**18 November 2013**

TRICARE Encounter Data – Institutional (TED-I)

for the

MHS Data Repository (MDR)

(Version 1.08.02)

Current Specification

**Revision History**

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| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| 1.03.00 | 07/21/2009 | J. Huber | * Appendix O | * Modified the DRG and MS-DRG grouper input and output layouts. |
| 1.04.00 | 09/09/2009 | J. Huber | * Tables O-1 through O-4 | * Format changes to grouper (v2009.3.3) |
| 1.05.00 | 02/04/2010 | J. Huber | * Page 11 * Page 16 | * Provider Group NPI added * Blank fill Hosp Dept Number |
| 1.06.00 | 02/25/2010 | J. Huber | * Appendix O | * DRG Grouper changes (v2010.0.1) |
| 1.06.01 | 04/05/2010 | J. Huber | * Page 19 | * Clarification in the rule for Hospital Department Number; changed "as of October 1, 2009" to "if cycle date is after October 1, 2009 |
| 1.06.02 | 05/11/2010 | J. Huber | * Page 20 | * Added the field AHRQPVADM. No change to the processor. |
| 1.06.03 | 08/13/2010 | J. Huber | * Internally Derived Fields | * Added contractor numbers 04 and 15 to TED Indicator derivation * Added contractor numbers 04 and 15 to Contract Type derivation |
| 1.06.04 | 10/12/2010 | K. Hutchinson for J. Huber | * Appendix O | * Clarified grouping so it is the same as SIDR. No change to the processor. |
| 1.06.05 | 04/20/2011 | M. North for J. Huber | * Appendix I | * Replaced algorithm for MERHCF flag derivation in Appendix I. Recalculate for all TED-I datasets, starting with most recent and working back to FY01. |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 8 | * PAYGRG - change value of OO (letters) to 00 (numbers) |
| 1.06.05 | 04/25/2011 | J. Huber | * Page 15 | * Add field: Accrual Fund Indicator |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 16 | * DSPONSVC - change blank to Z |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 16 | * RACE - change blank to Z |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 16 | * ETHNIC - change blank to Z |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 17 | * PARC - change blank to ZZ |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 17 | * Drop DDS for FY09+ |
| 1.06.05 | 05/04/2011 | J. Huber | * Page 21 | * Add derived field: ACVGROUP |
| 1.06.05 | 05/10/2011 | J. Huber | * Page 21 | * Add derived field: Age Group Common |
| 1.06.06 | 10/25/2011 | J. Huber | * Appendix O | * Clarified grouping so it is the same as SIDR. |
| 1.07.01 | 10/12/2012 | K. Hutchinson for J. Huber | * Appendix O | * Changed file layout for new DRG and MS-DRG grouper. It is the same as SIDR. |
| 1.07.01 | 10/12/2012 | J. Huber | * Table 1 | * Add Enrollment MEPRS Code and Medical Home Flag. |
| 1.07.02 | 2/12/2013 | J. Huber | * Internally Derived Fields, Appendix I | * Add Contractor Numbers 05,08 * Delete contractor numbers 16,17,18 |
| 1.07.03 | 4/23/2013 | M. North | * Table 1 | * Increase field sizes for ICD10. Removed TED source position column. |
| 1.08.01 | 6/6/2013 | J. Huber | * Table 1 | * Added MSMDC to Derived MDC FY09+ * Added PCM\_ID * Modified ACV Group algorithm * Files will need to be reprocessed back through FY 2009. |
| 1.08.02 | 11/18/2013 | D. McDonald | * Table 1 | * Add TRICARE Young Adult Flag |

# MDR Institutional Data File

1. Source:

The source system is the TMA-Aurora HCSR/TED acceptance system’s Net Master Databases or the Purchased Care Data Warehouse Databases. Two types of source data are sent each month, with each file containing accepted or provisionally accepted claims with end dates of care in the fiscal years required. The types of source data are:

* Pure net TED records
* HCSRs (incorporating adjustments, both TED and HCSR)

These source files are combined in the MDR processor, to produce complete fiscal year claims files for the MDR. Beginning with FY06 data, no HCSRs will be needed. Note that TED adjustments to HCSRs (ATOH) will continue to be required for fiscal years prior to FY06. All HCSR and ATOH processing will cease in January 2009.

1. Transmission (Format and Frequency):

Purchased care data files are normally transmitted via secure FTP from TMA-Aurora to the MDR according to ICD XX. Files are sent monthly. Purchased care data records consist of institutional claims[[1]](#footnote-1), non-institutional claims, and provider records. This specification deals solely with institutional records.

1. Organization and Batching

There are four final MDR TED institutional files[[2]](#footnote-2). The files include:

* Master TED Institutional File: The master file contains most raw fields (except revenue line items) from the source data, as well as appended fields described in this document. This file is the core MDR TED Institutional Database.
* Revenue File: Each record represents a revenue line item from the revenue file. This file contains a TED (or HCSR) Number, cycle year and month, the end date of care, the revenue line item number and associated detail. There are two appended fields, described in this document. This file is intended to be used in combination with the master TED institutional file.
* Cancellation and Denial Master File: Contains all claims with allowed amount (field number 1-125) less than or equal to 0. The format is the same as the TED interface with the MDR, with no appended fields. HCSR cancellations are not contained in this file. It is assumed that these records would be in the MDR HCSR dataset.
* Cancellation and Denial Revenue File: Contains all revenue segments for claims with allowed amount (field number 1-125) less than or equal to 0. The format is the same as the revenue segment interface with the MDR, with no appended fields. HCSR cancellations are not contained in this file. It is assumed that these records would be in the MDR HCSR dataset.

The master TED Institutional and Revenue Files are segmented by fiscal year, based on end date of care in the claim header.[[3]](#footnote-3) The cancellation and denial files are cumulative, spanning all years of data.

The initial file load is a one-time requirement and should represent all care with end date of care in FY04 or later. Previous year’s data will be incorporated into the new processor described herein, but this will occur at a later time.

Refreshes to the MDR institutional files are received and processed monthly. Priority is given to process FY04 and forward first before processing older years going back to FY00.

1. Receiving Filters

Only net records are provided to the MDR, as described in Section I. Only accepted (or provisionally accepted in the case of TED) records are provided in the source data. For the initial load, records are included if the end date of care on the net claim is in the fiscal year. Fiscal year files will be created for FY04 and later, but it is envisioned that the processor will be implemented in phases, with delivery expected for the most recent fiscal year first, with subsequent years to follow in reverse order.

Each monthly TED update batch includes records accepted or provisionally accepted by the TMA-Aurora system in the previous month. This should include initial records, adjustments to records previously sent, and cancellations and denials. The HCSR data should also be updated each month, including all new HCSRs accepted (through June 30, 2005), and all TED Adjustments to HCSRs (applied to the original HCSR) accepted or provisionally accepted the previous month.

For the revenue file, each monthly update includes all TED revenue line items for TED Numbers contained in the monthly Master Institutional data feed. This means that the feed will include all line items associated with the new records, as well as all revenue line items associated with updated records. That is, when a claim is updated for any reason, all revenue line items should be provided in the monthly revenue line item data feed. (The same basic rules apply for providing HCSRs and ATOHs).

1. Update process

The data in the HCSR feed is first mapped to TED format, and then appended to the corresponding TED feeds[[4]](#footnote-4). When the incremental raw feeds of Institutional data are processed, three types of records are removed from them. First, records that are denied or cancelled (records with an allowed amount less than or equal to 0) are separated out and added to the master cancellation data files (header and revenue). Then, ATOH records are removed from the TED feeds, if there are any, and records from the wrong fiscal year are dropped from all data feeds.

Using the remaining records, the processor identifies records that may potentially have changed fiscal year when the record was updated and the end date of care moved into the next fiscal year. These records are not removed from the data feeds, they are just identified and saved to an intermediate data set. This data set contains the record key for every record where the admission date is in a fiscal year prior to the fiscal year of the end date of care. This file will be referred to as the previous fiscal year data set later in this document.

To update the master fiscal year MDR Institutional TED data sets it is important to apply updates and prepare data sets in the following order;

* Master Institutional TED File:

Next, the processor appends variables to the incremental header data feed. Then it combines incremental and master header data sets, interleaving records by TED number and cycle date. The processor retains only the most recent version of the TED, as identified by TED number[[5]](#footnote-5). Then the processor uses the previous fiscal year data set to remove from the master data set any records that have moved to a subsequent fiscal year. This is done to ensure that records are not in two fiscal years.

Then the master cancellation data set is used to remove cancelled TEDs from the updated master data set. Finally, additional processing is performed to append more fields to the master TED-I data set. All of the appended fields are described in the next two sections of this document.

* Revenue File:

The processor first identifies which records are in both the incremental and the master revenue data sets and deletes those records from the master data set. Next the processor combines the incremental and modified master data sets to produce an updated master data set. The processor then uses the previous fiscal year file to remove any matching TED revenue segments from the updated master revenue data set. Finally, the intermediate cancellation data set is used to remove cancelled TEDs from the updated master revenue data set.

Note that the fiscal years must be processed in order, with the most recent fiscal year being processed first.

1. Field Transformations and Deletions for MDR Core Database

This section of this functional specification describes the data merges that are necessary to append many of the fields in the MDR TED Institutional file.

The table below describes each reference (or data) file being used to append fields to each MDR Institutional record. This table also lists whether or not the merge should be accomplished against the monthly feed (increment) or whether it is necessary to re-merge the corresponding file to each of the MDR Institutional records during each monthly process[[6]](#footnote-6). The basis upon which the MDR institutional records should be merged to the reference (or data) files is also described.

| **Merge** | **Merge to** | **Date Matching** | **Additional Matching** |
| --- | --- | --- | --- |
| Longitudinal VM4 File | Master | Begin Date of Care on TED, with begin and end dates for each changeable demographic segment. | EDI\_PN if available. |
| DEERS Person Demographics file | Increment |  | Match to HCSR or ATOH records based on SPONSSN and DDS (if both fields are no blank), otherwise, merge on PATSSN. |
| DEERS Dependent Suffix and EDI\_PN File[[7]](#footnote-7) | Initial HCSR and ATOH | FY based on end date of care | Match to HCSR or ATOH records by TED Key**. One time** **requirement to add EDI\_PN and DDS (if empty)**; only needed to build the initial datasets. Must be done prior to application of LVM4 and the DEERS Person Demographics file. **Retain DDS and EDI\_PN values in subsequent processing.** |
| Longitudinal Enrollment | Master | Fiscal year and calendar month of begin date of care on NI record, with enrollment information from corresponding monthly enrollment segment. | Sponsor social and DDS. **One time requirement for FY03 and earlier only**. Only needed to apply the DEERS ACV and DEERS Enrollment site variables. **Retain values in subsequent processing**. |
| Master Person Index | Master | None | For records with blank EDI\_PN, match TED and ATOH records by sponssn, patsex, patdob and grouped member relationship code. |
| DRG Weight Table | Increment | FY of end date of care and FY of MDR DRG Weight Table for FY 2008 and earlier. For FY 2009 and later, match 2008 weight table to TEDs. | Derived DRG from institutional data record, DRG from weight table. |
| MS DRG Weight Table | Increment | FY of end date of care and FY of MDR DRG Weight Table for FY 2009 and later. For FY 2008 and FY 2007, use FY 2009 table. | MSDRG from institutional data record, DRG from weight table. |
| Diagnosis and Procedure Code Mapping Format | Increment | FY of Admission Date and Associated Version Number of DRG Grouper Software (see Appendix O on DRG Grouping) |  |
| DMISID | Master | FY of end date of care, FY of MDR DMISID SAS format file. | Application based on enrollment DMISID, DEERS enrollment DMISID and catchment area DMISID |
| Omni-CAD | Increment | FY/FM of end date of care, FY/FM of MDR Omni CAD format file | Patient zip code & sponsor Service. Also based on provider zip |
| Inpatient Professional Services Tail file[[8]](#footnote-8) | Increment | FY of end date of care and FY of MDR inpatient professional services format file | Derived DRG, bed days, amount allowed, and coverage category |
| Administrative Tail file | Increment | FY of end date of care and FY of MDR administrative tail format file. | Contract type |
| Reservist GWOT file | Master | Admission date and dates associated with each reservist benefit type segment in the MDR Reservist format files. | Sponsor social security number |
| Final HCSR Payment Amount Reference file | Initial HCSR and ATOH | FY of reference file and FY of claim file | TED Number. **One time** **requirement**; only needed to build the initial datasets. **Retain values in subsequent processing.** |
| TED Episode Reference File | Master | Begin date of care | EDI\_PN |
| 3M Core Grouping Software | Increment | See appendix for description of processing to add DRGs to MDR Institutional Records. | |
| AHRQ Preventable Admission Indicator Software | Master | See appendix | |

Business rules for each of the appended fields that result from the merges above, are described in the body of the format table in Section VII, or in an appendix, referenced in that table.

