**December 18 2018**

Theater Medical Data Store (TMDS) Processing for the

MHS Data Repository (MDR)

(Version 1.05.00)

Future Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Para/Tbl/Fig** | **Originator** | **Description of Change** |
| 1.00.00 | 3/28/2016 | * Initial publication | A. Crouter & J. MacLeod | Initial version |
| 1.01.00 | 3/10/2017 | * Table 4 * Table 5 * Appendix B | J. MacLeod | * Added business rules for the ALCOHOL\_USE, TOBACCO\_USE, and MEPRS\_CODE fields on the Enhanced Encounter data set. * Adjusted length of T3 region on the enhanced data sets to be 2 characters in length. * Changed the label for the T3REG variable to include T3. * Changed from FILL\_DATE to ORDER\_DATE for deriving appended variables on the Enhanced Encounter Meds data set. * Dropped patage and agegroup fields from and added business rules for the FMP to the Enhanced People data set. * Added Appendix B – includes the logic for deriving the VA Embedded Fragments Registry extract |
| 1.02.00 | 3/30/2017 | * Appendix B | J. MacLeod | * Updated the logic for inclusion of records to use the beneficiary category rather than the patient category, per a decision made by the VA. |
| 1.02.01 | 5/2/2017 | * Appendix B | J. MacLeod | * Renamed the variable death\_date to dthdate. The name was incorrect. |
| 1.03.00 | 5/5/2017 | * Table 3 * Table 5 * Appendix B * Table B-1 | J. MacLeod | * In Table 3, added three source files required for VA extract – no requirements change. * In Table 5, specifically stated that only SSNS that are 9 characters in length are to be used for the MPI merge. * Eliminated the logic to set the zip code (from the LVM merges) to Z, if no match was found. * In appendix B, added a requirement for a header record on the VA extract. * In table B-1, populated the Source Data Set column, eliminated the format column, and added the RECORD\_TYPE variable to the end of the extract. |
| 1.04.00 | 11/2/2017 | * Table 4 * Table 6 * Table 7 | J. MacLeod | * Added fields related to NDAA 2017 and T2017. |
| 1.05.00 | 12/18/2018 | * Table 5 * Appendix B | J. MacLeod | * Modified the business rules for the PATSSN in the TMDS People data set. * Modified rules to reflect changes requested for the VA Embedded Fragments Registry Extract |

**Theater Medical Data Store (TMDS) Processing for the MDR**

1. Sources

The source data files used to create the TMDS files are provided by Defense Health Clinical Systems (DHCS) Program Executive Office via Secure FTP. These data represent medical care provided to ill or injured U.S. Department of Defense personnel in the Theater echelons of care. The source data files received contain medical encounter, pharmacy, patient demographic, and medical treatment facility information.

1. Transmission (Format and Frequency)

Source files are provided on a monthly basis. If data have not been provided within 7 business days of the expected date of delivery, DHSS shall contact the Program Manager or designee. The formats of the data feeds are described in the [Interface Control Document](http://www.tricare.mil/ocfo/bea/downloads/ICD%201300-6130-02%20Approved%20TDP%20ICD.doc) (ICD).

1. Organization and batching

Source Data: As described in the TMDS ICD, there are 12 separate files that make up the TMDS feed. The feeds contain new and updated records transmitted from the TMDS. Raw data are stored in the MDR according to routine MDR operating procedures.

Output Products:

The MDR TMDS processor produces the SAS data sets described in Table 1 and the extract for the Embedded Fragments Registry (EFR) for the Department of Veterans Affairs. The details for the EFR extract are in Appendix B.

**Table 1: MDR TMDS Processor Output Products**

|  |  |
| --- | --- |
| **MDR TMDS Data Set** | **Member Name** |
| Enhanced TMDS People Data Set | people.sas7bdat |
| Enhanced TMDS Encounter Data Set | encounter.sas7bdat |
| Enhanced TMDS Encounter Meds Data Set | enc\_meds.sas7bdat |
| Enhanced TMDS People Meds Data Set | people\_meds.sas7bdat |
| Basic TMDS Encounter Data Set | encounter.sas7bdat |
| Basic TMDS Encounter CPT Data Set | cpt.sas7bdat |
| Basic TMDS Encounter Diagnosis Data Set | diagnosis.sas7bdat |
| Basic TMDS Encounter Meds Data Set | enc\_meds.sas7bdat |
| Basic TMDS Encounter Symptoms Data Set | symptoms.sas7bdat |
| Basic TMDS Encounter Vitals Data Set | vitals.sas7bdat |
| Basic TMDS MTF Data Set | mtf.sas7bdat |
| Basic TMDS PV List Data Set | pvlist.sas7bdat |
| Basic TMDS Services Data Set | services.sas7bdat |
| Basic TMDS People Data Set | people.sas7bdat |
| Basic TMDS People Meds Data Set | people\_meds.sas7bdat |
| Basic TMDS People Profile Data Set | people\_profile.sas7bdat |

1. Receiving Filters

Eliminate from the feed data records on which the key fields are blank. The key fields for each data feed are as follows:

**Table 2: Key Fields**

|  |  |
| --- | --- |
| **MDR TMDS Data Set** | **Key Fields** |
| Basic TMDS Encounter Data Set | ID, RECORD\_TYPE |
| Basic TMDS Encounter CPT Data Set | ID, RECORD\_TYPE |
| Basic TMDS Encounter Diagnosis Data Set | ID, RECORD\_TYPE |
| Basic TMDS Encounter Meds Data Set | ID, RECORD\_TYPE |
| Basic TMDS Encounter Symptoms Data Set | ID, RECORD\_TYPE |
| Basic TMDS Encounter Vitals Data Set | ID, RECORD\_TYPE |
| Basic TMDS MTF Data Set | MTFID |
| Basic TMDS PV List Data Set | PVLISTID |
| Basic TMDS Services Data Set | SERVICE\_ID |
| Basic TMDS People Data Set | PEOPLE\_ID |
| Basic TMDS People Meds Data Set | PEOPLE\_MESSAGE\_ID |
| Basic TMDS People Profile Data Set | PEOPLE\_ID, PROFILE\_START\_DATE |

For each feed, if there is more than one record per key field(s), retain the last record in the file.

1. Update Procedures

The data are stored in both Basic and Enhanced data sets. To update the TMDS data, first the Basic master data sets should be updated using the logic described below. Then the Enhanced master data sets should be generated using the updated Basic master data sets.

The Basic data sets are processed before the Enhanced data. The Encounter data must be processed first. After that, the data may be processed in any order. Due to the fact that fields from some of the Enhanced data sets are appended to other Enhanced data sets, the Enhanced data must be processed in the following order:

* Enhanced People
* Enhanced Encounter
* Enhanced Encounter Meds
* Enhanced People Meds

Basic Data Set Update Rules

Within a feed data file, there will be both new records and records that update data that was previously submitted. Whenever an Encounter record is submitted, new or updated, all Vitals, Symptoms, Encounter Meds, CPT, Diagnosis records associated with the encounter record will be included with each feed.

To update each of the Basic Master data sets, combine the feed data with the master data set. If more than one record per key field(s) is found, keep the record from the feed data set.

1. Field Transformations, Deletions, and File Types for MDR Core Databases

There are three different types of data elements available in the MDR Enhanced TMDS data sets. There are data elements that are:

* Read in and retained from the TMDS data feeds, or
* Derived from data provided in the TMDS feeds, or
* Derived as a result of merges to external files.

The external merges should be applied to the entire database each processing cycle. These merges and associated merge keys are described in Table 3.

**Table 3: TMDS External Data Merges**

| **Merge** | **Date Matching** | **Additional Matching** |
| --- | --- | --- |
| Master Person Index | N/A | See MPI Specifications |
| Longitudinal VM File | The date used depends on the type of data. See the tables in Section VII for details. | EDIPN |
| Omni-CAD | FY/FM of data, FY/FM of MDR Omni CAD. The date used depends on the type of data. See the tables in Section VII for details. | ZIP code & sponsor Service; |
| DMIS ID Index Table | FY of data. The date used to determine the FY depends on the type of data. See the tables in Section VII for details. | DENRSITE and CATCH |
| CTS  (for VA extract) | N/A | EDIPN |
| Address  (for VA extract) | N/A | EDIPN |
| Master Death  (for VA extract) | N/A | EDIPN |

1. Record Layout and Content

**TMDS Encounter**: The MDR TMDS Encounter data are stored as SAS data sets, in separate fiscal year files. Table 4 below describes the format, file layout, and field derivation rules for the master TMDS Encounter data set.

