

Merative™ MarketScan® Research Databases 2022 Laboratory Results Database, v1.0

# Data Dictionary

© Copyright Merative US L.P. 2023

The authorized recipient of these materials shall treat the information contained therein as confidential proprietary information owned by Merative US LP. The recipient shall not disclose or permit to b disclosed, in full or in part, to third parties any information contained therein. No part of these materials may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from Merative.

Requests for permission to make copies of any part of this report should be mailed to:

Merative 100 Phoenix Drive Ann Arbor, Michigan 48108

The file should be cited as follows:

Merative™ MarketScan® Lab Database

#### **Format of Data Dictionary**

Each standard field that may be found in MarketScan data is defined on the following pages. Seven columns of information are present for each field.

#### Name

The short (2 to 8 character) name of the variable.

#### **Long Name**

Long name, or label of the variable. For example, the variable containing information about the type of provider who rendered the service is labeled "Provider Type."

#### **Description**

A definition of the data in the variable.

#### **Data Types/Formats**

CHAR: Character

NUM: Integer Numeric

FLT: Decimal Numeric (CSV only)

DATE: Date

#### **Valid Contents**

The meaning of each valid term in the field. For example, the standard values for SEX (Gender of Patient) are 1 and 2, with 1 meaning male and 2 meaning female.

Some variables have longer lists of standard values. For those, a separate attachment (which follows the alphabetical listing) has been created.

#### **Notes**

Information about the source of the data in the variable. The Note often relates to analytical uses of the data.

#### **Tables**

An abbreviation that indicates in which table the variable is found:

R: Laboratory Results

#### Laboratory Test Results Database Variable Summary

Name	Long Name	SAS Format	Tables
Clinical Variables			
DX1	Diagnosis 1	CHAR(7)	R
DXVER	Diagnosis Code ICD Version Indicator	CHAR(1)	R
MDC	Major Diagnostic Category	CHAR(2)	R
PROC1	Procedure Code 1	CHAR(7)	R
PROCTYP	Procedure Code Type	CHAR(1)	R
Demographic Variables			
AGE	Age of Patient	NUM(3)	R
AGEGRP	Age Group	CHAR(1)	R
DATATYP	Data Type	NUM(3)	R
DOBYR	Patient Birth Year	NUM(3)	R
EECLASS	Employee Classification	CHAR(1)	R
EESTATU	Employment Status	CHAR(1)	R
INDSTRY	Industry	CHAR(1)	R
PLANTYP	Plan Indicator	NUM(3)	R
SEX	Gender of Patient	CHAR(1)	R
Geographic Variables			
EGEOLOC	Geographic Location Employee	CHAR(2)	R
MSA	Metropolitan Statistical Area	NUM(4)	R
REGION	Region	CHAR(1)	R
Lab Result Variables			
ABNORMAL	Lab Abnormal Flag	CHAR(1)	R
LOINCCD	LOINC Code	CHAR(7)	R
ORDERID	Lab Test Order ID	NUM(6)	R
REFHIGH	Lab Result High Range	NUM(6)	R
REFLOW	Lab Result Low Range	NUM(6)	R
RESLTCAT	Lab Result Category Code	CHAR(3)	R
RESULT	Lab Result Numeric Value	NUM(6)	R
RESUNIT	Lab Result Units	CHAR(30)	R
TESTCNT	Lab Test Count	NUM(3)	R

#### Laboratory Test Results Database Variable Summary

Name	Long Name	SAS Format	Tables
Patient Variables			
EFAMID	Enrolled Family ID	NUM(6)	R
EIDFLAG	Enrollee ID Derivation Flag	CHAR(1)	R
EMPREL	Relation to Employee	CHAR(1)	R
ENRFLAG	Enrollment Flag	CHAR(1)	R
ENROLID	Enrollee ID	NUM(6)	R
HLTHPLAN	Health Plan Indicator	CHAR(1)	R
MEDADV	Medicare Advantage Flag	NUM(8)	R
MHSACOVG	Coverage Indicator MHSA	CHAR(1)	R
Provider Variables			
PHYFLAG	Physician Specialty Coding Flag	CHAR(1)	R
PROVID	Provider ID	NUM(6)	R
STDPLAC	Place of Service	NUM(3)	R
STDPROV	Provider Type	NUM(3)	R
Time Variables			
PDDATE	Date Claim Paid	NUM(4)	R
SVCDATE	Date Service Incurred	NUM(4)	R
YEAR	Date Year Incurred	NUM(3)	R
Other Variables			
RX	Cohort Drug Indicator	CHAR(1)	R
SEQNUM	Sequence Number	NUM(6)	R
VERSION	Version	CHAR(2)	R

Name	Long Name	Description	SAS Format	Valid Contents	Notes	Tables
ABNORMAL	Lab Abnormal Flag	Abnormal lab result value	CHAR(1)	A: Abnormal H: High L: Low N: Normal	As defined and coded by the lab test provider	R
AGE	Age of Patient	Patient age in years at the time of service	NUM(3)	Each character = 0-9	A table: calculated using DTSTART from the first enrollment detail (T) record of the year. I table: calculated using ADMDATE. D, F, O, S, R tables: calculated using SVCDATE. T table: calculated using DTSTART. Beginning in the 2016 data year: Age 0-6 - actual age as of the Date of Service/Enrollment Start Date/Admission Date. Age 7-16 - age as of the 15th of the month of the Date of Service/Enrollment Start Date/Admission Date. Age 17+ - age as of the July 1 of the year of the Date of Service/Enrollment Start Date/Admission Date.	R
AGEGRP	Age Group	A value identifying the patient or members age group	CHAR(1)	1: 0-17 2: 18-34 3: 35-44 4: 45-54 5: 55-64 6: 65 and older	Age group or cohort of patient on admissions (I), services (S), outpatient services (O), prescription drug claims (D), and lab results (R); of covered life on populations (P); the mode of monthly AGEGRP for a member on Annual Enrollment Summary (A); of member as of the start of the enrollment period on Enrollment Detail (T)	R
DATATYP	Data Type	A value identifying whether the claim or eligible population is fee-for-service, encounter, Medicare, or Medicare encounter. This field was new in 1998 and was developed to identify claims formerly found in the Private Pay Fee-For-Service, Encounter, and Medicare databases.	NUM(3)	1: Fee for Service 2: Encounter 3: Medicare 4: Medicare Encounter	Prior to 1998, Data Types 1 and 2 were not merged. Data Type 4 was not available prior to 1998.	R
DOBYR	Patient Birth Year	Year of patient birth	NUM(3)	CCYY	Calculated on the claims tables from the date of service and the patient age. Derived on the enrollment table from the date of birth recorded on the enrollment record.	R
DX1	Diagnosis 1	The diagnosis code as coded on the claim	CHAR(7)	See "Clinical Fields" in the MarketScan Database User's Guide.	-	R
DXVER	Diagnosis Code ICD Version Indicator	A code denoting which coding system is relevant to the value found in the DX1 field on the record	CHAR(1)	0: ICD-10-CM 9: ICD-9-CM	New in 2015	R
EECLASS	Employee Classification	The employment classification of the primary beneficiary also coded on spouse and dependent claims	CHAR(1)	1: Salary Non-union 2: Salary Union 3: Salary Other 4: Hourly Non-union 5: Hourly Union 6: Hourly Other 7: Non-union 8: Union 9: Unknown	Mapped from carrier specific coding to Merative standard values.	R