1. Record Layout and Content

The MDR TED files are stored as SAS data sets, in separate fiscal year files. There are two primary TED-Institutional Datasets for each fiscal year: The Master TED data file, and the Revenue data file. Records in the cancellation files remain in the format contained in the feed to the MDR (text).

The table below describes the format, file layout and field derivation rules for the master institutional database.

Table 1 Master MDR Institutional Header TED SAS Dataset

| **MDR TED Field** | **SAS Name** | **Format** | **Source Element - HCSR** | **Source Position - HCSR** | **Source Element - TED** | **Business Rule** |
| --- | --- | --- | --- | --- | --- | --- |
| TED Number | tedno | $24 | 1-015 | 65-71 | 1-015 | No transformation. |
| 1-016 | 72-74 | 1-020 |
| 1-020 | 75-81 | 1-025 |
| 1-021 | 82-87 | 1-030 |
| 1-025 | 88 | 1-035 |
| Process to Completion Date | procdate | yyyymmdd | 1-035 | 89-96 | 1-040 | Convert to SAS Date. |
| Sponsor SSN | sponssn | $9 | 1-045 | 105-113 | 1-050 | No transformation. |
| Sponsor SSN Type Code | idtype | $1 | DEERS | DEERS | 1-051 | If TED indicator is T then no transformation. Otherwise: merge in from DEERS demographic merge file (appendix J). Field may not be populated for HCSRs and ATOHs in FY03 and prior. |
| TED Sponsor Pay Grade | paygrd | $2 | 1-050 | 115-116 | 1-056 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A.  Change value of OO (letters) to 00 (numbers).  Apply retroactively to all TED-I datasets, working backwards from current year to FY01. |
| Sponsor Pay Plan | payplan | $5 | 117-121 | 1-057 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Service Branch | sponsvc | $1 | 1-055 | 122 | 1-060 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| AGR Service Legal Authority | agrauth | $1 | DEERS | DEERS | 1-065 | If TED indicator is T then no transformation. Otherwise: merge in from DEERS demographic merge file (appendix J). If agrauth from DEERS merge is blank then assign to ‘Z’. Field may not be populated for HCSRs and ATOHs in FY03 and prior. |
| Sponsor Status | memcat | $1 | 1-065 | 124 | 1-066 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Member Relationship Code | memrln | $1 | 1-070 | 125 | 1-070 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Last Name | lastname | $35 | 1-075 | 126-160 | 1-076 | If TED indicator is T, then no transformation. Otherwise, parse into separate fields |
| First Name | frstname | $25 | 161-185 | 1-077 |
| Middle Name | midlname | $25 | 186-210 | 1-078 |
| Cadency | cadency | $10 | DEERS | DEERS | 1-079 | If TED indicator is T then no transformation. Otherwise: merge in from DEERS demographic merge file (appendix J). Field may not be populated for HCSRs and ATOHs in FY03 and prior, should the HCSR be adjusted with an ATOH. |
| Patient SSN | patssn | $9 | 1-080 | 221-229 | 1-080 | If TED indicator is T then no transformation. Otherwise if TED indicator is not T and patssn is empty: merge in from DEERS demographic merge file (appendix J). Field may not be populated for HCSRs and ATOHs in FY03 and prior. |
| Patient SSN Type Code | pidtype | $1 | DEERS | DEERS | 1-081 | If TED indicator is T then no transformation. Otherwise: merge in from DEERS demographic merge file (appendix J). Field may not be populated for HCSRs and ATOHs in FY03 and prior. |
| Date of Birth | patdob | yyyymmdd | 1-085 | 231-238 | 1-085 | No transformation. |
| EDI\_PN | edi\_pn | $10 | N/A | N/A | 1-095 | Appendix K and Appendix M |
| DEERS Patient ID | deersid | $11 | DEERS | DEERS | 1-097 | If TED indicator is T then no transformation. Otherwise: merge in from DEERS demographic merge file (appendix J). Field may not be populated for HCSRs and ATOHs in FY03 and prior. |
| Gender | patsex | $1 | 1-095 | 260 | 1-100 | No transformation. |
| Patient Zip Code | patzip | $5 | 1-100 | 261-265 | 1-105 | If TED indicator is T then no transformation. Otherwise, if the content of the patient zip code is not numeric, apply mapping to take HCSR state codes to TED values. |
| Patient Zip Code + 4 | patzip4 | $4 | 266-269 | No transformation. |
| Enrollment Status | enrstat | $2 | 1-105 | 270-271 | 1-110 | If Enrollment DMISID begins with 69 and enrollment status is not “U”, then set to “U”. Otherwise, fill with enrollment status from the data feed. |
| HCDP | hcdp | $3 | DEERS | DEERS | 1-111 | If TED indicator is T, no transformation. Otherwise, fill with DEERS HCDP from LVM4 merge. |
| TED Region | tedreg | $1 | N/A | N/A | 1-112 | If TED indicator is T then no transformation. Otherwise leave blank. |
| Enrollment DMISID | enrsite | $4 | 1-205 | 277-280 | 1-115 | No transformation. |
| Total Amount Billed | bill | SN9.2 | 1-115 | 281-289 | 1-120 | No transformation. |
| Total Amount Allowed | allow | SN9.2 | 1-120 | 290-298 | 1-125 | No transformation. |
| Total OHI Paid | ohi | SN9.2 | 1-125 | 299-307 | 1-130 | No transformation. |
| Type of Other Government Health Insurance | govins | $1 | N/A | N/A | 1-131 | If TED indicator is T then no transformation. Otherwise set to blank. |
| Begin Reason Code for Other Government Ins | govinbeg | $1 | N/A | N/A | 1-132 | If TED indicator is T then no transformation. Otherwise set to blank. |
| Total Patient Cost Share | patcost | SN9.2 | D | 780-787, 788-795 | 1-135 | If TED indicator is T then no transformation. Otherwise, sum of patient coinsurance and patient copayment (read in from feed to derive this field, but then don't retain separately) |
| Copayment Factor | copayfac | $1 | D | D | 1-136 | If the TED indicator is T then no transformation. Otherwise, if comben is ‘4’ (AD) and not TRS (HCDP not in (401,402, 405-412)), then if rank is E4 or below (payplan='ME' and paygrd in (‘00’ '01' '02' '03' '04') or payplan=’MC’ and paygrd=’01’), set to A. If comben is ‘4’ (AD) and not TRS (HCDP not in (401,402, 405-412)), then if rank is E5 or greater, set to B. If comben in (‘2’ ‘3’) or (comben is ‘4’ (AD) and TRS (HCDP in (401,402, 405-412)), then C, else W. |
| Total Amount Paid | paid | SN9.2 | 1-155 | 320-328 | 1-140 | No transformation. |
| Total Interest Paid | intpaid | SN9.2 | N/A | N/A | 1-145 | No transformation. |
| Reason for Interest | intreas | $2 | N/A | N/A | 1-150 | No transformation. |
| Override Code 1 | ovride1 | $2 | 1-170 | 340-345 | 1-160 | Parse into separate fields |
| Override Code 2 | ovride2 | $2 | 1-170 |
| Override Code 3 | ovride3 | $2 | 1-170 |
| Submission Code | subcode | $1 |  | 346 | 1-165 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Care Authorization/NAS Number | authnum | $15 | 1-110 | 347-361 | 1-170 | No transformation. |
| Care Authorization/NAS Issue Reason | authrsn | $1 | 1-202 | 362 | 1-175 | No transformation. |
| Care Authorization/NAS Exc Reason | authexcp | $2 | 1-180 | 363-364 | 1-180 | No transformation. |
| Special Processing Code 1 | sprocd1 | $2 | 1-197 | 365-372 | 1-185 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Special Processing Code 2 | sprocd2 | $2 | 1-197 |
| Special Processing Code 3 | sprocd3 | $2 | 1-197 |
| Special Processing Code 4 | sprocd4 | $2 | N/A | No transformation. |
| Health Care Delivery Program Special Entitlement Code | hcdpspec | $2 | N/A | N/A | 1-186 | No transformation. |
| Pricing Rate Code | pricert | $2 | 1-198 | 798 | 1-190 | No transformation. |
| Provider State/Country Code | provloc | $3 | 1-210 | 377-379 | 1-195 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Provider Tax ID | taxid | $9 | 1-212 | 380-388 | 1-200 | No transformation. |
| Multiple Provider Suffix | multprov | $4 | 1-215 | 389-392 | 1-205 |
| Provider Individual NPI | provnpi | $10 | N/A | N/A | N/A | Blank fill. |
| Provider Group NPI | grpnpi | $10 | N/A | N/A | 1-215 | No transformation. Not populated prior to January 1, 2009. |
| Provider Zip | provzip | $5 | 1-220 | 413-417 | 1-220 | If TED indicator is T then no transformation. Otherwise, if the content of the provider zip code is not numeric, apply mapping to take HCSR state codes to TED values. |
| Provider Zip +4 | provzip4 | $4 | 1-220 | 418-421 | No transformation. |
| Provider Participation Indicator | provpart | $1 | 1-225 | 422 | 1-225 | No transformation |
| Provider Network Status Indicator | network | $1 | N/A | N/A | 1-230 | No transformation |
| Type of Institution | insttype | $2 | 1-230 | 424-425 | 1-235 | No transformation. |
| Claim Form Type | clmform | $1 | 1-204 | 426 | 1-240 | No transformation. |
| Billing Frequency Code | billfreq | $1 | 1-255 | 427 | 1-250 | No transformation. |
| Type of Admission | admtype | $1 | 1-260 | 428 | 1-255 | No transformation. |
| Source of Admission | admsrc | $1 | 1-265 | 429 | 1-260 | If TED indicator is T then no transformation. Otherwise, apply mapping in appendix A. |
| Admission Date | admdate | yyyymmdd | 1-235 | 430-437 | 1-265 | Convert to SAS date |
| Disposition Status | dispstat | $2 | 1-275 | 438-439 | 1-270 | No transformation |
| Begin Date of Care | begdate | yyyymmdd | 1-280 | 440-447 | 1-275 | Convert to SAS date. |
| End Date of Care | enddate | yyyymmdd | 1-285 | 448-455 | 1-280 | Convert to SAS date. |
| Administrative Clin 1 | admcln1 | $6 | N/A | N/A | 1-283 | Blank fill for HCSR. |
| Administrative Clin 2 | admcln2 | $6 | N/A | N/A | Blank fill for HCSR. |
| Administrative Clin 3 | admcln3 | $6 | N/A | N/A | Blank fill for HCSR. |
| Authorized Days | authdays | SN3 | 1-300 | 474-476 | 1-285 | No transformation |
| Raw DRG | rawdrg | $3 | 1-355 | 477-479 | 1-290 | No transformation. |
| SNF HIPPS Code | hipps | $5 | N/A | N/A | 1-292 | Blank fill for HCSR |
| Admitting Diagnosis | admdx | $7 | 1-310 | 485-490 | 1-295 | No transformation |
| Principle Diagnosis | dx1 | $7 | 1-315 | 491-496 | 1-300 | No transformation |
| Secondary Diagnosis 1 | dx2 | $7 | 1-320 | 497-502 | 1-305 | No transformation |
| Secondary Diagnosis 2 | dx3 | $7 | 1-325 | 503-508 | 1-310 | No transformation |
| Secondary Diagnosis 3 | dx4 | $7 | 1-330 | 509-514 | 1-315 | No transformation |
| Secondary Diagnosis 4 | dx5 | $7 | 1-335 | 515-520 | 1-320 | No transformation |
