



CSV File Data Dictionary

File	Description
allergies.csv	Patient allergy data.
careplans.csv	Patient care plan data, including goals.
conditions.csv	Patient conditions or diagnoses.
devices.csv	Patient-affixed permanent and semi-permanent devices.
encounters.csv	Patient encounter data.
imaging_studies.csv	Patient imaging metadata.
immunizations.csv	Patient immunization data.
medications.csv	Patient medication data.
observations.csv	Patient observations including vital signs and lab reports.

File	Description
organizations.csv	Provider organizations including hospitals.
patients.csv	Patient demographic data.
payer_transitions.csv	Payer Transition data (i.e. changes in health insurance).
payers.csv	Payer organization data.
procedures.csv	Patient procedure data including surgeries.
providers.csv	Clinicians that provide patient care.
supplies.csv	Supplies used in the provision of care.




Data Dictionary information for each CSV table follows below.

Allergies



	Column Name	Data Type	Required?	Description
	Start	Date (YYYY-MM-DD)	true	The date the allergy was diagnosed.
	Stop	Date (YYYY-MM-DD)	false	The date the allergy ended, if applicable.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter when the allergy was diagnosed.
	Code	String	true	Allergy code from SNOMED-CT
	Description	String	true	Description of the Allergy

CarePlans

	Column Name	Data Type	Required?	Description
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	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary Key. Unique Identifier of the care plan.
	Start	Date (YYYY-MM-DD)	true	The date the care plan was initiated.
	Stop	Date (YYYY-MM-DD)	false	The date the care plan ended, if applicable.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter when the care plan was initiated.
	Code	String	true	Code from SNOMED-CT
	Description	String	true	Description of the care plan.
	ReasonCode	String	true	Diagnosis code from SNOMED-CT that this care plan addresses.
	ReasonDescription	String	true	Description of the reason code.

Conditions


	Column Name	Data Type	Required?	Description
	Start	Date (YYYY-MM-DD)	true	The date the condition was diagnosed.
	Stop	Date (YYYY-MM-DD)	false	The date the condition resolved, if applicable.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter when the condition was diagnosed.
	Code	String	true	Diagnosis code from SNOMED-CT





	Column Name	Data Type	Required?	Description
	Description	String	true	Description of the condition.

Devices

	Column Name	Data Type	Required?	Description
	Start	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the device was associated to the patient.
	Stop	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	false	The date and time the device was removed, if applicable.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter when the device was associated.
	Code	String	true	Type of device, from SNOMED-CT
	Description	String	true	Description of the device.
	UDI	String	true	Unique Device Identifier for the device.




Encounters

	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary Key. Unique Identifier of the encounter.

	Column Name	Data Type	Required?	Description
	Start	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the encounter started.
	Stop	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	false	The date and time the encounter concluded.
	Patient	UUID	true	Foreign key to the Patient.
	Organization	UUID	true	Foreign key to the Organization.
	Provider	UUID	true	Foreign key to the Provider.
	Payer	UUID	true	Foreign key to the Payer.
	EncounterClass	String	true	The class of the encounter, such as ambulatory , emergency , inpatient , wellness , Or urgentcare
	Code	String	true	Encounter code from SNOMED-CT
	Description	String	true	Description of the type of encounter.
	Base_Encounter_Cost	Numeric	true	The base cost of the encounter, not including any line item costs related to medications, immunizations, procedures, or other services.
	Total_Claim_Cost	Numeric	true	The total cost of the encounter, including all line items.
	Payer_Coverage	Numeric	true	The amount of cost covered by the Payer.



	Column Name	Data Type	Required?	Description
	ReasonCode	String	false	Diagnosis code from SNOMED-CT, only if this encounter targeted a specific condition.
	ReasonDescription	String	false	Description of the reason code.

Imaging Studies

	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary Key. Unique Identifier of the imaging study.
	Date	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the imaging study was conducted.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter where the imaging study was conducted.
	Body Site Code	String	true	A SNOMED Body Structures code describing what part of the body the images in the series were taken of.
	Body Site Description	String	true	Description of the body site.
	Modality Code	String	true	A DICOM-DCM code describing the method used to take the images.
	Modality Description	String	true	Description of the modality.
	SOP Code	String	true	A DICOM-SOP code describing the Subject-Object Pair (SOP) that constitutes the image.