**Table 4: TMDS Encounter Data Set Layout**

| **Variable Name** | **SAS Name** | **Format** | **Source Data** | | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| **Basic Data Set** | **Element Name** |  |
| TMDS Record Identifier | ID | 8 | Encounter | ID |  |
| TMDS Record Type | RECORD\_TYPE | $3 | Encounter | RECORD\_TYPE |  |
| People Identifier | PEOPLE\_ID | 8 | Encounter | PEOPLE\_ID |  |
| MTF Identifier | MTFID | $80 | Encounter | MTFID |  |
| Disease Non-Battle Injury Identifier | DNBI\_ID | 8 | Encounter | DNBI\_ID |  |
| Disposition Description | DISPOSITION\_DESCR | $64 | Encounter | DISPOSITION\_DESCR |  |
| Disposition date | DISPOSITION\_DATE | 8 | Encounter | DISPOSITION\_DATE |  |
| Disposition time | DISPOSITION\_TIME | $8 | Encounter | DISPOSITION\_TIME |  |
| Last report date | REPORT\_DATE | 8 | Encounter | REPORT\_DATE |  |
| Last report time | REPORT\_TIME | $8 | Encounter | REPORT\_TIME |  |
| Subjective description | SUBJECTIVE | $4000 | Encounter | SUBJECTIVE |  |
| Objective description | OBJECTIVE | $4000 | Encounter | OBJECTIVE |  |
| Medical assessment | ASSESSMENT | $4000 | Encounter | ASSESSMENT |  |
| Treatment plan | PLAN\_OF\_CARE | $4000 | Encounter | PLAN\_OF\_CARE |  |
| Record data source | DATA\_SOURCE | $50 | Encounter | DATA\_SOURCE |  |
| Date of medical encounter | ENCOUNTER\_DATE | 8 | Encounter | ENCOUNTER\_DATE |  |
| Time of medical encounter | ENCOUNTER\_TIME | $8 | Encounter | ENCOUNTER\_TIME |  |
| Type of encounter | ENCOUNTER\_TYPE | $50 | Encounter | ENCOUNTER\_TYPE |  |
| Type of injury | INJURY\_TYPE | $2000 | Encounter | INJURY\_TYPE |  |
| Outpatient indicator | OUT\_PATIENT\_IND | $1 | Encounter | OUT\_PATIENT\_IND |  |
| Internal TMDS audit identifier | AUDIT\_ID | 8 | Encounter | AUDIT\_ID |  |
| Area of operation | AREA\_OF\_OPERATION | $80 | Encounter | AREA\_OF\_OPERATION |  |
| Initial visit indicator | INITIAL\_VISIT\_IND | $1 | Encounter | INITIAL\_VISIT\_IND |  |
| Disposition duty limitations | DISP\_DUTY\_LIMITATIONS | $4000 | Encounter | DISP\_DUTY\_LIMITATIONS |  |
| Medical Expense and Performance Reporting System Code | MEPRS\_CODE | $4 | Encounter | MEPRS\_CODE | Set to first four characters of the MEPRS\_CODE field in the Basic Encounter data set. |
| Original date | ORIGINAL\_DATE | 8 | Encounter | ORIGINAL\_DATE |  |
| Original time | ORIGINAL\_TIME | $8 | Encounter | ORIGINAL\_TIME |  |
| Patient Height | HEIGHT | $32 | Encounter | HEIGHT |  |
| Patient Weight | WEIGHT | $32 | Encounter | WEIGHT |  |
| Loss days | LOSS\_DAYS | 8 | Encounter | LOSS\_DAYS |  |
| Lite days | LITE\_DAYS | 8 | Encounter | LITE\_DAYS |  |
| Location where the patient was referred or evacuated | REF\_LOC | $100 | Encounter | REF\_LOC |  |
| Main complaint from the patient | CHIEF\_COMPLAINT | $4000 | Encounter | CHIEF\_COMPLAINT |  |
| Tobacco use narrative | TOBACCO\_USE | $5 | Encounter | TOBACCO\_USE | Set to first five characters of the TOBACCO\_USE field in the Basic Encounter data set. |
| Alcohol use narrative | ALCOHOL\_USE | $5 | Encounter | ALCOHOL\_USE | Set to first five characters of the ALCOHOL\_USE field in the Basic Encounter data set. |
| Type of admission | ADMISSION\_TYPE | $100 | Encounter | ADMISSION\_TYPE |  |
| Date of admission | ADMIT\_DATE | 8 | Encounter | ADMIT\_DATE |  |
| Time of admission | ADMIT\_TIME | $8 | Encounter | ADMIT\_TIME |  |
| Date patient discharged | DISCHARGE\_DATE | 8 | Encounter | DISCHARGE\_DATE |  |
| Time patient discharged | DISCHARGE\_TIME | $8 | Encounter | DISCHARGE\_TIME |  |
| Timestamp Date of TMDS record | RECORD\_DATE | 8 | Encounter | RECORD\_DATE |  |
| Timestamp Time of TMDS record | RECORD\_TIME | $8 | Encounter | RECORD\_TIME |  |
| Mapped DNBI Category | MAPPED\_DNBI\_CATEGORY | $40 | Encounter | MAPPED\_DNBI\_CATEGORY |  |
| Blood Transfusion Indicator | BLOOD\_TRANS\_IND | $1 | Encounter | BLOOD\_TRANS\_IND |  |
| CPT E and M Code | EM\_CODE | $10 | Encounter | EM\_CODE |  |
| **Merge to TMDS Diagnosis data** – by id and record type | | | | | |
| *Nth* Diagnosis Code | DX*N* | $7 | Diagnosis | DX | N = 1 to 20  There is a one-to-many relationship between the encounter and diagnosis tables. For each matching record in the diagnosis set DX*N* to the DX variable found on the diagnosis record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Diagnosis Code Modifier | DXMOD*N* | $1 | Diagnosis | DXMOD | N = 1 to 20  There is a one-to-many relationship between the encounter and diagnosis tables. For each matching record in the diagnosis set DXMOD*N* to the DXMOD variable found on the diagnosis record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Primary Diagnosis Code Indicator | PRIM\_DX\_FLAG*N* | 8 | Diagnosis | PRIM\_DX\_FLAG | N = 1 to 20  There is a one-to-many relationship between the encounter and diagnosis tables. For each matching record in the diagnosis set PRIM\_DX\_FLAG*N* to the PRIM\_DX\_FLAG variable found on the diagnosis record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| **Merge to TMDS CPT data** – by id and record type | | | | | |
| *Nth* CPT Code | CPT*N* | $10 | CPT | CPT | N = 1 to 10  There is a one-to-many relationship between the encounter and CPT tables. For each matching record in the CPT table, set CPT*N* to the CPT variable found on the CPT record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 10. |
| *Nth* MEDCIN Indicator | MEDCIN*N* | 8 | CPT | MEDCIN | N = 1 to 10  There is a one-to-many relationship between the encounter and CPT tables. For each matching record in the CPT table, set MEDCIN*N* to the MEDCIN variable found on the CPT record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 10. |
| **Merge to TMDS Symptoms data** – by id and record type | | | | | |
| *Nth* Major Symptom | MAJOR*N* | $250 | Symptoms | MAJOR | N = 1 to 50  There is a one-to-many relationship between the encounter and Symptoms tables. For each matching record in the Symptoms table, set MAJOR*N* to the MAJOR variable found on the Symptoms record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 50. |
| **Merge to TMDS Vitals data** – by id and record type | | | | | |
| *Nth* Date Vitals Taken | VITALS\_DATE*N* | 8 | Vitals | VITALS\_DATE | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set VITALS\_DATE*N* to the VITALS\_DATE variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Time Vitals Taken | VITALS\_TIME*N* | $8 | Vitals | VITALS\_TIME | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set VITALS\_TIME*N* to the VITALS\_TIME variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Systolic Blood Pressure | BP\_SYSTOLIC*N* | 8 | Vitals | BP\_SYSTOLIC | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set BP\_SYSTOLIC*N* to the BP\_SYSTOLIC variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Diastolic Blood Pressure | BP\_DIASTOLIC*N* | 8 | Vitals | BP\_DIASTOLIC | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set BP\_DIASTOLIC*N* to the BP\_DIASTOLIC variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Location Blood Pressure Taken | BP\_LOCATION*N* | $32 | Vitals | BP\_LOCATION | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set BP\_LOCATION*N* to the BP\_LOCATION variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Position of Person When Blood Pressure Taken | BP\_POSITION*N* | $32 | Vitals | BP\_POSITION | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set BP\_POSITION*N* to the BP\_POSITION variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Patient Temperature | TEMPERATURE*N* | $10 | Vitals | TEMPERATURE | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set TEMPERATURE*N* to the TEMPERATURE variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Method for Taking Temperature | TEMP\_METHOD*N* | $32 | Vitals | TEMP\_METHOD | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set TEMP\_METHOD*N* to the TEMP\_METHOD variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Percentage of Oxygen Percentage in Blood | PULSE\_OX*N* | 8 | Vitals | PULSE\_OX | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set PULSE\_OX*N* to the PULSE\_OX variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Pulse Rate | PULSE\_RATE*N* | 8 | Vitals | PULSE\_RATE | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set PULSE\_RATE*N* to the PULSE\_RATE variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| *Nth* Respiration Rate | RESP\_RATE*N* | 8 | Vitals | RESP\_RATE | N = 1 to 20  There is a one-to-many relationship between the encounter and Vitals tables. For each matching record in the Vitals table, set RESP\_RATE*N* to the RESP\_RATE variable found on the Vitals record. Start with *N* =1 for the first matching record and increment *N* by 1 for every subsequent matching record, up to a max of 20. |
| **Merge to TMDS People data** – by people\_id | | | | | |
| EDIPN | EDIPN | $10 | People | EDIPN |  |
| Sponsor Social Security Number | SPONSSN | $80 | People | SPONSSN |  |
| Patient Social Security Number | PATSSN | $80 | People | PATSSN |  |
| Date of Birth | DOB | 8 | People | DOB |  |
| Gender | GENDER | $1 | People | GENDER |  |
| **Merge to TMDS MTF data** – by mtfid | | | | | |
| MTF Description | MTF\_DESCR | $250 | MTF | MTF\_DESCR |  |
| MTF Branch of Service | MTF\_BRANCH | $24 | MTF | MTF\_BRANCH |  |
| MTF Echelon Type | MTF\_TYPE | $80 | MTF | MTF\_TYPE |  |
| Theater in which the MTF is Operating | MTF\_THEATER | $80 | MTF | MTF\_THEATER |  |
| DMIS ID | MTF\_DMISID | $4 | MTF | MTF\_DMISID |  |
| Contingency Aeromedical Staging Facility Flag | IS\_CASF | $1 | MTF | IS\_CASF |  |
| Veterans Affairs Facility Flag | IS\_VA | $1 | MTF | IS\_VA |  |
| **Merge to LVM** – use encounter date as the merge date | | | | | |
| DEERS Sponsor Service | DSPONSVC | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the DEERS sponsor service. Change blank to Z.  If no match is found:  Set to Z. |
| DEERS Sponsor Service Aggregate | DSVCAGG | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service (aggregate) from LVM, if ENCOUNTER\_DATE is between the begin and end date associated with the DEERS sponsor service (aggregate). Change blank to Z.  If no match is found:  Set to Z. |
| DEERS Enrollment DMIS ID | DENRSITE | $4 | N/A | N/A | If a match is found in the LVM:  Fill with enrollment DMISID from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the enrollment site.  If no match is found:  Set to NONE. |
| DEERS Beneficiary Category | BENCAT | $3 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS beneficiary category from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. |
| DEERS Common Beneficiary Category | COMBEN | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS common beneficiary category from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. |
| DEERS Zip Code | DEERSZIP | $5 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS zip code from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the DEERS zip code. |
| DEERS Alternate Care Value | ACV | $1 | N/A | N/A | If a match is found in the LVM:  Fill with ACV from LVM, if the ENCOUNTER\_DATE is between the begin and end date associated with the ACV.  If no match is found:  Set to Z.  Blank fill for encounter dates after Jan 1, 2018. See the VM6 Specification for segment and field positions. |
| DEERS HCDP – Assigned | HCDP\_ASSGN | $3 | N/A | N/A | If a match is found in the LVM:  Fill with the Assigned HCDP from the LVM, if the ENCOUNTER\_DATE is between the begin date and end date associated with the Assigned HCDP.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| Eligibility Group | ELG\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Eligibility Group from the LVM, if the ENCOUNTER\_DATE is between the begin date and end date associated with the Eligibility Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| Enrollment Group | ENR\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Enrollment Group from the LVM, if the ENCOUNTER\_DATE is between the begin date and end date associated with the Enrollment Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| PCM Type | PCM\_TYPE | $1 | N/A | N/A | If a match is found in the LVM:  Fill with the PCM Type Code from the LVM, if the ENCOUNTER\_DATE is between the begin date and end date associated with the PCM Type Code.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| **Merge to Omni CAD** - use the Encounter Date variable as the merge date | | | | | |
| Residence Catchment Area | CATCH | $4 | N/A | N/A | Based on matching FY & FM of ENCOUNTER\_DATE and DEERSZIP.  If dsvcagg=A then set equal to ACATCH, if dsvcagg = F then set equal to FCATCH; if dsvcagg in (M, N) then set equal to NCATCH, otherwise set equal to OCATCH. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ |
| Residence PRISM Area | PRISM | $4 | N/A | N/A | Based on matching FY & FM of ENCOUNTER\_DATE and DEERSZIP.  If dsvcagg=A then set equal to APRISM, if dsvcagg = F then set equal to FPRISM; if dsvcagg in (M, N) then set equal to NPRISM, otherwise set equal to OPRISM. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ |
| Residence TNEX Region | RESTNEX | $1 | N/A | N/A | HSSCREG, based on matching FY & FM of ENCOUNTER\_DATE and DEERSZIP |
| Residence MTF Service Area | MTFSVCAREA | $4 | N/A | N/A | Based on matching FY & FM of ENCOUNTER\_DATE, DEERSZIP, and DSVCAGG; returns Service related MTF service area |
| **Merge to DMIS ID Index Table** - use the Encounter Date variable as the merge date | | | | | |
| Enrollment TNEX region | ENRTNEXREG | $1 | N/A | N/A | HSSCREG, based on matching FY of the ENCOUNTER\_DATE and DENRSITE |
| Enrollment T3 region | ENRT3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ENCOUNTER\_DATE and DENRSITE |
| Enrollment T17 region | ENRT17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ENCOUNTER\_DATE and DENRSITE |
| Enrollment Site Branch of Service | ENRSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ENCOUNTER\_DATE and DENRSITE |
| Residence T3 Region | T3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ENCOUNTER\_DATE and CATCH |
| Residence T17 Region | T17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ENCOUNTER\_DATE and CATCH |
| Catchment Area Branch of Service | CATCHSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ENCOUNTER\_DATE and CATCH |
| **Internally Derived Fields** | | | | | |
| Patient Age | PATAGE | 8 | N/A | N/A | If the date of birth and encounter date variables are both populated and the encounter date is on or after the date of birth, calculate as age in completed years from variables DOB and ENCOUNTER\_DATE. Otherwise set to missing. |
| Age Group Code | AGEGRP | $1 | N/A | N/A | Derived from PATAGE.  A = 0-4  B = 5-14  C = 15-17  D = 18-24  E = 25-34  F = 35-44  G = 45-64  H = 65+  Z = all others |
| Calendar Year | CY | $4 | N/A | N/A | Year of the ENCOUNTER\_DATE. |
| Calendar Month | CM | $2 | N/A | N/A | Month of the ENCOUNTER\_DATE. |
| Fiscal Year | FY | $4 | N/A | N/A | Fiscal year equivalent of calendar year of the ENCOUNTER\_DATE |
| Fiscal Month | FM | $2 | N/A | N/A | Fiscal month equivalent of calendar month of the ENCOUNTER\_DATE |