| Secondary Diagnosis 5 | dx6 | $7 | 1-336 | 521-526 | 1-325 | No transformation |
| Secondary Diagnosis 6 | dx7 | $7 | 1-337 | 527-532 | 1-330 | No transformation |
| Secondary Diagnosis 7 | dx8 | $7 | 1-338 | 533-538 | 1-333 | No transformation |
| Secondary Diagnosis 8 | dx9 | $7 | 1-339 | 539-544 | 1-340 | No transformation |
| Secondary Diagnosis 9 | dx10 | $7 | N/A | N/A | 1-335 | Blank fill for HCSR |
| Secondary Diagnosis 10 | dx11 | $7 | N/A | N/A | 1-337 | Blank fill for HCSR |
| Secondary Diagnosis 11 | dx12 | $7 | N/A | N/A | 1-340 | Blank fill for HCSR |
| Principle Procedure | proc1 | $7 | 1-340 | 563-567 | 1-345 | No transformation |
| Secondary Procedure 1 | proc2 | $7 | 1-345 | 568-572 | 1-350 | No transformation |
| Secondary Procedure 2 | proc3 | $7 | 1-350 | 573-577 | 1-353 | No transformation |
| Secondary Procedure 3 | proc4 | $7 | 1-351 | 578-582 | 1-355 | No transformation |
| Secondary Procedure 4 | proc5 | $7 | 1-352 | 583-587 | 1-358 | No transformation |
| Secondary Procedure 5 | proc6 | $7 | 1-353 | 588-592 | 1-360 | No transformation |
| Secondary Procedure 6 | proc7 | $7 | N/A | N/A | 1-362 | Blank fill for HCSR |
| Secondary Procedure 7 | proc8 | $7 | N/A | N/A | 1-364 | Blank fill for HCSR |
| Secondary Procedure 8 | proc9 | $7 | N/A | N/A | 1-365 | Blank fill for HCSR |
| Secondary Procedure 9 | proc10 | $7 | N/A | N/A | 1-368 | Blank fill for HCSR |
| Secondary Procedure 10 | proc11 | $7 | N/A | N/A | 1-370 | Blank fill for HCSR |
| Secondary Procedure 11 | proc12 | $7 | N/A | N/A | 1-373 | Blank fill for HCSR |
| TED Record Correction Indicator | reccrt | $1 | N/A | N/A | 1-374 | Blank fill for HCSR |
| Number of Revenue Segments | revsegs | 3 | 1-360 | 624-626 | 1-375 | No transformation |
| Administrative Claim Count Code 1 | clmcnt1 | SN1 |  | 627 | D | No transformation |
| Administrative Claim Count Code 2 | clmcnt2 | SN1 | N/A | N/A | D | Blank fill for HCSR |
| Administrative Claim Count Code 3 | clmcnt3 | SN1 | N/A | N/A | D | Blank fill for HCSR |
| Common Beneficiary Category | comben | $1 |  | 642 | D | If HCDP in (401, 402, 405-412): if patient is a sponsor (memrln=’A’) then set to 2, else set to 3.  If HCDP not in (401, 402, 405-412), then set to the common beneficiary category in the data feed. |
| Benefit Claim Count Code | benclmct | 1 | D | 643 | D | No transformation |
| FY | fy | $4 | D | 644 | D | No transformation |
| Contractor Number | konum | $2 | D | 650 | D | No transformation |
| Cycle Number | cycle | $8 | D | 652 | D | No transformation |
| Diagnosis Code Edition Number | dxedit | $1 | 1-190 | 660 | D | No transformation |
| TNEX Region | rawtreg | $1 | N/A | N/A | D | If TED indicator is T then no transformation. Otherwise, apply  MDR OMNI CAD matching on FY, FM and patient zip code |
| Region | rawreg | $2 | D | 666 | D |  |
| Initial Transmission Date | trnsdate | yyyymmdd | N/A | N/A | D | Blank fill for HCSR. |
| Patient Age | patage | 3 | D | 687 | D | No transformation |
| Acceptance Date | accptdt | yyyymmdd | D | 745 | D | Convert to SAS date. No transformation if TED indicator is ‘T’. Otherwise concatenate day ‘01’ to 6-char YYYYMM to enable SAS date format. |
| TMA Batch/Voucher Processing | vouchdt | yyyymmdd | D | 765-771 (batch)  772-779 (voucher) | D | No transformation if TED indicator is ‘T’. Otherwise, If batch date is a valid date then fill voucher date with batch date, else no transformation. Note, batch date is in Julian date format and voucher date is in YYYYMMDD format. |
| Bed Days | days | SN3 | 1-295 | 761 | D | No transformation |
| Accrual Fund Eligibility Indicator | accrual\_fund\_ind | $1 | N/A | N/A | D | No transformation if TED indicator is ‘T’, otherwise blank fill for HCSR. |
| Derived DRG | drg | $3 | N/A | N/A | N/A | New DRG (text format) and New MDC (text format) from 3M Core Grouping software (DRG). See appendix O for specifics. |
| Derived MDC | mdc | $2 | N/A | N/A | N/A | Before FY09 use MDC from Table O-1  FY09+ use MSMDC from Table O-4 |
| Acute Care DRG | ac\_drg | $3 | N/A | N/A | N/A | If acute care indicator is 1 then fill with derived DRG, otherwise fill with ‘000’ |
| MS DRG (Acute Care) | msdrg | $3 | N/A | N/A | N/A | Only populated FY07 forward. If acute care indicator is not 1, then set to ‘000’ |
| MS DRG (All Care) | msdrg\_all | $3 | N/A | N/A | N/A | MS-DRG (text format) from 3M Core Grouping Software. Only populated FY07 forward. See appendix O for specifics. |
| Reservist Status | res\_stat | $1 | N/A | N/A | N/A | Populate with reservist status from MDR Reservist format file, if the admission date is between the begin and end dates of the reservist status code. |
| Special Operations Code | soc | $2 | N/A | N/A | N/A | Populate with special operations code from MDR Reservist format file, if the admission date is between the begin and end dates of the reservist status code. |
| DEERS Enrollment DMISID | denrsite | $4 | N/A | N/A | N/A | Fill with enrollment DMISID from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the enrollment site. |
| DEERS Alternate Care Value | acv | $1 | N/A | N/A | N/A | Fill with ACV from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the ACV. |
| DEERS Health Care Delivery Program Code | dhcdp | $3 | N/A | N/A | N/A | Fill with DEERS health care delivery program coverage code from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the DEERS health care delivery program coverage code. |
| DEERS Beneficiary Category | bencat | $3 | N/A | N/A | N/A | Fill with DEERS beneficiary category from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the DEERS beneficiary category.Change blank and Z to UNK. Apply retroactively to all TED-I datasets, working backwards from current year to FY01. |
| DEERS Sponsor Service Aggregate | dsponsvc | $1 | N/A | N/A | N/A | Fill with DEERS sponsor service (aggregate) from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the DEERS sponsor service (aggregate).Change blank to Z. Apply retroactively to all TED-I datasets, working backwards from current year to FY01. |
| DEERS Zip Code | deerszip | $5 | N/A | N/A | N/A | Fill with DEERS zip code from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the DEERS zip code. |
| DEERS Medical Privilege Code | privcode | $1 | N/A | N/A | N/A | Fill with DEERS privilege code from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the DEERS privilege code. |
| DEERS Race Code | race | $1 | N/A | N/A | N/A | Fill with DEERS Race Code from LVM-4. Change blank to Z. Apply retroactively to all TED-I datasets, working backwards from current year to FY01. |
| DEERS Ethnicity Code | ethnic | $1 | N/A | N/A | N/A | Fill with DEERS Ethnicity Code from LVM-4. Change blank to Z. Apply retroactively to all TED-I datasets. |
| DEERS Dependent Suffix | DDS | $2 | N/A | 796 | N/A | If TED indicator is T: fill with DDS from LVM-4 if a match is found, else if no match is found fill DDS from record, else DDS is blank.  If TED indicator is not T: When preparing initial database, if the DDS is blank, then merge record to the DDS and EDI\_PN Reference File by matching HCSR keys. Do not overwrite this value during subsequent processing, even when applying ATOHs. Drop DDS for FY09+. |
| TRICARE Prime Remote Eligibility Flag | tprelig | $1 | N/A | N/A | N/A | Fill with TPR Eligibility code from LVM-4, if the begin date of care on the claim is between the begin and end date associated with the TPR eligibility code. |
| Person Association Reason Code | parc | $2 | N/A | N/A | N/A | From MPI merge. See MPI specification. Change blank to ZZ. Apply retroactively to all TED-I datasets, working backwards from current year to FY01. |
| Admission Count | adm | 8 | N/A | N/A | N/A | If the submission code, legacy equal (‘C’, ‘D’ or ‘E’) or authorized days <= 0 or type of institution is ‘70’ then admission count is 0; else if (type if institution is 78 or 79 (Hospice) and no revenue codes are 0655 or 0656 then admission count is 0; else if bill frequency code is 1, 2 7 or (bill frequency code is 3 or 4 and submission code, legacy is not I, R or O) then admission count is 1, else admission count is 0. |
| Category of Care | catcare | $2 | N/A | N/A | N/A | See Appendix |
| MERHCF Flag | tflflag | $1 | N/A | N/A | N/A | See Appendix |
| Fiscal Year of Acceptance Date | fyaccpt | $4 | N/A | N/A | N/A | Fiscal year of acceptance date |
| Fiscal Month of Acceptance Date | fmaccpt | $2 | N/A | N/A | N/A | Fiscal month of acceptance date |
| Provider Choice | prvchc | $3 | N/A | N/A | N/A | If any of the special processing codes (1-4) are “PO” then set = “POS” (prime point of service); otherwise, if enrollment status is “V” then set = “EXT” (extra); otherwise if enrollment status is “T” then set = “STD” (standard), otherwise leave blank. |
| Total Bed Days this Episode | totdays | 8 | N/A | N/A | N/A | End Date – Admission Date +1, for claims where disposition status is not 30; otherwise set to 0 |
| Acute Care Hospital Indicator | acute | $1 | N/A | N/A | N/A | If institution type is in (10, 11, 12, 44, 45, 47, 49, 50, 51, 55, 57, 59, 90, 91) then set = 1, otherwise set = 0. |
| IBNR Category | ibnrcat | $1 | N/A | N/A | N/A | if enrstat in ('FE' 'FS') then set ibnrcat=1; otherwise ibnrcat=2 |
| Fiscal Month | fm | $2 | N/A | N/A | N/A | Fiscal month equivalent of calendar month of end date of care |
| Calendar Year | cy | $4 | N/A | N/A | N/A | Characters 1-4 of the end date of care. |
| Calendar Month | cm | $2 | N/A | N/A | N/A | Characters 5 and 6 of the end date of care. |
| Preventable Admission Indicator | prevadm | $1 | N/A | N/A | N/A | See Appendix |
| TED Indicator | tedind | $1 | N/A | N/A | N/A | If the last byte of the TED Number is either 0 (zero) or 5, then set the TED Indicator to ‘T’; else if the contractor number is in (02,04,05,08,15,61,62,63,64,65,70,71,99) then set the TED Indicator to ‘A’; else set the TED Indicator to ‘H’. |
| Program Indicator Code | pic | $1 | N/A | N/A | N/A | If any of the special processing codes have the value “PF”, then set program indicator code equal to H, otherwise set to I |
