

Virtual Data Warehouse Data Specifications - Public

**Version 5** 

7/21/2023

#### **INTRODUCTION**

The HCSRN's Virtual Data Warehouse (VDW) is a pioneering common data model designed to support multi-site health system research. The VDW consists of clinical and claims data mapped to a common format to create tremendous efficiencies for data extraction, collection and management.

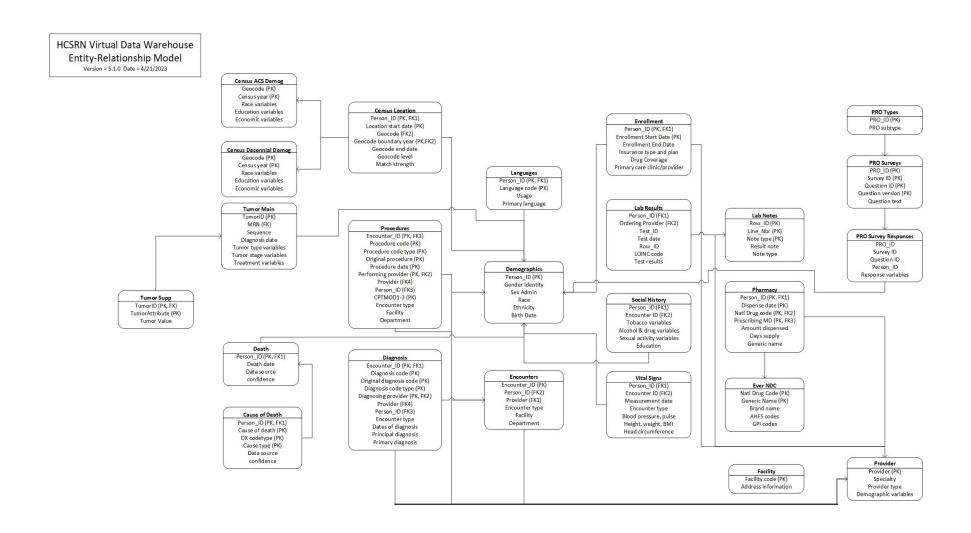
This document, the Virtual Data Warehouse Data Model Specifications, provides detailed data specifications for the VDW data model. These data areas are managed by site data managers and designated workgroups within the HCSRN sites. Some of the information contained in these specifications is only available to registered members of the HCSRN.

To submit a request for additional information regarding any of the data specs described in this document, please reach out to the VDW Operations Committee (VOC) at admin@hcsrn.org.

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## **DEMOGRAPHICS**

Version = 5.1.1 Date = 5/10/2022 StdVar = &\_vdw\_demographic

# **Subject Area Description**

The DEMOGRAPHICS table contains patient/enrollee level descriptives for the people found in VDW tables. It serves as a lookup dataset for MRNs. Every MRN appearing in any other VDW file should appear in the Demographics table, even if demographics information on the person is unknown.

| Variable Name | Definition   | Type(Len) | Values  |
|---------------|--|-----------|---|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site | char(*)   | Unique to each patient at each site   |
| BIRTH_DATE    | The person's date of birth   | num(4)    | SAS Date  |
| SEX_ADMIN     | The person's "administrative sex"—the value stored in official/legacy sources at last ascertainment  | char(1)   | F = Female M = Male X = Neither Male Nor Female O = Other U = Unknown /uncertain / missing  |
| SEX_AT_BIRTH  | The person's sex as assigned at birth  | char(1)   | F = Female M = Male I = Intersex O = Other U = Uncertain, Unknown or Not recorded on birth certificate C = Choose not to disclose |

| GENDER_IDENTITY                             | The person's gender identity as subjectively experienced, on last ascertainment.                                   | char(2) | FF = Female  MM = Male  FM = Female to Male transgender  MF = Male to Female transgender  GQ = Genderqueer or non-conforming or non-binary or genderfluid  OT = Other  ND = Choose not to disclose  UN = Unknown   |
|---|--|---------|--|
| RACE1 - RACE5                               | The person's race. Preference is for self-<br>reported; please see comment 1 for<br>recording multiple race values | char(2) | HP = Native Hawaiian / Pacific Islander IN = American Indian / Alaskan Native AS = Asian BA = Black or African American WH = White MU = Multiple races with particular unknown OT = Other, values that do not fit well in any other value UN = Unknown or Not Reported |
| HISPANIC                                    | Whether the person is of Hispanic origin / ethnicity   | char(1) | Y = Yes N = No U = Unknown   |
| NEEDS_INTERPRETER                           | Whether the person needs an interpreter to communicate with an English-only speaker                                | char(1) | Y = Yes<br>N = No<br>U = Unknown   |
| SEXUAL_ORIENTATION1-<br>SEXUAL_ORIENTATION3 | The person's response(s) to inquiry into their sexual orientation  | char(1) | B = Bisexual T = Heterosexual M = Homosexual A = Asexual P = Pansexual Q = Queer O = Other D = Does not know N = Choose not to disclose U = Not asked/no information   |

| Primary Key: |   |
|--------------|---|
| MRN          | _ |

| Source Variable |                     | Target Variable | Orphans  |
|-----------------|---------------------|-----------------|----------|
| (Foreign Key)   | <b>Target Table</b> | (Primary Key)   | allowed? |
| [None Defined]  |                     |                 |          |

### **LANGUAGE**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_language

# **Subject Area Description**

The LANGUAGE table contains information on the languages that patients speak and write. There is one record per person per known language. People on whom you have no language information should not be included in the table.

| Variable Name | Definition   | Type(Len) | Values   |
|---------------|--|-----------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site | char(*)   | Unique to each patient at each site  |
| LANG_ISO      | A code signifying the language.  | char(3)   | As defined by ISO-639-2 or 'unk' for unknown  Note that value set is lowercase |
| LANG_USAGE    | How the person uses this language.   | char(1)   | S = Spoken/signed W = Written B = Both spoken and written U = Unknown          |
| LANG_PRIMARY  | For spoken languages, whether this is the person's primary spoken language.                          | char(1)   | Y = Yes<br>N = No<br>U = Unknown   |

| Primary | Key: |  |
|---------|------|--|
|         |      |  |

MRN + LANG\_ISO

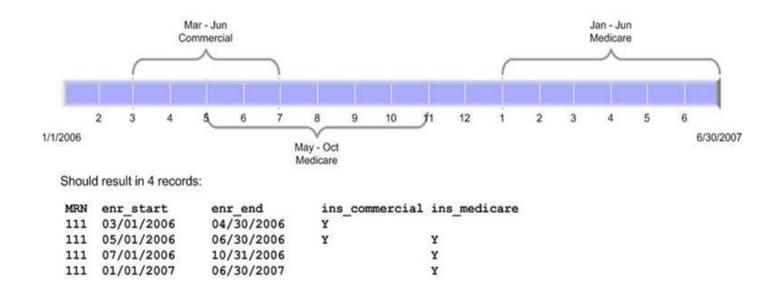
| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| MRN                              | DEMOGRAPHICS | MRN                              | No               |

#### **ENROLLMENT**

Version = 5.1.0 Date = 1/4/2022 StdVar = &\_vdw\_enroll

### **Subject Area Description**

The ENROLLMENT table contains periods of time during which we believe to have at least the partial capture of medical care information either because of enrollment in a health insurance plan that we know about or as a patient of a care delivery system that we own or interact with. Insurance coverage is not the only basis of data capture (see ENROLLMENT\_BASIS) nor do all records necessarily indicate completeness of data capture (see the capture warning variables, which all begin with 'INCOMPLETE'). Each record represents a period of time during which the information on the included variables was true. As many records as are necessary should be added to represent changes over time. There may be many contiguous records for a single period of enrollment, in order to account for these changes. However, periods may NOT overlap one another; there should be only one record covering any given day + medical record number. The following figure illustrates this concept:



| Variable Name  | Definition   | Type(Len) | Values  |
|----------------|--|-----------|---|
| MRN            | Medical record number is the unique patient identifier within a site and should never leave the site | char(*)   | Unique to each patient at each site                                   |
| ENR_START      | Beginning of the period at risk for medical care capture   | num(4)    | SAS Date  |
| ENR_END        | End of the period at risk for medical care capture   | num(4)    | SAS Date  |
| INS_MEDICAID   | Whether the person had any Medicaid insurance coverage during the period                             | char(1)   | Y = Yes E = Yes, but from an External organization N = No U = Unknown |
| INS_COMMERCIAL | Whether the person had any commercial insurance coverage during the period                           | char(1)   | Y = Yes E = Yes, but from an External organization N = No U = Unknown |
| INS_PRIVATEPAY | Whether the person had any insurance coverage in a private pay plan during the period                | char(1)   | Y = Yes E = Yes, but from an External organization N = No U = Unknown |

| INS_STATESUBSIDIZED | Whether the person had any state subsidized insurance coverage during the period   | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown          |
|---------------------|--|---------|--|
| INS_SELFFUNDED      | Whether the person had any insurance coverage through an employer group that insures itself during the period  | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown          |
| INS_HIGHDEDUCTIBLE  | Whether the person had any insurance coverage in a high deductible plan during the period as defined by the U.S. IRS (Pub 969) qualifying for a Health Savings Account | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown          |
| INS_MEDICARE        | Whether the person had any Medicare insurance coverage, including Medicare working aged, during the period   | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| INS_MEDICARE_A      | Whether the person had Medicare Part A insurance coverage during the period  | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| INS_MEDICARE_B      | Whether the person had Medicare Part B insurance coverage during the period  | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |

| INS_MEDICARE_C | Whether the person had Medicare Part C insurance coverage during the period   | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown          |
|----------------|---|---------|--|
| INS_MEDICARE_D | Whether the person had Medicare Part D insurance coverage during the period   | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| INS_OTHER      | Whether the person had insurance coverage during the period that is not otherwise included in the INS_* variables during the period | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| PLAN_HMO       | Whether the person had insurance coverage under an HMO plan during the period   | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| PLAN_POS       | Whether the person had insurance coverage in a point-of-service plan during the period  | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |
| PLAN_PPO       | Whether the person had insurance coverage in a preferred provider organization plan during the period                               | char(1) | Y = Yes<br>E = Yes, but from an External organization<br>N = No<br>U = Unknown |

| PLAN_INDEMNITY       | Whether the person had insurance coverage in a traditional indemnity plan during the period                      | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown   |
|----------------------|--|---------|---|
| DRUGCOV              | Whether the person had <i>any</i> insurance coverage that included at least some coverage for prescription drugs | char(1) | Y = Yes E = Yes, but from an External organization N = No U = Unknown   |
| INCOMPLETE_OUTPT_RX  | Is outpatient pharmacy fill data suspected to be incomplete for this person/period?                              | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |
| INCOMPLETE_OUTPT_ENC | Is outpatient encounter data suspected to be incomplete for this person/period?                                  | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |
| INCOMPLETE_INPT_ENC  | Is inpatient encounter data suspected to be incomplete for this person/period?                                   | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |

| INCOMPLETE_EMR   | Is electronic medical record data (e.g. social history, vital signs) suspected to be incomplete for this person/period?  | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |
|------------------|--|---------|---|
| INCOMPLETE_TUMOR | Is tumor data suspected to be incomplete for this person/period?   | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |
| INCOMPLETE_LAB   | Is lab results data suspected to be incomplete for this person/period?   | char(1) | K = There are known reasons to suspect incomplete capture N = No, there is no known reason to suspect incomplete capture X = This variable not implemented at this site |
| ENROLLMENT_BASIS | The basis for the claim that we have at least partial capture of the medical care information during the period. Historically 'I'nsurance was the only permissible basis |         | G = Geography I = Insurance B = Both geography & insurance P = Non-enrolled patient   |
| PCC              | The primary care clinic to which the patient is paneled in administrative record.  | char(*) | Same value set as UTILIZATION.FACILITY_CODE   |
| PCP              | The clinician to which the patient is paneled in administrative record   | char(*) | Values link as a foreign key to UTILIZATION.PROVIDER  |

### **Primary Key:**

MRN + ENR\_START (no overlapping time periods are permitted)

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| MRN             | DEMOGRAPHICS | MRN             | No       |
| PCP             | PROVIDER     | PROVIDER        | No       |

#### **ENCOUNTER**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_utilization

### **Subject Area Description**

The ENCOUNTER table contains one record for each significant medical-related interaction between a patient and a medical provider regardless of care setting or type of encounter. All known encounters should be included whether known through claims, through clinical systems, or a third source type. Inclusion, exclusions, classification, and uniqueness of an encounter is dependent on the type of service and care setting. For a precise description, please refer to the Utilization Implementation Guidelines and the Virtual Visits Proposal and Guidelines on the private HCSRN website,

| Variable Name | Definition  | Type (Len) | Values   |
|---------------|---|------------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site  | char(*)    | Unique to each patient at each site. Nulls are not allowed   |
| ADATE         | Encounter or admit date for inpatient or institutional stay. If encounter/admit date is unknown, then use the first date of a claim.  | num(4)     | SAS date. Nulls are not allowed  |
| ATIME         | Start time of an encounter.  - Use admission time for inpatient, emergency or institutional encounters.  - For other encounters (such as ambulatory visits), use check-in time if this field is populated, otherwise use appointment time.  If unknown, specify as null | num(4)     | SAS time. # of seconds since midnight (0-86,400),  If input data are default time values (placeholders and not actual time measurements) and there isn't another source for time, set these default time values to missing. Sites can restrict this rule to specific encounter type/subtype values and/or data sources.  null values are allowed |

| DDATE    | Discharge date for inpatient and overnight encounters. End date for other encounters if documented in the source data. If discharge date is unknown, then use the last date of a claim.                                  | num(4)  | SAS date  null values are allowed although this field is expected to be populated for inpatient and instistutional stays   |
|----------|--|---------|--|
| DTIME    | End time of an encounter.  - Use discharge time for inpatient, emergency or institutional encounters.  - For other encounters (such as ambulatory visits), use check-out time if populated.  If unknown, specify as null | num(4)  | SAS time. # of seconds since midnight (0-86,400),  If input data are default time values (placeholders and not actual time measurements) and there isn't another source for time, set these default time values to missing. Sites can restrict this rule to specific encounter type/subtype values and/or data sources.  Null values are allowed |
| PROVIDER | Identifies the provider most responsible for the encounter.  | char(*) | Unique to each provider at each site. If unknown, then use value "UNK"   |
| ENC_ID   | Uniquely identifies the encounter. The value should not change at update. An encounter should be unique across MRN, ADATE, ENCTYPE, PROVIDER, ENCOUNTER_SUBTYPE, FACILITY_CODE and appointment time.                     | char(*) | Unique to each encounter at each site.   |

| ENCTYPE | The type of encounter. Valid associated ENCOUNTER_SUBTYPE values are in brackets | char(2) | AV = Ambulatory visit including outpatient clinics, same-day surgeries, observation beds, urgent care visits, and same-day ambulatory hospital encounters. Excludes emergency department. [SUB = OC, OB, SD, HA, UC, RH, DI, OT]  ED = Emergency department excluding urgent care [SUB = HA, OC]  IP = Acute inpatient hospital stay including inpatient stays, same-day hospital discharges, hospital transfers when patient was admitted into hospital, acute inpatient pysch, and detox stays. [SUB = AI]  IS = Non-acute institutional stays including hospice, SNF, rehab, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays [SUB = HS, SN, NH, RH, DI, OT]  LO = A lab only encounter that cannot be matched to another encounter [SUB = OC, OT]  OE=Other Encounters: Non-overnight hospice visits, home health visits, SNF visits, or other visits that do not occur in a typical ambulatory clinic or hospital setting. This encounter type can include individual professional services or provider rounding visits for inpatient or institutional stays where no facility claim could be identified in which to merge these visits.  [Encounter_subtype=HS, HH, SN, RH, DI, OT, AI, NH]  RO = A radiology only encounter that cannot be matched to another encounter [SUB = OC, OT]  VC= Virtual Care - an encounter that takes place by phone, video, chat, online portal or another type of non-face to face mechanism. Can include synchronous or asychronous contact.  [SUB= CH, EM, OA, OI, OT, PP, TC, TN, TS, VV] |
|---------|--|---------|---|
|---------|--|---------|---|

| ENCOUNTER_SUBTYPE | Further specification of the type of encounter. Valid associated ENCTYPE values are in brackets   | char(2) | AI = Acute inpatient stay excluding observation bed [TYPE=IP, OE] CH = Online Text Chat [TYPE = VC] DI = Dialysis [TYPE = IS, AV, OE] EM= Email/Patient Message [TYPE=VC] HA = Hospital ambulatory; outpatient care at hospital excluding same-day surgery and observation beds [TYPE = AV, ED] HH = Home health [TYPE = OE] HS = Hospice [TYPE = IS, OE] NH = Nursing home including intermediate care facilities [TYPE = IS, OE] OA = Other Asynchronous Virtual Care [TYPE=VC] OI = Online Intake/Triage Form [TYPE=VC] OB = Observation bed [TYPE = AV] OC = Outpatient clinic visit [TYPE = AV, LO, RO, ED] PP = Provider to Provider/Facility to Facility Virtual Care [TYPE=VC] RH = Rehab [TYPE = IS, AV, OE] SD = Same-day surgery [TYPE = AV] SN = Skilled nursing facility [TYPE = IS, OE] TC = Telephone - Call Center/Advice/Triage [TYPE=VC] TN = Telephone - Scheduled Visit [TYPE=VC] VV = Video Visit [TYPE=VC] UC = Urgent care [TYPE = AV] OT = Other non-hospital [TYPE = IS, OE, AV, LO, RO, VC] |
|-------------------|---|---------|---|
| DRG_VERSION       | Identifies the version of the Diagnostic Related Group value (DRG_VALUE). Expected for hospital and some institutional stays but populate for all encounters where known. | char(1) | A = CMS-DRG (used prior to 10/1/07) B = MS-DRG (used post 10/1/07) C = APR-DRG (All Patients Refined DRG)  Null values are allowed  |
| DRG_VALUE         | The Diagnostic Related Group value. Used for hospital encounters. Using leading zeros for codes less than 100.  | char(3) | Values maintained by Centers for Medicare & Medicaid Services . Null values are allowed.  |