**TMDS People**: The MDR TMDS People data are stored in a SAS data set. Table 5 below describes the format, file layout, and field derivation rules for the master TMDS people data set.

**Table 5: TMDS People Data Set Layout**

| **Variable Name** | **SAS Name** | **Format** | **Source Data** | | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| **Basic Data Set** | **Element Name** |  |
| People Identifier | PEOPLE\_ID | 8 | People | PEOPLE\_ID |  |
| Patient Identifier | PATIENT\_ID | 8 | People | PATIENT\_ID |  |
| Last Name | LAST\_NAME | $32 | People | LAST\_NAME |  |
| First Name | FIRST\_NAME | $32 | People | FIRST\_NAME |  |
| Middle Name | MIDDLE\_NAME | $32 | People | MIDDLE\_NAME |  |
| Suffix | SUFFIX | $32 | People | SUFFIX |  |
| Duty Status | DUTY\_STATUS | $3 | People | DUTY\_STATUS |  |
| Date of Birth | DOB | 8 | People | DOB |  |
| Sponsor Family Member Prefix | FMP | $2 | People | FMP | Set to first two characters of the FMP in the Basic People data set. |
| Sponsor Social Security Number | SPONSSN | $80 | People | SPONSSN |  |
| Patient Social Security Number | PATSSN | $80 | People | PATSSN | If the PATSSN is blank, the SPONSSN is valid (per the LVM rules), and the FMP is 20, set the PATSSN equal to the SPONSSN. |
| Gender | GENDER | $1 | People | GENDER |  |
| Marital Status | MARITAL\_STATUS | $32 | People | MARITAL\_STATUS |  |
| Service Id | SERVICE\_ID | 8 | People | SERVICE\_ID |  |
| Pay Grade | PAY\_GRADE | $3 | People | PAY\_GRADE |  |
| Race Id | RACE\_ID | 8 | People | RACE\_ID |  |
| Service member’s unit identification code | UIC | $80 | People | UIC |  |
| Name of unit | UNIT\_NAME | $250 | People | UNIT\_NAME |  |
| Location of unit | UNIT\_LOCATION | $50 | People | UNIT\_LOCATION |  |
| Unit type description | UNIT\_TYPE | $100 | People | UNIT\_TYPE |  |
| Service member’s unit identification code A | UIC\_A | $80 | People | UIC\_A |  |
| Name of unit A | UNIT\_NAME\_A | $250 | People | UNIT\_NAME\_A |  |
| Location of unit A | UNIT\_LOCATION\_A | $50 | People | UNIT\_LOCATION\_A |  |
| Unit type description A | UNIT\_TYPE\_A | $100 | People | UNIT\_TYPE\_A |  |
| Service member’s unit identification code B | UIC\_B | $80 | People | UIC\_B |  |
| Name of unit B | UNIT\_NAME\_B | $250 | People | UNIT\_NAME\_B |  |
| Location of unit B | UNIT\_LOCATION\_B | $50 | People | UNIT\_LOCATION\_B |  |
| Unit type description B | UNIT\_TYPE\_B | $100 | People | UNIT\_TYPE\_B |  |
| **Merge to Services data -** Merge to the Services table by service\_id | | | | | |
| Service Name | SERVICE\_NAME | $50 | Services | SERVICE\_NAME |  |
| Service Description | SERVICE\_DESCR | $80 | Services | SERVICE\_DESCR |  |
| **Merge to PVList data -** Merge to the PVList table by pvlistid (pvlist table) & race\_id (people table) | | | | | |
| Race Code | RACE | $1 | PVList | SHORT\_DESCR |  |
| Race Description | RACE\_DESCR | $2000 | PVList | LONG\_DESCR |  |
| **Merge to Profile data -** Merge to the People Profile table by people\_id | | | | | |
| *Nth* Profile ICD Code | DIAG*N* | $11 | People Profile | PROFILE\_DIAG\_CODE | N = 1 to 5 |
| *Nth* Duty Limit Explanation | DUTY\_LIMIT*N* | $4000 | People Profile | PROFILE\_DUTY\_LIMIT | N = 1 to 5 |
| *Nth* Date Profile Starts | PROFILE\_START\_DATE*N* | 8 | People Profile | PROFILE\_START\_DATE | N = 1 to 5 |
| *Nth* Time Profile Starts | PROFILE\_START\_TIME*N* | $8 | People Profile | PROFILE\_START\_TIME | N = 1 to 5 |
| *Nth* Date Profile Ends | PROFILE\_END\_DATE*N* | 8 | People Profile | PROFILE\_END\_DATE | N = 1 to 5 |
| *Nth* Time Profile Ends | PROFILE\_END\_TIME*N* | $8 | People Profile | PROFILE\_END\_TIME | N = 1 to 5 |
| **Merge to MPI – only use SSNs that are 9 characters long** | | | | | |
| EDIPN | EDIPN | $10 | N/A | N/A |  |

**TMDS Encounter Meds**: The MDR Encounter Meds data are stored in SAS data sets, in separate fiscal year files. Table 6 describes the format, file layout, and field derivation rules for the TMDS Encounter Meds data set.