| Coverage Category | cvgcat | $1 | N/A | N/A | N/A | If any of the special processing codes (up to 4) have the value (“FF”, “FS”, "FG", "R", "T") or enrollment status is ’PS’ then set to “T” (TDEFIC/TFL), else if enrollment status is V then set to “E” (Extra), else if enrollment status is T then set to “S” (Standard), else if enrollment status is “W” or starts with an “S” then set to “A” (Supp Care) else if any of the special processing codes are “PO” then set to “X” (POS), else if enrollment status in (‘U’, “Z”, “WF” “X” “XF”) then set to “P” (Prime), else set to “O” (Other). |
| Number of Births | births | 8 | N/A | N/A | N/A | If the 1st 4 characters of any of the principle or secondary diagnosis codes is V270 or V271, set number of births to 1, else if the 1st 4 characters of any of the diagnosis codes is V272, V273 or V274, then set number of births to 2, else if the 1st 4 characters of any of the diagnosis codes is V275, V276, V277 or V279 then set number of births to 3, else set number of births to 0. |
| Monthly Transaction Amount | mnamt | 8 | N/A | N/A | N/A | If the claim is an intial claim, set to amount paid. If claim is an adjustment record, set to difference between the amount paid on the adjustment record and the amount paid on the record in the database. |
| Age Group Code | agegrp | $1 | N/A | N/A | N/A | If 0 <= patage <= 4 then set to “A”, else if patage<=14 then set to “B”, else if patage<=17 then set to “C”, else if patage<=24 then set to “D”, else if patage<=34 then set to “E”, else if patage<=44 then set to “F”, else if patage<=64 then set to “G”, else if patage not blank or negative set to “H”, else set to “Z” |
| Provisional Acceptance Indicator | provaccp | $1 | N/A | N/A | N/A | If positions 690-696 (these are the provisional acceptance indicators) are blank in the TED data feed, then set to 0, otherwise set to 1 |
| Contract Type | contype | $1 | N/A | N/A | N/A | If contractor number in (62, 63, 64, 04,05,08) then contype=’1’ (Tnex), else if contractor number in (03, 06, 07, 11, 25, 26, 60) then contype=’2’ (MCSC) else if contractor number is 61 or 70 then contype is 3 (Trex), else if contractor number is 65 or 71 then contype=’4’ (TDEFIC), else if contractor number is 02 then contype=’5’ (TMOP) else if contractor number is 15 then contype=’7’ (overseas) else contype=’6’ (other). |
| Type of Submission, Legacy | typesub | $1 | 1-175 | $346 | N/A | No transformation for HCSR. See appendix for TED (Map TED values to HCSR values). |
| Hospital Department Number | hospdep | $2 | N/A | N/A | N/A | If a match is found for the principal DX in the hospital department table then hospdep= value from the table, else hospdep=‘14’. Blank fill if cycle date is after October 1, 2009. |
| Amount Patient Pay | patpay | 8 | N/A | N/A | N/A | Amount patient pay=total amount allowed-total amount paid |
| TNex Option Period | op | $1 | N/A | N/A | N/A | Assign per appendix F unless contractor number is 71. If contractor number is 71 and end date of care is between July1, 2008 and June 30, 2009 then set to 1, else if edoc is between July 1, 2009 and June 30, 2010 then set to 2. |
| Hybrid Enrollment Site | hybenr | $4 | N/A | N/A | N/A | If TED Indicator is T then no transformation. Otherwise, if comben=’4’ and HCDP not in ( 401, 402, 405-412) or if enrollment HSSC region (ENRHSSC) is “O” or blank, then set to DEERS Enrollment Site (denrsite); else set to enrollment site (enrsite). |
| Space A (reliant) Flag | spacea | $1 | N/A | N/A | N/A | For FY04+: If DEERS ACV in A, E, H, J, M, Q then space A flag is N. Else space A flag is Y. Prior to FY04, if enrollment status is U, Z, W or WF, or bencat is 4 then space A flag is N, else Y. |
| Underwritten Flag | undflag | $1 | N/A | N/A | N/A | If TED indicator is ‘T’ then apply transformation (See Appendix), otherwise set to blank. |
| Admission Fiscal Year | admfy | $4 |  |  |  | If month in 10, 11, 12 then set to the first 4 characters of the admission date + 1; else set to first 4 characters of the admission date. If the resulting number is less than 2001, set to 2001. |
| Primary Diagnosis, POA | dx1poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 1, POA | dx2poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 2, POA | dx3poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 3, POA | dx4poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 4, POA | dx5poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 5, POA | dx6poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 6, POA | dx7poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 7, POA | dx8poa | $1 | N/A | N/A | TBD | TBD |
| Sec Diagnosis 8, POA | dx9poa | $1 | N/A | N/A | TBD | TBD |
| ACV Group | acvgroup | $15 | N/A | N/A | N/A | If ACV in (A, E, H or J) then set to “Prime”, else if ACV in (B, F) then set to “Overseas Remote”, else if ACV in (G, L) then set to “Plus”, else if ACV is U then set to “Desig Prov”, else if ACV in (R, V) then set to “Other”, else if ACV in (M, Q) then set to “Reliant”, else if Bencat Common = 4 then set to “Reliant”, else set to “Other”. Apply retroactively to all TED-I datasets, working backwards from current FY to FY01. |
| Age Group Common | expage | $1 | N/A | N/A | N/A | If 0 <= patage <= 4 then set to “A”, else if patage<=14 then set to “B”, else if patage<=17 then set to “C”, else if patage<=24 then set to “D”, else if patage<=34 then set to “E”, else if patage<=44 then set to “F”, else if patage<=64 then set to “G”, else if  patage<=69 then set to “H”, else if  patage<=74 then set to “I”, else if  patage<=79 then set to “J”, else if  patage<=84 then set to “K”, else if  patage not blank or negative set to “L”, else set to “Z”  Apply retroactively to all TED-I datasets, working backwards from current FY to FY01. |
| AHRQ Prevention Indicator Flag | ahrqpvadm | $1 | N/A | N/A | N/A | If astdiab = 1 then ahrqpvadm = A.  If apappd = 1 then ahrqpvadm = B.  If altdiab = 1 then ahrqpvadm = C.  If acopd = 1 then ahrqpvadm = D.  If ahyptn = 1 then ahrqpvadm = E.  If achf = 1 then ahrqpvadm = F.  If albw = 1 then ahrqpvadm = G.  If adhyd = 1 then ahrqpvadm = H.  If abacpn = 1 then ahrqpvadm = I.  If auti = 1 then ahrqpvadm = J.  If aawp = 1 then ahrqpvadm = K.  If auncdiab = 1 then ahrqpvadm = L.  If aasth = 1 then ahrqpvadm = M.  If aampdiab = 1 then ahrqpvadm = N.  If pasth = 1 then ahrqpvadm = P.  If pstdiab = 1 then ahrqpvadm = Q.  If pgastro = 1 then ahrqpvadm = R.  If pappd = 1 then ahrqpvadm = S.  If puti = 1 then ahrqpvadm = T.  Else ahrqpvadm = O. |
| Short Term Diabetes Complications | astdiab | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then astdiab = 0. If age <18 then astdiab = 0. If transferred from another institution then astdiab = 0. If primary diagnosis is not in the format $ACDIASD then astdiab = 0. Else if primary diagnosis is in $ACDIASD then astdiab = 1. |
| Perforated Appendix | apappd | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then apappd = 0. If age < 18 then apappd = 0. If transferred from another institution than apappd = 0. If any diagnosis is in format $ACSAP2D and not in format $ACSAPPD then apappd = 2. Else if any diagnosis is in $ACSAPPD then apappd = 1. |
| Diabetes Long Term Complications | altdiab | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then altdiab = 0. If age < 18 then altdiab = 0. If transferred from another institution then altdiab = 0. If primary diagnosis is not in format $ACDIALD then altdiab = 0. Else if primary diagnosis is in format $ACDIALD then altdiab = 1. |
| Chronic Obstructive Pulmonary Disorder | acopd | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then acopd = 0. If age < 18 then acopd = 0. If transferred from another institution then acopd = 0. If primary diagnosis is in format $ACCOPDD or primary diagnosis is in $ACCPD2D and any secondary diagnosis is in $ACCOPDD then acopd = 1. Else acopd = 0. |
| Hypertension Admission | ahyptn | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then ahyptn = 0. If age <18 then ahyptn = 0. If any procedure code is in format $ACSCARP then ahyptn = 0. If transferred from another institution then ahyptn = 0. If primary diagnosis is not in format $ACSHYPD then ahyptn = 0. Else if primary diagnosis is in format $ACSHYPD then ahyptn = 1. |
| Congestive Heart Failure Admission | achf | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then achf = 0. If age < 18 then achf = 0. If transferred from another institution then achf = 0. If any procedure code is in format $ACSCARP then achf = 0. If primary diagnosis is not in format $ACSCHFD then achf = 0. Else if primary diagnosis is in format $ACSCHFD then achf = 1. |
| Low Birth Weight | albw | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If age in days > than 28 then albw = 0. If age in days is missing and age > 0 then albw = 0. If transferred form another institution then albw = 0. if any diagnosis is in format $LIVEB2D then albw = 0. If any diagnosis is in format $V29D or any diagnosis is in format $LIVEBND and no diagnosis is in $ACSLBWD then albw = 2. Else if any diagnosis is in format $V29D or any diagnosis is in format $LIVEBND and any diagnosis is in format $ACSLBWD then albw=1. |
| Dehydration | adhyd | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then adhyd = 0. If age < 18 then adhyd = 0. If transferred from another institution then adhyd = 0. If primary diagnosis is not in format $ACSDEHD then adhyd = 0. Else if primary diagnosis is in format $ACSDEHD then adhyd = 1. |
| Bacterial Pneumonia | abacpn | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then abacpn = 0. If age < 18 then abacpn = 0. If transferred from another institution then abacpn = 0. If any diagnosis is in format $ACSBA2D then abacpn = 0. If primary diagnosis is not in format $ACSBACD then abacpn = 0. Else if primary diagnosis is in $ACSBACD then abacpn = 1. |
| Urinary Tract Infection | auti | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then auti = 0. If age < 18 then auti = 0. If transferred from another institution then auti = 0. If any diagnosis is in format $IMMUNID then auti = 0. If any diagnosis is in format $KIDNEY then auti = 0. If any procedure is in format $IMMUNIP then auti = 0. Else if primary diagnosis is in format $ACSUTID then auti = 1. |