| ENC_COUNT        | The number of visits associated with this encounter. Value may be greater than one when a claim indicates a number of visits, but dates of visits are not specified as may occur in a bundled claim e.g. of dialysis services. | num(4)  | Positive integer value   |
|------------------|--|---------|--|
| ADMITTING_SOURCE | The location from which the patient was admitted for events with admit.  | char(2) | AV=Ambulatory Visit  ED=Emergency Department  AF=Adult Foster Home  AL =Assisted Living Facility  HH=Home Health  HS=Hospice  HO=Home / Self Care  IP=Other Acute Inpatient Hospital  NH=Nursing Home (Includes ICF)  OT=Other  RS=Residential Facility  RH=Rehabilitation Facility  SN=Skilled Nursing Facility  UN=Unknown |

| DISCHARGE_STATUS      | The status of the patient at discharge for events with discharge.  | char(2) | AF=Adult Foster Home AL =Assisted Living Facility AM=Against Medical Advice AW=Absent without leave EX=Expired HH=Home Health HS=Hospice HO=Home / Self Care IP=Other Acute Inpatient Hospital NH=Nursing Home (Includes ICF) |
|-----------------------|--|---------|---|
|                       |  |         | OT=Other RS=Residential Facility RH=Rehabilitation Facility SH=Still In Hospital SN=Skilled Nursing Facility UN=Unknown A = Alive   |
| DISCHARGE_DISPOSITION | The disposition of the patient at discharge for events with discharge.   | char(1) | E = Expired U = Unknown   |
| FACILITY_CODE         | A code indiciating the facility, hospital, or clinic in which the encounter occurred.  | char(*) | Unique to each facility at each site. If unknown, then use value "UNK"  |
| DEPT                  | The department where the encounter took place as documented in the source data. This is not necessarily the specialty of the clinician providing services. | char(6) | If department information is unavailable in the source data (as may happen in claims data), specify as "UNKNWN". For valid DEPT values, please see "Appendix A1 Dept".  |
| DEPARTMENT            | DEPRECATED   | char(4) | As of version 4.0, DEPT has replaced DEPARTMENT. See Appendix A2 - DEPARTMENT for legacy values if needed.  |

|                         |   |         | E = Your site's EHR (Electronic Health Record) operated by your health   |
|-------------------------|---|---------|--|
| SOURCE_DATA             | Classification of the database that was used to create this record. | char(1) | care organization. Excludes claims and billing data. This category includes the following:  • Direct extract from your site's EHR (or associated reporting database).  • A secondary database that houses your site's EHR data (no code changes for billing)  • Data for services captured in other local systems (such as a separate lab or radiology system) and interfaced into your site's EHR.  B = Billing datafor services performed by your organization and captured in your org's EHR, but formatted for billing an outside insurer. These are sometimes referred to as 'internal' or 'outgoing' claims, or transaction data.  C = Claims datafor services performed outside of your health care organization, presented to your organization for payment as the patient's insurer.  L = Local data source but unrelated to your site's EHR. Often Includes pre-EHR systems prior to EHR implementation such as appointment management systems.  M = Multiple sourcesthe encounter is an amalgam of data from different sources (e.g., inpatient encounters with data from claims and EHR rounding)  O = Other. Not from the sources listed above.  U = Unknown  Can not be null |
| ELECTRONIC_CHART_REVIEW | Can this encounter be chart reviewed electronically?                | char(1) | Y=Yes N=No P=Partially (part of the record can be reviewed electronically). A couple of examples: - If only a discharge summary is available for inpatient stays - if only rounding data is available for inpatient stays U=Unknown  Can not be null   |

#### **Primary Key:**

ENC\_ID

| Source Variable |              | Target Variable | Orphans  |  |
|-----------------|--------------|-----------------|----------|--|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |  |

### **DIAGNOSIS**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_dx

# **Subject Area Description**

The DIAGNOSIS table contains all recorded diagnoses associated with the encounters indicated in the ENCOUNTERS table with the exception of admitting diagnoses for inpatient stays.

| Variable Name | Definition  | Type(Len) | Values                                 |
|---------------|---|-----------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site  | char(*)   | Unique to each patient at each site    |
| ADATE         | Refer to the ADATE variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redundancy is to improve querying performance.    |           |  |
| ENCTYPE       | Refer to the ENCTYPE variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redunancy is to improve querying performance.   |           |  |
| ENC_ID        | Foreign key to the ENCOUNTER table uniquely identifying the encounter.  | char(*)   | Unique to each encounter at each site. |
| PROVIDER      | Refer to the PROVIDER variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redundancy is to improve querying performance. |           |  |
| DIAGPROVIDER  | Identifies the provider that made the diagnosis. If unknown, set the value equal to the PROVIDER varaible.  | char(*)   |  |

| DX           | The diagnosis made. For ICD diagnosis coding, include decimal points in the value.   | char(*) | ICD-9-CM Format ###.##, V##.##, E###.#  ICD-10-CM Format A#@.@@@@@ (3-8 characters - includes a decimal point (except for 3 digit codes))  First digit is alpha (A); Digit 2 is numeric (#); Digits 3-7 are alpha or numeric (@)  Centers for Medicare & Medicaid Services  http://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/index.html |
|--------------|--|---------|---|
| DX_CODETYPE  | The coding set used in the DX variable for this record.  | char(2) | 07='ICD-7-CM' (including 'ICD-7') 08='ICD-8-CM' (including 'ICD-8') 09='ICD-9-CM' (including 'ICD-9') 10='ICD-10-CM' (including 'ICD-10') 11='ICD-11-CM' (including 'ICD-11') OT='Other'  |
| ORIGDX       | The diagnosis code as reported in source data without standardization or cleaning.   | char(*) |   |
| PRINCIPAL_DX | For hospital admissions, whether this diagnosis is the principal discharge diagnosis of the encounter. The principal diagnosis indicates the main reason why the patient was admitted to the hospital for care and the value on which a DRG is assigned. | char(1) | P = Principal diagnosis N = Not principal diagnosis X = Unknown or not classifiable   |
| PRIMARY_DX   | Whether this diagnosis is the primary diagnosis of the encounter. The primary diagnosis is the most serious or resource intensive diagnosis and is the primary reason for the procedures being rendered.   | char(1) | P = Primary diagnosis<br>S = Secondary diagnosis<br>X = Unknown or not classifiable   |

| SOURCE_DATA_DX | Classification of the database that was used to create this record. | char(1) | E = Your site's EHR (Electronic Health Record) operated by your health care organization. Excludes claims and billing data. This category includes the following:  • Direct extract from your site's EHR (or associated reporting database).  • A secondary database that houses your site's EHR data (no code changes for billing)  • Data for services captured in other local systems (such as a separate lab or radiology system) and interfaced into your site's EHR.  B = Billing datafor services performed by your organization and captured in your org's EHR, but formatted for billing an outside insurer. These are sometimes referred to as 'internal' or 'outgoing' claims, or transaction data.  C = Claims datafor services performed outside of your health care organization, presented to your organization for payment as the patient's insurer.  L = Local data source but unrelated to your site's EHR. Often Includes pre-EHR systems prior to EHR implementation such as appointment management systems.  O = Other. Not from the sources listed above.  U = Unknown |
|----------------|---|---------|--|
|----------------|---|---------|--|

| <b>Primary I</b> | Key: |
|------------------|------|
|------------------|------|

ENC\_ID + DX + ORIGDX + DIAGPROVIDER + DX\_CODETYPE

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| MRN             | DEMOGRAPHICS | MRN             | No       |
| ENC_ID          | ENCOUNTER    | ENC_ID          | No       |
| PROVIDER        | PROVIDER     | PROVIDER        | No       |
| DIAG_PROVIDER   | PROVIDER     | PROVIDER        | No       |

## **PROCEDURE**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_px

# **Subject Area Description**

The PROCEDURE table contains all recorded procedures that were actually performed associated with the encounters indicated in the ENCOUNTERS table.

| Variable Name | Definition  | Type(Len) | Values                                 |
|---------------|---|-----------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site  | char(*)   | Unique to each patient at each site    |
| ENCTYPE       | Refer to the ENCTYPE variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redunancy is to improve querying performance.   |           |  |
| ADATE         | Refer to the ADATE variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redundancy is to improve querying performance.    |           |  |
| PROCDATE      | The actual date when the procedure was performed. Unknown values should be coded as missing/null.   | num(4)    | SAS Date                               |
| ENC_ID        | Foreign key to the ENCOUNTER table uniquely identifying the encounter.  | char(*)   | Unique to each encounter at each site. |
| PROVIDER      | Refer to the PROVIDER variable on the ENCOUNTER table for definition, type, length, and value set. This variable's redundancy is to improve querying performance. |           |  |

| PERFORMINGPROVIDER | Identifies the provider that performed the procedure. If unknown, set the value equal to the PROVIDER varaible. | char(*) |   |
|--------------------|---|---------|---|
| PX                 | Code identifying the procedure that was performed   | char(*) | ##.## or ##.# ICD-9, \$\$\$\$\$\$\$ ICD-10, #####, ####A, ####T CPT-4, A#### for HCPCS, ### or #### for Revenue Codes (match source data) # = Numeric Digit, A=Alphabet Letter \$=Alpha or Numeric Convert local codes to standard codes if possible.  Value set is dependent on the PX_CODETYPE value and is set by external organizations.  Revenue codes may appear as both a 3-digit value and an equivalent 4-digit value with a leading zero, for example, both '123' and '0123' may appear in the data. Users should include both variants in filter/query conditions. |
| ORIGPX             | The procedure code as reported in source data without standardization or cleaning.                              | char(*) |   |

| PX_CODETYPE        | Identifies the coding scheme used in the PX variable to identify the procedure performed.   | char(2) | 09 = ICD-9-CM<br>10 = ICD-10-CM<br>11 = ICD-11-CM<br>C4 = CPT-4<br>H4 = HCPCS-4<br>RV = Revenue code<br>LO = Local homegrown<br>OT = Other   |
|--------------------|---|---------|--|
| PXCNT              | Number of times that the procedure was performed.   | num(4)  | Positive integer value   |
| CPTMOD1            | First modifier to a CPT or HCPCS procedure code used to communicate special circumstances related to the performance of a procedure.  | char(2) | Value set is set by the American Medical Association and proprietary   |
| CPTMOD2            | Second modifier to a CPT or HCPCS procedure code used to communicate special circumstances related to the performance of a procedure.   | char(2) | Value set is set by the American Medical Association and proprietary   |
| CPTMOD3            | Third modifier to a CPT or HCPCS procedure code used to communicate special circumstances related to the performance of a procedure.  | char(2) | Value set is set by the American Medical<br>Association and proprietary  |
| SOURCE_CATEGORY_PX | Source of the procedure information. Order and billing pertain to internal healthcare processes and data sources. Claim pertains to data from the bill fulfillment, generally data sources held by insurers and other health plans. | char(2) | OD=Order (such as from your EHR's order table) BI=Billing (billing data such as transaction tables and internal claims created from services inside the health care organization) CL=Claim (external claims for services outside the health care organization) NI=No information UN=Unknown OT=Other (including but not limited to your EHR's encounter table) |

| SOURCE_DATA_PX | Classification of the source database that was used to create this record. | char(1) | E = Your site's EHR (Electronic Health Record) operated by your health care organization. Excludes claims and billing data. This category includes the following:  • Direct extract from your site's EHR (or associated reporting database).  • A secondary database that houses your site's EHR data (no code changes for billing)  • Data for services captured in other local systems (such as a separate lab or radiology system) and interfaced into your site's EHR.  B = Billing datafor services performed by your organization and captured in your org's EHR, but formatted for billing an outside insurer. These are sometimes referred to as 'internal' or 'outgoing' claims, or transaction data.  C = Claims datafor services performed outside of your health care organization, presented to your organization for payment as the patient's insurer.  L = Local data source but unrelated to your site's EHR. Often Includes pre-EHR systems prior to EHR implementation such as appointment management systems.  O = Other. Not from the sources listed above.  U = Unknown |
|----------------|--|---------|--|
|----------------|--|---------|--|

| <b>Primary</b> | Key |
|----------------|-----|
|----------------|-----|

ENC\_ID + PROCDATE + PERFORMINGPROVIDER + ORIGPX + PX + PX\_CODETYPE + CPTMOD1-3

| Source Variable    |              | Target Variable | Orphans  |
|--------------------|--------------|-----------------|----------|
| (Foreign Key)      | Target Table | (Primary Key)   | allowed? |
| MRN                | DEMOGRAPHICS | MRN             | No       |
| ENC_ID             | ENCOUNTER    | ENC_ID          | No       |
| PROVIDER           | PROVIDER     | PROVIDER        | No       |
| PERFORMINGPROVIDER | PROVIDER     | PROVIDER        | No       |

### **PROVIDER**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_provider\_specialty

# **Subject Area Description**

The PROVIDER table contains proivder level descriptives for the providers found in VDW tables. Every provider appearing in any other VDW file should appear in the PROVIDER table, even if demographics information is unknown.

| Variable Name           | Definition  | Type(Len) | Values  |
|-------------------------|---|-----------|---|
| PROVIDER                | The unique provider identifier.   | char(*)   | Unique to each provider at each site                              |
| SPECIALTY               | The provider's specialty.   | char(3)   | See Appendix C - SPECIALTY for value list                         |
| SPECIALTY2 - SPECIALTYN | Optional variables (as many as desired) to indicate when a provider has multiple specialties.         | char(3)   | See Appendix C - SPECIALTY for value list                         |
| PROVIDER_TYPE           | The position, job, title, or role of the provider.  | char(3)   | See Appendix C - PROVIDER_TYPE for value list                     |
| PROVIDER_BIRTH_YEAR     | The year that the provider was born.  | num(4)    | Leave missing if unknown  |
| PROVIDER_GENDER         | The provider's gender and/or sex; if both gender and sex are known, this variable holds gender.       | char(1)   | M = Male F = Female O = Other including transgendered U = Unknown |
| PROVIDER_RACE           | Refer to the RACE1 variable on the DEMOGRAPHICS table for definition, type, length, and value set.    |           |   |
| PROVIDER_HISPANIC       | Refer to the HISPANIC variable on the DEMOGRAPHICS table for definition, type, length, and value set. |           |   |
| YEAR_GRADUATED          | The year that the provider graduated from medical/nursing/technical school.                           | num(4)    | Leave missing if unknown  |

| <b>Primary Key:</b> |  |
|---------------------|--|
| PROVIDER            |  |

| Source Variable (Foreign Key) | Target Table | Target Variable (Primary Key) | Orphans allowed? |
|-------------------------------|--------------|-------------------------------|------------------|
| [None Defined]                |              |                               |                  |

### **FACILITY**

Version = 5.0.1 Date = 1/4/2022 StdVar = &\_vdw\_facility

# **Subject Area Description**

Contains the most recent information about each health care facility found in the Update frequency: Updated after every update of the encounter table. Include in the VDW. This is a HMORN VDW table to be used in multi-site

| Variable name        | Definition   | Type(Len) | Values   |
|----------------------|--|-----------|--|
| FACILITY_CODE        | VDW Facility Code as defined by each site  | char(*)   | VDW facility_code values  Can not be null  |
| RELATIONSHIP         | Relationship between the facility and your health care organization                        | char(1)   | O=Owned and/or operated by your health care organization. E=External facility. A facility NOT owned nor operated by your health care organization. Includes contract facilities. U=Unknown Cannot be null  |
| RELATIONSHIP_HISTORY | Describes the relationhship history between the facility and your health care organization | char(1)   | O=Always owned and/or operated by your health care organization E=Always an external facility (includes contract facilities) 1=Was an owned facility, most recently an external facility 2=Was an external facility, most recently an owned facility U=Unknown |
| FULL_ADDRESS         | Full address of the facility.  | CHAR(*)   | Street address, city, state, zip combined in to one variable.  |

| STREET_ADDRESS        | Street address of the facility.   | CHAR(*) | This field is populated if the information is easily available in the source system.  Null values are allowed.   |
|-----------------------|---|---------|--|
| CITY                  | City where the facility is located  | CHAR(*) | This field is populated if the information is easily available in the source system.  Null values are allowed.   |
| STATE                 | State where the facility is located   | CHAR(2) | This field is populated if the information is easily available in the source system.  Null values are allowed.   |
| ZIP                   | Zip code of the facility (5 or 9 digits).                                     | CHAR(9) | 5 or 9 digit zip code, with leading zeroes, and no dashes. For example:  01234 12345 123456789  Null values are allowed.   |
| ADDRESS_FACILITY_TYPE | Specify whether the address information is for a clinical or billing facility | CHAR(1) | C=Clinical Facility B=Billing Facility. Typically, this is the zip code for a claims vendor. U=Unknown (specify if zip is not missing) Leave as missing when ZIP is missing. |
| LATITUDE              | The latitude of the location  | num(8)  | Value between -90 and +90 measured in degrees  Null values are allowed.  |

| LONGITUDE | The longitude of the location | Value between -180 and +180 measured in degrees |
|-----------|-------------------------------|---|
|           |                               | Null values are allowed.                        |