**Table 6: TMDS Encounter Meds Data Set Layout**

| **Variable Name** | **SAS Name** | **Format** | **Source Data** | | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| **Basic Data Set** | **Element Name** |  | |
| TMDS Record identifier | ID | 8 | Enc Meds | ID |  | |
| TMDS Record Type | RECORD\_TYPE | $3 | Enc Meds | RECORD\_TYPE |  | |
| Medication Name | MEDICATION\_NAME | $250 | Enc Meds | MEDICATION\_NAME |  | |
| Dosage Administered | DOSAGE | $200 | Enc Meds | DOSAGE |  | |
| Quantity of Medicine | QUANTITY | 8 | Enc Meds | QUANTITY |  | |
| Refills Remaining | REFILLS\_REMAINING | 8 | Enc Meds | REFILLS\_REMAINING |  | |
| Date Medication Will Be Started | START\_DATE | 8 | Enc Meds | START\_DATE |  | |
| Time Medication Will Be Started | START\_TIME | $8 | Enc Meds | START\_TIME |  | |
| Date Medication Will Be Stopped | STOP\_DATE | 8 | Enc Meds | STOP\_DATE |  | |
| Time Medication Will Be Stopped | STOP\_TIME | $8 | Enc Meds | STOP\_TIME |  | |
| Date Prescription Was Filled | FILL\_DATE | 8 | Enc Meds | FILL\_DATE |  | |
| Time Prescription Was Filled | FILL\_TIME | $8 | Enc Meds | FILL\_TIME |  | |
| Date Medication Was Ordered | ORDER\_DATE | 8 | Enc Meds | ORDER\_DATE |  | |
| Time Medication Was Ordered | ORDER\_TIME | $8 | Enc Meds | ORDER\_TIME |  | |
| Inpatient Detail Table Identifier | INP\_DETAIL\_ID | 8 | Enc Meds | INP\_DETAIL\_ID |  | |
| **Merge to TMDS Encounter data** – by ID and RECORD\_TYPE | | | | | | |
| People Identifier | PEOPLE\_ID | 8 | Encounter | PEOPLE\_ID |  | |
| MTF Identifier | MTFID | $80 | Encounter | MTFID |  | |
| **Merge to TMDS MTF data** – by MTFID | | | | | | |
| MTF Description | MTF\_DESCR | $250 | MTF | MTF\_DESCR |  | |
| MTF Branch of Service | MTF\_BRANCH | $24 | MTF | MTF\_BRANCH |  | |
| MTF Echelon Type | MTF\_TYPE | $80 | MTF | MTF\_TYPE |  | |
| Theater in which the MTF is Operating | MTF\_THEATER | $80 | MTF | MTF\_THEATER |  | |
| DMIS ID | MTF\_DMISID | $4 | MTF | MTF\_DMISID |  | |
| Contingency Aeromedical Staging Facility Flag | IS\_CASF | $1 | MTF | IS\_CASF |  | |
| Veterans Affairs Facility Flag | IS\_VA | $1 | MTF | IS\_VA |  | |
| **Merge to TMDS People data** – by PEOPLE\_ID | | | | | | |
| EDIPN | EDIPN | $10 | People | EDIPN |  | |
| Sponsor Social Security Number | SPONSSN | $80 | People | SPONSSN |  | |
| Patient Social Security Number | PATSSN | $80 | People | PATSSN |  | |
| Date of Birth | DOB | 8 | People | DOB |  | |
| Gender | GENDER | $1 | People | GENDER |  | |
| **Merge to LVM** – use Order Date as the merge date | | | | | | |
| DEERS Sponsor Service | DSPONSVC | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS sponsor service. Change blank to Z.  If no match is found:  Set to Z. | |
| DEERS Sponsor Service Aggregate | DSVCAGG | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service (aggregate) from LVM, if ORDER\_DATE is between the begin and end date associated with the DEERS sponsor service (aggregate). Change blank to Z.  If no match is found:  Set to Z. | |
| DEERS Enrollment DMIS ID | DENRSITE | $4 | N/A | N/A | If a match is found in the LVM:  Fill with enrollment DMISID from LVM, if the ORDER\_DATE is between the begin and end date associated with the enrollment site.  If no match is found:  Set to NONE. | |
| DEERS Beneficiary Category | BENCAT | $3 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS beneficiary category from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. | |
| DEERS Common Beneficiary Category | COMBEN | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS common beneficiary category from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. | |
| DEERS Zip Code | DEERSZIP | $5 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS zip code from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS zip code. | |
| DEERS Alternate Care Value | ACV | $1 | N/A | N/A | If a match is found in the LVM:  Fill with ACV from LVM, if the ORDER\_DATE is between the begin and end date associated with the ACV.  If no match is found:  Set to Z.  Blank fill for order dates after Jan 1, 2018. See VM6 Specification for segment and field positions. | |
| DEERS HCDP – Assigned | HCDP\_ASSGN | $3 | N/A | N/A | If a match is found in the LVM:  Fill with the Assigned HCDP from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Assigned HCDP.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. | |
| Eligibility Group | ELG\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Eligibility Group from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Eligibility Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. | |
| Enrollment Group | ENR\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Enrollment Group from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Enrollment Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. | |
| PCM Type | PCM\_TYPE | $1 | N/A | N/A | If a match is found in the LVM:  Fill with the PCM Type Code from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the PCM Type Code.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. | |
| **Merge to Omni CAD** - use the Order Date variable as the merge date | | | | | | |
| Residence Catchment Area | CATCH | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE and DEERSZIP.  If dsvcagg=A then set equal to ACATCH, if dsvcagg = F then set equal to FCATCH; if dsvcagg in (M, N) then set equal to NCATCH, otherwise set equal to OCATCH. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ | |
| Residence PRISM Area | PRISM | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE and DEERSZIP.  If dsvcagg=A then set equal to APRISM, if dsvcagg = F then set equal to FPRISM; if dsvcagg in (M, N) then set equal to NPRISM, otherwise set equal to OPRISM. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ | |
| Residence TNEX Region | RESTNEX | $1 | N/A | N/A | HSSCREG, based on matching FY & FM of ORDER\_DATE and DEERSZIP | |
| Residence MTF Service Area | MTFSVCAREA | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE, DEERSZIP, and sponsor service; returns Service related MTF service area | |
| **Merge to DMIS ID Index Table** - use the Order Date variable as the merge date | | | | | | |
| Enrollment TNEX region | ENRTNEXREG | $1 | N/A | N/A | HSSCREG, based on matching FY of the ORDER\_DATE and DENRSITE | |
| Enrollment T3 region | ENRT3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ORDER\_DATE and DENRSITE | |
| Enrollment T17 region | ENRT17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ORDER\_DATE and DENRSITE | |
| Enrollment Site Branch of Service | ENRSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ORDER\_DATE and DENRSITE | |
| Residence T3 Region | T3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ORDER\_DATE and CATCH | |
| Residence T17 region | T17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ORDER\_DATE and CATCH | |
| Catchment Area Branch of Service | CATCHSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ORDER\_DATE and CATCH | |
| **Internally Derived Fields** | | | | | | |
| Patient Age | PATAGE | 8. | N/A | N/A | If the date of birth and order date variables are both populated and the order date is on or after the date of birth, calculate as age in completed years from variables DOB and ORDER\_DATE. Otherwise set to missing. | |
| Age Group Code | AGEGRP | $1. | N/A | N/A | Derived from PATAGE.  A = 0-4  B = 5-14  C = 15-17  D = 18-24  E = 25-34  F = 35-44  G = 45-64  H = 65+  Z = all others | |
| Calendar Year | CY | $4. | N/A | N/A | Year of the ORDER\_DATE. | |
| Calendar Month | CM | $2. | N/A | N/A | Month of the ORDER\_DATE. | |
| Fiscal Year | FY | $4. | N/A | N/A | Fiscal year equivalent of calendar year of the ORDER\_DATE | |
| Fiscal Month | FM | $2. | N/A | N/A | Fiscal month equivalent of calendar month of the ORDER\_DATE | |

**TMDS People Meds**: The MDR TMDS People Meds data are stored in SAS data sets, in separate fiscal year files. Table 7 describes the format, file layout, and field derivation rules for the TMDS People Meds data set.