Name	Long Name	Description	SAS Format	Valid Contents	Notes	Tables
EESTATU	Employment Status	Employment status of the primary beneficiary, also coded on spouse and dependent claims	CHAR(1)	1: Active Full Time 2: Active Part Time or Seasonal 3: Early Retiree 4: Medicare Eligible Retiree 5: Retiree (status unknown) 6: COBRA Continuee 7: Long Term Disability 8: Surviving Spouse/Depend. 9: Other/Unknown	Mapped from carrier specific coding to Merative standard values	R
EFAMID	Enrolled Family ID	A unique one to nine digit number identifying each family group in the data file	NUM(6)	Each character = 0-9	New in 2011	R
EGEOLOC	Geographic Location Employee	Geographic location (state, division, region) of primary beneficiary's residence	CHAR(2)	See Attachment A - EGEOLOC	Population supported Mapped from employee ZIP Code	R
EIDFLAG	Enrollee ID Derivation Flag	Describes the quality of ENROLID assignment	CHAR(1)	1: ENRFLAG=1; ENROLID from enrollment 2: ENRFLAG=1; ENROLID from claims 3: ENRFLAG=1; ENROLID missing 4: ENRFLAG=0; ENROLID from claims 5: ENRGLAG=0; ENROLID missing 6: ENRFLAG=0; "pseudo" ENROLID	See Section 4. Person Level I dentifiers in the MarketScan CCAE MDCR User's Guide.	R
EMPREL	Relation to Employee	Relationship of the patient to the primary beneficiary	CHAR(1)	1: Employee 2: Spouse 3: Child/Other 4: Dependent-Relation Unknown	Mapped from carrier specific coding to Merative standard values	R
ENRFLAG	Enrollment Flag	A flag that indicates that person-level enrollment information is available for a data contributor	CHAR(1)	O: No person-level enrollment information available from this data contributor.  1: Person-level enrollment information is available from this data contributor.	See "The Enrollment Tables" in the MarketScan CCAE MDCR User's Guide.	R
ENROLID	Enrollee ID	A unique three to eleven digit number identifying each enrollee in the data file	NUM(6)	Each character = 0-9	See Section 4. Person Level I dentifiers in the MarketScan Database User's Guide.	R
HLTHPLAN	Health Plan Indicator	An indicator as to whether the data supplier of a record was a large US employer or a Health Plan	CHAR(1)	0: Employer 1: Health Plan	New in 2004	R

Name	Long Name	Description	SAS Format	Valid Contents	Notes	Tables
INDSTRY	Industry	Industry classification of the employer responsible for	CHAR(1)	1: Oil & Gas Extraction, Mining	-	R
		payment of claim		2: Manufacturing, Durable		
				Goods		
				3: Manufacturing, Nondurable		
				Goods		
				4: Transportation,		
				Communications, Utilities		
				5: Retail Trade		
				6: Finance, Insurance, Real		
				Estate		
				7: Services		
				A: Agriculture, Forestry, Fishing		
				C: Construction		
				W: Wholesale		
				O: Other		
				O: Otner		
LOINCCD	LOINC Code	Logical Observation Identifiers Names and Codes;	CHAR(7)	-	See http://loinc.org/ for code reference	R
		laboratory test identifier				
MDC	Major Diagnostic	Body-system or disease related groupings of clinical	CHAR(2)	See Attachment B - MDC	Assigned by Merative using DRG Grouper v40.0	R
	Category	conditions, based on diagnosis codes				
MEDADV	Medicare	A flag to indicate whether or not the enrollee is enrolled in a	NUM(8)	0: Not Medicare Advantage	New in 2020	R
	Advantage Flag	Medicare Advantage plan		1: Medicare Advantage		
MHSACOVG	Coverage	Identifies whether or not mental health/substance abuse	CHAR(1)	0: Not Covered/Claims Not Present	New in 2004. Added retrospectively to 2002 and 2003	R
	Indicator MHSA	claims for covered individuals are included for the current		1: Covered/Possible MHSA Claims	data. Missing values of this variable in 2002 and 2003	
		year of data			data are equivalent to a value of 1.	
MSA	Metropolitan	Metropolitan Statistical Area of primary beneficiary	NUM(4)	See Attachment C - MSA	Mapped from 5 digit employee ZIP Code	R
	Statistical Area					
ORDERID	Lab Test Order ID	Unique identifier for each lab test order	NUM(6)	Each character = 0-9	-	R
PDDATE	Date Claim Paid	The year, month, and day on which the claim was paid by	NUM(4)	-	On prescription drug records, the paid date is usually a	R
		the carrier/administrator			batch date and is defaulted to the date the data are	
					extracted.	
PHYFLAG	Physician	A flag that identifies claims from data contributors with	CHAR(1)	0: Fewerthan 70% of Outpatient	-	R
	Specialty Coding	highly-differentiated physician specialist coding on claims.		physician records have the		
	Flag			physician's specialty indicated.		
				1: 70% or more of the Outpatient		
				physician records have the		
				physician's specialty indicated.		
PLANTYP	Plan Indicator	Type of benefit plan	NUM(3)	1: Basic/major medical	Mapped from client specific coding to Merative	R
				2: Comprehensive	standard values.	
				3: EPO		
1			1	4: HMO	See "Plan Type Definition" in the MarketScan CCAE	
				5: POS	MDCR User's Guide.	
				6: PPO		
				7: POS with capitation		
				8: CDHP		
				9: HDHP		
1	1		1	1	1	I .