Primary Key:

FACILITY\_CODE. This field should be unique and never missing.

| Source Variable<br>(Foreign Key) | Target Table | Target Variable (Primary Key) | Orphans allowed? |
|----------------------------------|--------------|-------------------------------|------------------|
| [None Defined]                   |              |                               |                  |

#### **PHARMACY**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_rx

## **Subject Area Description**

The PHARMACY file contains data on medications dispensed in the outpatient setting. Dispensings in the inpatient setting are not included. Incomplete or unfilled medication orders are also excluded. Rows are unique on the combination of patient, NDC, dispense date, and prescribing provider (the primary key is under review, rolling up data is not required by the work group at this time). When multiple dispensings occur for the same patient for the same drug on the same day from the same provider, the amount dispensed and days supplied of the drug should be summed. Compound drugs may be represented differently across sites. If a drug of interest is a compound drug, users may want to check with individual sites on their handling of these dispensings.

|               |  | Туре     |   |
|---------------|--|----------|---|
| Variable Name | Definition   | (Len)    | Values  |
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site   | char(*)  | Unique to each patient at each site             |
| RXDATE        | Date that medication was dispensed   | num(*)   | SAS Date  |
| NDC           | The identifier of a drug (or pharmacy product). If available, this should be the National Drug Code in the HIPAA/CMS/NCPDP standard 5-4-2 configuration without dashes. If a true NDC is not available, a locally defined unique identifier with up to 11 characters can be used | char(11) | FDA National Drug Code Directory                |
| RXSUP         | Number of days of medication supplied  | num(8)   | Either RXSUP or RXAMT must be a positive value. |
| RXAMT         | Number of units (e.g. pills, tablets) dispensed  | num(8)   | Either RXSUP or RXAMT must be a positive value. |

|--|

**Primary Key:** 

MRN + RXDATE + NDC + RXMD

## Foreign Key Relationship:

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| MRN             | DEMOGRAPHICS | MRN             | No       |
| NDC             | EVERNDC      | NDC             | No       |
| RXMD            | PROVIDER     | PROVIDER        | No       |

## **EVERNDC**

Version = 5.0.1 Date = 4/21/2023 StdVar = &\_vdw\_everndc

# **Subject Area Description**

The EVERNDC table is a lookup table containing all National Drug Codes (NDC) found in the PHARMACY table at each site. That is, pharmacy dispensings occurring at site A will have at least one corresponding record in site A's EVERNDC table but not necessarily any records in site B's EVERNDC table.

| Variable Name   | Definition  | Type(Len) | Values   |
|-----------------|---|-----------|--|
| NDC             | The identifier of a drug (or pharmacy product). If available, this should be the National Drug Code in the HIPAA/CMS/NCPDP standard 5-4-2 configuration without dashes. If a true NDC is not available, a locally defined unique identifier with up to 11 characters can be used and the NDC_SITE_SPECIFIC_FLAG should be | char(11)  | FDA National Drug Code Directory                             |
| NDC_FDA         | The original FDA National Drug Code in 4-4-2, 5-3-2, or 5-4-1 format including dashes   | char(12)  |  |
| GENERIC         | The generic name of the drug in all upper case with form, strength, and other labels expunged   | char(105) |  |
| BRAND           | The brand name of the drug in all upper case with form, strength, and other labels expunged   | char(105) |  |
| AHFS1 - AHFS7   | The American Society of Health-System Pharmacists drug classification code. If code is in the 6 digit format, pad with two zeros at the end of the code. Store up to seven different AHFS codes across these variables  | char(8)   | Value set is set by AHFS and considered proprietary.         |
| GPI             | The Generic Product Identifier drug classification code   | char(14)  | Value set is set by Medi-Span and is considered proprietary. |
| UNIT_OF_MEASURE | The unit of measure as reported in source data without standardization or cleaning except for storing values in all upper case  | char(*)   | Example values are 2000, U/4ML, GM/15ML, %/5GM, -400 UNIT    |

| STRENGTH               | The drug strength as reported in source data without standardization or cleaning except for storing values in all upper case   | char(*) | Example values are 99.99%, 9G, 9MCG/0.3ML, 9000 UNIT                       |
|------------------------|--|---------|--|
| DOSAGE_FORM            | The dosage form as reported in source data without standardization or cleaning except for storing values in all upper case   | char(*) | Example values are VIAL, VIAL PORT, WAFER, WAF, SOLUTION, SOLN SEQ, SPIRIT |
| OBSOLETE_DT            | The date the NDC was made obsolete, only if the drug is reinstated with a different NDC/Generic combination at a later time  | num(*)  | SAS Date   |
| REINSTATED_DT          | The date the NDC was resinstated, only if the drug was reinstated with a different NDC/Generic combination   | num(*)  | SAS Date   |
| NDC_SITE_SPECIFIC_FLAG | Indicates whether an NDC is a site-specific, non-<br>standard item. This includes but is not limited to<br>compound drugs, stock items, repackaged drugs and<br>study medications. Some site specific NDCs are<br>identifiable via a starting set of characters, such as<br>11111 or 99999, or a term. | char(1) | Y = Yes<br>N = No<br>U = Unknown   |

**Primary Key:** 

\*Duplicate NDCs occur when an NDC is retired and

NDC + GENERIC reused for a new drug.

| Source Variable (Foreign Key) | Target Table | Target Variable (Primary Key) | Orphans allowed? |
|-------------------------------|--------------|-------------------------------|------------------|
| [None Defined]                |              |                               |                  |

## **LAB RESULTS**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_lab

# **Subject Area Description**

The LAB RESULTS table contains the results of laboratory tests performed on patients. If a test is not resulted for whatever reason (e.g. specimen not sufficient, patient did not show), then that test should not appear in the table.

| Variable Name | Definition   | Type(Len) | Values   |
|---------------|--|-----------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site | char(*)   | Unique to each patient at each site  |
| TEST_TYPE     | VDW-specific classification of laboratory results.   | char(20)  | <ul> <li>The Test_Type, LongName, LOINC, Priority excel spreadsheet maintained by the VDW Lab Workgroup lists all test_types currently defined along with LOINCs associated with each test_type.</li> <li>The same Test_Type-LOINC association can be found in the EverLOINC SAS table also maintained by the VDW Lab Workgroup.</li> <li>See Appendix D - Laboratory Test Reference for VDW Laboratory File PDF (The manual serves as a guide to help programmers associate source records with the correct Test_Type. The manual is not up to date.</li> </ul> |

| STAT   | Indicates the immediacy of the test. The intent of this value is to determine whether the test was obtained as part of routine care or as an emergent/urgent diagnostic test.  | char(1)  | E=Expedite S=Stat R=Routine U=Unknown or missing  |
|--------|--|----------|---|
| LOINC  | Logical Observation Identifiers Names and Codes (LOINC) is a universal coding system for laboratory tests and measurements developed by Regenstrief Institute. Follow http://loinc.org/ to download a list of all LOINC codes defined by Regenstrief. Not all LOINCs have been mapped to VDW test_types. | char(10) | <ul> <li>The Test_Type, LongName, LOINC, Priority excel spreadsheet maintained by the VDW Lab Workgroup lists all test_types currently defined along with LOINCs associated with each test_type.</li> <li>The same Test_Type-LOINC association can be found in the EverLOINC SAS table also maintained by the VDW Lab Workgroup.</li> <li>LOINC codes are in the form nnnnnnnnnn with one to 8 digits preceding the hyphen. Do not fill LOINC codes with leading zeros. Format is left-justified. The last digit of the LOINC code is a check digit and is always preceded by a hyphen. The hyphen, as well as all the numbers, is part of the LOINC and must be included.</li> </ul> |
| PT_LOC | Location of the patient when the lab specimen was obtained.  | char(1)  | I=Inpatient O=Outpatient E=Emergency Department H=Home U=Unknown or missing   |

| RESULT_LOC  | Location where the result was completed. Particularly whether the lab was completed in a certified laboratory.   | char(1) | L = Lab P = Point of care (e.g. home, provider office) Code nulls and unknowns as "L". There are no missing values. |
|-------------|--|---------|---|
| SPECIMEN_ID | Used to uniquely identify a collected specimen which may ultimately be used to obtain multiple lab results. Specimen ID will be used to connect multiple records from the same blood sample. | char(*) |   |

| SPECIMEN_SOURCE | The source or method for collecting the specimen.   | char(6) | BLOOD SERUM PLASMA SR_PLS = serum and/or plasma PPP = Platelet Poor Plasma CSF = cerebral spinal fluid URINE STOOL NSWAB = nasal swab (including nose) NWASH = nasal wash NPH = nasopharyngeal swab NPWASH = nasopharyngeal swab SALIVA SLFSWB = self-swab (similar to NSWAB but with 'self' designation) SPUTUM TR_ASP = tracheal aspirate SPUTUM BAL = bronchoalveolar lavage (BAL) BALBX = BAL biopsy BLDDOT OTHER NS = not specified [Null] = missing value |
|-----------------|---|---------|---|
| LOCAL_CD        | The lab test type code as reported in source data without standardization or cleaning. This code indicates in the data source system which test was performed.                                  | char(*) | Unique to each site   |
| BATTERY_CD      | The battery code as reported in source data without standarization or cleaning. A battery consists of a grouping or series of tests performed and is sometimes referred to as a panel of tests. | char(*) | Unique to each site   |

| PX          | Refer to the PX variable on the Procedure file for type and length.   |  | riable on the Procedure file for value set also an acceptable value on the lab result |
|-------------|---|--|---|
| PX_CODETYPE | Refer to the PX_CodeType variable on the Procedure file for type and length.  | Refer to the PX_CodeType variable on the Procedure file f value set EXCEPT missing is also an acceptable value on th result table. |   |
| ORDER_ID    | Uniquely identifies the order for this lab test. In the future, may link to a table of orders.  | char(*)  | Unique to each site   |
| ORDER_DT    | Date that the lab test was ordered. It is possible for the order date to be any date from months before the sample was taken (in the case of a recurring test to monitor a chronic condition or drug interaction) to the same day the sample was taken. | num(4)   | SAS date  |
| LAB_DT      | Date that the specimen was collected.   | num(4)   | SAS date  |
| LAB_TM      | Time that the specimen was collected.   | num(4)   | SAS time  |
| RESULT_DT   | Date that the test was resulted. This date could be the same day the specimen was collected or any date up to weeks later.  | num(4)   | SAS date  |
| RESULT_TM   | Time that the specimen was resulted.  | num(4)   | SAS time  |

| RESULT_C        | The result of the test stored in a character field. This variable works in conjunction with the Modifier variable.  | char(20) | <ul> <li>VDW Qualitative Laboratory Test         Standards spreadsheet lists expected results for qualitative test types.         See Appendix D - Laboratory Test         Reference for VDW Laboratory File PDF (The manual serves as a guide to help programmers correctly associate source records with Test_Types. The manual does not contain an entry for more recently defined test_types.         SEE LAB NOTES TABLE     </li> </ul> |
|-----------------|---|----------|---|
| MODIFIER        | Modifies the value stored in the Result_C field.  | char(2)  | TX = Text EQ = Equal LT = Less than LE = Less than or equal to GT = Greater than GE = Greater than or equal to RA = Range   |
| RESULT_UNIT     | The units in which the result is reported after basic standardizations have been applied. At the least, the value should be uppercase and left justified. | char(11) | Examples of possible values: %, U/L, MG/DL, K/UL, 10^6/UL   |
| RESULT_UNIT_RAW | The units in which the result is reported before basic standardizations are applied.  | char(11) | Examples of possible values: PER, Percent, units/L, mg/dL, 10*3/uL, 10^9/L, x10e6/uL  |
| NORMAL_LOW_C    | The lowest value still considered normal for this test. This variable works in conjunction with the Modifier_Low variable.                                | char(8)  |   |

| MODIFIER_LOW  | Modifies the value stored in the Normal_Low_C field.  | char(2) | EQ = Equal GT = Greater than GE = Greater than or equal to Null if Normal_Low_C is null  The following will probably not be needed for this variable TX = Text LT = Less than LE = Less than or equal to  |
|---------------|---|---------|---|
| NORMAL_HIGH_C | The highest value still considered normal for this test. This variable works in conjunction with the Modifer_High variable. | char(8) |   |
| MODIFIER_HIGH | Modifies the value stored in the Normal_High_C field.   | char(2) | EQ = Equal LT = Less than LE = Less than or equal to Null if Normal_High_C is null  The following will probably not be needed for this variable TX = Text GT = Greater than GE = Greater than or equal to |

| ABN_IND       | Indicates whether the test result is abnormal.   | char(2)                           | AB = Abnormal C = Critical AH = Abnormal high CH = Critical high AL = Abnormal low CL = Critical low IN = Inconclusive NL = Normal UK = Unknown or missing |
|---------------|--|-----------------------------------|--|
| ORDER_PROV    | Identifies the provider that ordered the lab test.   | char(*)                           | Unique to each site. Value set is same as rxmd in pharmacy or provider in utilization.   |
| ORD_DEPT      | The department or specialty in which the order took place.                                 | ` '                               | See Appendix A1 - DEPT. These values are the same as for the variable DEPT in encounters.  |
| FACILITY_CODE | A code indiciating the facility, hospital, or clinic in which the lab order originated.    | char(*)                           | Unique to each site. Value set is same as Facility_Code in utilization.  |
| ROW_ID        | A site specific identifer that enables linkage between the LAB NOTES and LAB RESULTtables. | type and length are site specific | Unique to each site  |

Primary Key:
No primary key defined

| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| MRN                              | DEMOGRAPHICS | MRN                              | No               |
| ORDER_PROV                       | PROVIDER     | PROVIDER                         | No               |

### **LAB NOTES**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_lab\_notes

# **Subject Area Description**

The LAB NOTES table includes text notes that may accompany lab test results. If a note is long, it may span over several records in the table.

The LAB NOTES table links to the LAB RESULT table by the variable Row\_ID. Not all records in the LAB RESULTS table will have corresponding

| Variable Name | Definition   | Type(Len)                         | Values  |
|---------------|--|-----------------------------------|---|
| ROW_ID        | A site specific identifer that enables linkage between the LAB NOTES and LAB RESULTtables.   | type and length are site specific |   |
| RESULT_NOTE   | Contains result note (or, theoretically, this field might be used to hold results or lower boundary or upper boundary of normal range values that require more than 8 bytes of storage). | char(80)                          |   |
| NOTE_TYPE     | Identifies the type of note in the Result_Note field.  | char(1)                           | R = Result<br>L = Low normal value<br>H = High normal value<br>N = Note |
| LINE          | A line counter starting at one and incrementing by one as needed to accommodate each Row_ID / Note_Type combination.   | num(4)                            | Positive integer  |

#### **Primary Key:**

ROW\_ID + NOTE\_TYPE + LINE

| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| No Foreign Key                   |              |                                  |                  |

### **VITAL SIGNS**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_vitalsigns

# **Subject Area Description**

The VITAL SIGNS table includes physiological (i.e. temperature, pulse, respiratory rate, blood pressure) and anthropometric (i.e. height, weight, BMI) measures taken by health professionals during encounters. It also includes these measures reported by a patient in a Virtual Care Encounter and measures collected through an approved medical device.

| Variable Name | Definition   | Type(Len) | Values  |
|---------------|--|-----------|---|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site                         | char(*)   | Unique to each patient at each site   |
| ENC_ID        | Foreign key to the ENCOUNTER table uniquely identifying the encounter; unlinkable records should contain null/missing values | char(*)   | Unique to each encounter at each site   |
| MEASURE_DATE  | The date on which these vital signs were measured  | num(4)    | SAS Date  |
| MEASURE_TIME  | The time at which these vital signs were measured  | num(4)    | SAS Time  |
| ENCTYPE       | Refer to the ENCTYPE variable on the ENCOUNTER table for definition, type, length, and value set                             |           |   |
| нт            | The height measured in inches of the patient at this time  | num(8)    | Positive real number HT missing if: age = 0 and (ht < 3 or ht > 41) age between 1 and 5 and (ht < 12 or ht > 60) age between 6 and 12 and (ht < 20 or ht > 84) age between 13 and 17 and (ht < 30 or ht > 108) age > = 18 and (ht < 36 or ht > 108) |

| The weight measured in pounds of the patient at this time  | num(8)  | Positive real number WT missing if: age = 0 and (wt < 0 or wt > 80) age between 1 and 5 and (wt < 9 or wt > 200) age between 6 and 12 and (wt < 20 or wt > 350) age between 13 and 17 and (wt < 25 or wt > 650) age > = 18 and (wt < 50 or wt > 1000)  |
|--|---|--|
| The systolic blood pressure measured in mmHg of the patient at this time   | num(4)  | Integer SYSTOLIC missing if < 50 or > 300  |
| The diastolic blood pressure measured in mmHg of the patient at this time  | num(4)  | Integer DIASTOLIC missing if < 20 or > 160   |
| The type of blood pressure taken   | char(1)   | R = Rooming O = Orthostatic M = Multiple E = Extended  |
| The patient's position for orthostatic blood pressure measurements   | char(1)   | 1 = Sitting 2 = Standing 3 = Supine Null = Unknown   |
| The height measurement as reported in source data without standardization or cleaning                                  | char(*)   | Examples may include specific values, ranges, or categories  |
| The weight measurement as reported in source data without standardization or cleaning                                  | char(*)   | Examples may include specific values, ranges, or categories  |
| The patient's body mass index measurement as reported in source data without standardization, calculation, or cleaning | char(*)   |  |
| The patient's head circumference measurement as reported in source data without standardization or cleaning            | char(*)   |  |
|  | The systolic blood pressure measured in mmHg of the patient at this time  The diastolic blood pressure measured in mmHg of the patient at this time  The type of blood pressure taken  The patient's position for orthostatic blood pressure measurements  The height measurement as reported in source data without standardization or cleaning  The weight measurement as reported in source data without standardization or cleaning  The patient's body mass index measurement as reported in source data without standardization, calculation, or cleaning  The patient's head circumference measurement as reported in source data without standardization or | The systolic blood pressure measured in mmHg of the patient at this time  The diastolic blood pressure measured in mmHg of the patient at this time  The type of blood pressure taken  The type of blood pressure taken  The patient's position for orthostatic blood pressure measurements  The height measurement as reported in source data without standardization or cleaning  The weight measurement as reported in source data without standardization or cleaning  The patient's body mass index measurement as reported in source data without standardization, calculation, or cleaning  The patient's head circumference measurement as reported in source data without standardization or char(*)  char(*) |

| SYSTOLIC_RAW  | The systolic blood pressure measurement as reported in source data without standardization or cleaning            | char(*) | Examples may include specific values, ranges, or categories |
|---------------|---|---------|---|
| DIASTOLIC_RAW | The diastolic blood pressure measurement as reported in source data without standardization or cleaning           | char(*) | Examples may include specific values, ranges, or categories |
| RESPIR_RAW    | The respirations in breaths per minute measurement as reported in source data without standardization or cleaning | char(*) |   |
| TEMP_RAW      | The patient's body temperature measurement as reported in source data without standardization or cleaning         | char(*) |   |
| PULSE_RAW     | The heartbeats per minute measurement as reported in source data without standardization or cleaning              | char(*) |   |

| <b>Primary</b> | Key | <b>/</b> : |
|----------------|-----|------------|
|----------------|-----|------------|

No primary key defined

| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| MRN                              | DEMOGRAPHICS | MRN                              | No               |
| ENC_ID                           | ENCOUNTER    | ENC_ID                           | No               |

#### **SOCIAL HISTORY**

Version = 5.0.1 Date = 07/21/2023 StdVar = &\_vdw\_social\_hx

## **Subject Area Description**

The SOCIAL HISTORY table contains behavioral measures taken by health professionals during clinic visits, over the telephone, or via questionnaires. These measures include the use of tobacco, alcohol, and illegal drugs as well as sexual behavior and contraceptive use. Because of the range of tobacco products available and the variability in the level of detail recorded, precision and capture of tobacco related variables may vary both across and within sites. Consistency of response is also not guaranteed over time.