**Table 7: TMDS People Meds Data Set Layout**

| **Variable Name** | **SAS Name** | **Format** | **Source Data** | | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| **Basic Data Set** | **Element Name** |
| TMDS message identifier | PEOPLE\_MESSAGE\_ID | 8 | People Meds | PEOPLE\_MESSAGE\_ID |  |
| People identifier | PEOPLE\_ID | 8 | People Meds | PEOPLE\_ID |  |
| Internal TMDS audit identifier | AUDIT\_ID | 8 | People Meds | AUDIT\_ID |  |
| Medical treatment facility identifier | MTFID | $80 | People Meds | MTFID |  |
| Message type identifier | MSG\_TYPE\_ID | 8 | People Meds | MSG\_TYPE\_ID |  |
| Message report date | REPORT\_DATE | 8 | People Meds | REPORT\_DATE |  |
| Message report time | REPORT\_TIME | $8 | People Meds | REPORT\_DATE |  |
| Data source | DATA\_SOURCE | $80 | People Meds | DATA\_SOURCE |  |
| Message encounter date | MSG\_ENCOUNTER\_DATE | 8 | People Meds | MSG\_ENCOUNTER\_DATE |  |
| Message encounter time | MSG\_ENCOUNTER\_TIME | $8 | People Meds | MSG\_ENCOUNTER\_TIME |  |
| Date medication was ordered | ORDER\_DATE | 8 | People Meds | ORDER\_DATE |  |
| Time medication was ordered | ORDER\_TIME | $8 | People Meds | ORDER\_TIME |  |
| Case Identifier | CASE\_ID | $120 | People Meds | CASE\_ID |  |
| Medication name | MEDICATION\_NAME | $100 | People Meds | MEDICATION\_NAME |  |
| Alternate medication name | ALT\_MEDICATION\_NAME | $100 | People Meds | ALT\_MEDICATION\_NAME |  |
| Medication dispense amount | DISPENSE\_AMOUNT | 8 | People Meds | DISPENSE\_AMOUNT |  |
| Date of the most recent medication refill | MOST\_RECENT\_REFILL\_DATE | 8 | People Meds | MOST\_RECENT\_REFILL\_DATE |  |
| Time of the most recent medication refill | MOST\_RECENT\_REFILL\_TIME | $8 | People Meds | MOST\_RECENT\_REFILL\_TIME |  |
| Refill amount remaining | REFILL\_AMOUNT\_REMAINING | 8 | People Meds | REFILL\_AMOUNT\_REMAINING |  |
| Order Identifier | ORDER\_ID | $50 | People Meds | ORDER\_ID |  |
| **Merge to TMDS People data** – by people\_id | | | | | |
| EDIPN | EDIPN | $10 | People | EDIPN |  |
| Sponsor Social Security Number | SPONSSN | $80 | People | SPONSSN |  |
| Patient Social Security Number | PATSSN | $80 | People | PATSSN |  |
| Date of Birth | DOB | 8 | People | DOB |  |
| Gender | GENDER | $1 | People | GENDER |  |
| **Merge to TMDS MTF data** – by mtfid | | | | | |
| MTF Description | MTF\_DESCR | $250 | MTF | MTF\_DESCR |  |
| MTF Branch of Service | MTF\_BRANCH | $24 | MTF | MTF\_BRANCH |  |
| MTF Echelon Type | MTF\_TYPE | $80 | MTF | MTF\_TYPE |  |
| Theater in which the MTF is Operating | MTF\_THEATER | $80 | MTF | MTF\_THEATER |  |
| DMIS ID | MTF\_DMISID | $4 | MTF | MTF\_DMISID |  |
| Contingency Aeromedical Staging Facility Flag | IS\_CASF | $1 | MTF | IS\_CASF |  |
| Veterans Affairs Facility Flag | IS\_VA | $1 | MTF | IS\_VA |  |
| **Merge to LVM** – use Order Date as the merge date | | | | | |
| DEERS Sponsor Service | DSPONSVC | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS sponsor service. Change blank to Z.  If no match is found:  Set to Z. |
| DEERS Sponsor Service Aggregate | DSVCAGG | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS sponsor service (aggregate) from LVM, if ORDER\_DATE is between the begin and end date associated with the DEERS sponsor service (aggregate). Change blank to Z.  If no match is found:  Set to Z. |
| DEERS Enrollment DMISID | DENRSITE | $4 | N/A | N/A | If a match is found in the LVM:  Fill with enrollment DMISID from LVM, if the ORDER\_DATE is between the begin and end date associated with the enrollment site.  If no match is found:  Set to NONE. |
| DEERS Beneficiary Category | BENCAT | $3 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS beneficiary category from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. |
| DEERS Common Beneficiary Category | COMBEN | $1 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS common beneficiary category from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS beneficiary category.  If no match is found:  Set to Z. |
| DEERS Zip Code | DEERSZIP | $5 | N/A | N/A | If a match is found in the LVM:  Fill with DEERS zip code from LVM, if the ORDER\_DATE is between the begin and end date associated with the DEERS zip code. |
| DEERS Alternate Care Value | ACV | $1 | N/A | N/A | If a match is found in the LVM:  Fill with ACV from LVM, if the ORDER\_DATE is between the begin and end date associated with the ACV.  If no match is found:  Set to Z.  Blank fill for order dates after Jan 1, 2018. See the VM6 Specification for segment and field positions. |
| DEERS HCDP – Assigned | HCDP\_ASSGN | $3 | N/A | N/A | If a match is found in the LVM:  Fill with the Assigned HCDP from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Assigned HCDP.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| Eligibility Group | ELG\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Eligibility Group from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Eligibility Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| Enrollment Group | ENR\_GRP | $2 | N/A | N/A | If a match is found in the LVM:  Fill with the Enrollment Group from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the Enrollment Group.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| PCM Type | PCM\_TYPE | $1 | N/A | N/A | If a match is found in the LVM:  Fill with the PCM Type Code from the LVM, if the ORDER\_DATE is between the begin date and end date associated with the PCM Type Code.  If no value is assigned, leave blank.  See the VM6 specification for segment and field position. |
| **Merge to Omni CAD** - use the Order Date variable as the merge date | | | | | |
| Residence Catchment Area | CATCH | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE and DEERSZIP.  If DSVCAGG =A then set equal to ACATCH, if DSVCAGG = F then set equal to FCATCH; if DSVCAGG in (M, N) then set equal to NCATCH, otherwise set equal to OCATCH. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ |
| Residence PRISM Area | PRISM | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE and DEERSZIP.  If DSVCAGG =A then set equal to APRISM, if DSVCAGG = F then set equal to FPRISM; if DSVCAGG in (M, N) then set equal to NPRISM, otherwise set equal to OPRISM. If ZIP code not found in MDR Omni-CAD, set equal to ‘0999’ |
| Residence TNEX Region | RESTNEX | $1 | N/A | N/A | HSSCREG, based on matching FY & FM of ORDER\_DATE and DEERSZIP |
| Residence MTF Service Area | MTFSVCAREA | $4 | N/A | N/A | Based on matching FY & FM of ORDER\_DATE, DEERSZIP, and DSVCAGG; returns Service related MTF service area |
| **Merge to DMIS ID Index Table** - use the Order Date variable as the merge date | | | | | |
| Enrollment TNEX region | ENRTNEXREG | $1 | N/A | N/A | HSSCREG, based on matching FY of the ORDER\_DATE and DENRSITE |
| Enrollment T3 region | ENRT3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ORDER\_DATE and DENRSITE |
| Enrollment T17 region | ENRT17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ORDER\_DATE and DENRSITE |
| Enrollment Site Branch of Service | ENRSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ORDER\_DATE and DENRSITE |
| Residence T3 Region | T3REG | $2 | N/A | N/A | T3REG, based on matching FY of the ORDER\_DATE and CATCH |
| Residence T17 Region | T17REG | $2 | N/A | N/A | T17REG, based on matching FY of the ORDER\_DATE and CATCH |
| Catchment Area Branch of Service | CATCHSVC | $1 | N/A | N/A | UBU\_SVC, based on matching FY of the ORDER\_DATE and CATCH |
| **Internally Derived Fields** | | | | | |
| Patient Age | PATAGE | 8. | N/A | N/A | If the date of birth and order date variables are both populated and the order date is on or after the date of birth, calculate as age in completed years from variables DOB and ORDER\_DATE. Otherwise set to missing. |
| Age Group Code | AGEGRP | $1. | N/A | N/A | Derived from PATAGE.  A = 0-4  B = 5-14  C = 15-17  D = 18-24  E = 25-34  F = 35-44  G = 45-64  H = 65+  Z = all others |
| Calendar Year | CY | $4. | N/A | N/A | Year of the ORDER\_DATE. |
| Calendar Month | CM | $2. | N/A | N/A | Month of the ORDER\_DATE. |
| Fiscal Year | FY | $4. | N/A | N/A | Fiscal year equivalent of calendar year of the ORDER\_DATE |
| Fiscal Month | FM | $2. | N/A | N/A | Fiscal month equivalent of calendar month of the ORDER\_DATE |

1. Refresh Frequency

Frequency of updates:

* Current FY: Every month.
* Prior FYs: Every month where data is received in the incoming raw feed.

1. Data marts

None at this time.

1. Data Quality

It is expected that when the TMDS processor is run each month, that basic quality checks are performed. It is recommended that the DHSS vendor develop a spreadsheet which tracks key characteristics of the data across processing cycles; making it relatively easy to understand how the data should generally look. DHSS vendors need to review these statistics each month prior to releasing the data. DHCAPE (the functional proponent and the specification author) should be contacted immediately should any quality issues arise. These checks, at a minimum, should include:

* Total record counts in the data feeds should be relatively stable across processing cycles. Any anomalies should immediately be investigated.
* The distribution of all categorical fields (ex: beneficiary category) should be consistent. The results of proc freq analyses will verify this.
* The number of null values for important fields such as SPONSSN, EDIPN should be tracked across monthly updates.
* When reading in the TMDS data feeds, a small number of records should be manually inspected to ensure they have been read in properly.
* Cross tabulations should be reviewed on derived elements to ensure the derivation logic works.
* A data flow tracker should be built to ensure that all records that are intended to make it into the final TMDS datasets do. In other words, all inserts and updates should be tracked and explained in the data flow worksheet.