Name	Long Name	Description	SAS Format	Valid Contents	Notes	Tables
PROC1	Procedure 1	The procedure code as coded on claim	CHAR(7)	See "Clinical Fields" in the	-	R
				MarketScan Database User's		
				Guide.		
PROCTYP	Procedure Code	The type of procedure coding used by the	CHAR(1)	*: ICD-9-CM	1 -	R
PROCITE	Type	carrier/administrator in the PROC1 (Procedure1) field	CHAR(I)	0: ICD-10-CM		п
	туре	carrier/authinistrator in the PHOCT (Procedure) held		1: CPT		
				3: UB92 Revenue Code		
				6: NABSP		
				7: HCPC		
				8: CDT (ADA)		
PROVID	Provider ID	Identifier for provider of service used by the carrier	NUM(6)	Each character = 0-9	-	R
	i rovidor ib	Encrypted as of 2001 data	140111(0)	Edon Grandstor = 0 0		
REFHIGH	Lab Result High	A number with the reference high range. Missing if the	NUM(6)	Each character = 0-9	As coded on the record	R
	Range	result is categorical.				
REFLOW	Lab Result Low	A number with the reference low range. Missing if the	NUM(6)	Each character = 0-9	As coded on the record	R
	Range	result is categorical.				
REGION	Region	Geographic Region of employee residence	CHAR(1)	1: Northeast	-	R
				2: North Central		
				3: South		
				4: West		
			01115(0)	5: Unknown		
RESLTCAT	Lab Result	Categorical result, where applicable	CHAR(3)	See Attachment D - RESLTCAT	-	R
DECLUT	Category Code	Ni wasania wasanit	NILIM/C)	Fach character, 0.0	<u> </u>	П
RESULT	Lab Result Numeric Value	Numeric result	NUM(6)	Each character = 0-9	-	R
RESUNIT	Lab Result Units	_	CHAR(30)	_	-	R
RX	Cohort Drug	Identifies whether or not Merative captures drug claims for	· /	0: No drug benefit identified	See "Tables" in the MarketScan CCAE MDCR User's	R
	Indicator	an enrolled individual's plan group	0.1.1.(1)	1: Identifies drug benefit	Guide.	
SEQNUM	Sequence	A code indicating a unique identifier for every record on a	NUM(6)	Each character = 0-9	Normal values for a full dataset are 1 through the	R
,	Number	table	. ,		number of records (e.g. a table with 2,000,000 records	
					will have SEQNUM values 1 to 2000000). For custom	
					datasets, this range may vary.	
SEX	Gender of Patient	Gender of the patient on admissions, services, outpatient	CHAR(1)	1: Male	As coded on claim	R
		claims and prescription drug claims; of covered life on		2: Female		
		populations				
STDPLAC	Place of Service	Setting where service occurred	NUM(3)	See Attachment E - STDPLAC	Mapped from carrier specific coding to Merative	R
OTDDDC:/	Durantido T	004 000 F 1114 -	NILIPA(O)	One Attackment 5 OTDDDC:	standard values	
STDPROV	Provider Type	001-099 Facility	NUM(3)	See Attachment F - STDPROV	Mapped from carrier specific coding to Merative	R
		100-799 Physician			standard values	
		100-199 Non-admitting Physicians				
		200-499 Admitting Physicians 500-599 Surgeons				
		800-899 Professionals (Non-Physician)				
		900-999 Agencies				
SVCDATE	Date Service	Date of inpatient or outpatient service or date prescription	NUM(4)	mmddyy10.	Represents the "from" date if service was provided	R
STODAIL	Incurred	was filled	140141(4)	Tim radyy io.	over more than one day	- ' '
TESTONT	Lab Test Count	-	NUM(3)	-	-	R
VERSION	Version	A Merative internal database version number	CHAR(2)	Each character = 0-9	-	R
YEAR	Date Year	The calendar year during which the service was rendered,	NUM(3)	CCYY	-	R
1	Incurred	the admission began or the population was eligible				

### **Attachment A - EGEOLOC**

Value	Label
01	Nation, unknown region
02	Northeast Region, unknown division
03	New England Division, unknown state
04	Connecticut
05	Maine
06	Massachusetts
07	New Hampshire
08	Rhode Island
09	Vermont
10	Middle Atlantic Division, unknown state
11	New Jersey
12	New York
13	Pennsylvania
14	North Central Region, unknown division
15	East North Central Division, unknown state
16	Illinois
17	Indiana
18	Michigan
19	Ohio
20	Wisconsin
21	West North Central Division, unknown state
22	Iowa
23	Kansas
24	Minnesota
25	Missouri
26	Nebraska
27	North Dakota
28	South Dakota
29	South Region, unknown division
30	South Atlantic Division, unknown state
31	Washington, DC
32	Delaware
33	Florida
34	Georgia Mondand
35	Maryland North Carolina
36	
37 38	South Carolina Vieginia
38	Virginia

### **Attachment A - EGEOLOC**

Value	Label
39	West Virginia
40	East South Central Division, unknown state
41	Alabama
42	Kentucky
43	Mississippi
44	Tennessee
45	West South Central Division, unknown state
46	Arkansas
47	Louisiana
48	Oklahoma
49	Texas
50	West Region, unknown division
51	Mountain Division, unknown state
52	Arizona
53	Colorado
54	Idaho
55	Montana
56	Nevada
57	New Mexico
58	Utah
59	Wyoming
60	Pacific Division, unknown state
61	Alaska
62	California
63	Hawaii
64	Oregon
65	Washington
97	Puerto Rico