Social history measures may carry special privacy concerns. Beyond the nature of these variables, the use of free text fields in any content area warrants additional care as they may contain personal health information. Users are encouraged to consult with privacy experts and/or experienced users before extracting data if they are unfamiliar with these additional data sensitivities.

| Variable Name   | Definition   | Type(Len) | Values                              |
|-----------------|--|-----------|-------------------------------------|
| MRN             | Medical record number is the unique patient identifier within a site and should never leave the site                         | char(*)   | Unique to each patient at each site |
| CONTACT_DATE    | Date of encounter or date of social history data collection  | num(4)    | SAS date, missing is not allowed    |
| ENC_ID          | Foreign key to the ENCOUNTER table uniquely identifying the encounter; unlinkable records should contain null/missing values | char(*)   | SAS date, missing values allowed    |
| EDUCATION_YEARS | Number of years of education completed recorded as free text   | char(*)   | Free text, missing values allowed   |

| SEX_ACTIVE         | Whether the person is sexually active                | char(1) | Y = Yes N = No W = Not currently (Was) X = Not asked U = Unknown or missing |
|--------------------|--|---------|---|
| SEX_FEMALE_PARTNER | Whether the person has female sex partners           | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing                         |
| SEX_MALE_PARTNER   | Whether the person has male sex partners             | char(1) | Y = Yes<br>N = No<br>X = Not asked<br>U = Unknown or missing                |
| SEX_COMMENT        | Comment about the person's sexual activity           | char(*) | Free text, missing values allowed   |
| BC_ABSTINENCE      | Whether the person uses abstinence as birth control  | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing                         |
| BC_CONDOM          | Whether the person uses condoms as birth control     | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing                         |
| BC_DIAPHRAGM       | Whether the person uses a diaphragm as birth control | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing                         |
| BC_IMPLANT         | Whether the person uses an implant as birth control  | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing                         |

|                |   | 1         | ly y.                  |
|----------------|---|-----------|------------------------|
|                |   |           | Y = Yes                |
| BC_INJECTION   | Whether the person uses injections as birth       | char(1)   | N = No                 |
| _              | control   |           | X = Not asked          |
|                |   | <u> </u>  | U = Unknown or missing |
|                |   |           | Y = Yes                |
| BC_INSERTS     | Whether the person uses inserts as birth control  | char(1)   | N = No                 |
| 565            | Whether the person uses inserts as sintil control | Jonai (2) | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   |           | Y = Yes                |
| BC_IUD         | Whether the person uses an intrauterine device    | char(1)   | N = No                 |
| BC_10D         | (IUD) as birth control                            | Cital(1)  | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   |           | Y = Yes                |
| DC DILL        | Whather the person uses hirth central pills       | shar(1)   | N = No                 |
| BC_PILL        | Whether the person uses birth control pills       | char(1)   | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   |           | Y = Yes                |
| DC DUVTUM      | Whether the person uses the rhythm method as      | ala a (1) | N = No                 |
| BC_RHYTHM      | birth control                                     | char(1)   | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   |           | Y = Yes                |
| DC CDED 4101DE | Whether the preson uses spermicide as birth       |           | N = No                 |
| BC_SPERMICIDE  | control   | char(1)   | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   |           | Y = Yes                |
|                |   | .]. ,,    | N = No                 |
| BC_SPONGE      | Whether the person uses a sponge as birth contro  | char(1)   | X = Not asked          |
|                |   |           | U = Unknown or missing |
|                |   | 1         | Y = Yes                |
|                | Whether a surgery (e.g. vasectomy, hysterectomy)  | d         | N = No                 |
| BC_SURGICAL    | significantly reduces the chance of contraception | char(1)   | X = Not asked          |
|                | significantly reduces the chance of contraception |           | U = Unknown or missing |
|                | 1   |           | o onknown or missing   |

| BC_OTHER                 | Whether another type of birth control is used that has not been previously specified | char(1) | Y = Yes<br>N = No<br>X = Not asked<br>U = Unknown or missing                                   |
|--------------------------|--|---------|--|
| BC_COMMENT               | Comment about the person's birth control   | char(*) | Free text, missing values allowed  |
| ALCOHOL_USE              | Whether the person is an alcohol drinker   | char(1) | Y = Yes N = No I = Infrequent Q = Quit/Former X = Not asked U = Unknown or missing             |
| ALCOHOL_BEER_NWK         | The number of drinks per week, beer  | char(*) | Drinks/wk, beer; could be a range; 0 is valid  |
| ALCOHOL_WINE_NWK         | The number of drinks per week, wine  | char(*) | Drinks/wk, wine; could be a range; 0 is valid  |
| ALCOHOL_LIQ_NWK          | The number of drinks per week, hard liquor   | char(*) | Drinks/wk, liquor; could be a range; 0 is valid  |
| ALCOHOL_UNSPEC_NWK       | The number of drinks per week, unspecified type                                      | char(*) | Drinks/wk, unspecified; could be a range; 0 is valid   |
| ALCOHOL_COMMENT          | Comment about the person's alcohol use   | char(*) | Free text, missing values allowed  |
| ILLICIT_DRUG_USE         | Whether the person uses illicit drugs  | char(1) | Y = Yes N = No I = Infrequent P = Passive Q = Quit/Former X = Not asked U = Unknown or missing |
| ILLICIT_DRUG_USE_FREQ    | Frequency of illicit drug use as free text   | char(*) | Free text, missing values allowed  |
| ILLICIT_DRUG_USE_COMMENT | Comment about the person's illicit drug use  | char(*) | Free text, missing values allowed  |

| IV_DRUG_USE                  | Whether the person uses IV drugs                | char(1) | Y = Yes N = No I = Infrequent Q = Quit/Former X = Not asked U = Unknown or missing  |
|------------------------------|---|---------|---|
| TOBACCO_USE                  | Whether the person is a user of tobacco         | char(1) | Y = Yes / Current I = Infrequent N = Never Q = Quit / Former P = Passive/Environmental/Second hand X = Not Asked U = Unknown or missing |
| TOBACCO_USE_YEARS            | The number of years the person used tobacco     | char(*) | Free text, missing values allowed   |
| TOBACCO_PACKS_DAY            | Number of packs smoked per day as free text     | char(*) | Free text, missing values allowed   |
| TOBACCO_SMOKELESS_USE        | Whether the person uses smokeless tobacco       | char(1) | Y = Yes / Current I = Infrequent N = No / Never used Q = Quit / Former X = Not asked U = Unknown or missing                             |
| TOBACCO_SMOKELESS_START_DATE | Date the person started using smokeless tobacco | num(4)  | SAS Date, missing allowed   |
| TOBACCO_SMOKELESS_QUIT_DATE  | Date the person quit using smokeless tobacco    | num(4)  | SAS Date, missing allowed   |

| TOBACCO_SMOKING_USE        | Whether the person uses smoking tobacco      | char(1) | E = Current every day S = Current some days H = Heavy smoker L = Light smoker N = Never P = Passive Q = Former U = Unknown X = Never assessed Y = Smoker - current status unknown |
|----------------------------|--|---------|---|
| TOBACCO_SMOKING_START_DATE | Date the person started using smoked tobacco | num(4)  | SAS Date, missing allowed   |
| TOBACCO_SMOKING_QUIT_DATE  | Date the person quit using smoked tobacco    | num(4)  | SAS Date, missing allowed   |
| TOBACCO_CHEW               | Whether the person uses chew tobacco         | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing   |
| TOBACCO_CIGARETTES         | Whether the person uses tobacco cigarettes   | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing   |
| TOBACCO_CIGARS             | Whether the person uses tobacco cigars       | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing   |
| TOBACCO_PIPES              | Whether the person uses tobacco pipes        | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing   |
| TOBACCO_SNUFF              | Whether the person uses snuff tobacco        | char(1) | Y = Yes N = No X = Not asked U = Unknown or missing   |

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| TOBACCO_UNSPECIFIED | Whether the person uses an unspecified form of tobacco | char(1) | Y = Yes<br>N = No<br>X = Not asked<br>U = Unknown or missing |
|---------------------|--|---------|--|
| TOBACCO_COMMENT     | Comment about the person's tobacco use                 | char(*) | Free text, missing values allowed                            |

| <b>Primary</b> | Key: |
|----------------|------|
|----------------|------|

No primary key defined

| Source Variable (Foreign Key) | Target Table | Target Variable (Primary Key) | Orphans allowed? |
|-------------------------------|--------------|-------------------------------|------------------|
| MRN                           | DEMOGRAPHICS | MRN                           | No               |
| ENC_ID                        | ENCOUNTER    | ENC_ID                        | No               |

### **DEATH**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_death

# **Subject Area Description**

The DEATH table contains one record per person in the DEMOGRAPHICS table for whom there is some belief that the person may be dead. When sources of death provide conflicting information, site data managers should make local determinations as to which source to use, collating information when possible, and reflecting their confidence in the observation overall using the CONFIDENCE variable.

| Variable Name | Definition  | Type(Len) | Values   |
|---------------|---|-----------|--|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site                    | char(*)   | Unique to each patient at each site  |
| DEATHDT       | The date that the person most likely died.  | num(4)    | SAS date, missing values allowed   |
| DTIMPUTE      | Indicates whether the death date is imputed and if so, how it was imputed.  | char(1)   | M = Month of date imputed D = Day of date imputed B = Both month & day imputed N = Date not imputed  |
| SOURCE_LIST   | A list of all sources of data that report this death regardless of any discrepencies in other variables (e.g. DEATHDT). | char(8)   | A concatenated string of letters in descending order of reliability indicating all sources that report this person's death B = Social Security Admin N = National Death Index S = State Death records T = Tumor registry E = Encounter data P = Patient data M = Membership data O = Other |
| CONFIDENCE    | Based on all information available, the level of confidence that this person is in fact dead.                           | char(1)   | E = Excellent F = Fair P = Poor  |

| Primary Key: |  |
|--------------|--|
| MRN          |  |

| Source Variable<br>(Foreign Key) |              |     | Orphans allowed? |
|----------------------------------|--------------|-----|------------------|
| MRN                              | DEMOGRAPHICS | MRN | No               |

# **CAUSE OF DEATH**

Version = 5.0.0 Date = 11/16/2021 StdVar = &\_vdw\_cause\_of\_death

# **Subject Area Description**

The CAUSE OF DEATH table contains one record per person per known cause of death.

| Variable Name | Definition  | Type(Len) | Values  |
|---------------|---|-----------|---|
| MRN           | Medical record number is the unique patient identifier within a site and should never leave the site        | char(*)   | Unique to each patient at each site   |
| COD           | The cause of death diagnosis mortality code. For ICD diagnosis coding, include decimal points in the value. | char(8)   |   |
| DX_CODETYPE   | Refer to the DX_CODETYPE variable on the ENCOUNTER table for definition, type, length, and value set.       |           |   |
| CAUSETYPE     | The type of cause of death.   | char(1)   | <ul><li>I = Immediate/Primary</li><li>U = Underlying</li><li>C = Contributory</li><li>O = Other</li></ul> |
| SOURCE_LIST   | Refer to the SOURCE_LIST variable on the DEATH table for definition, type, length, and value set.           |           |   |
| CONFIDENCE    | Refer to the CONFIDENCE variable on the DEATH table for definition, type, length, and value set.            |           |   |

| Primary key:                        |  |
|-------------------------------------|--|
| MRN + COD + DX_CODETYPE + CAUSETYPE |  |
| Foreign Key Relationship:           |  |

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| MRN             | DEMOGRAPHICS | MRN             | No       |

#### **TUMOR MAIN**

Version = 5.1.0 Date = 4/21/2023 StdVar = &\_vdw\_tumor\_main

## **Subject Area Description**

The TUMOR content area contains records of documented neoplasms (typically malignant) diagnosed in patients as indicated in a tumor registry. In the Tumor Main table, there is one record per separately diagnosed neoplasm per reporting registry. Diagnoses of neoplasms in sources other than registries should not be included. Information in this table should be based entirely on information reported by registries (e.g., do not populate demographic variables with information from other sources).

The Tumor Main table contains a subset of the relevant tumor related information, namely those variables that are most likely to be important to the definition of a cohort. Additional information can be retrieved from the Tumor Supplemental table, which links to the Main table via tumorID.

The most current description as of 10/28/2022 is provided. It is always advisable to check http://datadictionary.naaccr.org/default.aspx?c=23 for the official descriptions of variables that correspond directly to NAACCR items as well as their value sets.