**Appendix A: Basic Data Sets Layouts**

**Table A-1: TMDS Encounter Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| Type of Admission | ADMISSION\_TYPE | $100 | Encounter | 32 |  |
| Date and Time of Admission | ADMIT\_DATE\_TIME | $19 | Encounter | 33 |  |
| Date of Admission | ADMIT\_DATE | 8 | Encounter | 33 | Read from first 10 characters of ADMIT\_DATE\_TIME.  If year portion of ADMIT\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time of Admission | ADMIT\_TIME | $8 | Encounter | 33 | Read from positions 12-19 of ADMIT\_DATE\_TIME. |
| Alcohol Use Narrative | ALCOHOL\_USE | $4000 | Encounter | 31 |  |
| Area of operation | AREA\_OF\_OPERATION | $80 | Encounter | 19 |  |
| Medical assessment | ASSESSMENT | $4000 | Encounter | 11 |  |
| Internal TMDS audit identifier | AUDIT\_ID | 8 | Encounter | 18 |  |
| Blood Transfusion Indicator | BLOOD\_TRANS\_IND | $1 | Encounter | 37 |  |
| Main Complaint from the Patient | CHIEF\_COMPLAINT | $4000 | Encounter | 29 |  |
| Record data source | DATA\_SOURCE | $50 | Encounter | 13 |  |
| Date and Time Patient Discharged | DISCHARGE\_DATE\_TIME | $19 | Encounter | 34 |  |
| Date Patient Discharged | DISCHARGE\_DATE | 8 | Encounter | 34 | Read from first 10 characters of DISCHARGE\_DATE\_TIME.  If year portion of DISCHARGE\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Patient Discharged | DISCHARGE\_TIME | $8 | Encounter | 34 | Read from positions 12-19 of DISCHARGE\_DATE\_TIME. |
| Disposition duty limitations | DISP\_DUTY\_LIMITATIONS | $4000 | Encounter | 21 |  |
| Disposition Date and Time | DISPOSITION\_DATE\_TIME | $19 | Encounter | 7 |  |
| Disposition date | DISPOSITION\_DATE | 8 | Encounter | 7 | Read from first 10 characters of DISPOSITION\_DATE\_TIME.  If year portion of DISPOSITION\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Disposition time | DISPOSITION\_TIME | $8 | Encounter | 7 | Read from positions 12-19 of DISPOSITION\_DATE\_TIME. |
| Disposition Description | DISPOSITION\_DESCR | $64 | Encounter | 6 |  |
| Disease Non-Battle Injury Identifier | DNBI\_ID | 8 | Encounter | 5 |  |
| CPT E and M Code | EM\_CODE | $10 | Encounter | 38 |  |
| Date and Time of Medical Encounter | ENCOUNTER\_DATE\_TIME | $19 | Encounter | 14 |  |
| Date of medical encounter | ENCOUNTER\_DATE | 8 | Encounter | 14 | Read from first 10 characters of ENCOUNTER\_DATE\_TIME.  If year portion of ENCOUNTER\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time of medical encounter | ENCOUNTER\_TIME | $8 | Encounter | 14 | Read from positions 12-19 of ENCOUNTER\_DATE\_TIME. |
| Type of encounter | ENCOUNTER\_TYPE | $50 | Encounter | 15 |  |
| Patient Height | HEIGHT | $32 | Encounter | 24 |  |
| TMDS Record Identifier | ID | 8 | Encounter | 1 |  |
| Initial visit indicator | INITIAL\_VISIT\_IND | $1 | Encounter | 20 |  |
| Type of injury | INJURY\_TYPE | $2000 | Encounter | 16 |  |
| Lite days | LITE\_DAYS | 8 | Encounter | 27 |  |
| Loss days | LOSS\_DAYS | 8 | Encounter | 26 |  |
| Mapped DNBI Category | MAPPED\_DNBI\_CATEGORY | $40 | Encounter | 36 |  |
| Medical Expense and Performance Reporting System Code | MEPRS\_CODE | $10 | Encounter | 22 |  |
| MTF Identifier | MTFID | $80 | Encounter | 4 |  |
| Objective description | OBJECTIVE | $4000 | Encounter | 10 |  |
| Original Date and Time | ORIGINAL\_DATE\_TIME | $19 | Encounter | 23 |  |
| Original date | ORIGINAL\_DATE | 8 | Encounter | 23 | Read from first 10 characters of ORIGINAL\_DATE\_TIME.  If year portion of ORIGINAL\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Original time | ORIGINAL\_TIME | $8 | Encounter | 23 | Read from positions 12-19 of ORIGINAL\_DATE\_TIME. |
| Outpatient indicator | OUT\_PATIENT\_IND | $1 | Encounter | 17 |  |
| People Identifier | PEOPLE\_ID | 8 | Encounter | 3 |  |
| Treatment plan | PLAN\_OF\_CARE | $4000 | Encounter | 12 |  |
| Timestamp of TMDS Record | RECORD\_DATE\_TIME | $19 | Encounter | 35 |  |
| Timestamp Date of TMDS record | RECORD\_DATE | 8 | Encounter | 35 | Read the first 10 characters of RECORD\_DATE\_TIME.  If year portion of RECORD\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Timestamp Time of TMDS record | RECORD\_TIME | $8 | Encounter | 35 | Read from positions 12-19 of RECORD\_DATE\_TIME. |
| TMDS Record Type | RECORD\_TYPE | $3 | Encounter | 2 |  |
| Location where the Patient was Referred or Evacuated | REF\_LOC | $100 | Encounter | 28 |  |
| Last Report Date and Time | REPORT\_DATE\_TIME | $19 | Encounter | 8 |  |
| Last report date | REPORT\_DATE | 8 | Encounter | 8 | Read from first 10 characters of REPORT\_DATE\_TIME.  If year portion of REPORT\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Last report time | REPORT\_TIME | $8 | Encounter | 8 | Read from positions 12-19 of REPORT\_DATE\_TIME. |
| Subjective description | SUBJECTIVE | $4000 | Encounter | 9 |  |
| Tobacco Use Narrative | TOBACCO\_USE | $4000 | Encounter | 30 |  |
| Patient Weight | WEIGHT | $32 | Encounter | 25 |  |

**Table A-2: TMDS Encounter CPT Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Record Identifier | ID | 8 | CPT | 1 |  |
| TMDS Record Type | RECORD\_TYPE | $3 | CPT | 2 |  |
| Current Procedural Terminology Code | CPT | $10 | CPT | 3 | Remove decimal point. |
| MEDCIN identifier | MEDCIN | 8 | CPT | 4 |  |

**Table A-3: TMDS Encounter Diagnosis Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Record Identifier | ID | 8 | Diagnosis | 1 |  |
| TMDS Record Type | RECORD\_TYPE | $3 | Diagnosis | 2 |  |
| Diagnosis Code | DX | $7 | Diagnosis | 3 | Remove decimal point. If a modifier is present, parse it out and populate DXMOD with the modifier. If multiple diagnosis codes are present, parse and create a new record for each code. |
| Diagnosis Code Type | DX\_TYPE | $5 | Diagnosis | 4 |  |
| Primary Diagnosis Code Indicator | PRIM\_DX\_FLAG | 8 | Diagnosis | 5 |  |
| Diagnosis Code Modifier | DXMOD | $1 | Diagnosis | 5 | If a modifier is present on DX, parse it out and assign it to the DXMOD variable. |

**Table A-4: TMDS Encounter Meds Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Record Identifier | ID | 8 | Enc Meds | 1 |  |
| TMDS Record Type | RECORD\_TYPE | $3 | Enc Meds | 2 |  |
| Medication Name | MEDICATION\_NAME | $250 | Enc Meds | 3 |  |
| Dosage Administered | DOSAGE | $200 | Enc Meds | 4 |  |
| Quantity of Medicine | QUANTITY | 8 | Enc Meds | 5 |  |
| Refills Remaining | REFILLS\_REMAINING | 8 | Enc Meds | 6 |  |
| Date and Time Medication will be Started | START\_DATE\_TIME | $19 | Enc Meds | 7 |  |
| Date Medication will be Started | START\_DATE | 8 | Enc Meds | 7 | Read from first 10 characters of START\_DATE\_TIME.  If year portion of START\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Medication will be Started | START\_TIME | $8 | Enc Meds | 7 | Read from positions 12-19 of START\_DATE\_TIME. |
| Date and Time Medication will be Stopped | STOP\_DATE\_TIME | $19 | Enc Meds | 8 |  |
| Date Medication will be Stopped | STOP\_DATE | 8 | Enc Meds | 8 | Read from first 10 characters of STOP\_DATE\_TIME.  If year portion of STOP\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Medication will be Stopped | STOP\_TIME | $8 | Enc Meds | 8 | Read from positions 12-19 of STOP\_DATE\_TIME. |
| Date and Time Prescription was Filled | FILL\_DATE\_TIME | $19 | Enc Meds | 9 |  |
| Date Prescription was Filled | FILL\_DATE | 8 | Enc Meds | 9 | Read from first 10 characters of FILL\_DATE\_TIME.  If year portion of FILL\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Prescription was Filled | FILL\_TIME | $8 | Enc Meds | 9 | Read from positions 12-19 of the FILL\_DATE\_TIME. |
| Date and Time Medication was Ordered | ORDER\_DATE\_TIME | $19 | Enc Meds | 10 |  |
| Date Medication was Ordered | ORDER\_DATE | 8 | Enc Meds | 10 | Read from first 10 characters of ORDER\_DATE\_TIME.  If year portion of ORDER\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Medication was Ordered | ORDER\_TIME | $8 | Enc Meds | 10 | Read from positions 12-19 of ORDER\_DATE\_TIME. |
| Inpatient Detail Table Identifier | INP\_DETAIL\_ID | 8 | Enc Meds | 11 |  |

**Table A-5: TMDS Encounter Symptoms Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Record Identifier | ID | 8 | Symptoms | 1 |  |
| TMDS Record Type | RECORD\_TYPE | $3 | Symptoms | 2 |  |
| Major Symptom Noted | MAJOR | $250 | Symptoms | 3 |  |

**Table A-6: TMDS Encounter Vitals Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Record Identifier | ID | 8 | Vitals | 1 |  |
| TMDS Record Type | RECORD\_TYPE | $3 | Vitals | 2 |  |
| Date and Time Vitals were Taken | VITALS\_DATE\_TIME | $19 | Vitals | 3 |  |
| Date Vitals were Taken | VITALS\_DATE | 8 | Vitals | 3 | Read from first 10 characters of VITALS\_DATE\_TIME.  If year portion of VITALS\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Vitals were Taken | VITALS\_TIME | $8 | Vitals | 3 | Read from positions 12-19 of VITALS\_DATE\_TIME. |
| Systolic Blood Pressure | BP\_SYSTOLIC | 8 | Vitals | 4 |  |
| Diastolic Blood Pressure | BP\_DIASTOLIC | 8 | Vitals | 5 |  |
| Arm on which Blood Pressure was Taken | BP\_LOCATION | $32 | Vitals | 6 |  |
| Position of Person when Blood Pressure was Taken | BP\_POSITION | $32 | Vitals | 7 |  |
| Patient’s Temperature | TEMPERATURE | $10 | Vitals | 8 |  |
| Method Used to Take Patient’s Temperature | TEMP\_METHOD | $32 | Vitals | 9 |  |
| Percentage of Oxygen in the Blood | PULSE\_OX | 8 | Vitals | 10 |  |
| Number of Patient Pulse Beats Per Minute | PULSE\_RATE | 8 | Vitals | 11 |  |
| Number of Patient Respirations in a Minute | RESP\_RATE | 8 | Vitals | 12 |  |