### Attachment B - MDC

Value	Label
00	Missing/Invalid Diagnosis
01	Nervous
02	Eye
03	Ear, Nose, Mouth & Throat
04	Respiratory
05	Circulatory
06	Digestive
07	Liver, Pancreas
08	Musculoskeletal
09	Skin, Breast
10	Metabolic
11	Kidney
12	Male Reproductive
13	Female Reproductive
14	Pregnancy, Childbirth
15	Newborns
16	Blood
17	Myeloproliferative Diseases
18	Infections
19	Mental
20	Alcohol/Drug Use
21	Injuries, Poisonings
22	Burns
23	Health Status
24	Multiple Trauma
25	HIV Infections

Value	Label
0	Non-MSA
10180	Abilene, TX
10380	Aguadilla-Isabela, PR
10420	Akron, OH
10500	Albany, GA
10540	Albany, OR
10580	Albany-Schenectady-Troy, NY
10740	Albuquerque, NM
10780	Alexandria, LA
10900	Allentown-Bethlehem-Easton, PA-NJ
11020	Altoona, PA
11100	Amarillo, TX
11180	Ames, IA
11244	Anaheim-Santa Ana-Irvine, CA
11260	Anchorage, AK
11460	Ann Arbor, MI
11500	Anniston-Oxford-Jacksonville, AL
11540	Appleton, WI
11640	Arecibo, PR
11700	Asheville, NC
12020	Athens-Clarke County, GA
12060	Atlanta-Sandy Springs-Roswell, GA
12100	Atlantic City-Hammonton, NJ
12220	Auburn-Opelika, AL
12260	Augusta-Richmond County, GA-SC
12420	Austin-Round Rock, TX
12540	Bakersfield, CA
12580	Baltimore-Columbia-Towson, MD
12620	Bangor, ME
12700	Barnstable Town, MA
12940	Baton Rouge, LA
12980	Battle Creek, MI
13020	Bay City, MI
13140	Beaumont-Port Arthur, TX
13220	Beckley, WV
13380	Bellingham, WA
13460	Bend-Redmond, OR
13740	Billings, MT

Value	Label
13780	Binghamton, NY
13820	Birmingham-Hoover, AL
13900	Bismarck, ND
13980	Blacksburg-Christiansburg-Radford, VA
14010	Bloomington, IL
14020	Bloomington, IN
14100	Bloomsburg-Berwick, PA
14260	Boise City, ID
14454	Boston, MA
14500	Boulder, CO
14540	Bowling Green, KY
14740	Bremerton-Silverdale, WA
14860	Bridgeport-Stamford-Norwalk, CT
15180	Brownsville-Harlingen, TX
15260	Brunswick, GA
15380	Buffalo-Cheektowaga-Niagara Falls, NY
15500	Burlington, NC
15540	Burlington-South Burlington, VT
15680	California-Lexington Park, MD
15764	Cambridge-Newton-Framingham, MA
15804	Camden, NJ
15940	Canton-Massillon, OH
15980	Cape Coral-Fort Myers, FL
16020	Cape Girardeau, MO-IL
16060	Carbondale-Marion, IL
16180	Carson City, NV
16220	Casper, WY
16300	Cedar Rapids, IA
16540	Chambersburg-Waynesboro, PA
16580	Champaign-Urbana, IL
16620	Charleston, WV
16700	Charleston-North Charleston, SC
16740	Charlotte-Concord-Gastonia, NC-SC
16820	Charlottesville, VA
16860	Chattanooga, TN-GA
16940	Cheyenne, WY
16974	Chicago-Naperville-Arlington Heights, IL (no longer in use starting with 2022v1.0)
16984	Chicago-Naperville-Evanston, IL

Value	Label
17020	Chico, CA
17140	Cincinnati, OH-KY-IN
17300	Clarksville, TN-KY
17420	Cleveland, TN
17460	Cleveland-Elyria, OH
17660	Coeur dAlene, ID
17780	College Station-Bryan, TX
17820	Colorado Springs, CO
17860	Columbia, MO
17900	Columbia, SC
17980	Columbus, GA-AL
18020	Columbus, IN
18140	Columbus, OH
18580	Corpus Christi, TX
18700	Corvallis, OR
18880	Crestview-Fort Walton Beach-Destin, FL
19060	Cumberland, MD-WV
19124	Dallas-Plano-Inving, TX
19140	Dalton, GA
19180	Danville, IL
19300	Daphne-Fairhope-Foley, AL
19340	Davenport-Moline-Rock Island, IA-IL
19380	Dayton, OH (no longer in use starting with 2022v1.0)
19430	Dayton-Kettering, OH
19460	Decatur, AL
19500	Decatur, IL
19660	Deltona-Daytona Beach-Ormond Beach, FL
19740	Denver-Aurora-Lakewood, CO
19780	Des Moines-West Des Moines, IA
19804	Detroit-Dearborn-Livonia, MI
20020	Dothan, AL
20100	Dover, DE
20220	Dubuque, IA
20260	Duluth, MN-WI
20500	Durham-Chapel Hill, NC
20524	Dutchess County-Putnam County, NY (no longer in use starting with 2022v1.0)
20700	East Stroudsburg, PA
20740	Eau Claire, WI

Value	Label
20940	El Centro, CA
20994	Elgin, IL
21060	Elizabethtown-Fort Knox, KY
21140	Elkhart-Goshen, IN
21300	Elmira, NY
21340	El Paso, TX
21420	Enid, OK
21500	Erie, PA
21660	Eugene, OR
21780	Evansville, IN-KY
21820	Fairbanks, AK
22020	Fargo, ND-MN
22140	Farmington, NM
22180	Fayetteville, NC
22220	Fayetteville-Springdale-Rogers, AR-MO
22380	Flagstaff, AZ
22420	Flint, MI
22500	Florence, SC
22520	Florence-Muscle Shoals, AL
22540	Fond du Lac, WI
22660	Fort Collins, CO
22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL
22900	Fort Smith, AR-OK
23060	Fort Wayne, IN
23104	Fort Worth-Arlington, TX
23224	Frederick-Gaithersburg-Rockville, MD
23420	Fresno, CA
23460	Gadsden, AL
23540	Gainesville, FL
23580	Gainesville, GA
23844	Gary, IN
23900	Gettysburg, PA
24020	Glens Falls, NY Goldsboro, NC
24140 24220	Grand Forks, ND-MN
24220	Grand Forks, ND-MN Grand Island, NE
24260	Grand Junction, CO
24300	Grand Rapids-Wyoming, MI
24340	Jalana napias-vvyortiirig, ivii