| Variable Name | Definition  | Type(Len) | Values   |
|---------------|---|-----------|--|
| tumorID       | Unique identifier of this tumor record              | char(*)   | Unique to each tumor record                            |
| mrn           | Medical record number is the unique patient         |           | Unique to each patient at each site                    |
|               | identifier within a site and should never leave the | char(*)   |  |
|               | site  |           |  |
|               | Indicates the source of data for this record.       |           | For the first two positions use:                       |
|               |   |           | LO = Local registry                                    |
|               |   |           | SE = Regional SEER registry                            |
|               |   | char(4)   | ST = State operated registry                           |
|               |   | Criar (4) | The final two positions are locally defined to further |
|               |   |           | differentiate source. Use values 'XX' for these        |
|               |   |           | positions if they are not needed at your site.         |
| dataSource    |   |           |  |

|                     |  |         | As defined by NAACCR items #560 (Sequence            |
|---------------------|--|---------|--|
|                     |  |         | Number—Hospital) or #380 (Sequence Number—Central).  |
|                     |  | char(2) | ,  |
|                     |  |         | 00=first and only, 01=first of several, 02-35 = 2nd- |
|                     | Central (preferred) or facility sequence number of |         | 35th tumor, 60-87 = 1st-27th non-malignant tumor     |
| sequence            | tumor  |         |  |
|                     | Date of diagnosis (numeric/date version of         | num(4)  | numeric/date version of dateOfDiagnosis (NAACCR      |
| dxDate              | dateOfDiagnosis)                                   | mum(4)  | item #390)   |
|                     |  |         | M = Month of date imputed                            |
|                     |  | char(1) | D = Day of date imputed                              |
|                     |  | Char(I) | B = Both month & day imputed                         |
| dxDateImpute        | Indicates whether parts of dxDate were imputed     |         | N = Date not imputed                                 |
|                     |  |         | Four-digit year (which should correspond to year     |
|                     |  | num(4)  | extracted from dxDate, if populated). Unknown        |
| dxYear              | Year of diagnosis (from date of diagnosis)         |         | values should be null (not 9999)                     |
|                     |  |         | As defined by NAACCR item #400. Valid codes are      |
|                     |  |         | those listed by the WHO (excluding the decimal       |
|                     |  | char(4) | point) at http://codes.iarc.fr/topography.           |
| primarySite         | Primary site                                       |         |  |
|                     |  |         | 0 = In situ  |
|                     |  |         | 1 = Localized  |
|                     |  |         | 2 = Regional, direct extension only                  |
|                     |  |         | 3 = Regional, regional lymph nodes only              |
|                     |  |         | 4 = Regional, direct extension and regional lymph    |
|                     |  | char(1) | nodes  |
|                     |  |         | 5 = Regional, NOS                                    |
|                     |  |         | 7 = Distant  |
|                     |  |         | 8 = Not applicable                                   |
| seerSummaryStage    | Best available SEER Summary Stage                  |         | 9 = Unstaged   |
|                     | Histologic type                                    |         | As defined by NAACCR item #522. Refer to             |
|                     |  | char(4) | https://www.naaccr.org/icdo3/ for the inventory of   |
| histologicTypeIcdO3 |  |         | codes.   |

| behavior      | The data item Behavior Code describes the malignant potential of the tumor, ranging from /0 benign to /3 malignant (invasive). | char(1)  | As defined by NAACCR item #523 (Behavior Code ICD-O-3; preferred) or #430 (Behavior [92-00] ICD-O-2). Valid values are:  0 = Benign (Reportable for intracranial and CNS sites only)  1 = Uncertain whether benign or malignant, borderline malignancy, low malignant potential, and uncertain malignant potential (Reportable for intracranial and CNS sites only)  2 = Carcinoma in situ; intraepithelial; noninfiltrating; non-invasive (carcinoma)  3 = Malignant, primary site (invasive)  6 = Metastatic site  9 = Unknown |
|---------------|--|----------|--|
| stageAJatDx   | AJCC stage group assessed at diagnosis   | char(15) | Expected values: 0, 0A, 0IS, 1, 1A, 1A1, 1A2, 1B, 1B1, 1B2, 1C, 1S, 2, 2A, 2A1, 2A2, 2B, 2C, 2BULKY, 3, 3A, 3B, 3C, 3C1, 3C2, 4, 4A, 4A1, 4A2, 4B, 4C, OC, 88, 99, XX  |
| stageAJpostTx | AJCC stage group assessed after neoadjuvant treatment  | char(15) | Expected values: 0, 0A, 0IS, 1, 1A, 1A1, 1A2, 1B, 1B1, 1B2, 1C, 1S, 2, 2A, 2A1, 2A2, 2B, 2C, 2BULKY, 3, 3A, 3B, 3C, 3C1, 3C2, 4, 4A, 4A1, 4A2, 4B, 4C, OC, 88, 99, XX  |
| gradeAtDx     | Grade (differentiation) at diagnosis   | char(1)  | As defined by NAACCR items 440, 3843, and 3844: 1-9, A-E, L, H, M, S   |
| gradePostTx   | Grade (differentiation) after neoadjuvant treatment  | char(1)  | As defined by NAACCR items 1068 and 3845:<br>1-5, 8, 9, A-E, L, H, M, S  |
| dxAge         | Age at diagnosis   | num(4)   | Numeric version of NAACCR item #230. Unknown ages (stored as 999) should be left blank   |
| birthDate     | Date of birth  | num(4)   | numeric/date version of dateOfBirth (NAACCR item #220)   |

| sex                   | Sex  | char(1) | As defined by NAACCR item #220:  1 = Male  2 = Female  3 = Other (intersex, disorders of sexual development/DSD)  4 = Transsexual, NOS  5 = Transsexual, natal male  6 = Transsexual, natal female  9 = Not stated/Unknown   |
|-----------------------|--|---------|--|
| race1-race5           | Race   | char(2) | As defined by NAACCR item #160, valid values are 01–08, 10–17, 20–22, 25–28, 30–32, and 96–99. For race2-5, code 88 as well as null values are allowed as well.  |
| spanishHispanicOrigin | Hispanic origin  | char(1) | As defined by NAACCR item #190:  0 = Non-Spanish; non-Hispanic  1 = Mexican (includes Chicano)  2 = Puerto Rican  3 = Cuban  4 = South or Central American (except Brazil)  5 = Other specified Spanish/Hispanic origin (includes European; excludes Dominican Republic)  6 = Spanish, NOS Hispanic, NOS Latino, NOS  7 = Spanish surname only  8 = Dominican Republic  9 = Unknown whether Spanish or not |
| classOfCase           | Class of case; defines involvement of facility in diagnosis and treatment of the tumor | char(2) | As defined by NAACCR item #610, valid values are 00, 10–14, 20–22, 30–38, 40–43, 49, and 99. To limit an analysis to so-called "analytic" cases, restrict classOfCase to values 00 through 22.   |
| vitalStatus           | Vital status of patient as of last contact   | char(1) | As defined by NAACCR item #1760: 0 = Dead 1 = Alive  |

| dateLastFollowUp | Date of last contact; identical to date of death if vital status=dead   | num(4)  | SAS date version of NAACCR item #1750 (dateOfLastContact)  |
|------------------|---|---------|--|
| laterality       | Laterality  | char(1) | As defined by NAACCR item #410:  0 = Not a paired site  1 = Right: origin of primary  2 = Left: origin of primary  3 = Only one side involved, right or left origin unspecified  4 = Bilateral involvement at time of diagnosis, lateral origin unknown for a single primary; or both ovaries involved simultaneously, single histology; bilateral retinoblastomas; bilateral Wilms' tumors  5 = Paired site: midline tumor  9 = Paired site, but no information concerning laterality |
| rxSummSurgery    | Cancer-directed surgery code as part of first course of treatment   | char(4) | Site specific codes; As defined by NAACCR items #1290,#1646,#1640 (00-99 codes) as well as #1291 (A000-A990 codes)   |
| rxSummRadiation  | Codes for the type of radiation therapy performed as part of the first course of treatment.   | char(2) | As defined in NAACCR item #1360  |
| rxSummChemo      | Codes for chemotherapy given as part of the first course of treatment or the reason chemotherapy was not given. Includes treatment given at all facilities as part of the first course. | char(2) | As defined in NAACCR item #1390  |
| rxSummHormone    | Records whether systemic hormonal agents were administered as first-course treatment at any facility, or the reason they were not given   | char(2) | As defined in NAACCR item #1400  |

|                       |  |           | As defined in NAACCR item #1410       |
|-----------------------|--|-----------|---------------------------------------|
|                       | Records whether immunotherapeutic (biologic          |           |                                       |
|                       | response modifiers) agents were administered as      | char(2)   |                                       |
|                       | first-course treatment at all facilities or the      |           |                                       |
| rxSummBrm             | reason they were not given                           |           |                                       |
|                       | Identifies other treatment given at all facilities   |           | As defined in NAACCR item #1420       |
|                       | that cannot be defined as surgery, radiation, or     | char(2)   |                                       |
|                       | systemic therapy according to the defined data       | Criar(2)  |                                       |
| rxSummOther           | items in this manual                                 |           |                                       |
|                       | Identifies systemic therapeutic procedures           |           | As defined in NAACCR item #3250       |
|                       | administered as part of the first course of          | char(2)   |                                       |
| rxSummTransplntEndocr | treatment at this and all other facilities           |           |                                       |
|                       | Palliative Care at any facility. Identifies any care |           | As defined in NAACCR item #3270       |
|                       | provided in an effort to palliate or alleviate       | char(2)   |                                       |
| rxSummPalliativeProc  | symptoms   |           |                                       |
| recurrenceType1st     | Recurrence type (of first recurrence)                | char(2)   | As defined in NAACCR item #1880       |
| recurrenceDate        | Date of first recurrence                             | num(4)    | SAS date version of NAACCR item #1860 |
|                       |  | Hulli(4)  | (recurrenceDate1st)                   |
| surgeryDate           | Date of cancer-directed surgery (as part of 1st      | num(4)    | SAS date version of NAACCR item #1200 |
|                       | course of treatment)                                 | mum(4)    | (rxDateSurgery)                       |
| chemoDate             | Date of chemotherapy start (as part of 1st course    | num(4)    | SAS date version of NAACCR item #1220 |
|                       | of treatment)  | Hulli(4)  | (rxDateChemo)                         |
| radiationDate         | Date of radiation therapy start ( as part of 1st     | num(4)    | SAS date version of NAACCR item #1210 |
|                       | course of treatment)                                 | Hulli(4)  | (rxDateRadiation)                     |
| hormoneDate           | Date of hormone therapy start (as part of 1st        | num(4)    | SAS date version of NAACCR item #1230 |
|                       | course of treatment)                                 | Hulli(4)  | (rxDateHormone)                       |
| brmDate               | Date of immunotherapy (biological response           |           | SAS date version of NAACCR item #1240 |
|                       | modifier therapy) start (as part of 1st course of    | num(4)    | (rxDateBrm)                           |
|                       | treatment)   |           |                                       |
| otherDate             | Date of other cancer therapy start (as part of 1st   | num(4)    | SAS date version of NAACCR item #1250 |
|                       | course of treatment)                                 | 114111(4) | (rxDateOther)                         |
| systemicDate          | Date of systemic therapy start (as part of 1st       | num(4)    | SAS date version of NAACCR item #3230 |
|                       | course of treatment)                                 |           | (rxDateSystemic)                      |

| transplnt Endocr Date | Date of Hematologic Transplant and Endocrine   |        | valid SAS date |
|-----------------------|--|--------|----------------|
|                       | Procedure (as part of 1st course of treatment) | num(4) |                |
|                       |  |        |                |

| Primary | Key: |  |
|---------|------|--|
|         |      |  |

TumorID

| Source Variable |              | Target Variable |                  |
|-----------------|--------------|-----------------|------------------|
| (Foreign Key)   | Target Table | (Primary Key)   | Orphans Allowed? |
| MRN             | DEMOGRAPHICS | MRN             | No               |

#### **TUMOR SUPPLEMENTAL**

Version = 5.1.0 Date = 4/21/2023 StdVar = &\_vdw\_tumor\_supp

## **Subject Area Description**

The TUMOR content area contains records of documented neoplasms (typically malignant) diagnosed in patients as indicated in a tumor registry. One Tumor ID corresponds one diagnosed neoplasm in one reporting registry. (see Tumor Main for more information)

The Tumor Supplemental table has one record per NAACCR item per tumorID. It contains detailed tumor information on staging, prognosis, treatment and outcomes.

There should be no missing values. If information is not available, there should be no record in this table.

The most current description as of 10/28/2022 is provided, it's always advised to check http://datadictionary.naaccr.org/default.aspx?c=23 for the official descriptions of variables that correspond directly to NAACCR items.

| Variable Name  | Definition   | Type(Len) | Values  |
|----------------|--|-----------|---|
| tumorID        | Unique identifier of the Tumor record  | char(*)   |   |
| tumorAttribute | Attribute of the tumor record for which information is provided on this line | char(32)  | For NAACCR items, the NAACCR XML tag; other, locally defined attributes can be added, but their name must not be a NAACCR XML tag |
| tumorValue     | The value corresponding to the attribute                                     | char(30)  | as defined by NAACCR depending on the attribute (NAACCR item); must not be null   |

#### **Primary Key:**

TumorID + TumorAttribute

| Source Variable |              | Target Variable | Target Variable  |  |
|-----------------|--------------|-----------------|------------------|--|
| (Foreign Key)   | Target Table | (Primary Key)   | Orphans allowed? |  |
| TumorID         | TumorMain    | TumorID         | No               |  |

#### Version = 5.1.0 Date = 4/21/2023

#### **EAV Attributes to be populated (to the extent possible)**

#### **NAACCR**

| IVAACCII                               |                                     |         |
|--|-------------------------------------|---------|
| Item # TumorAttribute (NAACCR XML Tag) | Description                         | Comment |
| 80 addrAtDxState                       | Address at DxState                  |         |
| 89 countyAtDxAnalysis                  | County at Dx Analysis               |         |
| 90 countyAtDx                          | County at Dx                        |         |
| 95 countyAtDxGeocode2000               | County at DX Geocode2000            |         |
| 96 countyAtDxGeocode2010               | County at DX Geocode2010            |         |
| 97 countyAtDxGeocode2020               | County at DX Geocode2020            |         |
| 191 nhiaDerivedHispOrigin              | NHIA Derived Hispanic Origin        |         |
| 230 ageAtDiagnosis                     | Age at Diagnosis                    |         |
| 240 dateOfBirth                        | Date of Birth                       |         |
| 344 tobaccoUseSmokingStatus            | Tobacco Use Smoking Status          |         |
| 364 censusTrCert19708090               | Census Tr Cert 1970/80/90           |         |
| 365 censusTrCertainty2000              | Census Tr Certainty 2000            |         |
| 367 censusTrCertainty2010              | Census Tr Certainty 2010            |         |
| 369 censusTractCertainty2020           | Census Tract Certainty 2020         |         |
| 380 sequenceNumberCentral              | Sequence NumberCentral              |         |
| 390 dateOfDiagnosis                    | Date of Diagnosis                   |         |
| 420 histologyIcdO2                     | Histology (92-00) ICD-O-2           |         |
| 430 behaviorIcdO2                      | Behavior (92-00) ICD-O-2            |         |
| 440 grade                              | Grade                               |         |
| 490 diagnosticConfirmation             | Diagnostic Confirmation             |         |
| 550 accessionNumberHosp                | Accession NumberHosp                |         |
| 560 sequenceNumberHospital             | Sequence NumberHospital             |         |
| 670 rxHospSurgPrimSite                 | RX HospSurg Prim Site               |         |
| 682 dateRegionalLNDissection           | Date Regional Lymph Node Dissection |         |
| 690 rxHospRadiation                    | RX HospRadiation                    |         |
| 700 rxHospChemo                        | RX HospChemo                        |         |
| 710 rxHospHormone                      | RX HospHormone                      |         |
|  |                                     |         |

720 rxHospBrm RX Hosp--BRM 730 rxHospOther RX Hosp--Other

746 rxHospSurgPrimSite2023 RX Hosp--Surg Prim Site 2023

752 tumorSizeClinical
754 tumorSizePathologic
756 tumorSizeSummary
759 seerSummaryStage2000
760 seerSummaryStage1977
762 derivedSummaryStage2018

Tumor Size Pathologic
Tumor Size Summary
Size Summary
Size Summary
Stage 2000
SEER Summary Stage 1977
Derived Summary Stage 2018

764 summaryStage2018

772 eodPrimaryTumor

774 eodRegionalNodes

Summary Stage 2018

EOD Primary Tumor

EOD Regional Nodes

776 eodMets EOD Mets

779 extentOfDisease10Dig Extent of Disease 10-Dig

780 eodTumorSize EOD--Tumor Size
785 derivedEod2018T Derived EOD 2018 T
790 eodExtension EOD--Extension

795 derivedEod2018M Derived EOD 2018 M

800 eodExtensionProstPath

810 eodLymphNodeInvolv

815 derivedEod2018N

EOD--Extension Prost Path

EOD--Lymph Node Involv

Derived EOD 2018 N

818 derivedEod2018StageGroup Derived EOD 2018 Stage Group

820 regionalNodesPositive Regional Nodes Positive 830 regionalNodesExamined Regional Nodes Examined

832 dateSentinelLymphNodeBiopsy
834 sentinelLymphNodesExamined
835 sentinelLymphNodesPositive
SentinelLymphNodesPositive
SentinelLymphNodesPositive

840 eodOld13Digit EOD--Old 13 Digit 850 eodOld2Digit EOD--Old 2 Digit 860 eodOld4Digit EOD--Old 4 Digit

870 codingSystemForEod Coding System for EOD

880 tnmPathT TNM Path T 890 tnmPathN TNM Path N 900 tnmPathM TNM Path M

910 tnmPathStageGroup TNM Path Stage Group 920 tnmPathDescriptor TNM Path Descriptor

940 tnmClinTTNM Clin T950 tnmClinNTNM Clin N960 tnmClinMTNM Clin M

970 tnmClinStageGroup
980 tnmClinDescriptor
TNM Clin Stage Group
TNM Clin Descriptor

995 ajccld AJCC ID

1001 ajccTnmClinTAJCC TNM Clin T1002 ajccTnmClinNAJCC TNM Clin N1003 ajccTnmClinMAJCC TNM Clin M

1004 ajccTnmClinStageGroup AJCC TNM Clin Stage Group

1011 ajccTnmPathTAJCC TNM Path T1012 ajccTnmPathNAJCC TNM Path N1013 ajccTnmPathMAJCC TNM Path M

1014 ajccTnmPathStageGroup AJCC TNM Path Stage Group

1021 ajccTnmPostTherapyTAJCC TNM Post Therapy Path (yp) T1022 ajccTnmPostTherapyNAJCC TNM Post Therapy Path (yp) N1023 ajccTnmPostTherapyMAJCC TNM Post Therapy Path (yp) M

1024 ajccTnmPostTherapyStageGroup AJCC TNM Post Therapy Path (yp) Stage Group

1031 ajccTnmClinTSuffix
AJCC TNM Clin T Suffix
1032 ajccTnmPathTSuffix
AJCC TNM Path T Suffix

1033 ajccTnmPostTherapyTSuffix AJCC TNM Post Therapy Path (yp) T Suffix

1034 ajccTnmClinNSuffix AJCC TNM Clin N Suffix 1035 ajccTnmPathNSuffix AJCC TNM Path N Suffix

1036 ajccTnmPostTherapyNSuffix AJCC TNM Post Therapy Path (yp) N Suffix

1060 tnmEditionNumber TNM Edition Number

1062 ajccTnmPostTherapyClinT AJCC TNM Post Therapy Clin (yc) T

1063 ajccTnmPostTherapyClinTSuffix AJCC TNM Post Therapy Clin (yc) T Suffix 1064 ajccTnmPostTherapyClinN AJCC TNM Post Therapy Clin (yc) N

1064 ajccTnmPostTherapyClinN AJCC TNM Post Therapy Clin (yc) N
1065 ajccTnmPostTherapyClinNSuffix AJCC TNM Post Therapy Clin (yc) N Suffix

