EHR Systems

EPIC - This document provides a step-by-step documentation including SQL scripts and python procedures to extract ONC standard datasets from Epic and load an i2b2 data warehouse. https://datahandbook.epic.com/Reports/Details/9000400 (Need to be a EPIC customer to view)

AllScripts - Data Schema https://developer.allscripts.com/Account/Login?ReturnUrl=%2fDownloads#clientkits (Need to be a All Scripts customer to view)

TABLES	PRIMARY KEYS
DEMOGRAPHICS	IMREDEM_CODE
SCHEDULE	IMRESCHED_CODE
ENCOUNTER	IMREENC_CODE
CONTACT	IMRECONTACT_CODE
IMMUNIZATION_RECORD	IMMREC_ID
LABORDERS	IMRELABORDER_CODE
MEDICATIONS	IMREMED_CODE
PROVIDER	IMREPROV_CODE
RESULT	RESULT_ID
VITALS_DATA	VITALS_CODE
DX	IMREDX_CODE
HX_DIAGNOSIS	HX_DIAGNOSIS_ID

Common Patient Tables

• HPSITE.DEMOGRAPHICS– Name, DOB, SSN, Bloodtype, Language, Marital Status

• HPSITE.ADDRESSES– holdsaddressesfor5typesofentities

• Patient, Provider, Site, Insurance Carriers, Institutions

• HPSITE.INSURANCES– containsinsuranceinformationforthepatient

• HPSITE.DEMOGRAPHICPICTURE link to picture in the EHR that is associated with the patient

• HPSITE.PHARMACYFAVORITE Containsprimarypharmacyinformation

• HPSITE.DEMGUARANTOR contains patient guarantor information

Nextgen - Two Presentations on the data schema

Cerner - Download Cerner Millennium Data Model here. (Need to be a Cerner Customer)

- `person` table contains patient data like name and date of birth.
- `prsnl` table holds data for personnel and there is an alias table `prsnl_alias` (to look up Provider NPI for example).
- `person_prsnl_reltn` personnel related to a patient. For example, this table can be used to look up patient's Primary care physician.
- `encntr_prsnl_reltn` can be used to look up Admitting or Attending physicians.
- `address` and `phone` tables are used to store various types of addresses and phone numbers for patients and physicians.
- `organization` table contains details about hospitals (facilities), outpatient practices, vendors, payers etc.
- `location`, `nurse_unit`, `room` and `bed` tables can help you determine exact location of your patient in hospital down to a room and a bed.
- `orders`,`order_catalog`, `order_action`, `order_detail` and `order_ingredient` are used to pull orders, alerts, drugs administration and procedures.
- `diagnosis` and `nomenclature` tables keep various classifications like CPT and ICD and can be tied to an encounter. For example, you can pull all the ICD-10 codes which are final coded or only ones present on admission.
- `pathway` and `pathway_catalog` store details about powerplans.
- `clinical_event` table (accumulated thousands of events per patient encounter for every day of stay such as vital signs, drugs administration time, lab results and so much more. It is huge as well!