCES


ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_encoding_concept_id FOREIGN KEY (encoding_concept_id) REFERENCES vocabulari


ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_language_concept_id FOREIGN KEY (language_concept_id) REFERENCES vocabulari


ALTER TABLE ONLY cdm.note_nlp
    ADD CONSTRAINT fpk_note_nlp_concept FOREIGN KEY (note_nlp_concept_id) REFERENCES vocabularies.conce
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ALTER TABLE ONLY cdm.note_nlp
    ADD CONSTRAINT fpk_note_nlp_concept_s FOREIGN KEY (note_nlp_source_concept_id) REFERENCES vocabular

ALTER TABLE ONLY cdm.note_nlp
    ADD CONSTRAINT fpk_note_nlp_note FOREIGN KEY (note_id) REFERENCES cdm.note(note_id) DEFERRABLE;

ALTER TABLE ONLY cdm.note_nlp
    ADD CONSTRAINT fpk_note_nlp_section_concept FOREIGN KEY (section_concept_id) REFERENCES vocabularies

ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_note_class_concept_id FOREIGN KEY (note_class_concept_id) REFERENCES vocabul

ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_note_event_field_concept_id FOREIGN KEY (note_event_field_concept_id) REFER

ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_note_type_concept_id FOREIGN KEY (note_type_concept_id) REFERENCES vocabula

ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) ON UPDAT

ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT fpk_note_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provider_id)

ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_obs_event_field_concept_id FOREIGN KEY (obs_event_field_concept_id)

ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_observation_concept_id FOREIGN KEY (observation_concept_id) REFERENC

ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_observation_source_concept_id FOREIGN KEY (observation_source_concep
ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_observation_type_concept_id FOREIGN KEY (observation_type_concept_id



ALTER TABLE ONLY cdm.observation_period
    ADD CONSTRAINT fpk_observation_period_period_type_concept_id FOREIGN KEY (period_type_concept_id) R



ALTER TABLE ONLY cdm.observation_period
    ADD CONSTRAINT fpk_observation_period_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) O



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provide



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_qualifier_concept_id FOREIGN KEY (qualifier_concept_id) REFERENCES v



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_unit_concept_id FOREIGN KEY (unit_concept_id) REFERENCES vocabularie



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_value_as_concept_id FOREIGN KEY (value_as_concept_id) REFERENCES voca



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_visit_detail_id FOREIGN KEY (visit_detail_id) REFERENCES cdm.visit_d



ALTER TABLE ONLY cdm.observation
    ADD CONSTRAINT fpk_observation_visit_occurrence_id FOREIGN KEY (visit_occurrence_id) REFERENCES cdm



ALTER TABLE ONLY cdm.payer_plan_period
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    ADD CONSTRAINT fpk_payer_plan_period_contract_concept_id FOREIGN KEY (contract_concept_id) REFERENC


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_contract_person_id FOREIGN KEY (contract_person_id) REFERENCES


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_contract_source_concept_id FOREIGN KEY (contract_source_concep


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_payer_concept_id FOREIGN KEY (payer_concept_id) REFERENCES voca


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_payer_source_concept_id FOREIGN KEY (payer_source_concept_id) 


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_plan_concept_id FOREIGN KEY (plan_concept_id) REFERENCES vocabu


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_plan_source_concept_id FOREIGN KEY (plan_source_concept_id) REF


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_sponsor_concept_id FOREIGN KEY (sponsor_concept_id) REFERENCES


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_sponsor_source_concept_id FOREIGN KEY (sponsor_source_concept_


ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_stop_reason_concept_id FOREIGN KEY (stop_reason_concept_id) REF
```

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ALTER TABLE ONLY cdm.payer_plan_period
    ADD CONSTRAINT fpk_payer_plan_period_stop_reason_source_concept_id FOREIGN KEY (stop_reason_source_c



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_care_site_id FOREIGN KEY (care_site_id) REFERENCES cdm.care_site(care_site



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_ethnicity_concept_id FOREIGN KEY (ethnicity_concept_id) REFERENCES vocabul



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_ethnicity_source_concept_id FOREIGN KEY (ethnicity_source_concept_id) REFE



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_gender_concept_id FOREIGN KEY (gender_concept_id) REFERENCES vocabularies



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_gender_source_concept_id FOREIGN KEY (gender_source_concept_id) REFERENCES



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provider_id)



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_race_concept_id FOREIGN KEY (race_concept_id) REFERENCES vocabularies.conc



ALTER TABLE ONLY cdm.person
    ADD CONSTRAINT fpk_person_race_source_concept_id FOREIGN KEY (race_source_concept_id) REFERENCES voc



ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_modifier_concept_id FOREIGN KEY (modifier_concept_id) REFERE



ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(pers
ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_procedure_concept_id FOREIGN KEY (procedure_concept_id) REF


ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_procedure_source_concept_id FOREIGN KEY (procedure_source_c


ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_procedure_type_concept_id FOREIGN KEY (procedure_type_conce


ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provid


ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_visit_detail_id FOREIGN KEY (visit_detail_id) REFERENCES cd


ALTER TABLE ONLY cdm.procedure_occurrence
    ADD CONSTRAINT fpk_procedure_occurrence_visit_occurrence_id FOREIGN KEY (visit_occurrence_id) REFER


ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT fpk_provider_care_site_id FOREIGN KEY (care_site_id) REFERENCES cdm.care_site(care_s


ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT fpk_provider_gender_concept_id FOREIGN KEY (gender_concept_id) REFERENCES vocabulari


ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT fpk_provider_gender_source_concept_id FOREIGN KEY (gender_source_concept_id) REFEREN


ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT fpk_provider_specialty_concept_id FOREIGN KEY (specialty_concept_id) REFERENCES voca


ALTER TABLE ONLY cdm.provider
    ADD CONSTRAINT fpk_provider_specialty_source_concept_id FOREIGN KEY (specialty_source_concept_id) R
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ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_anatomic_site_concept_id FOREIGN KEY (anatomic_site_concept_id) REFEREN

ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_disease_status_concept_id FOREIGN KEY (disease_status_concept_id) REFER

ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id) ON U

ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_specimen_concept_id FOREIGN KEY (specimen_concept_id) REFERENCES vocabul

ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_specimen_type_concept_id FOREIGN KEY (specimen_type_concept_id) REFEREN

ALTER TABLE ONLY cdm.specimen
    ADD CONSTRAINT fpk_specimen_unit_concept_id FOREIGN KEY (unit_concept_id) REFERENCES vocabularies.c

ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_assisted_concept_id FOREIGN KEY (assisted_concept_id) REFERENCES

ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_collection_method_concept_id FOREIGN KEY (collection_method_conce

ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id

ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(pro

ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_respondent_type_concept_id FOREIGN KEY (respondent_type_concept_i
ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_survey_concept_id FOREIGN KEY (survey_concept_id) REFERENCES vocal



ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_survey_source_concept_id FOREIGN KEY (survey_source_concept_id) RE



ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_timing_concept_id FOREIGN KEY (timing_concept_id) REFERENCES vocal



ALTER TABLE ONLY cdm.survey_conduct
    ADD CONSTRAINT fpk_survey_conduct_validated_survey_concept_id FOREIGN KEY (validated_survey_concept_



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_care_site_id FOREIGN KEY (care_site_id) REFERENCES cdm.care_site(ca



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_discharged_to_concept_id FOREIGN KEY (discharged_to_concept_id) REFE



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_id)



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_preceding_visit_detail_id FOREIGN KEY (preceding_visit_detail_id) RE



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(provid



ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_visit_detail_concept_id FOREIGN KEY (visit_detail_concept_id) REFER



ALTER TABLE ONLY cdm.visit_detail
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    ADD CONSTRAINT fpk_visit_detail_visit_detail_parent_id FOREIGN KEY (parent_visit_detail_id) REFEREN


ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_visit_detail_source_concept_id FOREIGN KEY (visit_detail_source_con


ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_visit_detail_type_concept_id FOREIGN KEY (visit_detail_type_concept_


ALTER TABLE ONLY cdm.visit_detail
    ADD CONSTRAINT fpk_visit_detail_visit_occurrence_id FOREIGN KEY (visit_occurrence_id) REFERENCES cd


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_care_site_id FOREIGN KEY (care_site_id) REFERENCES cdm.care_sit