1066 ajccTnmPostTherapyClinM AJCC TNM Post Therapy Clin (yc) M

1067 ajccTnmPostTherapyClinStageGrp AJCC TNM Post Therapy Clin (yc) Stage Group

1068 gradePostTherapyClin Grade Post Therapy Clin (yc)

| 1112 metsAtDxBone           | Mets at DX-Bone            |
|-----------------------------|----------------------------|
| 1113 metsAtDxBrain          | Mets at DX-Brain           |
| 1114 metsAtDxDistantLn      | Mets at Dx-Distant LN      |
| 1115 metsAtDxLiver          | Mets at DX-Liver           |
| 1116 metsAtDxLung           | Mets at DX-Lung            |
| 1117 metsAtDxOther          | Mets at DX-Other           |
| 1120 pediatricStage         | Pediatric Stage            |
| 1130 pediatricStagingSystem | Pediatric Staging System   |
| 1150 tumorMarker1           | Tumor Marker 1             |
| 1160 tumorMarker2           | Tumor Marker 2             |
| 1170 tumorMarker3           | Tumor Marker 3             |
| 1182 lymphVascularInvasion  | Lymphovascular Invasion    |
| 1200 rxDateSurgery          | RX Date Surgery            |
| 1210 rxDateRadiation        | RX Date Radiation          |
| 1220 rxDateChemo            | RX Date Chemo              |
| 1230 rxDateHormone          | RX Date Hormone            |
| 1240 rxDateBrm              | RX Date BRM                |
| 1250 rxDateOther            | RX Date Other              |
| 1260 dateInitialRxSeer      | Date Initial RX SEER       |
| 1270 date1stCrsRxCoc        | Date 1st Crs RX CoC        |
| 1280 rxDateDxStgProc        | RX Date DX/Stg Proc        |
| 1285 rxSummTreatmentStatus  | RX SummTreatment Status    |
| 1290 rxSummSurgPrimSite     | RX SummSurg Prim Site      |
| 1291 rxSummSurgPrimSite2023 | RX SummSurg Prim Site 2023 |
| 1292 rxSummScopeRegLnSur    | RX SummScope Reg LN Sur    |
| 1294 rxSummSurgOthRegDis    | RX SummSurg Oth Reg/Dis    |
| 1296 rxSummRegLnExamined    | RX SummReg LN Examined     |
| 1310 rxSummSurgicalApproch  | RX SummSurgical Approch    |
| 1320 rxSummSurgicalMargins  | RX SummSurgical Margins    |
| 1330 rxSummReconstruct1st   | RX SummReconstruct 1st     |
| 1340 reasonForNoSurgery     | Reason for No Surgery      |
| 1370 rxSummRadToCns         | RX SummRad to CNS          |
| 1380 rxSummSurgRadSeq       | RX SummSurg/Rad Seq        |
| 1430 reasonForNoRadiation   | Reason for No Radiation    |
|                             |                            |

| 1440 reasonForNoChemo                 | Reason for no Chemo                              |
|---------------------------------------|--|
| 1450 reasonforNoHormone               | Reason for no Hormone                            |
| 1501 phase1DosePerFraction            | Phase I Dose per Fraction                        |
| 1502 phase1RadiationExternalBeamTech  | Phase I Radiation External Beam Planning Tech    |
| 1503 phase1NumberOfFractions          | Phase I Number of Fractions                      |
| 1504 phase1RadiationPrimaryTxVolume   | Phase I Radiation Primary Treatment Volume       |
| 1505 phase1RadiationToDrainingLN      | Phase I Radiation to Draining Lymph Nodes        |
| 1506 phase1RadiationTreatmentModality | Phase I Radiation Treatment Modality             |
| 1507 phase1TotalDose                  | Phase I Total Dose                               |
| 1510 radRegionalDoseCgy               | RadRegional Dose: cGy                            |
| 1511 phase2DosePerFraction            | Phase II Dose per Fraction                       |
| 1512 phase2RadiationExternalBeamTech  | Phase II Radiation External Beam Planning Tech   |
| 1513 phase2NumberOfFractions          | Phase II Number of Fractions                     |
| 1514 phase2RadiationPrimaryTxVolume   | Phase II Radiation Primary Treatment Volume      |
| 1515 phase2RadiationToDrainingLN      | Phase II Radiation to Draining Lymph Nodes       |
| 1516 phase2RadiationTreatmentModality | Phase II Radiation Treatment Modality            |
| 1517 phase2TotalDose                  | Phase II Total Dose                              |
| 1520 radNoOfTreatmentVol              | RadNo of Treatment Vol                           |
| 1521 phase3DosePerFraction            | Phase III Dose per Fraction                      |
| 1522 phase3RadiationExternalBeamTech  | Phase III Radiation External Beam Planning Tech  |
| 1523 phase3NumberOfFractions          | Phase III Number of Fractions                    |
| 1524 phase3RadiationPrimaryTxVolume   | Phase III Radiation Primary Treatment Volume     |
| 1525 phase3RadiationToDrainingLN      | Phase III Radiation to Draining Lymph Nodes      |
| 1526 phase3RadiationTreatmentModality | Phase III Radiation Treatment Modality           |
| 1527 phase3TotalDose                  | Phase III Total Dose                             |
| 1531 radiationTxDiscontinuedEarly     | Radiation Treatment Discontinued Early           |
| 1532 numberPhasesOfRadTxToVolume      | Number of Phases of Rad Treatment to this Volume |
| 1533 totalDose                        | Total Dose                                       |
| 1540 radTreatmentVolume               | RadTreatment Volume                              |
| 1550 radLocationOfRx                  | RadLocation of RX                                |
| 1570 radRegionalRxModality            | RadRegional RX Modality                          |
| 1632 neoadjuvantTherapy               | Neoadjuvant Therapy                              |
| 1633 neoadjuvTherapyClinicalResponse  | Neoadjuvant Therapy-Clinical Response            |
| 1634 neoadjuvTherapyTreatmentEffect   | Neoadjuvant Therapy-Treatment Effect             |
|                                       |  |

| 1639 rxSummSystemicSurSeq   | RX SummSystemic/Sur Seq            |
|-----------------------------|------------------------------------|
| 1640 rxSummSurgeryType      | RX SummSurgery Type                |
| 1646 rxSummSurgSite9802     | RX SummSurg Site 98-02             |
| 1647 rxSummScopeReg9802     | RX SummScope Reg 98-02             |
| 1648 rxSummSurgOth9802      | RX SummSurg Oth 98-02              |
| 1750 dateOfLastContact      | Date of Last Contact               |
| 1770 cancerStatus           | Cancer Status                      |
| 1772 dateOfLastCancerStatus | Date of Last Cancer (tumor) Status |
| 1860 recurrenceDate1st      | Recurrence Date1st                 |
| 1861 recurrenceDate1stFlag  | Recurrence Date1st Flag            |
| 1880 recurrenceType1st      | Recurrence Type1st                 |
| 1910 causeOfDeath           | Cause of Death                     |
| 1914 seerCauseSpecificCod   | SEER Cause Specific COD            |
| 1915 seerOtherCod           | SEER Other COD                     |
| 1960 sitelcdO1              | Site (73-91) ICD-O-1               |
| 1970 morphicdO1             | Morph (73-91) ICD-O-1              |
| 1971 histologylcdO1         | Histology (73-91) ICD-O-1          |
| 1972 behaviorlcdO1          | Behavior (73-91) ICD-O-1           |
| 1973 gradelcdO1             | Grade (73-91) ICD-O-1              |
| 2800 csTumorSize            | CS Tumor Size                      |
| 2810 csExtension            | CS Extension                       |
| 2820 csTumorSizeExtEval     | CS Tumor Size/Ext Eval             |
| 2830 csLymphNodes           | CS Lymph Nodes                     |
| 2840 csLymphNodesEval       | CS Lymph Nodes Eval                |
| 2850 ccMatcAtDy             | CS Mate at DV                      |

2850 csMetsAtDx

2851 csMetsAtDxBone

2852 csMetsAtDxBrain

2853 csMetsAtDxLiver

2854 csMetsAtDxLung

2860 csMetsEval

CS Mets at Dx-Brain

CS Mets at Dx-Liver

CS Mets at Dx-Liver

CS Mets at Dx-Liver

CS Mets at Dx-Liver

2861 csSiteSpecificFactor7CS Site-Specific Factor 72862 csSiteSpecificFactor8CS Site-Specific Factor 82863 csSiteSpecificFactor9CS Site-Specific Factor 92864 csSiteSpecificFactor10CS Site-Specific Factor10

| 2865 csSiteSpecificFactor11 | CS Site-Specific Factor11 |
|-----------------------------|---------------------------|
| 2866 csSiteSpecificFactor12 | CS Site-Specific Factor12 |
| 2867 csSiteSpecificFactor13 | CS Site-Specific Factor13 |
| 2868 csSiteSpecificFactor14 | CS Site-Specific Factor14 |
| 2869 csSiteSpecificFactor15 | CS Site-Specific Factor15 |
| 2870 csSiteSpecificFactor16 | CS Site-Specific Factor16 |
| 2871 csSiteSpecificFactor17 | CS Site-Specific Factor17 |
| 2872 csSiteSpecificFactor18 | CS Site-Specific Factor18 |
| 2873 csSiteSpecificFactor19 | CS Site-Specific Factor19 |
| 2874 csSiteSpecificFactor20 | CS Site-Specific Factor20 |
| 2875 csSiteSpecificFactor21 | CS Site-Specific Factor21 |
| 2876 csSiteSpecificFactor22 | CS Site-Specific Factor22 |
| 2877 csSiteSpecificFactor23 | CS Site-Specific Factor23 |
| 2878 csSiteSpecificFactor24 | CS Site-Specific Factor24 |
| 2879 csSiteSpecificFactor25 | CS Site-Specific Factor25 |
| 2880 csSiteSpecificFactor1  | CS Site-Specific Factor 1 |
| 2890 csSiteSpecificFactor2  | CS Site-Specific Factor 2 |
| 2900 csSiteSpecificFactor3  | CS Site-Specific Factor 3 |
| 2910 csSiteSpecificFactor4  | CS Site-Specific Factor 4 |
| 2920 csSiteSpecificFactor5  | CS Site-Specific Factor 5 |
| 2930 csSiteSpecificFactor6  | CS Site-Specific Factor 6 |
| 2935 csVersionInputOriginal | CS Version Input Original |
| 2936 csVersionDerived       | CS Version Derived        |
| 2937 csVersionInputCurrent  | CS Version Input Current  |
| 2940 derivedAjcc6T          | Derived AJCC-6 T          |
| 2950 derivedAjcc6TDescript  | Derived AJCC-6 T Descript |
| 2960 derivedAjcc6N          | Derived AJCC-6 N          |
| 2970 derivedAjcc6NDescript  | Derived AJCC-6 N Descript |
| 2980 derivedAjcc6M          | Derived AJCC-6 M          |
| 2990 derivedAjcc6MDescript  | Derived AJCC-6 M Descript |
| 3000 derivedAjcc6StageGrp   | Derived AJCC-6 Stage Grp  |
| 3010 derivedSs1977          | Derived SS1977            |
| 3020 derivedSs2000          | Derived SS2000            |
| 3030 derivedAjccFlag        | Derived AJCCFlag          |

| 3040 derivedSs1977Flag     | Derived SS1977Flag        |
|----------------------------|---------------------------|
| 3050 derivedSs2000Flag     | Derived SS2000Flag        |
| 3200 radBoostRxModality    | RadBoost RX Modality      |
| 3210 radBoostDoseCgy       | RadBoost Dose cGy         |
| 3220 rxDateRadiationEnded  | RX Date Rad Ended         |
| 3230 rxDateSystemic        | RX Date Systemic          |
| 3280 rxHospPalliativeProc  | RX HospPalliative Proc    |
| 3400 derivedAjcc7T         | Derived AJCC-7 T          |
| 3402 derivedAjcc7TDescript | Derived AJCC-7 T Descript |
| 3410 derivedAjcc7N         | Derived AJCC-7 N          |
| 3412 derivedAjcc7NDescript | Derived AJCC-7 N Descript |
| 3420 derivedAjcc7M         | Derived AJCC-7 M          |
| 3422 derivedAjcc7MDescript | Derived AJCC-7 M Descript |
| 3430 derivedAjcc7StageGrp  | Derived AJCC-7 Stage Grp  |
| 3440 derivedPrerx7T        | Derived PreRx-7 T         |
| 3442 derivedPrerx7TDescrip | Derived PreRx-7 T Descrip |
| 3450 derivedPrerx7N        | Derived PreRx-7 N         |
| 3452 derivedPrerx7NDescrip | Derived PreRx-7 N Descrip |
| 3460 derivedPrerx7M        | Derived PreRx-7 M         |
| 3462 derivedPrerx7MDescrip | Derived PreRx-7 M Descrip |
| 3470 derivedPrerx7StageGrp | Derived PreRx-7 Stage Grp |
| 3480 derivedPostrx7T       | Derived PostRx-7 T        |
| 3482 derivedPostrx7N       | Derived PostRx-7 N        |
| 3490 derivedPostrx7M       | Derived PostRx-7 M        |
| 3492 derivedPostrx7StgeGrp | Derived PostRx-7 Stge Grp |
| 3600 derivedNeoadjuvRxFlag | Derived Neoadjuv Rx Flag  |
| 3605 derivedSeerPathStgGrp | Derived SEER Path Stg Grp |
| 3610 derivedSeerClinStgGrp | Derived SEER Clin Stg Grp |
| 3614 derivedSeerCmbStgGrp  | Derived SEER Cmb Stg Grp  |
| 3616 derivedSeerCombinedT  | Derived SEER Combined T   |
| 3618 derivedSeerCombinedN  | Derived SEER Combined N   |
| 3620 derivedSeerCombinedM  | Derived SEER Combined M   |
| 3622 derivedSeerCmbTSrc    | Derived SEER Cmb T Src    |
| 3624 derivedSeerCmbNSrc    | Derived SEER Cmb N Src    |
|                            |                           |

| 3626 derivedSeerCmbMSrc               | Derived SEER Cmb M Src                       |
|---------------------------------------|--|
| 3645 npcrDerivedAjcc8TnmClinStgGrp    | NPCR Derived AJCC 8 TNM Clin Stg Grp         |
| 3646 npcrDerivedAjcc8TnmPathStgGrp    | NPCR Derived AJCC 8 TNM Path Stg Grp         |
| 3647 npcrDerivedAjcc8TnmPostStgGrp    | NPCR Derived AJCC 8 TNM Post Therapy Stg Grp |
| 3650 npcrDerivedClinStgGrp            | NPCR Derived Clin Stg Grp                    |
| 3655 npcrDerivedPathStgGrp            | NPCR Derived Path Stg Grp                    |
| 3801 chromosome1pLossHeterozygosity   | Chromosome 1p: Loss of Heterozygosity (LOH)  |
| 3802 chromosome19qLossHeterozygosity  | Chromosome 19q: Loss of Heterozygosity (LOH) |
| 3803 adenoidCysticBasaloidPattern     | adenoid Cystic Basaloid Pattern              |
| 3804 adenopathy                       | adenopathy                                   |
| 3805 afpPostOrchiectomyLabValue       | afpPostOrchiectomyLabValue                   |
| 3806 afpPostOrchiectomyRange          | afpPostOrchiectomyRange                      |
| 3807 afpPreOrchiectomyLabValue        | afpPreOrchiectomyLabValue                    |
| 3808 afpPreOrchiectomyRange           | afpPreOrchiectomyRange                       |
| 3809 afpPretreatmentInterpretation    | afpPretreatmentInterpretation                |
| 3810 afpPretreatmentLabValue          | afpPretreatmentLabValue                      |
| 3811 anemia                           | Anemia                                       |
| 3812 bSymptoms                        | B symptoms                                   |
| 3813 bilirubinPretxTotalLabValue      | Bilirubin Pretreatment Total Lab Value       |
| 3814 bilirubinPretxUnitOfMeasure      | Bilirubin Pretreatment Unit of Measure       |
| 3815 boneInvasion                     | Bone Invasion                                |
| 3816 brainMolecularMarkers            | Brain Molecular Markers                      |
| 3817 breslowTumorThickness            | Breslow Tumor Thickness                      |
| 3818 ca125PretreatmentInterpretation  | CA-125 Pretreatment Interpretation           |
| 3819 ceaPretreatmentInterpretation    | CEA Pretreatment Interpretation              |
| 3820 ceaPretreatmentLabValue          | CEA Pretreatment Lab Value                   |
| 3821 chromosome3Status                | Chromosome 3 Status                          |
| 3822 chromosome8qStatus               | Chromosome 8q Status                         |
| 3823 circumferentialResectionMargin   | Circumferential Resection Margin (CRM)       |
| 3824 creatininePretreatmentLabValue   | Creatinine Pretreatment Lab Value            |
| 3825 creatininePretxUnitOfMeasure     | Creatinine Pretreatment Unit of Measure      |
| 3826 estrogenReceptorPercntPosOrRange | Estrogen Receptor Percent Positive or Range  |
| 3827 estrogenReceptorSummary          | Estrogen Receptor Summary                    |
| 3828 estrogenReceptorTotalAllredScore | Estrogen Receptor Total Allred Score         |
|                                       |  |