	Column Name	Data Type	Required?	Description
	SOP Description	String	true	Description of the SOP code.

Immunizations

	Column Name	Data Type	Required?	Description
	Date	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date the immunization was administered.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter where the immunization was administered.
	Code	String	true	Immunization code from CVX.
	Description	String	true	Description of the immunization.
	Cost	Numeric	true	The line item cost of the immunization.



Medications

	Column Name	Data Type	Required?	Description
	Start	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the medication was prescribed.
	Stop	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	false	The date and time the prescription ended, if applicable.


	Column Name	Data Type	Required?	Description
	Patient	UUID	true	Foreign key to the Patient.
	Payer	UUID	true	Foreign key to the Payer.
	Encounter	UUID	true	Foreign key to the Encounter where the medication was prescribed.
	Code	String	true	Medication code from RxNorm.
	Description	String	true	Description of the medication.
	Base_Cost	Numeric	true	The line item cost of the medication.
	Payer_Coverage	Numeric	true	The amount covered or reimbursed by the Payer.
	Dispenses	Numeric	true	The number of times the prescription was filled.
	TotalCost	Numeric	true	The total cost of the prescription, including all dispenses.
	ReasonCode	String	false	Diagnosis code from SNOMED-CT specifying why this medication was prescribed.
	ReasonDescription	String	false	Description of the reason code.

Observations

	Column Name	Data Type	Required?	Description
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	Column Name	Data Type	Required?	Description
	Date	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the observation was performed.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter where the observation was performed.
	Code	String	true	Observation or Lab code from LOINC
	Description	String	true	Description of the observation or lab.
	Value	String	true	The recorded value of the observation.
	Units	String	false	The units of measure for the value.
	Type	String	true	The datatype of Value : text OR numeric

Organizations

	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary key of the Organization.
	Name	String	true	Name of the Organization.
	Address	String	true	Organization's street address without commas or newlines.
	City	String	true	Street address city.
	State	String	false	Street address state abbreviation.

	Column Name	Data Type	Required?	Description
	Zip	String	false	Street address zip or postal code.
	Lat	Numeric	false	Latitude of Organization's address.
	Lon	Numeric	false	Longitude of Organization's address.
	Phone	String	false	Organization's phone number.
	Revenue	Numeric	true	The monetary revenue of the organization during the entire simulation.
	Utilization	Numeric	true	The number of Encounters performed by this Organization.


Patients


	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary Key. Unique Identifier of the patient.
	BirthDate	Date (YYYY-MM-DD)	true	The date the patient was born.
	DeathDate	Date (YYYY-MM-DD)	false	The date the patient died.
	SSN	String	true	Patient Social Security identifier.
	Drivers	String	false	Patient Drivers License identifier.
	Passport	String	false	Patient Passport identifier.

	Column Name	Data Type	Required?	Description
	Prefix	String	false	Name prefix, such as Mr. , Mrs. , Dr. , etc.
	First	String	true	First name of the patient.
	Last	String	true	Last or surname of the patient.
	Suffix	String	false	Name suffix, such as PhD , MD , JD , etc.
	Maiden	String	false	Maiden name of the patient.
	Marital	String	false	Marital Status. M is married, S is single. Currently no support for divorce (D) or widowing (W)
	Race	String	true	Description of the patient's primary race.
	Ethnicity	String	true	Description of the patient's primary ethnicity.
	Gender	String	true	Gender. M is male, F is female.
	BirthPlace	String	true	Name of the town where the patient was born.
	Address	String	true	Patient's street address without commas or newlines.


	Column Name	Data Type	Required?	Description
	City	String	true	Patient's address city.
	County	String	false	Patient's address county.
	State	String	true	Patient's address state.
	Zip	String	false	Patient's zip code.
	Lat	Numeric	false	Latitude of Patient's address.
	Lon	Numeric	false	Longitude of Patient's address.
	Healthcare_Expenses	true	The total lifetime cost of healthcare to the patient (i.e. what the patient paid).	
	Healthcare_Coverage	true	The total lifetime cost of healthcare services that were covered by Payers (i.e. what the insurance company paid).	

