

# University of Iowa Empirical Data Characterization Summary

Table IA. Demographic Summary

This table contains general descriptive information about the patients in the DEMOGRAPHIC table. These patients may or may not be represented in other CDM tables.

	N	%	Source table
Patients	760,683		DEM_L3_N
Age			DEM_L3_AGEYRSDIST1
Mean	41		
Median	38		
Age group			DEM_L3_AGEYRSDIST2
0-4	35,912	4.7	
5-14	91,253	12.0	
15-21	70,669	9.3	
22-64	411,237	54.1	
65+	151,584	19.9	
Missing	28	0.0	
Hispanic			DEM_L3_HISPDIST
N (No)	625,035	82.2	
Y (Yes)	28,671	3.8	
Missing or Refused	106,977	14.1	
Sex			DEM_L3_SEXDIST
F (Female)	400,121	52.6	
M (Male)	360,489	47.4	
Missing or Ambiguous	73	0.0	
Race			DEM_L3_RACEDIST
White	634,179	83.4	
Non-White	74,841	9.8	
Missing or Refused	51,663	6.7	

Table excludes records with values outside of CDM specifications.

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**Table IB. Potential Pools of Patients**

This table illustrates the number of patients meeting different inclusion criteria and supports data checks 3.04 and 3.05. Data check exceptions are highlighted in red and must be corrected.

Metric	Metric Description	Result	Source table
Potential pool of patients for observational studies	Number of unique patients with at least 1 ED, EI, IP, or AV encounter within the past 5 years	623,506	ENC_L3_DASH2
Potential pool of patients for trials	Number of unique patients with at least 1 ED, EI, IP, or AV encounter within the past 1 year	267,875	ENC_L3_DASH2
Potential pool of patients for studies requiring data on diagnoses, vital measures and (a) medications or (b) medications and lab results	Number of unique patients with at least 1 ED, EI, IP, or AV encounter and DIAGNOSIS and VITAL records within the past 5 years	67,426	XTBL_L3_DASH1
	Number of unique patients with at least 1 encounter and DIAGNOSIS, VITAL, and PRESCRIBING or DISPENSING records within the past 5 years	49,563	XTBL_L3_DASH2
	Number of unique patients with at least 1 encounter and DIAGNOSIS, VITAL, PRESCRIBING or DISPENSING, and LAB_RESULT_CM records within the past 5 years	25,863	XTBL_L3_DASH3
Patients with diagnosis data	Percentage of patients with encounters who have at least 1 diagnosis	85%	ENC_L3_N; DIA_L3_N
Patients with procedure data	Percentage of patients with encounters who have at least 1 procedure	61%	ENC_L3_N; PRO_L3_N

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### Table IC. Height, Weight, and Body Mass Index

This table contains descriptive statistics and frequencies of VITAL table measurements.

	Result	%	Source table
Height measurements			VIT_L3_HT_DIST
Records	4,089,775		
Height (inches), mean	61		
Height (inches), median	65		
Weight measurements			VIT_L3_WT_DIST
Records	7,145,061		
Weight (lbs.), mean	161		
Weight (lbs.), median	164		
Body Mass Index (BMI) measurements			VIT_L3_BMI
Records	5,323,659		
BMI <=25	2,305,179	43.3	
BMI 26-30	1,290,550	24.2	
BMI >=31	1,727,930	32.5	

Table excludes records with null or missing values.

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### Table ID. Records, Patients, Encounters, and Date Ranges by Table

This table contains summary counts and date ranges by table. The Encounters column shows the number of distinct ENCOUNTERIDS in each table. ENCOUNTERID is required for ENCOUNTER, DIAGNOSIS, and PROCEDURES and optional for VITAL, PRESCRIBING and DISPENSING. Missingness for ENCOUNTERID is depicted in Table IVD.

Table	Records	Patients	Encounters	Data Range			Source Tables
				Field name	Min	Max	
DEMOGRAPHIC	760,683	760,683	---	BIRTH_DATE	1850_Jan	2017_Mar	DEM_L3_N; XTBL_L3_DATES
ENROLLMENT	760,683	760,683	---	ENR_START_DATE	1841_Jan	2024_Jun	ENR_L3_N; XTBL_L3_DATES
ENCOUNTER	16,261,709	834,395	16,261,709	ADMIT_DATE	2001_Mar	2017_Apr	ENC_L3_N; XTBL_L3_DATES
DIAGNOSIS	18,996,368	710,173	8,628,608	ADMIT_DATE	2010_Jan	2017_Apr	DIA_L3_N; XTBL_L3_DATES
PROCEDURES	6,440,377	512,438	2,837,572	ADMIT_DATE	2009_Sep	2017_Apr	PRO_L3_N; XTBL_L3_DATES
VITAL	8,191,385	928,817	8,191,385	MEASURE_DATE	1983_Jun	2017_Jan	VIT_L3_N; XTBL_L3_DATES
LAB_RESULT_CM	5,647,773	323,156	1,561,546	RESULT_DATE	1920_Sep	2017_Apr	LAB_L3_N; XTBL_L3_DATES
PRESCRIBING	7,308,730	484,381	3,763,868	RX_START_DATE	2008_Apr	2103_Apr	PRES_L3_N; XTBL_L3_DATES
DISPENSING	39,037,163	427,822	---	DISPENSE_DATE	2010_Jan	2017_Apr	DISP_L3_N; XTBL_L3_DATES

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Table IE. Records Per Table By Encounter Type

This table contains record counts by encounter type for the ENCOUNTER, DIAGNOSIS, and PROCEDURES tables.