**Table A-7: TMDS MTF Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| MTF Identifier | MTFID | $80 | MTF | 1 |  |
| MTF Description | MTF\_DESCR | $250 | MTF | 2 |  |
| MTF Address | MTF\_ADDRESS | $500 | MTF | 4 |  |
| Hours Offset from GMT | GMT\_OFFSET | 8 | MTF | 5 |  |
| MTF Latitude | MTF\_LAT | 8 | MTF | 6 |  |
| MTF Longitude | MTF\_LONG | 8 | MTF | 7 |  |
| MTF Branch of Service | MTF\_BRANCH | $24 | MTF | 8 |  |
| MTF Echelon Type | MTF\_TYPE | $80 | MTF | 9 |  |
| Date and Time MTF Closed | CLOSE\_MTF\_DATE\_TIME | 19 | MTF | 10 |  |
| Date MTF Closed | CLOSE\_MTF | 8 | MTF | 10 | Read from first 10 characters of the CLOSE\_MTF\_DATE\_TIME.  If year portion of CLOSE\_MTF\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Joint Task Force Identifier for this MTF | JTF\_ID | 8 | MTF | 11 |  |
| Clinical Document Architecture | CDA | $32 | MTF | 12 |  |
| Department of Defense Unit Identification Code | DODUIC | $80 | MTF | 13 |  |
| Type of Facility | FAC\_TYPE | $32 | MTF | 14 |  |
| Who Submitted the Report | SUBMITTED\_BY | $80 | MTF | 15 |  |
| Exercise or Simulation Number | REAL\_EX\_SIM | 8 | MTF | 17 |  |
| Theater in which the MTF is Operating | MTF\_THEATER | $80 | MTF | 18 |  |
| MTF Co-Located Units | COLLOCATED\_UNITS | $1000 | MTF | 23 |  |
| MTF Joined Indicator | JOINED | $1 | MTF | 25 |  |
| MTF Country Code | COUNTRY\_CODE | $2 | MTF | 26 |  |
| Contingency Aeromedical Staging Facility Flag | IS\_CASF | $1 | MTF | 27 |  |
| Veterans Affairs Facility Flag | IS\_VA | $1 | MTF | 28 |  |
| DMIS ID | MTF\_DMISID | $4 | MTF | 29 |  |
| Transfer Disposition Id | TRANS\_CODE | 8 | MTF | 30 |  |
| Numeric Identifier for the MTF | ID | 8 | MTF | 31 |  |
| MTF Active Flag | MTF\_ACTIVE\_FLAG | $1 | MTF | 32 |  |
| Comments | MTF\_COMMENT | $2000 | MTF | 33 |  |

**Table A-8: TMDS PV List Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| PV List Identifier | PVLISTID | 8 | PV List | 1 |  |
| Attribute Group Name | ATTRIBUTE | $25 | PV List | 2 |  |
| Short Description | SHORT\_DESCR | $80 | PV List | 3 |  |
| Long Description | LONG\_DESCR | $2000 | PV List | 4 |  |
| Default Flag | DEFAULT\_FLAG | 8 | PV List | 5 |  |

**Table A-9: TMDS Services Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| Service Identifier | SERVICE\_ID | 8 | Services | 1 |  |
| Name of the Service | SERVICE\_NAME | $50 | Services | 2 |  |
| Description of the Service | SERVICE\_DESCR | $80 | Services | 3 |  |
| Service Identifier this Service Identifier Rolls Up to | PARENT\_SERVICE\_ID | 8 | Services | 4 |  |

**Table A-10: TMDS People Data**

| **Variable Name** | | **SAS Name** | **Format** | | **Source Feed** | | **Input Position** | | **Business Rule** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| People Identifier | | PEOPLE\_ID | 8 | | People | | 1 | |  |
| Patient Identifier | | PATIENT\_ID | 8 | | People | | 2 | |  |
| Last Name | | LAST\_NAME | $32 | | People | | 3 | |  |
| First Name | | FIRST\_NAME | $32 | | People | | 4 | |  |
| Middle Name | | MIDDLE\_NAME | $32 | | People | | 5 | |  |
| Suffix | | SUFFIX | $32 | | People | | 6 | |  |
| Duty Status | | DUTY\_STATUS | $3 | | People | | 7 | |  |
| Date and Time of Birth | DOB\_DATE\_TIME | | | $19 | | People | | 8 |  |
| Date of Birth | | DOB | 8 | | People | | 8 | | Read from first 10 characters of DOB\_DATE\_TIME.  If year portion of DOB\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Sponsor Family Member Prefix | | FMP | $80 | | People | | 9 | |  |
| Sponsor Social Security Number | | SPONSSN | $80 | | People | | 10 | |  |
| Patient Social Security Number | | PATSSN | $80 | | People | | 11 | |  |
| Gender | | GENDER | $1 | | People | | 12 | |  |
| Marital Status | | MARITAL\_STATUS | $32 | | People | | 13 | |  |
| Service Id | | SERVICE\_ID | 8 | | People | | 14 | |  |
| Pay Grade | | PAY\_GRADE | $3 | | People | | 15 | |  |
| Race Id | | RACE\_ID | 8 | | People | | 16 | |  |
| Service member’s unit identification code | | UIC | $80 | | People | | 17 | |  |
| Name of unit | | UNIT\_NAME | $250 | | People | | 18 | |  |
| Location of unit | | UNIT\_LOCATION | $50 | | People | | 19 | |  |
| Unit type description | | UNIT\_TYPE | $100 | | People | | 20 | |  |
| Service member’s unit identification code A | | UIC\_A | $80 | | People | | 21 | |  |
| Name of unit A | | UNIT\_NAME\_A | $250 | | People | | 22 | |  |
| Location of unit A | | UNIT\_LOCATION\_A | $50 | | People | | 23 | |  |
| Unit type description A | | UNIT\_TYPE\_A | $100 | | People | | 24 | |  |
| Service member’s unit identification code B | | UIC\_B | $80 | | People | | 25 | |  |
| Name of unit B | | UNIT\_NAME\_B | $250 | | People | | 26 | |  |
| Location of unit B | | UNIT\_LOCATION\_B | $50 | | People | | 27 | |  |
| Unit type description B | | UNIT\_TYPE\_B | $100 | | People | | 28 | |  |

**Table A-11: TMDS People Med Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| TMDS Message Identifier | PEOPLE\_MESSAGE\_ID | 8 | People Message | 1 |  |
| People Identifier | PEOPLE\_ID | 8 | People Message | 2 |  |
| Internal TMDS Audit Identifier | AUDIT\_ID | 8 | People Message | 3 |  |
| Medical Treatment Facility Identifier | MTFID | $80 | People Message | 4 |  |
| Message Type Identifier | MSG\_TYPE\_ID | 8 | People Message | 5 |  |
| Message Report Date and Time | REPORT\_DATE\_TIME | $19 | People Message | 6 |  |
| Message Report Date | REPORT\_DATE | 8 | People Message | 6 | Read from first 10 characters of REPORT\_DATE\_TIME.  If year portion of REPORT\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Message Report Time | REPORT\_TIME | $8 | People Message | 6 | Read from positions 12-19 of REPORT\_DATE\_TIME. |
| Data Source | DATA\_SOURCE | $80 | People Message | 7 |  |
| Message Encounter Date and Time | MSG\_ENCOUNTER\_DATE\_TIME | $19 | People Message | 8 |  |
| Message Encounter Date | MSG\_ENCOUNTER\_DATE | 8 | People Message | 8 | Read from first 10 characters of MSG\_ENCOUNTER\_DATE\_TIME.  If year portion of MSG\_ENCOUNTER\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Message Encounter Time | MSG\_ENCOUNTER\_TIME | $8 | People Message | 8 | Read from positions 12-19 of MSG\_ENCOUNTER\_DATE\_TIME. |
| Date and Time Medication was Ordered | ORDER\_DATE\_TIME | $19 | People Message | 9 |  |
| Date Medication was Ordered | ORDER\_DATE | 8 | People Message | 9 | Read from first 10 characters of ORDER\_DATE\_TIME.  If year portion of ORDER\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Medication was Ordered | ORDER\_TIME | $8 | People Message | 9 | Read from positions 12-19 of ORDER\_DATE\_TIME. |
| Case Identifier | CASE\_ID | $120 | People Message | 10 |  |
| Medication Name | MEDICATION\_NAME | $100 | People Message | 11 |  |
| Alternate Medication Name | ALT\_MEDICATION\_NAME | $100 | People Message | 12 |  |
| Medication Dispense Amount | DISPENSE\_AMOUNT | 8 | People Message | 13 |  |
| Date and Time of the Most Recent Medication Refill | MOST\_RECENT\_REFILL\_DATE\_TIME | $19 | People Message | 14 |  |
| Date of the Most Recent Medication Refill | MOST\_RECENT\_REFILL\_DATE | 8 | People Message | 14 | Read from first 10 characters of MOST\_RECENT\_REFILL\_DATE\_TIME.  If year portion of MOST\_RECENT\_REFILL\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time of the Most Recent Medication Refill | MOST\_RECENT\_REFILL\_TIME | $8 | People Message | 14 | Read from positions 12-19 of MOST\_RECENT\_REFILL\_DATE\_TIME. |
| Refill Amount Remaining | REFILL\_AMOUNT\_REMAINING | 8 | People Message | 15 |  |
| Order Identifier | ORDER\_ID | $50 | People Message | 16 |  |

