Theater Medical Data Store (TMDS) Processing for the
MHS Data Repository (MDR)
(Version 1.05.00)

Current 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.

Version	Date	Para/Tbl/Fig	Originator	Description of Change
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

I. 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.

II. 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 (ICD).

III. 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

IV. 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.

V. 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.

VI. 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

VII. 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	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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'

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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'

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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	

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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.

Variable Name	SAS Name	Format	Basic Data Set	Element Name	Business Rule
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

VIII. REFRESH FREQUENCY

Frequency of updates:

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

IX. DATA MARTS

None at this time.

X. 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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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.

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	

Variable Name	SAS Name	Format	Source Feed	Input Position	Business Rule
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	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.
DX1	DX1	TMDS Enhanced Encounter	
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	

Description	SAS Variable Name	Source Data Set	Business Rule
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)

Description	SAS Variable Name	Source Data Set	Business Rule
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)

Description	SAS Variable Name	Source Data Set	Business Rule
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

Description	SAS Variable Name	Source Data Set	Business Rule
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.

Description	SAS Variable Name	Source Data Set	Business Rule
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)