Value	Label
24420	Grants Pass, OR
24500	Great Falls, MT
24540	Greeley, CO
24580	Green Bay, WI
24660	Greensboro-High Point, NC
24780	Greenville, NC
24860	Greenville-Anderson-Mauldin, SC
25020	Guayama, PR
25060	Gulfport-Biloxi-Pascagoula, MS
25180	Hagerstown-Martinsburg, MD-WV
25220	Hammond, LA
25260	Hanford-Corcoran, CA
25420	Harrisburg-Carlisle, PA
25500	Harrisonburg, VA
25540	Hartford-West Hartford-East Hartford, CT
25620	Hattiesburg, MS
25860	Hickory-Lenoir-Morganton, NC
25940	Hilton Head Island-Bluffton-Beaufort, SC
25980	Hinesville, GA
26140	Homosassa Springs, FL
26300	Hot Springs, AR
26380	Houma-Thibodaux, LA
26420	Houston-The Woodlands-Sugar Land, TX
26580	Huntington-Ashland, WV-KY-OH
26620	Huntsville, AL
26820	Idaho Falls, ID
26900	Indianapolis-Carmel-Anderson, IN
26980	Iowa City, IA
27060	Ithaca, NY
27100	Jackson, MI
27140	Jackson, MS
27180	Jackson, TN
27260	Jacksonville, FL
27340	Jacksonville, NC
27500	Janesville-Beloit, WI
27620	Jefferson City, MO
27740	Johnson City, TN
27780	Johnstown, PA

Value	Label
27860	Jonesboro, AR
27900	Joplin, MO
27980	Kahului-Wailuku-Lahaina, HI
28020	Kalamazoo-Portage, MI
28100	Kankakee, IL
28140	Kansas City, MO-KS
28420	Kennewick-Richland, WA
28660	Killeen-Temple, TX
28700	Kingsport-Bristol-Bristol, TN-VA
28740	Kingston, NY
28940	Knoxville, TN
29020	Kokomo, IN
29100	La Crosse-Onalaska, WI-MN
29180	Lafayette, LA
29200	Lafayette-West Lafayette, IN
29340	Lake Charles, LA
29404	Lake County-Kenosha County, IL-WI
29420	Lake Havasu City-Kingman, AZ
29460	Lakeland-Winter Haven, FL
29540	Lancaster, PA
29620	Lansing-East Lansing, MI
29700	Laredo, TX
29740	Las Cruces, NM
29820	Las Vegas-Henderson-Paradise, NV
29940	Lawrence, KS
30020	Lawton, OK
30140	Lebanon, PA
30300	Lewiston, ID-WA
30340	Lewiston-Auburn, ME
30460	Lexington-Fayette, KY
30620	Lima, OH
30700	Lincoln, NE
30780	Little Rock-North Little Rock-Conway, AR
30860	Logan, UT-ID
30980	Longview, TX
31020	Longview, WA
31084	Los Angeles-Long Beach-Glendale, CA
31140	Louisville/Jefferson County, KY-IN

Value	Label
31180	Lubbock, TX
31340	Lynchburg, VA
31420	Macon-Bibb County, GA
31460	Madera, CA
31540	Madison, WI
31700	Manchester-Nashua, NH
31740	Manhattan, KS
31860	Mankato-North Mankato, MN
31900	Mansfield, OH
32420	Mayaguez, PR
32580	McAllen-Edinburg-Mission, TX
32780	Medford, OR
32820	Memphis, TN-MS-AR
32900	Merced, CA
33124	Miami-Miami Beach-Kendall, FL
33140	Michigan City-La Porte, IN
33220	Midland, MI
33260	Midland, TX
33340	Milwaukee-Waukesha-West Allis, WI
33460	Minneapolis-St. Paul-Bloomington, MN-WI
33540	Missoula, MT
33660	Mobile, AL
33700	Modesto, CA
33740	Monroe, LA
33780	Monroe, MI
33860	Montgomery, AL
33874	Montgomery County-Bucks County-Chester County, PA
34060	Morgantown, WV
34100	Morristown, TN
34580	Mount Vernon-Anacortes, WA
34620	Muncie, IN
34740	Muskegon, MI
34820 34900	Myrtle Beach-Conway-North Myrtle Beach, SC-NC Napa, CA
34900	Naples-Immokalee-Marco Island, FL
34940	Nashville-DavidsonMurfreesboroFranklin, TN
35004	, ,
35004	Nassau County-Suffolk County, NY Newark, NJ-PA
35U84	inewaik, inj-ra

Value	Label
35100	New Bern, NC
35154	New Brunswick-Lakewood, NJ
35300	New Haven-Milford, CT
35380	New Orleans-Metairie, LA
35614	New York-Jersey City-White Plains, NY-NJ
35660	Niles-Benton Harbor, MI
35840	North Port-Sarasota-Bradenton, FL
35980	Norwich-New London, CT
36084	Oakland-Hayward-Berkeley, CA
36100	Ocala, FL
36140	Ocean City, NJ
36220	Odessa, TX
36260	Ogden-Clearfield, UT
36420	Oklahoma City, OK
36500	Olympia-Tumwater, WA
36540	Omaha-Council Bluffs, NE-IA
36740	Orlando-Kissimmee-Sanford, FL
36780	Oshkosh-Neenah, WI
36980	Owensboro, KY
37100	Oxnard-Thousand Oaks-Ventura, CA
37340	Palm Bay-Melbourne-Titusville, FL
37460	Panama City, FL
37620	Parkersburg-Vienna, WV
37860	Pensacola-Ferry Pass-Brent, FL
37900	Peoria, IL
37964	Philadelphia, PA
38060	Phoenix-Mesa-Scottsdale, AZ
38220	Pine Bluff, AR
38300	Pittsburgh, PA
38340	Pittsfield, MA
38540	Pocatello, ID
38660	Ponce, PR
38860	Portland-South Portland, ME
38900	Portland-Vancouver-Hillsboro, OR-WA
38940	Port St. Lucie, FL
39100	Poughkeepsie-Newburgh-Middletown, NY
39140	Prescott, AZ (no longer in use starting with 2022v1.0)
39150	Prescott Valley-Prescott, AZ