**Table A-12: TMDS People Profile Data**

| **Variable Name** | **SAS Name** | **Format** | **Source Feed** | **Input Position** | **Business Rule** |
| --- | --- | --- | --- | --- | --- |
| People Identifier | PEOPLE\_ID | 8 | People Profile | 1 |  |
| Profile ICD Code | PROFILE\_DIAG\_CODE | $11 | People Profile | 2 |  |
| Profile Duty Limit Explanation | PROFILE\_DUTY\_LIMIT | $4000 | People Profile | 3 |  |
| Date and Time Profile Starts | PROFILE\_START\_DATE\_TIME | $19 | People Profile | 4 |  |
| Date Profile Starts | PROFILE\_START\_DATE | 8 | People Profile | 4 | Read from first 10 characters of PROFILE\_START\_DATE\_TIME.  If year portion of PROFILE\_START\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Profile Starts | PROFILE\_START\_TIME | $8 | People Profile | 4 | Read from positions 12-19 of PROFILE\_START\_DATE\_TIME. |
| Date and Time Profile Ends | PROFILE\_END\_DATE\_TIME | $19 | People Profile | 5 |  |
| Date Profile Ends | PROFILE\_END\_DATE | 8 | People Profile | 5 | Read from first 10 characters of PROFILE\_END\_DATE\_TIME.  If year portion of PROFILE\_END\_DATE\_TIME is less than or equal to 3000 and greater than or equal to 1850 then convert to SAS date, else set to missing. |
| Time Profile Ends | PROFILE\_END\_TIME | $8 | People Profile | 5 | Read from positions 12-19 of PROFILE\_END\_DATE\_TIME. |

**Appendix B: Embedded Fragments Registry Extract**

The file should be written out with a pipe-delimited, variable-length record format and should contain a header record that lists all of the fields in the extract.

The business rules for determining which records to include in the extract are as follows:

1.) Time frame: from data base beginning

2.) All TMDS stored data from ALL Levels of CARE 1,2,3,4

3.) All data origins AHLTA-T, AHLKTA-M, TC2, SAMS, GEMS, TRACES, TMDS

4.) FMP 20, Common Beneficiary Category = 4

5.) The patient SSN must be populated.

**Definition 1: ECODE RANGE**

1. 'E993.0-.9','E979','E991','E959','E923','E995' (Exxx.0 -.9)

**Definition 2:**

**ICD-9 Range**

1. 800-959.9

**Where the records have any of the following KEY WORDS**

1. 'FRAGMENT%'
2. 'FRAG%'
3. 'FRAGS%'
4. 'PENETR%'
5. 'PENETRATING%'
6. 'PENETRATION%'
7. 'FOREIGN%'
8. 'FOREIGN BODY%'
9. 'FOREIGN BODIES%'
10. = 'FB'
11. = 'FBS'
12. = “FB’S”
13. 'PUNCTURE%'
14. 'EMBED%'
15. 'EMBEDDED%'
16. 'SHRAP%'
17. 'SHRAPNEL%'
18. 'RETAIN%'
19. 'RETAINED%'

**Except when the above KEYWORDS are preceded with “NO” or followed by “NOT” (e.g., exclude records with “no fragment” or “shrapnel not”)**

All encounter data that meet the criteria listed above must be collapsed down to a single record per patient SSN, patient date of birth, and patient gender combination.

The layout for the extract is contained in Table B-1.

**Table B-1: Embedded Fragments Registry Extract**

| **Description** | **SAS Variable Name** | **Source Data Set** | **Business Rule** |
| --- | --- | --- | --- |
| ASSESSMENT | ASSESSMENT | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| CDA | CDA | TMDS Basic MTF | Select from the first encounter record (by encounter date) |
| DISPOSITION\_DESCR | DISPOSITION\_DESCR | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| DOB | DOB | TMDS Enhanced Encounter |  |
| ENCOUNTER\_DATE | ENCOUNTER\_DATE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| FIRST\_NAME | FIRST\_NAME | TMDS Enhanced Encounter | Select from the most recent encounter record (by encounter date) |
| GENDER | GENDER | TMDS Enhanced Encounter |  |
| DX1 | DX1 | TMDS Enhanced Encounter | Starting with the diagnosis codes on the first encounter record (by encounter date), create an unduplicated list of the diagnosis codes observed on all of the records for the given patssn. Report only the first 20 unique diagnosis codes. |
| DX2 | DX2 | TMDS Enhanced Encounter |
| DX3 | DX3 | TMDS Enhanced Encounter |
| DX4 | DX4 | TMDS Enhanced Encounter |
| DX5 | DX5 | TMDS Enhanced Encounter |
| DX6 | DX6 | TMDS Enhanced Encounter |
| DX7 | DX7 | TMDS Enhanced Encounter |
| DX8 | DX8 | TMDS Enhanced Encounter |
| DX9 | DX9 | TMDS Enhanced Encounter |
| DX10 | DX10 | TMDS Enhanced Encounter |
| DX11 | DX11 | TMDS Enhanced Encounter |
| DX12 | DX12 | TMDS Enhanced Encounter |
| DX13 | DX13 | TMDS Enhanced Encounter |
| DX14 | DX14 | TMDS Enhanced Encounter |
| DX15 | DX15 | TMDS Enhanced Encounter |
| DX16 | DX16 | TMDS Enhanced Encounter |
| DX17 | DX17 | TMDS Enhanced Encounter |
| DX18 | DX18 | TMDS Enhanced Encounter |
| DX19 | DX19 | TMDS Enhanced Encounter |
| DX20 | DX20 | TMDS Enhanced Encounter |
| ID | ID | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| INJURY\_TYPE | INJURY\_TYPE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| LAST\_NAME | LAST\_NAME | TMDS Enhanced Encounter | Select from the most recent encounter record (by encounter date) |
| MAJOR1 | MAJOR1 | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MAJOR2 | MAJOR2 | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MAJOR3 | MAJOR3 | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MAJOR4 | MAJOR4 | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MAJOR5 | MAJOR5 | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MTF\_ADDRESS | MTF\_ADDRESS | TMDS Basic MTF | Select from the first encounter record (by encounter date) |
| MTF\_BRANCH | MTF\_BRANCH | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| MTF\_COMMENT | MTF\_COMMENT | TMDS Basic MTF | Select from the first encounter record (by encounter date) |
| MTF\_LAT | MTF\_LAT | TMDS Basic MTF | Select from the first encounter record (by encounter date) |
| MTF\_LONG | MTF\_LONG | TMDS Basic MTF | Select from the first encounter record (by encounter date) |
| MTF\_THEATER | MTF\_THEATER | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| OBJECTIVE | OBJECTIVE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| PAY\_GRADE | PAY\_GRADE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| PLAN\_OF\_CARE | PLAN\_OF\_CARE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| RACE\_DESCR | RACE\_DESCR | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| SERVICE\_DESCR | SERVICE\_DESCR | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| SERVICE\_NAME | SERVICE\_NAME | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| PATSSN | PATSSN | TMDS Enhanced Encounter |  |
| SUBJECTIVE | SUBJECTIVE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| UIC | UIC | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| UNIT\_NAME | UNIT\_NAME | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| UNIT\_TYPE | UNIT\_TYPE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| ADDRESS\_LINE1 | D\_ADDR1 | MDR Address | Merge to current Address data |
| ADDRESS\_LINE2 | D\_ADDR2 | MDR Address | Merge to current Address data |
| CITY | D\_CITY | MDR Address | Merge to current Address data |
| STATE | D\_STATE | MDR Address | Merge to current Address data |
| COUNTRY | D\_CNTRY | MDR Address | Merge to current Address data |
| ZIP | D\_ZIP | MDR Address | Merge to current Address data |
| ZIP+4 | D\_ZIPX | MDR Address | Merge to current Address data |
| HOME\_PHONE | D\_HMFON | MDR Address | Merge to current Address data |
| DEPLOYED | DEPLOYED | CTS | If the person is found in the CTS data, set the deployed flag to Y, otherwise set it to N |
| DEATH\_DATE | DTHDATE | Master Death | Merge to the current Master Death File |
| MARITAL\_STATUS | MARITAL\_STATUS | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| ETHNICITY | ETHNICITY | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |
| SUBJECTIVE\_KEYWORDS | SUBJECTIVE\_FINAL\_KEYWORDS | N/A | Per patssn, using all of the encounter records for that patssn, build a list of all of the keywords found that meet the criteria for inclusion in the extract. Separate all of the keywords using ^^^ as the delimiter. If a keyword is found on more than one encounter record, only report it one time. |
| OBJECTIVE\_KEYWORDS | OBJECTIVE\_FINAL\_KEYWORDS | N/A | Per patssn, using all of the encounter records for that patssn, build a list of all of the keywords found that meet the criteria for inclusion in the extract. Separate all of the keywords using ^^^ as the delimiter. If a keyword is found on more than one encounter record, only report it one time. |
| ASSESSMENT\_KEYWORDS | ASSESSMENT\_FINAL\_KEYWORDS | N/A | Per patssn, using all of the encounter records for that patssn, build a list of all of the keywords found that meet the criteria for inclusion in the extract. Separate all of the keywords using ^^^ as the delimiter. If a keyword is found on more than one encounter record, only report it one time. |
| PLAN\_OF\_CARE\_KEYWORDS | PLAN\_OF\_CARE\_FINAL\_KEYWORDS | N/A | Per patssn, using all of the encounter records for that patssn, build a list of all of the keywords found that meet the criteria for inclusion in the extract. Separate all of the keywords using ^^^ as the delimiter. If a keyword is found on more than one encounter record, only report it one time. |
| RECORD\_TYPE | RECORD\_TYPE | TMDS Enhanced Encounter | Select from the first encounter record (by encounter date) |