| 3829 esophagusAndEgjTumorEpicenter   | Esophagus and EGJ Tumor Epicenter                  |
|--------------------------------------|--|
| 3830 extranodalExtensionClin         | Extranodal Extension Clin (non-Head and Neck)      |
| 3831 extranodalExtensionHeadNeckClin | Extranodal Extension Head and Neck Clinical        |
| 3832 extranodalExtensionHeadNeckPath | Extranodal Extension Head and Neck Pathological    |
| 3833 extranodalExtensionPath         | Extranodal Extension Path (non-Head and Neck)      |
| 3834 extravascularMatrixPatterns     | Extravascular Matrix Patterns                      |
| 3835 fibrosisScore                   | Fibrosis Score                                     |
| 3836 figoStage                       | FIGO Stage   |
| 3837 gestationalTrophoblasticPxIndex | Gestational Trophoblastic Prognostic Scoring Index |
| 3838 gleasonPatternsClinical         | Gleason Patterns Clinical                          |
| 3839 gleasonPatternsPathological     | Gleason Patterns Pathological                      |
| 3840 gleasonScoreClinical            | Gleason Score Clinical                             |
| 3841 gleasonScorePathological        | Gleason Score Pathological                         |
| 3842 gleasonTertiaryPattern          | Gleason Tertiary Pattern                           |
| 3843 gradeClinical                   | Grade Clinical                                     |
| 3844 gradePathological               | Grade Pathological                                 |
| 3845 gradePostTherapy                | Grade Post Therapy Path (yp)                       |
| 3846 hcgPostOrchiectomyLabValue      | hCG Post-Orchiectomy Lab Value                     |
| 3847 hcgPostOrchiectomyRange         | hCG Post-Orchiectomy Range                         |
| 3848 hcgPreOrchiectomyLabValue       | hCG Pre-Orchiectomy Lab Value                      |
| 3849 hcgPreOrchiectomyRange          | hCG Pre-Orchiectomy Range                          |
| 3850 her2lhcSummary                  | HER2 IHC Summary                                   |
| 3851 her2lshDualProbeCopyNumber      | HER2 ISH Dual Probe Copy Number                    |
| 3852 her2lshDualProbeRatio           | HER2 ISH Dual Probe Ratio                          |
| 3853 her2IshSingleProbeCopyNumber    | HER2 ISH Single Probe Copy Number                  |
| 3854 her2lshSummary                  | HER2 ISH Summary                                   |
| 3855 her2OverallSummary              | HER2 Overall Summary                               |
| 3856 heritableTrait                  | Heritable Trait                                    |
| 3857 highRiskCytogenetics            | High Risk Cytogenetics                             |
| 3858 highRiskHistologicFeatures      | High Risk Histologic Features                      |
| 3859 hivStatus                       | HIV Status   |
| 3860 iNRProthrombinTime              | International Normalized Ratio Prothrombin Time    |
| 3861 ipsilateralAdrenalGlandInvolve  | Ipsilateral Adrenal Gland Involvement              |
| 3862 jak2                            | JAK2   |
|                                      |  |

3863 ki67 Ki-67 3864 invasionBeyondCapsule **Invasion Beyond Capsule** 3865 kitGeneImmunohistochemistry KIT Gene Immunohistochemistry **KRAS** 3866 kras 3867 IdhPostOrchiectomyRange LDH Post-Orchiectomy Range 3868 IdhPreOrchiectomyRange LDH Pre-Orchiectomy Range 3869 IdhPretreatmentLevel LDH Level 3870 ldhUpperLimitsOfNormal LDH Upper Limits of Normal 3871 InAssessMethodFemoralInguinal LN Assessment Method Femoral-Inguinal 3872 InAssessMethodParaaortic LN Assessment Method Para-Aortic 3873 InAssessMethodPelvic LN Assessment Method Pelvic 3874 InDistantAssessMethod LN Distant Assessment Method 3875 InDistantMediastinalScalene LN Distant: Mediastinal, Scalene 3876 InHeadAndNeckLevels1To3 LN Head and Neck Levels I-III LN Head and Neck Levels IV-V 3877 InHeadAndNeckLevels4To5 3878 InHeadAndNeckLevels6To7 LN Head and Neck Levels VI-VII 3879 InHeadAndNeckOther LN Head and Neck Other 3880 InIsolatedTumorCells LN Isolated Tumor Cells (ITC)

3881 InLaterality LN Laterality

3882 InPositiveAxillaryLevel1To2 LN Positive Axillary Level I-II

3883 InSize LN Size

LN Status Femoral-Inguinal, Para-Aortic, Pelvic 3884 InStatusFemorInguinParaaortPelv

Lymphocytosis 3885 lymphocytosis

3886 majorVeinInvolvement Major Vein Involvement 3887 measuredBasalDiameter Measured Basal Diameter 3888 measuredThickness Measured Thickness

3889 methylationOfO6MGMT Methylation of O6-Methylguanine-Methyltransferase

3890 microsatelliteInstability Microsatellite Instability (MSI)

3891 microvascular Density Microvascular Density

3892 mitoticCountUvealMelanoma Mitotic Count Uveal Melanoma

3893 mitoticRateMelanoma Mitotic Rate Melanoma 3894 multigeneSignatureMethod Multigene Signature Method 3895 multigeneSignatureResults Multigene Signature Results

3896 nccnInternationalPrognosticIndex NCCN International Prognostic Index (IPI)

| 3897 numberOfCoresExamined            | Number of Cores Examined                        |
|---------------------------------------|---|
| 3898 numberOfCoresPositive            | Number of Cores Positive                        |
| 3899 numberOfExaminedParaAorticNodes  | Number of Examined Para-Aortic Nodes            |
| 3900 numberOfExaminedPelvicNodes      | Number of Examined Pelvic Nodes                 |
| 3901 numberOfPositiveParaAorticNodes  | Number of Positive Para-Aortic Nodes            |
| 3902 numberOfPositivePelvicNodes      | Number of Positive Pelvic Nodes                 |
| 3903 oncotypeDxRecurrenceScoreDcis    | Oncotype Dx Recurrence Score-DCIS               |
| 3904 oncotypeDxRecurrenceScoreInvasiv | Oncotype Dx Recurrence Score-Invasive           |
| 3905 oncotypeDxRiskLevelDcis          | Oncotype Dx Risk Level-DCIS                     |
| 3906 oncotypeDxRiskLevelInvasive      | Oncotype Dx Risk Level-Invasive                 |
| 3907 organomegaly                     | Organomegaly                                    |
| 3908 percentNecrosisPostNeoadjuvant   | Percent Necrosis Post Neoadjuvant               |
| 3909 perineuralInvasion               | Perineural Invasion                             |
| 3910 peripheralBloodInvolvement       | Peripheral Blood Involvement                    |
| 3911 peritonealCytology               | Peritoneal Cytology                             |
| 3913 pleuralEffusion                  | Pleural Effusion                                |
| 3914 progesteroneRecepPrcntPosOrRange | Progesterone Receptor Percent Positive or Range |
| 3915 progesteroneRecepSummary         | Progesterone Receptor Summary                   |
| 3916 progesteroneRecepTotalAllredScor | Progesterone Receptor Total Allred Score        |
| 3917 primarySclerosingCholangitis     | Primary Sclerosing Cholangitis                  |
| 3918 profoundImmuneSuppression        | Profound Immune Suppression                     |
| 3919 prostatePathologicalExtension    | EOD Prostate Pathologic Extension               |
| 3920 psaLabValue                      | PSA (Prostatic Specific Antigen) Lab Value      |
| 3921 residualTumVolPostCytoreduction  | Residual Tumor Volume Post Cytoreduction        |
| 3922 responseToNeoadjuvantTherapy     | Response to Neoadjuvant Therapy                 |
| 3923 sCategoryClinical                | S Category Clinical                             |
| 3924 sCategoryPathological            | S Category Pathological                         |
| 3925 sarcomatoidFeatures              | Sarcomatoid Features                            |
| 3929 separateTumorNodules             | Separate Tumor Nodules                          |
| 3930 serumAlbuminPretreatmentLevel    | Serum Albumin Pretreatment Level                |
| 3931 serumBeta2MicroglobulinPretxLvl  | Serum Beta-2 Microglobulin Pretreatment Level   |
| 3932 IdhPretreatmentLabValue          | LDH Lab Value                                   |
| 3933 thrombocytopenia                 | Thrombocytopenia                                |
| 3934 tumorDeposits                    | Tumor Deposits                                  |
| •                                     | •   |

3935 tumorGrowthPattern
3936 ulceration
3937 visceralParietalPleuralInvasion
Tumor Growth Pattern
Ulceration
Visceral and Parietal Pleural Invasion

3938 alkRearrangement

3939 egfrMutationalAnalysis

3940 brafMutationalAnalysis

3941 nrasMutationalAnalysis

3942 ca199PretxLabValue

ALK Rearrangement

EGFR Mutational Analysis

BRAF Mutational Analysis

NRAS Mutational Analysis

3950 macroscopicEvalOfTheMesorectum Macroscopic Evaluation of Mesorectum

3956 p16 p16

3957 InStatusPelvic

3958 InStatusParaAortic

LN Status Para-Aortic

LN Status Para-Aortic

LN Status Femoral-Inguinal

Best AJCC Stage (ignoring complications of neoadjuvant N/A stageAJ treatment)

N/A reasonForNoBrm Reason no Immunotherapy was administered N/A reasonForNoOther Reason no other therapy was administered

N/A reasonForNoTransplntEndocr Reason hematologic transplant or endocrine procedure was

constructed from multiple NAACCR items; historical only

no NAACCR item; historical only no NAACCR item; historical only no NAACCR item; historical only

## **CENSUS LOCATION**

Version = 5.1.1 Date = 5/10/2022 StdVar = &\_vdw\_census\_loc

# **Subject Area Description**

The CENSUS LOCATION table contains geographic location markers for patient residencies over time.

Projects are encouraged to contact sites regarding the version of Census data available.

| Variable Name         | Definition  | Type(Len) | Values   |
|-----------------------|---|-----------|--|
| MRN                   | Medical record number is the unique patient identifier within a site and should never leave the site                    | char(*)   | Unique to each patient at each site  |
| LOC_START             | The date on which the person's tenure at this location began.   | num(4)    | SAS date   |
| LOC_END               | The date on which the person's tenure at this location ended.   | num(4)    | SAS date   |
| GEOCODE               | The concatenation of FIPS codes for State,<br>County, and Census Tract.   | char(11)  | FIPS values are set by the National Institute of Standards & Technology and are public information |
| GEOCODE_BOUNDARY_YEAR | The decade of the boundary files used to perform geocoding.   | num(8)    | Year values (e.g. 2010, 2020)  |
| GEOLEVEL              | The most granular geographic level of the GEOCODE indicating the specificity of the match made. Also called 'map flag'. | char(1)   | T = Tract C = County Z = Zip code U = Unable to be appended P = Address is post office             |

| IMAI( H SIRENGIH | A code indicating the type of match achieved by the geocoding software.  | char(1) | 0 = No coordinates 1 = Zip +0 centroid 2 = Zip +2 centroid 3 = Zip +4 centroid 4 = Shape path centroid 5 = Street address position 6 = Point zip centroid X = Street intersection |
|------------------|--|---------|---|
| LATITUDE         | The latitude of the location   | num(8)  | Value between -90 and +90 measured in degrees   |
| LONGITUDE        | The longitude of the location  | num(8)  | Value between -180 and +180 measured in degrees   |
| ZIP              | Zip Codea five-character numeric code assigned<br>by the US Postal Service to various regions where<br>it delivers mail. | char(5) | Any valid zip code, as assigned by the US Postal Service  |
| GEOCODE_APP      | The name of the application used to geocode this location  | char(*) | Free text field   |

## **Primary Key:**

MRN + GEOCODE\_BOUNDARY\_YEAR + LOC\_START (no overlapping time periods are permitted)

## Foreign Key Relationship:

|                               |                               | Target Variable |                  |
|-------------------------------|-------------------------------|-----------------|------------------|
| Source Variable (Foreign Key) | Table Target                  | (Primary Key)   | Orphans allowed? |
| MRN                           | DEMOGRAPHICS                  | MRN             | No               |
|                               |                               | GEOCODE +       |                  |
| GEOCODE +                     |                               | GEOCODE_BOUN    |                  |
| GEOCODE_BOUNDARY_YEAR         | CENSUS ACS DEMOGRAPHICS       | DARY_YEAR       | No               |
|                               |                               |                 |                  |
| GEOCODE +                     |                               | GEOCODE +       |                  |
| GEOCODE_BOUNDARY_YEAR         | CENSUS DECENNIAL DEMOGRAPHICS | CENSUS_YEAR     | No               |

## **CENSUS ACS DEMOGRAPHICS**

Version = 5.1.0 Date = 2/21/2022 StdVar = &\_vdw\_census\_demog\_acs

# **Subject Area Description**

The CENSUS ACS DEMOGRAPHICS table contains data from the American Community Survey (ACS) administered by the US Census Bureau. The ACS is an ongoing survey with an annual release covering a 5-year lookback period; this table includes data at the census tract level. It is recommended that sites implement the full ACS data file released by the HCSRN.

Projects are encouraged to contact sites regarding the version of Census data available.

| Variable Name         | Definition  | Type(Len) | Values   |
|-----------------------|---|-----------|--|
| CENSUS_YEAR           | Year the ACS data was released by the Census<br>Bureau  | Num(8)    | Year values (e.g. 2016, 2017)  |
| GEOCODE               | Concatenation of the FIPS codes for State, County, and Census Tract                                     | Char(11)  | The first two characters signify the state, the next three signify the county, the next six signify the tract. |
| GEOCODE_BOUNDARY_YEAR | The decade of the boundary year used to create the census tracts of the ACS data.                       | num(8)    | Year values (e.g. 2010, 2020)  |
| STATE                 | State Codea two-character numeric code assigned to US states, districts, territories and protectorates. | char(2)   | Any valid state code, as used by the USCB.   |
| COUNTY                | County Codea 3-character numeric code assigned to census counties.                                      | char(3)   | Any valid county code, as used by the USCB.  |
| TRACT                 | Tract Codea six-character numeric code assigned to census tracts.                                       | char(6)   | Any valid tract code, as used by the USCB.   |
| EDUCATION1            | Less than 9th grade   | num(8)    | Any proportion between 0 and 1.  |
| EDUCATION2            | 9th - 12th grade  | num(8)    | Any proportion between 0 and 1.  |
| EDUCATION3            | high school graduate  | num(8)    | Any proportion between 0 and 1.  |

| EDUCATION4   | some college, no degree         | num(8) | Any proportion between 0 and 1. |
|--------------|---------------------------------|--------|---------------------------------|
| EDUCATION5   | associate degree                | num(8) | Any proportion between 0 and 1. |
| EDUCATION6   | bachelor degree                 | num(8) | Any proportion between 0 and 1. |
| EDUCATION7   | graduate or professional degree | num(8) | Any proportion between 0 and 1. |
| EDUCATION8   | Doctorate degree                | num(8) | Any proportion between 0 and 1. |
| MEDFAMINCOME | Median Family Income            | num(8) | Any integer.                    |
| FAMINCOME1   | less than \$10,000              | num(8) | Any proportion between 0 and 1. |
| FAMINCOME2   | \$10,000 - \$14,999             | num(8) | Any proportion between 0 and 1. |
| FAMINCOME3   | \$15,000-\$19,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME4   | \$20,000-\$24,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME5   | \$25,000-\$29,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME6   | \$30,000-\$34,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME7   | \$35,000-\$39,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME8   | \$40,000-\$44,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME9   | \$45,000-\$49,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME10  | \$50,000-\$59,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME11  | \$60,000-\$74,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME12  | \$75,000-\$99,999               | num(8) | Any proportion between 0 and 1. |
| FAMINCOME13  | \$100,000-\$124,999             | num(8) | Any proportion between 0 and 1. |
| FAMINCOME14  | \$125,000-\$149,999             | num(8) | Any proportion between 0 and 1. |
| FAMINCOME15  | \$150,000-\$199,999             | num(8) | Any proportion between 0 and 1. |
| FAMINCOME16  | \$200,000+                      | num(8) | Any proportion between 0 and 1. |

| FAMPOVERTY    | Proportion of family households in the geography with below-poverty level income. | num(8) | Any proportion between 0 and 1. |
|---------------|---|--------|---------------------------------|
| MEDHOUSINCOME | median household income   | num(8) | Any integer.                    |
| HOUSINCOME1   | < \$10,000  | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME2   | \$10,000-\$14,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME3   | \$15,000-\$19,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME4   | \$20,000-\$24,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME5   | \$25,000-\$29,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME6   | \$30,000-\$34,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME7   | \$35,000-\$39,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME8   | \$40,000-\$44,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME9   | \$45,000-\$49,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME10  | \$50,000-\$59,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME11  | \$60,000-\$74,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME12  | \$75,000-\$99,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME13  | \$100,000-\$124,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME14  | \$125,000-\$149,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME15  | \$150,000-\$199,999   | num(8) | Any proportion between 0 and 1. |
| HOUSINCOME16  | \$200,000+  | num(8) | Any proportion between 0 and 1. |
| HOUSPOVERTY   | %Households with below-poverty level income                                       | num(8) | Any proportion between 0 and 1. |
| POV_LT_50     | <50% of poverty level   | num(8) | Any proportion between 0 and 1. |
| POV_50_74     | Between 50 and 74.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
| POV_75_99     | Between 75 and 99.99% of poverty level  | num(8) | Any proportion between 0 and 1. |