Value	Label
39300	Providence-Warwick, RI-MA
39340	Provo-Orem, UT
39380	Pueblo, CO
39460	Punta Gorda, FL
39540	Racine, WI
39580	Raleigh, NC
39660	Rapid City, SD
39740	Reading, PA
39820	Redding, CA
39900	Reno, NV
40060	Richmond, VA
40140	Riverside-San Bernardino-Ontario, CA
40220	Roanoke, VA
40340	Rochester, MN
40380	Rochester, NY
40420	Rockford, IL
40484	Rockingham County-Strafford County, NH
40580	Rocky Mount, NC
40660	Rome, GA
40900	SacramentoRosevilleArden-Arcade, CA
40980	Saginaw, MI
41060	St. Cloud, MN
41100	St. George, UT
41140	St. Joseph, MO-KS
41180	St. Louis, MO-IL
41420	Salem, OR
41500	Salinas, CA
41540	Salisbury, MD-DE
41620	Salt Lake City, UT
41660	San Angelo, TX
41700	San Antonio-New Braunfels, TX
41740	San Diego-Carlsbad, CA
41884	San Francisco-Redwood City-South San Francisco, CA
41900	San German, PR
41940	San Jose-Sunnyvale-Santa Clara, CA
41980	San Juan-Carolina-Caguas, PR
42020	San Luis Obispo-Paso Robles-Arroyo Grande, CA
42034	San Rafael, CA

Value	Label
42100	Santa Cruz-Watsonville, CA
42140	Santa Fe, NM
42200	Santa Maria-Santa Barbara, CA
42220	Santa Rosa, CA
42340	Savannah, GA
42540	ScrantonWilkes-BarreHazleton, PA
42644	Seattle-Bellevue-Everett, WA
42680	Sebastian-Vero Beach, FL
42700	Sebring, FL
43100	Sheboygan, WI
43300	Sherman-Denison, TX
43340	Shreveport-Bossier City, LA
43420	Sierra Vista-Douglas, AZ
43524	Silver Spring-Frederick-Rockville, MD (no longer in use starting with 2022v1.0)
43580	Sioux City, IA-NE-SD
43620	Sioux Falls, SD
43780	South Bend-Mishawaka, IN-MI
43900	Spartanburg, SC
44060	Spokane-Spokane Valley, WA
44100	Springfield, IL
44140	Springfield, MA
44180	Springfield, MO
44220	Springfield, OH
44300	State College, PA
44420	Staunton-Waynesboro, VA
44700	Stockton-Lodi, CA
44940	Sumter, SC
45060	Syracuse, NY
45104	Tacoma-Lakewood, WA
45220	Tallahassee, FL
45300	Tampa-St. Petersburg-Clearwater, FL
45460	Terre Haute, IN
45500	Texarkana, TX-AR
45540	The Villages, FL
45780	Toledo, OH
45820	Topeka, KS
45940	Trenton, NJ
46060	Tucson, AZ

Value	Label
46140	Tulsa, OK
46220	Tuscaloosa, AL
46300	Twin Falls, ID
46340	Tyler, TX
46520	Urban Honolulu, HI
46540	Utica-Rome, NY
46660	Valdosta, GA
46700	Vallejo-Fairfield, CA
47020	Victoria, TX
47220	Vineland-Bridgeton, NJ
47260	Virginia Beach-Norfolk-Newport News, VA-NC
47300	Visalia-Porterville, CA
47380	Waco, TX
47460	Walla Walla, WA
47580	Warner Robins, GA
47664	Warren-Troy-Farmington Hills, MI
47894	Washington-Arlington-Alexandria, DC-VA-MD-WV
47940	Waterloo-Cedar Falls, IA
48060	Watertown-Fort Drum, NY
48140	Wausau, WI
48260	Weirton-Steubenville, WV-OH
48300	Wenatchee, WA
48424	West Palm Beach-Boca Raton-Delray Beach, FL
48540	Wheeling, WV-OH
48620	Wichita, KS
48660	Wichita Falls, TX
48700	Williamsport, PA
48864	Wilmington, DE-MD-NJ
48900	Wilmington, NC
49020	Winchester, VA-WV
49180	Winston-Salem, NC

#### **Attachment D - RESLTCAT**

Value	Label
ABN	Abnormal
ABS	Absent
ADQ	Adequate
AMB	Amber
BLD	Blood
BLK	Black
BLU	Blue
BRN	Brown
CLD	Cloudy
CLR	Clear
DEC	Decreased
DET	Detected
DNR	DNR
EQI	Equivocal
FEW	Few
FIN	Final
FIR	Final Report
GRN	Green
HAZ	Hazy
HIG	High
INC	Increased
IND	Indeterminate
LES	Less
LOW	Low
LRG	Large
LSL	LSL
MIC	Micro
MIX	Mixed
MNY	Many
MOD	Moderate
NA	Not Applicable
NEG	Negative
NIL	Nil
NO	No Not Coloulated
NOC NOE	Not Calculated None
NOG	No Growth
NON	Not Detected

#### **Attachment D - RESLTCAT**

Value	Label
NOR	Non Reactive
NOS	None Seen
NRM	Normal
NTG	Not Given
NTI	Not Indicated
NTO	Not Observed
ORA	Orange
OTH	Other
PER	Performed
POS	Positive
PRS	Present
PTR	PTRA
RAR	Rare
REA	Reactive
RED	Red
RNL	RNIL
SML	Small
SPR	SPRCS
TAN	Tan
TNP	TNP
TRA	Trace
TUR	Turbid
UPT	UPTCAL
URI	Urine
VAG	Vaginal
VOI	Void
WHI	White
YEL	Yellow
YES	Yes