| Angina without Procedure | aawp | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MCD – 14 or 15 then aawp = 0. If age < 18 then aawp = 0. If transferred from another institution then aawp = 0. If any procedure code is in format $ACSCARP then aawp = 0. If primary diagnosis is not in format $ACSANGD then aawp = 0. Else if primary diagnosis is in format $ACSANGD then aawp = 1. |
| Uncontrolled Diabetes | auncdiab | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then auncdiab = 0. If age < 18 then auncdiab = 0. If transferred from another institution then auncdiab = 0. If Primary diagnosis is not in format $ACDIAUD then auncdiab = 0. Else if primary diagnosis is in format $ACDIAUD then auncdiab = 1. |
| Adult Asthma | aasth | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5. IF MDC = 14 or 15 then aasth = 0. If age < 18 then aasth = 0. If any diagnosis is in format $RESPAN then aasth = 0. If transferred from another institution then aasth = 0. If primary diagnosis is not in format $ACSASTD then aasth = 0. Else if primary diagnosis is in format $ACSASTD then aasth = 1. |
| Lower-extremity Amputation among patients with Diabetes | aampdiab | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 or 15 then aampdiab = 0. If age < 18 then aampdiab = 0. If any diagnosis codes are in format $ACLEA2D then aampdiab = 0. If transferred from another institution then aampdiab = 0. Else if any diagnosis codes are in format $ACSLEAD and any procedure codes are format $ACSLEAP then aampdiab = 1. |
| Adult Overall Composite | aovall | $1 | N/A | N/A | N/A | IF astdiab = 1 OR altdiab = 1 OR acopd = 1 OR ahyptn = 1 OR achf = 1 OR adhyd = 1 OR abacpn = 1 OR auti = 1 OR aawp = 1 OR auncdiab = 1 OR aasth = 1 OR aampdiab = 1 THEN aovall = 1. |
| Adult Acute Composite | aacute | $1 | N/A | N/A | N/A | IF adhyd = 1 OR abacpn = 1 OR auti = 1 THEN aacute = 1. |
| Adult Chronic Composite | achron | $1 | N/A | N/A | N/A | IF astdiab = 1 OR altdiab = 1 OR acopd = 1 OR ahyptn = 1 OR achf = 1 OR aawp = 1 OR auncdiab = 1 OR aasth = 1 OR aampdiab = 1 THEN achron = 1. |
| Pediatric Asthma Admission | pasth | $1 | N/A | N/A | N/A | Substring diagnosis codes to 5 characters. If MDC = 14 then pasth = 0. If age < 2 then pasth = 0. If age > 17 then pasth = 0. If DRG is in format $ADULTDR then pasth = 0. If any diagnosis is in format $RESPAN then pasth = 0. If transferred from another institution then pasth = 0. If primary diagnosis is not in format $ACSASTD then pasth = 0. Else if primary diagnosis is in format $ACSASTD then pasth = 1. |
| Pediatric Short term Diabetes | pstdiab | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 then pstdiab = 0. If age < 6 then pstdiab = 0. If age > 17 then pstdiab = 0. If transferred from another institution then pstdiab = 0. If DRG is in format $ADULTDR then pstdiab = 0. If primary diagnosis is not in $ACDIASD then pstdiab = 0. Else if primary diagnosis is in $ACDIASD then pstdiab = 1. |
| Pediatric Gastroenteritis | pgastro | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 then pgastro = 0. If age < 3 months pgastro = 0. If age > 17 then pgastro = 0. If any diagnosis codes are in format $ACGDISD then pgastro = 0. If DRG is in format $ADULTDR then pgastro = 0. If transferred from another institution then pgastro = 0. If primary diagnosis is in format $ACPGASD then pgastro = 1. If primary diagnosis is in $ACSDEHD and any secondary diagnosis is in $ACPGASD then pgastro =1. Else pgastro = 0. |
| Perforated Appendix (Pediatric) | pappd | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 then pappd = 0. If age < 1 then pappd = 0. I age > 17 then pappd = 0. If transferred from another institution then pappd = 0. If DRG is in format $ADULTDR then pappd = 0. If any diagnosis is in format $ACSAP2D and no diagnosis is in format $ACSAPPD then pappd = 2. If any diagnosis is in $ACSAPPD then pappd = 1. Else pappd = 0. |
| Pediatric Urinary Tract Infection | puti | $1 | N/A | N/A | N/A | Substring diagnosis codes (all of them) to 5 characters. If MDC = 14 then puti = 0. if age < 3 months then puti = 0. If age > 17 then puti = 0. If any diagnosis is in format $IMMUNHD then puti = 0. If any diagnosis is in format $KIDNEY then puti = 0. IF any diagnosis is in format $IMMUITD then puti = 0. If any diagnosis is in format $HEPFA2D then puti = 0. If any procedure is in format $TRANSPP then puti = 0. If DRG is in format $ADULTDR then puti = 0. Else if primary diagnosis is in format $ACSUTID then puti = 1. |
| Pediatric Overall Composite | povall | $1 | N/A | N/A | N/A | IF pasth = 1 OR pstdiab = 1 OR pgastro = 1 OR puti = 1 THEN povall = 1; else povall = 0. |
| Pediatric Chronic Composite | pchron | $1 | N/A | N/A | N/A | IF pasth = 1 OR pstdiab = 1 THEN pchron = 1. Else pchron = 0. |
| Pediatric Acute Composite | pacute | $1 | N/A | N/A | N/A | IF pgastro = 1 OR puti = 1 THEN pacute = 1; else pacute =0. |
| Combined Overall Adult and Pediatric Composite | padcdovl | $1 | N/A | N/A | N/A | IF aovall = 1 OR povall = 1 THEN padcdovl = 1; else padcdovl =0. |
| Combined Chronic Adult and Pediatric Composite | padcdchn | $1 | N/A | N/A | N/A | IF achron = 1 OR pchron = 1 THEN padcdchn = 1; else padcdchn =0. |
| Combined Acute Adult and Pediatric Composite | Padcdact | $1 | N/A | N/A | N/A | aacute = 1 OR pacute = 1 THEN padcdact = 1; else padcdact =0 |
| Relative Weighted Product | Rwp | 8.4 | N/A | N/A | N/A | See Appendix. |
| MS RWP | Msrwp | 8.4 | N/A | N/A | N/A | Use the same logic as RWP, except apply the MS RWP DRG Weight table, and use ‘msdrg’, instead of the AC\_DRG. Only populated for FY07+. See appendix for more details. |
| MS Professional RWP | Msprofrwp | 8.4 | N/A | N/A | N/A | Only populated for FY07+.  Currently set to 0. |
| MS Full RWP | Msfullrwp | 8.4 | N/A | N/A | N/A | Only populated for FY07+.  Currently set to 0.  When MS Professional RWP is being calculated (i.e, not set to 0 on all records), this will be the sum of the MS RWP (msrwp) and the MS Professional RWP (msprofrwp). |
| HCSR Amount Paid | Hcsrpay | 10.2 | N/A | N/A | N/A | Set to 0 if TED indicator is T. Otherwise, match to HCSR records based on HCSR key, and assign the HCSR payment amount from the reference file. This matching need only be done when preparing the original database. The value from the initial assignment can simply be retained for subsequent processing of HCSRs, including ATOH application. |
| Admitting TED Number | Admtedno | $24 | N/A | N/A | N/A | See appendix |
| Professional Services Tail | Proftail | 5.2 | N/A | N/A | N/A | See appendix.  Field is not populated in FY03 and prior. |
| Administrative Tail | Admtail | 5.2 | N/A | N/A | N/A | Currently blank. |
| Residence Catchment Area | Catch | $4 | N/A | N/A | N/A | Based on matching FY, FM and patzip; if sponsvc=A then set equal to ACATCH, if sponsvc = F then set equal to FCATCH; if sponsvc 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 | N/A | Based on matching FY, FM and patzip; if sponsvc=A then set equal to APRISM, if sponsvc = F then set equal to FPRISM; if sponsvc 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 TPR Flag | Tprflag | $1 | N/A | N/A | N/A | TPRFLAG, based on matching FY, FM and patzip |
| Residence Region | Resreg | $2 | N/A | N/A | N/A | MOD\_REG, based on matching FY, FM and patient zip code |
| Residence TNEX Region | Restnex | $1 | N/A | N/A | N/A | HSSCREG, based on matching FY, FM and patient zip code. |
| Residence Market Area ID | Retmkt | $3 | N/A | N/A | N/A | Defer until update of CAD format file to include market area ID and MTF Service Area. Must be done prior to, or along with development of Institutional Summary File. |
| Residence MTF Service Area | Resmtfsvc | $4 | N/A | N/A | N/A |
| Residence Prime Service Area | Respsa | $1 | N/A | N/A | N/A |
| Provider Catchment Area | Pvcatch | $4 | N/A | N/A | N/A | Based on matching FY, FM and pvzip; set = OCATCH. If pvzip not found in MDR Omni-CAD, set equal to ‘0999’ |
| Provider PRISM Area | Pvprism | $4 | N/A | N/A | N/A | Based on matching FY, FM and pvzip; set = OPRISM. If pvzip not found in MDR Omni-CAD, set equal to ‘0999’ |
| Provider Region | Provrgn | $2 | N/A | N/A | N/A | Defer until update of CAD format file to include market area ID and MTF Service Area. Must be done prior to, or along with development of Institutional Summary File. |
| Provider Market Area | Provmkt | $1 | N/A | N/A | N/A |
| Provider Prime Service Area | Provpsa | $1 | N/A | N/A | N/A |
| Provider Tnex Region | Provtnex | $1 | N/A | N/A | N/A |
| Provider TPR Flag | Pvtpr | $1 | N/A | N/A | N/A |
| Residence Catchment Area Service Branch | Catchsvc | $1 | N/A | N/A | N/A | UBU\_SVC, based on matching FY and catch |
| Enrollment Region | Enrreg | $2 | N/A | N/A | N/A | MOD\_REG, based on matching FY and denrsite |
| Enrollment HSSC Region | Enrhssc | $1 | N/A | N/A | N/A | HSSCREG, based on matching FY and denrsite |
| Enrollment Site Service | Enrsvc | $1 | N/A | N/A | N/A | UBU\_SVC, based on matching FY and denrsite |
| PPS Enrollment Parent DMIS ID | Ppsprnt | $4 | N/A | N/A | N/A | PPS\_PAR, based on matching FY and denrsite |
| Enrollment MEPRS Code | med\_home\_meprs | $4 | N/A | N/A | N/A | Populated FY11+  reference the Enrollment MEPRS Code File Processing Specification, Appendix A Section 1. Use begin date of care for join. |
| Medical Home Flag | med\_home\_flag | $1 | N/A | N/A | N/A | Populated FY11+  reference the Enrollment MEPRS Code File Processing Specification, Appendix A Section 1. Use begin date of care for join. |
| Primary Care Manager ID | pcmidlvm | $18 | N/A | N/A | N/A | Based on LVM4/LVM6 merge. Merge on patient ID and begin date of care. |
| TRICARE Young Adult Flag | tyaflag | $1 | N/A | N/A | N/A | Fill with TYA Flag from LVM4, if the begin date of care on the record is between the begin and end dates associated with the TYA Flag. If no match is found or a match is found but the date window criteria do not apply then set to “0”. |