Encounter Type	ENCOUNTER		DIAGNOSIS		PROCEDURES	
	N	%	N	%	N	%
AV (Ambulatory Visit)	10,133,031	62.3	15,007,381	79.0	4,433,016	68.8
ED (Emergency Dept)	299,041	1.8	562,292	3.0	212,283	3.3
EI (ED to IP Stay)	0		0		0	
IP (Inpatient Hospital Stay)	268,672	1.7	1,551,819	8.2	1,641,112	25.5
IS (Non-acute Institutional Stay)	49,274	0.3	152,286	0.8	85,546	1.3
OA (Other Ambulatory Visit)	0		0		0	
Missing, NI, UN or OT	5,511,691	33.9	1,722,590	9.1	68,420	1.1
Total	16,261,709		18,996,368		6,440,377	
Source table	ENC_L3_ENCTYPE		DIA_L3_ENCTYPE		PRO_L3_ENCTTPE	

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Table IG. Lab Results

This table illustrates the number of records and number of unique patients for each LAB\_NAME, and the percentage of patients in the ENCOUNTER table who have these results. Although there is not a required relationship between the ENCOUNTER and LAB\_RESULT\_CM tables, patients with encounters are the most relevant denominator for this table. LAB\_NAME will be NULL or missing for lab results which do not correspond to a common lab measure.

LAB_NAME	Records	Percentage of records in the LAB_RESULT_CM table	Patients	Percentage of patients in the ENCOUNTER table	Source tables
AIC	462,522	8.2	90,016	10.8	LAB_L3_NAME;ENC_L3_N
CK	61,417	1.1	29,912	3.6	LAB_L3_NAME;ENC_L3_N
CK_MB	28	0.0	BT		LAB_L3_NAME;ENC_L3_N
CK_MBI	0		0	0.0	LAB_L3_NAME;ENC_L3_N
CREATININE	2,042,903	36.2	261,176	31.3	LAB_L3_NAME;ENC_L3_N
HGB	2,313,229	41.0	284,863	34.1	LAB_L3_NAME;ENC_L3_N
INR	505,756	9.0	116,184	13.9	LAB_L3_NAME;ENC_L3_N
LDL	210,132	3.7	99,429	11.9	LAB_L3_NAME;ENC_L3_N
TROP_I	BT		BT		LAB_L3_NAME;ENC_L3_N
TROP_T_QL	0		0	0.0	LAB_L3_NAME;ENC_L3_N
TROP_T_QN	51,775	0.9	11,915	1.4	LAB_L3_NAME;ENC_L3_N
NULL or missing	0		0	0.0	LAB_L3_NAME;ENC_L3_N
Total					

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**Table IIID. Encounters Per Visit and Per Patient**

This table shows the number of encounters, patients, visits (unique combinations of PATID, ADMIT\_DATE, ENC\_TYPE, and PROVIDER\_ID), encounters per patient, and encounters per visit by encounter type and supports Data Check 2.04. A high number of encounters per visit may signal potential redundancy or duplication. Data check exceptions are highlighted in blue and should be investigated.

Encounter Type	Encounters	Patients	Encounters per Patient	Encounters with known PROVIDERID	Visit (unique combinations of PATID, ENC_TYPE, ADMIT_DATE, and PROVIDERID)	Encounters with known PROVIDERID per visit	Source table
AV (Ambulatory Visit)	10,133,031	732,922	13.8	10,034,561	10,034,561	1.00	ENC_L3_ENCTYPE
ED (Emergency Dept)	299,041	140,138	2.1	216,741	216,741	1.00	ENC_L3_ENCTYPE
EI (ED to IP Stay)	0	0		0	0		ENC_L3_ENCTYPE
IP (Inpatient Hospital Stay)	268,672	147,924	1.8	237,067	237,067	1.00	ENC_L3_ENCTYPE
IS (Non-acute Institutional Stay)	49,274	32,575	1.5	40,213	40,213	1.00	ENC_L3_ENCTYPE
OA (Other Ambulatory Visit)	0	0		0	0		ENC_L3_ENCTYPE
Missing, NI, UN or OT	5,511,691	577,479	9.5	5,468,506	5,468,506	1.00	ENC_L3_ENCTYPE

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