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_discharged_to_concept_id FOREIGN KEY (discharged_to_concept_id)


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_person_id FOREIGN KEY (person_id) REFERENCES cdm.person(person_


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_preceding_visit_occurrence_id FOREIGN KEY (preceding_visit_occu


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_provider_id FOREIGN KEY (provider_id) REFERENCES cdm.provider(p


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_visit_concept_id FOREIGN KEY (visit_concept_id) REFERENCES voca


ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_visit_source_concept_id FOREIGN KEY (visit_source_concept_id) R
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ALTER TABLE ONLY cdm.visit_occurrence
    ADD CONSTRAINT fpk_visit_occurrence_visit_type_concept_id FOREIGN KEY (visit_type_concept_id) REFER



ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT measurement_visit_detail_id_fkey FOREIGN KEY (visit_detail_id) REFERENCES cdm.visit_



ALTER TABLE ONLY cdm.measurement
    ADD CONSTRAINT measurement_visit_occurrence_id_fkey FOREIGN KEY (visit_occurrence_id) REFERENCES cd



ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT note_visit_detail_id_fkey FOREIGN KEY (visit_detail_id) REFERENCES cdm.visit_detail(



ALTER TABLE ONLY cdm.note
    ADD CONSTRAINT note_visit_occurrence_id_fkey FOREIGN KEY (visit_occurrence_id) REFERENCES cdm.visit_



ALTER TABLE ONLY vocabularies.concept_ancestor
    ADD CONSTRAINT fpk_concept_ancestor_ancestor_concept_id FOREIGN KEY (ancestor_concept_id) REFERENCES



ALTER TABLE ONLY vocabularies.concept_ancestor
    ADD CONSTRAINT fpk_concept_ancestor_descendant_concept_id FOREIGN KEY (descendant_concept_id) REFER



ALTER TABLE ONLY vocabularies.concept_class
    ADD CONSTRAINT fpk_concept_class_concept_class_concept_id FOREIGN KEY (concept_class_concept_id) RE



ALTER TABLE ONLY vocabularies.concept
    ADD CONSTRAINT fpk_concept_concept_class_id FOREIGN KEY (concept_class_id) REFERENCES vocabularies.



ALTER TABLE ONLY vocabularies.concept
    ADD CONSTRAINT fpk_concept_domain_id FOREIGN KEY (domain_id) REFERENCES vocabularies.domain(domain_



ALTER TABLE ONLY vocabularies.concept_relationship
    ADD CONSTRAINT fpk_concept_relationship_concept_id_1 FOREIGN KEY (concept_id_1) REFERENCES vocabula
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ALTER TABLE ONLY vocabularies.concept_relationship
    ADD CONSTRAINT fpk_concept_relationship_concept_id_2 FOREIGN KEY (concept_id_2) REFERENCES vocabular



ALTER TABLE ONLY vocabularies.concept_relationship
    ADD CONSTRAINT fpk_concept_relationship_relationship_id FOREIGN KEY (relationship_id) REFERENCES voc



ALTER TABLE ONLY vocabularies.concept_synonym
    ADD CONSTRAINT fpk_concept_synonym_concept FOREIGN KEY (concept_id) REFERENCES vocabularies.concept



ALTER TABLE ONLY vocabularies.concept_synonym
    ADD CONSTRAINT fpk_concept_synonym_language_concept FOREIGN KEY (language_concept_id) REFERENCES voc



ALTER TABLE ONLY vocabularies.concept
    ADD CONSTRAINT fpk_concept_vocabulary_id FOREIGN KEY (vocabulary_id) REFERENCES vocabularies.vocabul



ALTER TABLE ONLY vocabularies.domain
    ADD CONSTRAINT fpk_domain_domain_concept_id FOREIGN KEY (domain_concept_id) REFERENCES vocabularies



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT fpk_drug_strength_amount_unit_concept_id FOREIGN KEY (amount_unit_concept_id) REFEREN



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT fpk_drug_strength_denominator_unit_concept_id FOREIGN KEY (denominator_unit_concept_



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT fpk_drug_strength_drug_concept_id FOREIGN KEY (drug_concept_id) REFERENCES vocabulari



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT fpk_drug_strength_ingredient_concept_id FOREIGN KEY (ingredient_concept_id) REFERENC



ALTER TABLE ONLY vocabularies.drug_strength
    ADD CONSTRAINT fpk_drug_strength_numerator_unit_concept_id FOREIGN KEY (numerator_unit_concept_id)
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ALTER TABLE ONLY vocabularies.relationship
    ADD CONSTRAINT fpk_relationship_relationship_concept_id FOREIGN KEY (relationship_concept_id) REFER


ALTER TABLE ONLY vocabularies.relationship
    ADD CONSTRAINT fpk_relationship_reverse_relationship_id FOREIGN KEY (reverse_relationship_id) REFER


ALTER TABLE ONLY vocabularies.source_to_concept_map
    ADD CONSTRAINT fpk_source_to_concept_map_source_vocabulary_id FOREIGN KEY (source_vocabulary_id) RE


ALTER TABLE ONLY vocabularies.source_to_concept_map
    ADD CONSTRAINT fpk_source_to_concept_map_target_concept_id FOREIGN KEY (target_concept_id) REFERENC


ALTER TABLE ONLY vocabularies.source_to_concept_map
    ADD CONSTRAINT fpk_source_to_concept_map_target_vocabulary_id FOREIGN KEY (target_vocabulary_id) RE


ALTER TABLE ONLY vocabularies.vocabulary
    ADD CONSTRAINT fpk_vocabulary_vocabulary_concept_id FOREIGN KEY (vocabulary_concept_id) REFERENCES


ALTER TABLE ONLY vocabularies.source_to_standard_vocab_map
    ADD CONSTRAINT source_to_standard_vocab_map_source_concept_class_id_fkey FOREIGN KEY (source_concep


ALTER TABLE ONLY vocabularies.source_to_standard_vocab_map
    ADD CONSTRAINT source_to_standard_vocab_map_source_domain_id_fkey FOREIGN KEY (source_domain_id) RE


ALTER TABLE ONLY vocabularies.source_to_standard_vocab_map
    ADD CONSTRAINT source_to_standard_vocab_map_target_concept_class_id_fkey FOREIGN KEY (target_concep


ALTER TABLE ONLY vocabularies.source_to_standard_vocab_map
    ADD CONSTRAINT source_to_standard_vocab_map_target_concept_id_fkey FOREIGN KEY (target_concept_id)


ALTER TABLE ONLY vocabularies.source_to_standard_vocab_map
    ADD CONSTRAINT source_to_standard_vocab_map_target_vocabulary_id_fkey FOREIGN KEY (target_vocabular
```