**The table below contains the file layout for the MDR Institutional TED Revenue Code dataset. Each record represents a line item from a non-institutional HCSR or TED, where the end date of care on the claim is within the fiscal year of the file.**

Table 2 Master MDR Institutional Revenue TED SAS Dataset

| **MDR TED Field** | | **SAS Name** | | **Format** | | **Source Element - HCSR** | | **Source Position - HCSR** | | **Source Element - TED** | | **Source Position - TED** | | **Business Rule** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TED Number | | tedno | | $24 | | 1-015 | | 1-7 | | 1-015 | | 1-7 | |  |
| 1-016 | | 8-10 | | 1-020 | | 8-10 | |  | |
| 1-020 | | 11-17 | | 1-025 | | 11-17 | |  | |
| 1-021 | | 18-23 | | 1-030 | | 18-23 | |  | | |
| 1-025 | | 24 | | 1-035 | | 24 | |
| Cycle Number | | cycle | | $8 | | D | | 25-32 | | D | | 25-32 | | No transformation. | |
| End Date of Care | | enddate | | yyyymmdd | | 1-285 | | 33-40 | | 1-280 | | 33-40 | | Convert to SAS Date | |
| Revenue Line Item Number | | linum | | 3 | | 1-385 | | 41-43 | | 1-375 | | 41-43 | |  | |
| Revenue Code | | revcode | | $4 | | 1-365 | | 44-47 | | 1-385 | | 44-47 | | If TED indicator is T then no transformation. Otherwise, add leading zero to first 3 substring of revcode. If revcode is blank then assign revcode='0000'. | |
| Units of Service | | svcs | | SN10 | | 1-370 | |  | | 1-390 | | 48-57 | |  | |
| Amount Billed | | revbill | | SN9.2 | | 1-375 | |  | | 1-395 | | 58-66 | |  | |
| Adjustment/Denial Reason Code | | adjcode | | $5 | |  | |  | | 1-400 | | 67-71 | | Set to blank if TED indicator is not T. | |
| Provisional Acceptance Line Item Indicator | | provact | | $7 | |  | |  | | D | | 76-82 | | Set to blank if TED indicator is not T. | |
| **Internally Derived Fields** | | | | | | | | | | | | | | | |
| Adjustment Reason Derived Code | | dadjcd | | $2 | | N/A | | N/A | | N/A | | N/A | | Apply adjustment reason format[1] file to the adjustment/denial reason code (1-400). If the type of reason code for the revenue line item is “B”, then set adjustment reason derived code according to the format. Otherwise, if the type of reason is C, then if the type of submission is “O’, then set according to the format, otherwise set to blank | |
| Denial Reason Derived Code | | denial | | $2 | | 1-380 | | 72-73 | | N/A | | N/A | | If TED indicator is T then apply denial reason format8 file to the adjustment/denial reason code (1-400). If the type of reason code for the revenue line item is “D”, then set denial reason derived code to the format, else if the type of reason code for the revenue line item is “C” and type of submission code is not “O” then set according to the format, otherwise set to blank.  If TED indicator is not T then populate from HCSR denial reason code. | |

1. Data Marts

Data feeds are prepared in MDR processing and provided to the M2 on a monthly basis, as described in M2 TRICARE Encounter Data Specification.

1. Special Outputs

There are three types of special outputs prepared during processing of the institutional TED file: A death file and the TED Institutional episode reference file**.**

* Death File: The death file contains records for beneficiaries where the TED disposition status code indicates that the patient died. See “MDR Encounter Death File Specification” for business rules and a file layout.
* TED Institutional Episode Reference File: This file is used in processing the MDR TED Institutional and Non Institutional Files. Specifically, the admission date and greatest end date of care are retained for each person for each acute hospital stay. Each record in this file represents a person who has an admission in the TED-Institutional Data, with a variable length set of information about each of this person’s admissions. This file is merged to TED Institutional and Non-Institutional records, to assign the admitting TED number to each TED Institutional and Non-Institutional record for care that is likely associated with the acute care hospital stay.

Episode files are updated monthly after the master TED-I files have been updated and processed through the usual processing steps. The episode program reads in monthly updated TED-I files from current FY and going back to (FY??). Priority is given to create episode files using TED-I master files FY04 and forward first before creating episode files using FY03 and prior. Episode files are parsed into fiscal year files where any episode with admit date and end date falling within the FY is output to their respective FY episode file. Each fiscal year episode file will then be used to update the Admitting TED number field on the corresponding FY TED-I master file.

The layout of this reference table is provided below:

| **Data Element** | **Name** | **Format** | **Business Rule** |
| --- | --- | --- | --- |
| DEERS EDI\_PN | edi\_pn | $char10 | No transformation |
| Occurrence Count | occ | 2 | Number of occurrences of episodes in episode format file |
| Repeating Episode Segments | | | |
| Admission Date1 - Admission Daten | admdaten | YYYYMMDD | Admission date of episode. One field per admission in TED Institutional File (all years after FY02) |
| End Date1 - End Daten | enddaten | YYYYMMDD | One field per admission in TED Institutional File (all years after FY02). ENDDATEcontains the greatest end date of all claims with matching person identifier (EDI\_PN), admission date, and provider ID. |
| Admitting TED Number1 – Admitting TED Numbern | admtednon | $24 | Admitting TEDNO of episode. One field per admission in TED Institutional File (all years after FY02). |
| Disposition Flag1 – Disposition Flagn | dispn | $1 | Disposition flag of episode. If patient is still in the institution set disposition flag=’N’ else set flag to ‘Y’. One field per admission in TED Institutional File (all years after FY02). |

* Intermediate ATOH File: The intermediate ATOH file is used to determine the amount of a record that was paid under the old managed care support contracts (HCSRPAY). This reference file is prepared from the ATOH data feeds provided to the MDR. To keep the intermediate ATOH file updated, the monthly ATOH feed is appended to the existing ATOH file. If this results in more than one record per key, the record with the greatest cycle date is retained. The file layout for the interim ATOH file is contained in the table below.

| Data Element | SAS Name | Business Rule |
| --- | --- | --- |
| TED Number | tedno | No transformation |
| Cycle Number | cycle | No transformation |
| Amount Paid | paid | No transformation |

**APPENDIX A: Mapping of HCSRs into TED format**

Records that are sent in that originated as HCSRs undergo a mapping process to ensure consistency among data elements, regardless of whether the data originated from a HCSR or a TED. Fields are read in from the HCSR data feeds, and transformed to the TED coding shema according to the tables below.

**Table A-1: Sponsor Pay Plan**

|  |  |
| --- | --- |
| **HCSR Rank** | **Pay Plan** |
| [00-09] | ME |
| [10-15] | MW |
| 19 | MC |
| [20-31] | MO |
| [40-58] | GS |
| 90 | ZZ |
| 95 | ZZ |
| 99 | ZZ |
| Any Other | ZZ |

**Table A-2: Sponsor Pay Grade**

|  |  |  |
| --- | --- | --- |
| **HCSR Rank** | **Pay Plan** | **Pay Grade** |
| [00-09] | ME | HCSR Rank |
| [10-15] | MW | [01-05] (HCSR Rank – 10) |
| 19 | MC | 01 |
| [20-31] | MO | [01-11] (HCSR Rank – 20) |
| [40-58] | GS | [01-18] (HCSR Rank – 40) |
| 00,90,95,99 | Any | 00 |
| All Other | All Other | 00 |

**Table A-3: Branch of Service**

| **HCSR Service** | **HCSR Sponsor Status** | **TED Service** |
| --- | --- | --- |
| A | T | 1 |
| N | T | 2 |
| M | T | 3 |
| F | T | 4 |
| A | Not T | A |
| C | Not T | X |
| E | Not T | H |
| F | Not T | F |
| I | Not T | O |
| M | Not T | M |
| N | Not T | N |
| P | Not T | C |
| All other | Not T | X |

**Table A-4: Sponsor Status**

|  |  |
| --- | --- |
| **Sponsor Status** | **Member Category** |
| B | A |
| I | D |
| K | Z |
| O | D |
| All other | Set to sponsor status |

**Table A-5: Patient Relationship to Sponsor**

| **HCSR Patient Relationship to Sponsor** | TED Member Relationship |
| --- | --- |
| <blank> | A |
| C | C |
| F | G |
| G | G |
| H | H |
| L | F |
| M | F |
| P | F |
| R | I |
| S | B |
| T | H |
| U | F |
| V | C |
| W | E |
| X | Z |
| Y | I |
| Z | Z |

**Table A-6: Submission Code**

|  |  |
| --- | --- |
| **HCSR Type of Submission** | **TED Type of Submission** |
| A | B |
| B | B |
| C | E |
| D | D |
| E | E |
| F | B |
| G | B |
| I | I |
| O | O |
| R | R |

**Table A-7: Special Processing Codes**

|  |  |
| --- | --- |
| **HCSR Special Processing Code** | **TED Special Processing Code** |
| @ | 10 |
| # | 11 |
| $ | 12 |
| & | 14 |
| ? | 16 |
| \* | 17 |
| All Other | No change |

**Table A-8: Source of Admission**

| **HCSR Source of Admission** | **TED Source of Admission** |
| --- | --- |
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |
| R | A |
| S | B |
| T | C |
| All Other | No Change |

**Table A-9: HCSR Country Code to TED Country Code**: Used in mapping provider zip, patient zip, provider state/country code.