### **Attachment E - STDPLAC**

Value	Label
1	Pharmacy
2	Telehealth
3	School
4	Homeless Shelter
5	Indian HIth Svc Free-stand Fac
6	Indian HIth Svc Prov-based Fac
7	Tribal 638 Free-standing Fac
8	Tribal 638 Provider-based Fac
9	Prison-Correctional Facility
10	Telehealth Provided in Pat Hm
11	Office
12	Patient Home
13	Assisted Living Facility
14	Group Home
15	Mobile Unit
16	Temporary Lodging
17	Walk-in Retail Health Clinic
18	Place of Employment-Worksite
19	Outpatient Hospital-Off Campus
20	Urgent Care Facility
21	Inpatient Hospital
22	Outpatient Hospital-On Campus
23	Emergency Room - Hospital
24	Ambulatory Surgical Center
25	Birthing Center
26	Military Treatment Facility
27	Outreach Site/Street (Effective October 1, 2023); Inpatient Long-Term Care (NEC) (Claims incurred 2008 and prior)
28	Other Inpatient Care (NEC)
31	Skilled Nursing Facility
32	Nursing Facility
33	Custodial Care Facility
34	Hospice
35	Adult Living Care Facility
41	Ambulance (land)
42	Ambulance (air or water)
49	Independent Clinic
50	Federally Qualified Health Ctr
51	Inpatient Psychiatric Facility

### **Attachment E - STDPLAC**

Value	Label
52	Psych Facility Partial Hosp
53	Community Mental Health Center
54	Intermed Care/Intellect Disab
55	Residential Subst Abuse Facil
56	Psych Residential Treatmnt Ctr
57	Non-resident Subst Abuse Facil
60	Mass Immunization Center
61	Comprehensive Inpt Rehab Fac
62	Comprehensive Outpt Rehab Fac
65	End-Stage Renal Disease Facil
71	State/Local Public Health Clin
72	Rural Health Clinic
81	Independent Laboratory
95	Outpatient (NEC)
98	Pharmacy
99	Other/Unknown

Value	Label					
1	Acute Care Hospital					
5	Ambulatory Surgery Centers					
6	Urgent Care Facility					
10	Birthing Center					
15	Treatment Center					
20	Mental Health/Chemical Dep NEC					
21	Mental Health Facilities					
22	Chemical Depend Treatment Ctr					
23	Mental Hlth/Chem Dep Day Care					
25	Rehabilitation Facilities					
30	Longterm Care (NEC)					
31	Extended Care Facility					
32	Geriatric Hospital					
33	Convalescent Care Facility					
34	Intermediate Care Facility					
35	Residential Treatment Center					
36	Continuing Care Retirement Com					
37	Day/Night Care Center					
38	Hospice Facility					
40	Other Facility (NEC)					
41	Infirmary					
42	Special Care Facility (NEC)					
100	Dentist - MD & DDS (NEC)					
105	Dental Specialist					
120	Chiropractor/DCM					
130	Podiatry					
140	Pain Mgmt/Pain Medicine					
145	Pediatric Anesthesiology					
150	Anesthesiology					
160	Nuclear Medicine					
170	Pathology Pathology					
175	Pediatric Pathology					
180 185	Radiology  Redictoria Redictory					
200	Pediatric Radiology  Medical Doctor - MD (NEC)					
200	Osteopathic Medicine					
202	Internal Medicine (NEC)					
204	MultiSpecialty Physician Group					
206	INIUIIIS peciality Physician Group					

Value	Label					
208	Proctology					
210	Urology					
215	Dermatology					
220	Emergency Medicine					
225	Hospitalist					
227	Palliative Medicine					
230	Allergy & Immunology					
240	Family Practice					
245	Geriatric Medicine					
250	Cardiovascular Dis/Cardiology					
260	Neurology					
265	Critical Care Medicine					
270	Endocrinology & Metabolism					
275	Gastroenterology					
280	Hematology					
285	Infectious Disease					
290	Nephrology					
295	Pulmonary Disease					
300	Rheumatology					
320	Obstetrics & Gynecology					
325	Genetics					
330	Ophthalmology					
340	Otolaryngology					
350	Physical Medicine & Rehab					
355	Plastic/Maxillofacial Surgery					
360	Preventative Medicine					
365	Psychiatry					
380	Oncology					
400	Pediatrician (NEC)					
410	Pediatric Specialist (NEC)					
413	Pediatric Nephrology					
415	Pediatric Ophthalmology					
418	Pediatric Orthopaedics					
420	Pediatric Otolaryngology					
423	Pediatric Critical Care Med					
425	Pediatric Pulmonology					
428	Pediatric Emergency Medicine					
430	Pediatric Allergy & Immunology					

Value	Label					
433	Pediatric Endocrinology					
435	Neonatal-Perinatal Medicine					
438	Pediatric Gastroenterology					
440	Pediatric Cardiology					
443	Pediatric Hematology-Oncology					
448	Pediatric Infectious Diseases					
450	Pediatric Rheumatology					
453	Sports Medicine (Pediatrics)					
455	Pediatric Urology					
458	Child Psychiatry					
460	Pediatric Medical Toxicology					
500	Surgeon (NEC)					
505	Surgical Specialist (NEC)					
510	Colon & Rectal Surgery					
520	Neurological Surgery					
530	Orthopaedic Surgery					
535	Abdominal Surgery					
540	Cardiovascular Surgery					
545	Dermatologic Surgery					
550	General Vascular Surgery					
555	Head and Neck Surgery					
560	Pediatric Surgery					
565	Surgical Critical Care					
570	Transplant Surgery					
575	Traumatic Surgery					
580	Cardiothoracic Surgery					
585	Thoracic Surgery					
805	Dental Technician					
810	Dietitian					
815	Medical Technician					
820	Midwife					
822	Nursing Services					
824	Psychiatric Nurse					
825	Nurse Practitioner					
827	Nurse Anesthetist					
830	Optometrist					
835	Optician					
840	Pharmacist					