Payer Transitions

	Column Name	Data Type	Required?	Description
	Patient	UUID	true	Foreign key to the Patient.
	Start_Year	Date (yyyy)	true	The year the coverage started (inclusive).
	End_Year	Date (yyyy)	true	The year the coverage ended (inclusive).



	Column Name	Data Type	Required?	Description
	Payer	UUID	true	Foreign key to the Payer.
	Ownership	String	false	The owner of the insurance policy. Legal values: Guardian , Self , Spouse .

Payers



	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary key of the Payer (e.g. Insurance).
	Name	String	true	Name of the Payer.
	Address	String	false	Payer's street address without commas or newlines.
	City	String	false	Street address city.
	State_Headquartered	String	false	Street address state abbreviation.
	Zip	String	false	Street address zip or postal code.
	Phone	String	false	Payer's phone number.
	Amount_Covered	Numeric	true	The monetary amount paid to Organizations during the entire simulation.
	Amount_Uncovered	Numeric	true	The monetary amount not paid to Organizations during the entire simulation, and covered out of pocket by patients.
	Revenue	Numeric	true	The monetary revenue of the Payer during the entire simulation.

	Column Name	Data Type	Required?	Description
	Covered_Encounters	Numeric	true	The number of Encounters paid for by this Payer.
	Uncovered_Encounters	Numeric	true	The number of Encounters not paid for by this Payer, and paid out of pocket by patients.
	Covered_Medications	Numeric	true	The number of Medications paid for by this Payer.
	Uncovered_Medications	Numeric	true	The number of Medications not paid for by this Payer, and paid out of pocket by patients.
	Covered_Procedures	Numeric	true	The number of Procedures paid for by this Payer.
	Uncovered_Procedures	Numeric	true	The number of Procedures not paid for by this Payer, and paid out of pocket by patients.
	Covered_Immunizations	Numeric	true	The number of Immunizations paid for by this Payer.
	Uncovered_Immunizations	Numeric	true	The number of Immunizations not paid for by this Payer, and paid out of pocket by patients.
	Unique_Customers	Numeric	true	The number of unique patients enrolled with this Payer during the entire simulation.
	QOLS_Avg	Numeric	true	The average Quality of Life Scores (QOLS) for all patients enrolled with this Payer during the entire simulation.
	Member_Months	Numeric	true	The total number of months that patients were enrolled with this Payer during the simulation and paid monthly premiums (if any).

Procedures



	Column Name	Data Type	Required?	Description
	Date	iso8601 UTC Date (yyyy-MM-dd'T'HH:mm'Z')	true	The date and time the procedure was performed.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter where the procedure was performed.
	Code	String	true	Procedure code from SNOMED-CT
	Description	String	true	Description of the procedure.
	Base_Cost	Numeric	true	The line item cost of the procedure.
	ReasonCode	String	false	Diagnosis code from SNOMED-CT specifying why this procedure was performed.
	ReasonDescription	String	false	Description of the reason code.

Providers

	Column Name	Data Type	Required?	Description
	Id	UUID	true	Primary key of the Provider/Clinician.
	Organization	UUID	true	Foreign key to the Organization that employees this provider.
	Name	String	true	First and last name of the Provider.

	Column Name	Data Type	Required?	Description
	Gender	String	true	Gender. M is male, F is female.
	Speciality	String	true	Provider speciality.
	Address	String	true	Provider's street address without commas or newlines.
	City	String	true	Street address city.
	State	String	false	Street address state abbreviation.
	Zip	String	false	Street address zip or postal code.
	Lat	Numeric	false	Latitude of Provider's address.
	Lon	Numeric	false	Longitude of Provider's address.
	Utilization	Numeric	true	The number of Encounter's performed by this provider.

Supplies

	Column Name	Data Type	Required?	Description
	Date	Date (YYYY-MM-DD)	true	The date the supplies were used.
	Patient	UUID	true	Foreign key to the Patient.
	Encounter	UUID	true	Foreign key to the Encounter when the supplies were used.
	Code	String	true	Code for the type of supply used, from SNOMED-CT
	Description	String	true	Description of supply used.