| POV_100_124       | Between 100 and 124.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
|-------------------|---|--------|---------------------------------|
| POV_125_149       | Between 125 and 149.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
| POV_150_174       | Between 150 and 174.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
| POV_175_184       | Between 175 and 184.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
| POV_185_199       | Between 185 and 199.99% of poverty level  | num(8) | Any proportion between 0 and 1. |
| POV_GT_200        | > 200% of poverty level   | num(8) | Any proportion between 0 and 1. |
| ENGLISH_SPEAKER   | Proportion of people over age 5 that speak only<br>English or speak english "very well"     | Num(8) | Any proportion between 0 and 1. |
| SPANISH_SPEAKER   | Proportion of people over age 5 who speak only spanish or speak spanish "very well"         | Num(8) | Any proportion between 0 and 1. |
| BORNINUS          | Proportion of people over age 5 that were born in the US                                    | Num(8) | Any proportion between 0 and 1. |
| MOVEDINLAST12MON  | Proportion of households that moved in the last 12 months                                   | Num(8) | Any proportion between 0 and 1. |
| MARRIED           | Proportion of people over age 15 who are married  | Num(8) | Any proportion between 0 and 1. |
| DIVORCED          | Proportion of people over age 15 who are divorced   | Num(8) | Any proportion between 0 and 1. |
| DISABILITY        | Proportion of people over age 18 living with any disability                                 | Num(8) | Any proportion between 0 and 1. |
| UNEMPLOYMENT      | Proportion of civilian noninstitutionalized population between 18 and 64 who are unemployed | Num(8) | Any proportion between 0 and 1. |
| UNEMPLOYMENT_MALE | Proportion of civilian noninstitutionalized males between 18 and 64 who are unemployed      | Num(8) | Any proportion between 0 and 1. |
| INS_MEDICARE      | Proportion of people covered by Medicare  | Num(8) | Any proportion between 0 and 1. |
| INS_MEDICAID      | Proportion of people covered by Medicaid  | Num(8) | Any proportion between 0 and 1. |
| HH_NOCAR          | Proportion of households with no car (owner and renter occupied)                            | Num(8) | Any proportion between 0 and 1. |

| HH_PUBLIC_ASSISTANCE  | Proportion of households on public assistance   | Char(1) | Any proportion between 0 and 1.       |
|-----------------------|---|---------|---------------------------------------|
| HMOWNER_COSTS_MORT    | Proportion of households with monthly owner costs > 50% HH income, in homes with mortgages    | Num(8)  | Any proportion between 0 and 1.       |
| HMOWNER_COSTS_NO_MORT | Proportion of households with monthly owner costs > 50% HH income, in homes without mortgages | Num(8)  | Any proportion between 0 and 1.       |
| HOMES_MEDVALUE        | Median value of homes   | Num(8)  | Any integer.                          |
| PCT_CROWDING          | Proportion of households with >= 1 person per   | Num(8)  | Any proportion between 0 and 1.       |
| FEMALE_HEAD_OF_HH     | Proportion of households headed by females (no male present)                                  | Num(8)  | Any proportion between 0 and 1.       |
| MGR_FEMALE            | Proportion of female management occupations   | Num(8)  | Any proportion between 0 and 1.       |
| MGR_MALE              | Proportion of male management occupations   | Num(8)  | Any proportion between 0 and 1.       |
| RESIDENTS_65          | Proportion of population over 65  | Num(8)  | Any proportion between 0 and 1.       |
| SAME_RESIDENCE        | Proportion of persons in same residence since year 2005                                       | Num(8)  | What years does ACS provide for this? |

## **Primary Key:**

GEOCODE + CENSUS\_YEAR

## Foreign Key Relationship:

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| [None Defined]  |              |                 |          |

#### **CENSUS DECENNIAL DEMOGRAPHICS**

Version = 5.0.0 Date= 11/16/2021 StdVar = &\_vdw\_census\_demog\_dec

# **Subject Area Description**

The CENSUS DECENNIAL DEMOGRAPHICS table contains data from the Decennial survey administered by the US Census Bureau. The Decennial survey is conducted every ten years; this table includes data at the census tract level. It is recommended that sites implement the most recent Decennial data Projects are encouraged to contact sites regarding the version of Census data available.

| Variable Name | Definition  | Type(Len) | Values   |
|---------------|---|-----------|--|
| CENSUS_YEAR   | Year of the Decennial survey  | Num(8)    | Year values (e.g. 2010, 2020)  |
| GEOCODE       | Concatenation of the FIPS codes for State,<br>County, and Census Tract                                  | Char(11)  | The first two characters signify the state, the next three signify the county, the next six signify the tract. |
| STATE         | State Codea two-character numeric code assigned to US states, districts, territories and protectorates. | char(2)   | Any valid state code, as used by the USCB.   |
| COUNTY        | County Codea 3-character numeric code assigned to census counties.                                      | char(3)   | Any valid county code, as used by the USCB.  |
| TRACT         | Tract Codea six-character numeric code assigned to census tracts.                                       | char(6)   | Any valid tract code, as used by the USCB.   |
| RA_NHS_WH     | %white, non-hispanic  | num(8)    | Any proportion between 0 and 1.  |
| RA_NHS_BL     | %black or african american, non-hispanic  | num(8)    | Any proportion between 0 and 1.  |
| RA_NHS_AM     | %american indian or alaska native, non-<br>hispanic   | num(8)    | Any proportion between 0 and 1.  |
| RA_NHS_AS     | %asian, non-hispanic  | num(8)    | Any proportion between 0 and 1.  |
| RA_NHS_HA     | %native hawaiian or other pacific islander,<br>non-hispanic   | num(8)    | Any proportion between 0 and 1.  |
| RA_NHS_OT     | %other, non-hispanic  | num(8)    | Any proportion between 0 and 1.  |

| RA_NHS_ML             | %two or more races, non-hispanic   | num(8) | Any proportion between 0 and 1. |
|-----------------------|--|--------|---------------------------------|
| RA_HIS_WH             | %white, hispanic   | num(8) | Any proportion between 0 and 1. |
| RA_HIS_BL             | %black or african american, hispanic   | num(8) | Any proportion between 0 and 1. |
| RA_HIS_AM             | %amercian indian or alaska native, hispanic  | num(8) | Any proportion between 0 and 1. |
| RA_HIS_AS             | %asian, hispanic   | num(8) | Any proportion between 0 and 1. |
| RA_HIS_HA             | %native hawaiian or other pacific islander, hispanic                                     | num(8) | Any proportion between 0 and 1. |
| RA_HIS_OT             | %other, hispanic   | num(8) | Any proportion between 0 and 1. |
| RA_HIS_ML             | %two or more races, hispanic   | num(8) | Any proportion between 0 and 1. |
| HOUSES_N              | Number of housing units in geography   | num(8) | Any integer.                    |
| HOUSES_OCCUPIED       | Proportion of houses_n that are occupied.  | num(8) | Any proportion between 0 and 1. |
| HOUSES_OWN            | Proportion of occupied housing units that are occupied by owners.                        | num(8) | Any proportion between 0 and 1. |
| HOUSES_RENT           | Proportion of occupied housing units that are occupied by renters.                       | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_FORRENT  | Proportion of unoccupied housing units that are for rent.                                | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_FORSALE  | Proportion of unoccupied housing units that are for sale                                 | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_RENTSOLD | Proportion of unoccupied housing units that are rented or sold, but still unoccupied.    | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_SEASONAL | Proportion of unoccupied housing units that are used seasonally or other occasional use. | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_MIGRANT  | Proportion of unoccupied housing units that are used for migrant workers.                | num(8) | Any proportion between 0 and 1. |
| HOUSES_UNOCC_OTHER    | Proportion of unoccupied housing units that are vacant for other reasons.                | num(8) | Any proportion between 0 and 1. |

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| Primary Key:     |      |
|------------------|------|
| GEOCODE + CENSUS | VFΔR |

## Foreign Key Relationship:

| Source Variable |              | Target Variable | Orphans  |
|-----------------|--------------|-----------------|----------|
| (Foreign Key)   | Target Table | (Primary Key)   | allowed? |
| [None Defined]  |              |                 |          |

## **PRO TYPES**

Version = 5.1.0 Date = 1/4/2022 StdVar = &\_vdw\_pro\_types

# **Subject Area Description**

The PRO\_TYPES table serves as a lookup dataset for patient surveys based on the survey type & subtype. Every pro\_id, pro\_type, and pro\_subtype appearing in other VDW files should appear in the PRO\_TYPES table.

| Variable Name           | Definition                                    | Type(Len) | Values  |
|-------------------------|---|-----------|---|
| PRO_ID                  | Unique identifier to a questionnaire type and | Char(10)  | Use designated values from the PRO Workgroup where they   |
|                         | subtype combination                           |           | exist. For site specific surveys, choose an appropriate   |
|                         |   |           | number, prefixed by your site abbreviation (Ex: HFHS_101) |
| PRO_TYPE                | Name of the questionnaire type                | Char(15)  | Example: PHQ  |
| PRO_TYPE_DESCRIPTION    | Description of questionnaire type             | Char(80)  | Example: Patient Health Questionnaire                     |
| PRO_SUBTYPE             | Name of the questionnaire subtype             | Char(15)  | Example: PHQ-9  |
| PRO_SUBTYPE_DESCRIPTION | Description of questionnaire subtype          | Char(80)  |   |
| PRO_TYPE_NOTES          | Additional notes for the questionaire type    | Char(255) |   |

| Primary Key: |  |
|--------------|--|
| DPO ID       |  |

#### Foreign Key Relationship:

| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| [None Defined]                   |              |                                  |                  |

## **PRO SURVEYS**

Version = 5.1.0 Date = 1/4/2022 StdVar = &\_vdw\_pro\_surveys

## **Subject Area Description**

The PRO\_SURVEYS table serves as a lookup dataset for the PRO\_SURVEY\_RESPONSES table, and contains survey metadata, such as the survey name, question text, and question version.

Variable Name Definition Type(Len) Values

| Variable Hallic    | Definition  | ·         | • alacs  |
|--------------------|---|-----------|--|
| PRO_ID             | Unique identifier to a questionnaire type and subtype | Char(10)  | Use values from the PRO_Types table.             |
|                    | combination   |           |  |
| SURVEY_DATA_SOURCE | Data source of the survey                             | Char(100) | Varies by site.                                  |
|                    |   |           | Ex. Questionnaires, Vendor, etc.                 |
| SURVEY_ID          | Unique identifier to a collection of questions.       | Char(18)  |  |
| SURVEY_NAME        | The name of the survey                                | Char(100) | Ex: DEPRESSION SCREEN - PHQ 9                    |
| QUESTION_ID        | Unique identifier for a question                      | Char(18)  |  |
| QUESTION_VER       | Sequence number of available versions of each         | Num       | Ex: 1, 2, 3                                      |
| QUESTION_DATE      | Date the question was published                       | Num       |  |
| QUESTION_TEXT      | Standardized question text                            | Char(255) |  |
| QUESTION_TEXT_ORIG | Source question text                                  | Char(255) |  |
| QUESTION_LANG      | Language of the source question text                  | Char(3)   | Values are consistent with lang_iso from the VDW |

#### **Primary Key:**

PRO\_ID + SURVEY\_ID +
QUESTION\_ID +

QUESTION\_VER

#### Foreign Key Relationship:

| Source Variable<br>(Foreign Key) | Target Table | Target Variable<br>(Primary Key) | Orphans allowed? |
|----------------------------------|--------------|----------------------------------|------------------|
| [None Defined]                   |              |                                  |                  |

#### **PRO SURVEY RESPONSES**

Version = 5.2.0 Date = 4/21/2023 StdVar = &\_vdw\_pro\_survey\_responses

#### **Subject Area Description**

The PRO SURVEY RESPONSES table holds question level responses to patient surveys, one record per response.

#### Variable Name **Definition** Type(Len) Values Unique identifier to a questionnaire type and subtype Use values from the PRO\_Types table. PRO ID Char(10) SURVEY ID Unique identifier to a questionnaire Use values from the PRO Surveys table. Char(18) QUESTION ID Unique identifier for a question Char(18) Use values from the PRO Surveys table. QUESTION VER Sequence number of available versions of each question Num Use values from the PRO Surveys table. Identifier unique to an individual. Used to link across VDW ta Char(Varies) MRN Use values from the VDW Demographics table. RESPONSE DATE Date associated with the entered response Num RESPONSE TIME Time associated with the entered response Num Standardized response text Char(255) RESPONSE TEXT RESPONSE\_TEXT ORIG Source response text Char(255) Unique identifier used for linking table to the VDW Values should be populated and mapped to the VDW Encounter ENC ID Char(Varies) table when possible. However, missing and/or unlinked values Encounter table are acceptable. SURVEY MODE How the survey question was administered. Char(2) TV = Telephone/Video OV = Office/Hospital Visit HV = Home Visit GV = Group Visit MA = Mail WE = Web/Electronic OT = Other UN = Unknown

#### **Primary Key:**

None

Foreign Key Relationship:

| Toroigh hey herations |              |                 |          |
|-----------------------|--------------|-----------------|----------|
| Source Variable       |              | Target Variable | Orphans  |
| (Foreign Key)         | Target Table | (Primary Key)   | allowed? |
| [None Defined]        |              |                 |          |

Version = 5.0.1 Date = 4/21/2023 Foreign Key Tables (Copied as Linked Pictures)

| ENROLLMENT         |                |                        |          |
|--------------------|----------------|------------------------|----------|
| Source Variable    |                | Target Variable        | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| MRN                | DEMOGRAPHICS   | MRN                    | No       |
| PCP                | PROVIDER       | PROVIDER               | No       |
|                    | TROTIBER       | · NOVIBEN              |          |
| PHARMACY           |                |                        |          |
| Source Variable    |                | <b>Target Variable</b> | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| MRN                | DEMOGRAPHICS   | MRN                    | No       |
| NDC                | EVERNDC        | NDC                    | No       |
| RXMD               | PROVIDER       | PROVIDER               | No       |
|                    |                |                        |          |
| DEMOGRAPHICS       |                |                        |          |
| Source Variable    |                | <b>Target Variable</b> | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| [None Defined]     |                |                        |          |
|                    |                |                        |          |
| ENCOUNTER          |                |                        |          |
| Source Variable    |                | <b>Target Variable</b> | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| MRN                | DEMOGRAPHICS   | MRN                    | No       |
| PROVIDER           | PROVIDER       | PROVIDER               | No       |
|                    |                |                        |          |
| DIAGNOSIS          |                |                        |          |
| Source Variable    |                | Target Variable        | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| MRN                | DEMOGRAPHICS   | MRN                    | No       |
| ENC_ID             | ENCOUNTER      | ENC_ID                 | No       |
| PROVIDER           | PROVIDER       | PROVIDER               | No       |
| DIAG_PROVIDER      | PROVIDER       | PROVIDER               | No       |
|                    |                |                        |          |
| PROCEDURE          |                |                        |          |
| Source Variable    |                | Target Variable        | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| MRN                | DEMOGRAPHICS   | MRN                    | No       |
| ENC_ID             | ENCOUNTER      | ENC_ID                 | No       |
| PROVIDER           | PROVIDER       | PROVIDER               | No       |
| PERFORMINGPROVIDER | PROVIDER       | PROVIDER               | No       |
| PROVIDER           |                |                        |          |
| Source Variable    |                | Target Variable        | Orphans  |
| (Foreign Key)      | Target Table   | (Primary Key)          | allowed? |
| [None Defined]     | . a. Bet Table | (· ·····α· y //cy)     | anonca.  |

| LANGUAG | Е |
|---------|---|
|---------|---|

| LANGUAGE        |                     |                        |          |
|-----------------|---------------------|------------------------|----------|
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
|                 |                     |                        |          |
| DEATH           |                     |                        |          |
| Source Variable |                     | Target Variable        | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
|                 |                     |                        |          |
| CAUSE OF DEATH  |                     |                        |          |
| Source Variable |                     | Target Variable        | Orphans  |
| (Foreign Key)   | <b>Target Table</b> | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
|                 |                     |                        |          |
| VITALS          |                     |                        |          |
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
| ENC_ID          | ENCOUNTER           | ENC_ID                 | No       |
|                 |                     |                        |          |
| EVERNDC         |                     |                        |          |
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| [None Defined]  |                     |                        |          |
|                 |                     |                        |          |
| LAB RESULTS     |                     |                        |          |
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
| ORDER_PROV      | PROVIDER            | PROVIDER               | No       |
|                 |                     |                        |          |
| LAB NOTES       |                     |                        |          |
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| No Foreign Key  |                     |                        |          |
|                 |                     |                        |          |
| TUMOR MAIN      |                     |                        |          |
| Source Variable |                     | <b>Target Variable</b> | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
|                 |                     |                        |          |
| SOCIAL HISTORY  |                     |                        |          |
| Source Variable |                     | Target Variable        | Orphans  |
| (Foreign Key)   | Target Table        | (Primary Key)          | allowed? |
| MRN             | DEMOGRAPHICS        | MRN                    | No       |
| ENC_ID          | ENCOUNTER           | ENC_ID                 | No       |
|                 |                     |                        |          |

## **Census Location**

| Source Variable       |              | <b>Target Variable</b> | Orphans  |
|-----------------------|--------------|------------------------|----------|
| (Foreign Key)         | Target Table | (Primary Key)          | allowed? |
| MRN                   | DEMOGRAPHICS | MRN                    | No       |
|                       |              | GEOCODE +              |          |
| GEOCODE + CENSUS_YEAR | CENSUS DEMOG | CENSUS_YEAR            | No       |
|                       |              |                        |          |
| Census Demographics   |              |                        |          |
| Source Variable       |              | Target Variable        | Orphans  |
| (Foreign Key)         | Target Table | (Primary Key)          | allowed? |
| [None Defined]        |              |                        |          |