Value	Label						
845	Physician Assistant Physician Assistant						
850	Therapy (Physical)						
853	Therapists (Supportive)						
855	Therapists (Alternative)						
857	Renal Dialysis Therapy						
860	Psychologist						
865	Acupuncturist						
870	Spiritual Healers						
900	Health Educator/Agency						
905	Transportation						
910	Health Resort						
915	Hearing Labs						
920	Home Health Organiz/Agency						
925	Imaging Center						
930	Laboratory						
935	Pharmacy						
940	Supply Center						
945	Vision Center						
950	Public Health Agency						
955	Unknown Clinic						
960	Case Manager						

#### **Appendix - CSV Schema**

	Column				
Table	Number	Name	Long Name	CSV Data Type	Example Values
R	1	SEQNUM	Seguence Number	NUM(11)	Each character = 0-9
R	2	VERSION	Version	CHAR(2)	Each character = 0-9
R	3	ENROLID	Enrollee ID	NUM(11)	Each character = 0-9
R	4	DATATYP	Data Type	NUM(1)	1, 2, 3, 4
R	5	EFAMID	Enrolled Family ID	NUM(9)	Each character = 0-9
R	6	DOBYR	Patient Birth Year	NUM(4)	1965, 1984, 2005
R	7	YEAR	Date Year Incurred	NUM(4)	1999, 2015, 2021
R	8	ABNORMAL	Lab Abnormal Flag	CHAR(1)	A, H, L, N
R	9	AGE	Age of Patient	NUM(3)	18. 52. 65
R	10	DX1	Diagnosis 1	CHAR(7)	E119, Z01419, M069
R	11	DXVER	Diagnosis Code ICD Version Indicator	CHAR(1)	0,9
R	12	LOINCCD	LOINC Code	CHAR(7)	2028-9, 31039-1, 1558-6
R	13	MHSACOVG	Coverage Indicator MHSA	CHAR(1)	0,1
R	14	ORDERID	Lab Test Order ID	NUM(12)	Each character = 0-9
R	15	PDDATE	Date Claim Paid	DATE(10)	01/06/1999, 05/04/2018, 10/12/2020
R	16	PLANTYP	Plan Indicator	NUM(1)	1, 2, 3, 4, 5, 6, 7, 8, 9
R	17	PROC1	Procedure Code 1	CHAR(7)	80061, 81000, 85014
R	18	PROCTYP	Procedure Code Type	CHAR(1)	*, 0, 1, 3, 6, 7, 8
R	19	PROVID	Provider ID	NUM(9)	Each character = 0-9
R	20	REFHIGH	Lab Result High Range	FLT(20.6)	0, 10.8, 8.299999, 129
R	21	REFLOW	Lab Result Low Range	FLT(20.6)	0, 10.8, 8.299999, 129
R	22	RESLTCAT	Lab Result Category Code	CHAR(3)	NEG, POS, RAR
R	23	RESULT	Lab Result Numeric Value	FLT(20.6)	0, 10.8, 8.299999, 129
R	24	RESUNIT	Lab Result Units	CHAR(30)	G/DL, FL, UNK
R	25	SVCDATE	Date Service Incurred	DATE(10)	04/04/1999, 11/3/2020, 07/11/2021
R	26	TESTCNT	Lab Test Count	NUM(4)	1
R	27	MDC	Major Diagnostic Category	CHAR(2)	02, 11, 23
R	28	REGION	Region	CHAR(1)	1, 2, 3, 4, 5
R	29	MSA	Metropolitan Statistical Area	NUM(5)	0, 15190, 29404
R	30	STDPLAC	Place of Service	NUM(2)	1, 11, 81, 99
R	31	STDPROV	Provider Type	NUM(3)	1, 204, 930
R	32	AGEGRP	Age Group	CHAR(1)	1, 2, 3, 4, 5, 6
R	33	EECLASS	Employee Classification	CHAR(1)	1, 2, 3, 4, 5, 6, 7, 8, 9
R	34	EESTATU	Employment Status	CHAR(1)	1, 2, 3, 4, 5, 6, 7, 8, 9
R	35	EGEOLOC	Geographic Location Employee	CHAR(2)	01, 32, 64
R	36	EIDFLAG	Enrollee ID Derivation Flag	CHAR(1)	1, 2, 3, 4, 5, 6
R	37	EMPREL	Relation to Employee	CHAR(1)	1, 2, 3, 4
R	38	ENRFLAG	Enrollment Flag	CHAR(1)	0,1
R	39	PHYFLAG	Physician Specialty Coding Flag	CHAR(1)	0,1
R	40	RX	Cohort Drug Indicator	CHAR(1)	0,1
R	41	SEX	Gender of Patient	CHAR(1)	1,2
R	42	HLTHPLAN	Health Plan Indicator	CHAR(1)	0,1
R	43	INDSTRY	Industry	CHAR(1)	1, 2, 3, 4, 5, 6, 7, O
R	44	MEDADV	Medicare Advantage Flag	NUM(1)	0,1
				/	1 - 7

© Copyright Merative US L.P. 2023

Merative 100 Phoenix Drive Ann Arbor, Michigan 48108

Produced in the United States of America December 2023

Merative, the Merative logo and MarketScan are trademarks of Merative in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

This document is current as of the initial date of publication and may be changed by Merative at any time. Not all offerings are available in every country in which Merative operates.

The information in this document is provided "as is" without any warranty, express or implied, including without any warranties of merchantability, fitness for a particular purpose and any warranty or condition of non-infringement. Merative products are warranted according to the terms and conditions of the agreements under which they are provided.

The client is responsible for ensuring compliance with all applicable laws and regulations applicable to it. Merative does not provide legal advice or represent or warrant that its services or products will ensure that the client is in compliance with any law or regulation. The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on the specific configurations and operating conditions. It is the user's responsibility to evaluate and verify the operation of any other products or programs with Merative product and programs.

Statement of Good Security Practices: IT system security involves protecting systems and information through prevention, detection and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, misappropriated or misused or can result in damage to or misuse of your systems, including for use in attacks on others. No IT system or product should be considered completely secure and no single product, service or security measure can be completely effective in preventing improper use or access. Merative systems, products and services are designed to be part of a lawful, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products or services to be most effective. Merative does not warrant that any systems, product or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.