| **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |  | **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |  | **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |  | **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |  | **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |  | **HCSR State/**  **Country Code** | **TED State/**  **Country Code** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AW | ABW |  | KM | COM |  | HT | HTI |  | MS | MSR |  | SO | SOM |  | 09 | CT |
| AF | AFG |  | CV | CPV |  | HU | HUN |  | MQ | MTQ |  | PM | SPM |  | 10 | DE |
| AO | AGO |  | CR | CRI |  | ID | IDN |  | MU | MUS |  | ST | STP |  | 11 | DC |
| AI | AIA |  | CU | CUB |  | IN | IND |  | MW | MWI |  | SR | SUR |  | 12 | FL |
| AX | ALA |  | CX | CXR |  | IO | IOT |  | MY | MYS |  | SK | SVK |  | 13 | GA |
| AL | ALB |  | KY | CYM |  | IE | IRL |  | YO | MYT |  | SI | SVN |  | 15 | HI |
| AD | AND |  | CY | CYP |  | IR | IRN |  | NA | NAM |  | SE | SWE |  | 16 | ID |
| AN | ANT |  | CZ | CZE |  | IQ | IRQ |  | NC | NCL |  | SZ | SWZ |  | 17 | IL |
| AE | ARE |  | DE | DEU |  | IS | ISL |  | NE | NER |  | SC | SYC |  | 18 | IN |
| AR | ARG |  | DJ | DJI |  | IL | ISR |  | NF | NFK |  | SY | SYR |  | 19 | IA |
| AM | ARM |  | DM | DMA |  | IT | ITA |  | NG | NGA |  | TC | TCA |  | 20 | KS |
| AS | ASM |  | DK | DNK |  | JM | JAM |  | NI | NIC |  | TD | TCD |  | 21 | KY |
| AQ | ATA |  | DO | DOM |  | JO | JOR |  | NU | NIU |  | TG | TGO |  | 22 | LA |
| TF | ATF |  | DZ | DZA |  | JP | JPN |  | NL | NLD |  | TH | THA |  | 23 | ME |
| AG | ATG |  | EC | ECU |  | KZ | KAZ |  | NO | NOR |  | TJ | TJK |  | 24 | MD |
| AU | AUS |  | EG | EGY |  | KE | KEN |  | NP | NPL |  | TM | TKM |  | 25 | MA |
| AT | AUT |  | ER | ERI |  | KG | KGZ |  | NR | NRU |  | TP | TMP |  | 26 | MI |
| AZ | AZE |  | EH | ESH |  | KH | KHM |  | NZ | NZL |  | TT | TTO |  | 27 | MN |
| BI | BDI |  | ES | ESP |  | KI | KIR |  | OM | OMN |  | TN | TUN |  | 28 | MS |
| BE | BEL |  | EE | EST |  | KN | KNA |  | PK | PAK |  | TR | TUR |  | 29 | MO |
| BJ | BEN |  | ET | ETH |  | KR | KOR |  | PA | PAN |  | TV | TUV |  | 30 | MT |
| BF | BFA |  | FI | FIN |  | KW | KWT |  | PN | PCN |  | TW | TWN |  | 31 | NE |
| BD | BGD |  | FJ | FJI |  | LA | LAO |  | PE | PER |  | TZ | TZA |  | 32 | NV |
| BG | BGR |  | FK | FLK |  | LB | LBN |  | PH | PHL |  | UG | UGA |  | 33 | NH |
| BH | BHR |  | FR | FRA |  | LR | LBR |  | PW | PLW |  | UA | UKR |  | 34 | NJ |
| BS | BHS |  | FO | FRO |  | LY | LBY |  | PG | PNG |  | UM | UMI |  | 35 | NM |
| BA | BIH |  | FM | FSM |  | LC | LCA |  | PL | POL |  | UY | URY |  | 36 | NY |
| BY | BLR |  | FX | FXX |  | LI | LIE |  | PR | PRI |  | BQ | USA |  | 37 | NC |
| BZ | BLZ |  | GA | GAB |  | LK | LKA |  | KP | PRK |  | UZ | UZB |  | 38 | ND |
| BM | BMU |  | GB | GBR |  | LS | LSO |  | PT | PRT |  | VA | VAT |  | 39 | OH |
| BO | BOL |  | GE | GEO |  | LT | LTU |  | PY | PRY |  | VC | VCT |  | 40 | OK |
| BR | BRA |  | GH | GHA |  | LU | LUX |  | PF | PYF |  | VE | VEN |  | 41 | OR |
| BB | BRB |  | GI | GIB |  | LV | LVA |  | QA | QAT |  | VG | VGB |  | 42 | PA |
| BN | BRN |  | GN | GIN |  | MO | MAC |  | RE | REU |  | VI | VIR |  | 44 | RI |
| BT | BTN |  | GP | GLP |  | MA | MAR |  | RO | ROM |  | VN | VNM |  | 45 | SC |
| BV | BVT |  | GM | GMB |  | MC | MCO |  | RS | RUS |  | VU | VUT |  | 46 | SD |
| BW | BWA |  | GW | GNB |  | MD | MDA |  | RW | RWA |  | WF | WLF |  | 47 | TN |
| CF | CAF |  | GQ | GNQ |  | MG | MDG |  | SA | SAU |  | WS | WSM |  | 48 | TX |
| CA | CAN |  | GR | GRC |  | MV | MDV |  | CS | SCG |  | YE | YEM |  | 49 | UT |
| CC | CCK |  | GD | GRD |  | MX | MEX |  | SD | SDN |  | YU | YUG |  | 50 | VT |
| CH | CHE |  | GL | GRL |  | MH | MHL |  | SN | SEN |  | ZA | ZAF |  | 51 | VA |
| CL | CHL |  | GT | GTM |  | MK | MKD |  | SG | SGP |  | ZM | ZMB |  | 53 | WA |
| CN | CHN |  | GF | GUF |  | ML | MLI |  | GS | SGS |  | ZW | ZWE |  | 54 | WV |
| CI | CIV |  | GU | GUM |  | MT | MLT |  | SH | SHN |  | 01 | AL |  | 55 | WI |
| CM | CMR |  | GY | GUY |  | MM | MMR |  | SJ | SJM |  | 02 | AK |  | 56 | WY |
| CD | COD |  | HK | HKG |  | MN | MNG |  | SB | SLB |  | 04 | AZ |  |  |  |
| CG | COG |  | HM | HMD |  | MP | MNP |  | SL | SLE |  | 05 | AR |  |  |  |
| CK | COK |  | HN | HND |  | MZ | MOZ |  | SV | SLV |  | 06 | CA |  |  |  |
| CO | COL |  | HR | HRV |  | MR | MRT |  | SM | SMR |  | 08 | CO |  |  |  |

**APPENDIX B: Relative Weighted Products**

Relative weighted products (RWPs) are intended to reflect the relative resource intensity of acute care confinements. Two different types of RWPs are calculated in the MDR TED processor. Since the rules for the preparation of each of these data elements is essentially the same, the process is only described once, using the generic “DRG”. The only places where the rules are different are when DRG Numbers are referenced. This document describes the process of deriving RWPs in institutional TED data.

Selection Rules: Relative weighted products are only applied to records where the institution indicates that the care was provided in an acute care hospital. The institution type values which represent acute care facilities are defined in Table B-1:

**Table B-1: Acute Care Institution Types**

| **Code** | **Institution Type** |
| --- | --- |
| 10 | General medical and surgical |
| 11 | Hospital unit of an institution (prison hospital, college infirmary etc.) |
| 12 | Hospital unit within an institution for the mentally retarded |
| 44 | Obstetrics and gynecology |
| 45 | Eye, ear, nose and throat |
| 47 | Orthopedic |
| 49 | Other specialty |
| 50 | Children’s general |
| 51 | Children’s hospital unit of an institution |
| 55 | Children’s eye, ear, nose, and throat |
| 57 | Children’s orthopedic |
| 59 | Children’s other specialty |
| 90 | Cancer |
| 91 | Sole community |

Methodology:

RWPs for both the interim claim length of stay and the previous length of stay for the episode are calculated. Previous length of stays are not calculated where the bill frequency code indicates the record to be an initial claim, admitted through a discharge or transfer HCSR. The bill frequency values which represent this are defined in Table B-2:

**Table B-2: Bill Frequency Acute Care Institution Types**

| **Code** | **Bill Frequency** |
| --- | --- |
| 1 | Admit through discharge HCSR |
| 2 | Interim - initial HCSR |

RWPs should be calculated according to the following algorithm:

1. Merge TED to the DRG tables (TRICARE and MS-DRG) according to the following:

|  |  |  |
| --- | --- | --- |
| **Fiscal Year** | **TRICARE DRG Weight Table FY** | **MS-DRG Weight Table FY** |
| 2009+ | 2008 | Matching FY |
| 2008 | 2008 | 2009 |
| 2007 | 2007 | 2009 |
| <=2006 | Matching FY | N/A |

1. Using the long and short stay outlier thresholds from the DRG weight table, calculate a variable for both the interim claim and previous claim to indicate whether the patient was an:
   1. Inlier: Short stay threshold < length of stay < long stay thresholds
   2. Short Stay Outlier: length of stay <= short stay threshold
   3. Long Stay Outlier: length of stay >= long stay threshold

Where the length of stay for the interim claim is max(“enddate - admdate”,1) and for the previous claim is “begdate - admdate”.

1. Calculate the interim claim and previous claim RWP for the appropriate threshold.
   1. For Inlier RWP calculations, there are three separate cases based on the following criteria:
      1. Case 1: When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was not a newborn DRG.

**Calculation: minimum (base weight, ((2\*per diem)+(per diem)(length of stay - 1))**

* + 1. Case 2: When the record is considered a “transfer out” but not a “transfer in” but contained a newborn DRG.

**Calculation: minimum (base weight, (2\*per diem)+(1.25\*per diem\*(length of stay - 1))**

* + 1. Case 3: When the record is neither Case1 nor Case 2 the calculation is simply the base weight.
  1. For Short Stay Outlier RWP calculations there are four separate cases based on the following criteria:
     1. Case 1:
        1. Case 1a: ***For DRG RWP:*** When the record contained a DRG of (‘600' '601' '603' '605' or '608’) the calculation is simply the base weight.
        2. Case 1b: For MS-DRG RWP: When the record contained a MS-DRG of (‘610’ ‘611’ ‘613’ ‘632’ ‘635’)
     2. Case 2: When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was not a newborn DRG.

**Calculation: minimum (base weight, (((2\*per diem)+(per diem)(length of stay-1))**

* + 1. Case 3:When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was a newborn DRG.

**Calculation: minimum (base weight, ((2\*per diem)+(1.25\*per diem\*(length of stay-1))**

* + 1. Case 4: When the record did not meet the criteria for Case 1, 2 or 3.

**Calculation: minimum (base weight, 2\*per diem\*length of stay)**

* 1. Long Stay Outlier

**Calculation: (base weight + per diem\*.33\*(length of stay - long stay threshold))**

In the calculations above the per diem is the base weight divided by the GLOS. Transfer indicators are defined based on “admission source” and “disposition status”. The admission source values which represent “transfers in” are defined in Table B-3:

**Table B-3: Transfers In**

| **Code** | **Admission Source** |
| --- | --- |
| 4 | Transfer from a Hospital |
| 5 | Transfer from a skilled nursing facility |
| 6 | Transfer from another health care facility |
| A | Transfer from a critical access hospital |

The disposition status values which represent “transfers out” are defined in Table B-4:

**Table B-4: Transfers Out**

| **Code** | **Disposition Status** |
| --- | --- |
| 02 | Transferred |
| 05 | Discharged/Transferred to another type of institution (including distinct parts). |
| 43 | Transfer to a federal facility |

Newborn TRICARE DRGs are defined in Table B-5:

**Table B-5: Newborn DRGs**

| **Code** | **DRG** |
| --- | --- |
| 602 | NEONATE, BWT <750G DISCH ALIVE |
| 604 | NEONATE, BWT 750-999G, D/C ALIVE |
| 606 | NEONATE, BWT 100-1499G W/OR |
| 607 | NEONATE, BWT 100-1499G, W/O OR |
| 609 | N 1500-1999G W/OR W/> 1 PROB |
| 610 | N 1500-1999G W/OR W/O > 1 PROB |
| 611 | N 1500-1999G W/O OR W/> 1 PROB |
| 612 | N 1500-1999G W/O OR, W/PROB |
| 613 | N 1500-1999G W/O OR W/MIN PROB |
| 614 | N 1500-1999G W/O OR W/OTH PROB |
| 615 | N 2000-2499G W/OR W/> 1 PROB |
| 616 | N 2000-2499G W/ OR W/O > 1 PROB |
| 617 | N 2000-2499G W/O OR W/> 1 PROB |
| 618 | N 2000-2499G W/O OR W/PROB |
| 619 | N 2000-2499G W/O OR W/MIN PROB |
| 621 | NEO 2000-2499G W/O OR W/OTH PROB |
| 622 | NEO > 2499G W/OR W/> 1 PROB |
| 623 | NEO > 2499G W/O OR W/> 1 PROB |
| 624 | NEO > 2499G W/MIN ABDOMINAL PROC |
| 626 | NEO > 2499G W/O OR W/> 1 PROB |
| 627 | NEO > 2499G W/O OR W/MAJ PROB |
| 628 | NEO > 2499G W/O OR W/MIN PROB |
| 630 | NEO > 2499G W/O OR W/OTH PROB |
| 635 | NEONATAL, AFTERCARE FOR WEIGHT GAIN |
| 636 | NEONATAL DIAGN0SIS, AGE > 28 DAYS |

Newborn TRICARE MS-DRGs are defined in Table B-6:

**Table B-6: Newborn DRGs**

| **MS-DRG** | **Description** |
| --- | --- |
| 631 | Neonate, birthwt 750-999g, discharged alive |
| 632 | Neonate, birthwt 750-999g, died |
| 633 | Neonate, birthwt 1000-1499g, w signif O.R. proc, discharged alive |
| 634 | Neonate, birthwt 1000-1499g, w/o signif O.R. proc, discharged alive |
| 635 | Neonate, birthwt 1000-1499g, died |
| 636 | Neonate, birthwt 1500-1999g, w signif O.R. proc, w mult major prob |
| 646 | Neonate, birthwt 1500-1999g, w signif O.R. proc, w/o mult major prob |
| 647 | Neonate, birthwt 1500-1999g, w/o signif O.R. proc, w mult major prob |
| 648 | Neonate, birthwt 1500-1999g, w/o signif O.R. proc, w major prob |
| 649 | Neonate, birthwt 1500-1999g, w/o signif O.R. proc, w minor prob |
| 650 | Neonate, birthwt 1500-1999g, w/o signif O.R. proc, w other prob |
| 651 | Neonate, birthwt 2000-2499g, w signif O.R. proc, w mult major prob |
| 676 | Neonate, birthwt 2000-2499g, w signif O.R. proc, w/o mult major prob |
| 677 | Neonate, birthwt 2000-2499g, w/o signif O.R. proc, w mult major prob |
| 678 | Neonate, birthwt 2000-2499g, w/o signif O.R. proc, w major prob |
| 679 | Neonate, birthwt 2000-2499g, w/o signif O.R. proc, w minor prob |
| 680 | Neonate, birthwt 2000-2499g, w/o signif O.R. proc, w other prob |
| 681 | Neonate, birthwt >2499g, w signif O.R. proc, w mult major prob |
| 787 | Neonate, birthwt >2499g, w signif O.R. proc, w/o mult major prob |
| 788 | Neonate, birthwt >2499g, w minor abdom procedure |
| 789 | Neonate, birthwt >2499g, w/o signif O.R. proc, w mult major prob |
| 790 | Neonate, birthwt >2499g, w/o signif O.R. proc, w major prob |
| 791 | Neonate, birthwt >2499g, w/o signif O.R. proc, w minor prob |
| 792 | Neonate, birthwt >2499g, w/o signif O.R. proc, w other prob |
| 793 | Neonatal aftercare for weight gain |
| 794 | Neonatal diagnosis, age > 28 days |
| 795 | Normal newborn |
| 796 | Multiple, other and unspecified congenital anomalies, w CC/MCC |
| 797 | Multiple, other and unspecified congenital anomalies, w/o CC/MCC |

1. The final step in calculating the RWP is to subtract the previous length of stay RWP from the interim claim length of stay RWP and to reset cases with ungroupable DRGs or DRG 000 to 0. (Ungroupable TRICARE DRGs are 469, 470; ungroupable MS-DRGs are 998 and 999)

Examples: The following example illustrates the RWP calculation method. Assuming the record had appropriate Institution Type Code and the record was an interim claim (Bill Frequency Code indicating an interim claim for this example), that the record was considered a “transfer out” but not a “transfer in”, and given the following information:

DRG 302 (Kidney Transplant)

Admission date – 01/10/04

Begin date – 01/11/04

End date – 01/20/04

From Weight Table for DRG 302:

Weight 3.9582

ALOS 3.9582

GLOS 8.5

Short Stay Threshold 1

Long Stay Threshold 31

The Interim Claim Length of Stay would be considered an “inlier” and the Previous Claim Length of Stay would be considered a “short stay length of stay”.

***Interim Claim Length of Stay = max(End date – Admission date,1) = max(01/20/04 - 01/10/04,1) = max(10,1)=10***

***Previous Claim Length of Stay= Begin date – Admission date = 01/11/04 – 01/10/04 = 1***

RWP for Interim Claim

*For this example - Case 1: When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was not a newborn DRG.*

**Inlier Calculation: minimum (base weight, ((2\*per diem)+(per diem)(length of stay-1))**

**=minimum(3.9582,((2\*(3.9582/8.5))+( 3.9582/8.5)(10-1))**

**=minimum(3.9582,** **5.122376)**

**=3.9582**

RWP for Previous Claim

*For this example - Case 2: When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was not a newborn DRG.*

**Short Stay Calculation: minimum (base weight, (((2\*per diem)+(per diem)(length of stay-1))**

**=3.9582**

if billfrq in ('1' '2' '5') then prevrwp=0;

rwp=revrwp-prevrwp;

**RWP CALCULATION**

=RWP for Interim Claim - RWP for Previous Claim

=3.9582 - 3.9582

=0

Now if the above information was the same but, the record was for an initial claim (based on the Bill Frequency Code) the RWP calculation would be as follows:

RWP for Previous Claim = 0 ***(not calculated or zero, since in this example there is no previous claim, the record is an initial claim)***

RWP for Interim Claim ***(actually an intial claim)***

*For this example - Case 1: When the record is considered a “transfer out” but not a “transfer in” and the DRG on the record was not a newborn DRG.*

**Inlier Calculation: minimum (base weight, ((2\*per diem)+(per diem)(length of stay-1))**

**=minimum(3.9582,((2\*(3.9582/8.5))+( 3.9582/8.5)(10-1))**

**=minimum(3.9582,** **5.122376)**

**=3.9582**

**RWP CALCULATION**

=3.9582 – 0

=3.9582

**Appendix C: Preventable Admission Indicator**

The preventable admission indicator is used to determine cases where sufficient access to ambulatory care may have prevented a hospital admission. Preventable admission indicators are always set to 0 if the patient’s age is less than 18. Otherwise, the table below describes the rules used to create the preventable admission indicator values.

| **Code** | **Description** | **Business Rule** |
| --- | --- | --- |
| C | COPD | First three characters of the primary diagnosis codes are 491, 492, 494 or 496, or the first four characters of the primary diagnosis code is 4660 and the first three characters of any of the secondary diagnosis codes are 491, 492, 494 or 496. |
| B | Bacterial Pneumonia | First three characters of the primary diagnosis code is 481, 483, 485, 486 or the first four characters of the primary diagnosis code is 4822, 4823, 4829 AND none of the first four characters of the secondary diagnosis codes (check all of them) is 2826 |
| A | Asthma | First three digits of the primary diagnosis code is 493 |
| H | Congestive Heart Failure | First 4 characters of the primary diagnosis code is 5184 or the first 3 characters of the primary diagnosis code is 428 or the primary diagnosis code is 40201, 40211, or 40291 AND none of the procedure codes are 3601, 3602, 3605 AND none of the first three characters of the procedure codes are 361, 375, 377 |
| P | Angina | First four characters of the primary diagnosis code is 4111, 4118 or the first three characters of the primary diagnosis code is 413. |
| T | Cellulitis (Step 1) | DRG is 263, 264 or the first three characters of the primary diagnosis code is 681, 682, 683 or 686 AND |
| D | Diabetes | First four characters of the primary diagnosis code are one of 2501, 2502, 2503, 2508, 2509 or 2500. |
| G | Gastroenteritis | First four characters of the primary diagnosis code are 5589 |
| U | Kidney/Urinary Infections | First three characters of the primary diagnosis are 590 or the first four characters of the primary diagnosis of 5990 or 5999 |
| T | Cellulitis (last step) | If the value of the preventable admission indicator code is T, then if the first three characters of any of the procedure codes are blank or 860, or the first two characters of any of the procedure codes are between 87 and 99 inclusive. |
| 0 | Not a preventable admission | Any record that doesn’t meet any of the criteria described in this table, or any record where the patient is less than 18. |

**Appendix D: Inpatient Professional Services Reference File**

The purpose of this file is to provide an estimated professional services amount paid relating to the inpatient stay. Different business rules were used to estimate the professional services amount paid for acute care and non-acute care inpatient stays. Methodology used to calculate acute care professional services amount paid is described below. Plans to include non-acute care professional services are expected to be completed at a later time. The inpatient professional services reference file is produced yearly.

Below are steps describing the methodology used to estimate professional services for acute care inpatient stay.

Step 1 – Build episodes for all acute care hospital institutional stays (including interim claims) by consolidating same patient (EDI\_PN), same provider (Provider Tax ID) and same admission date. Exclude TDEFIC claims (any Special Processing Codes are FF, FG, FS, R, T, W), claims where patient has not been discharge (Disposition Status=30), and inpatient stays where provider is located in an external resource sharing catchment area.

Step 2 – Gather all non-institutional professional services claims where date of care is between the admission date and end date of care of the episode. Exclude facility charges (Provider Specialty=99) and internal resource sharing (Place of Service=26), and specific level II HCPC codes starting with D, G, H, M, or R.

Include non-institutional claims using following logic, in order:

1. Include any single date encounter falling within the stay dates, inclusive, except exclude a shoulder date[[9]](#footnote-9) when the setting is not a hospital.
2. Include any encounter whose span[[10]](#footnote-10) is totally within the stay.
3. Include if the encounter span overlaps the stay and has a global procedure code of length greater than zero.
4. Include if the encounter span overlaps the stay AND the setting is a hospital.
5. If none of the above are true, the non-institutional encounter is not included.

Use the following logic to assign an encounter if it would be assigned to more than one institutional claims, in order:

1. If only the shoulder date applies to the earlier stay, assign it entirely to the latter stay.
2. Add the number of overlap days of all stays with the encounter, and assign to each the percentage of its allowable cost that it has of the total overlap days. (Note: the sum of the overlap days can be greater than the length of stay for a transfer case, since the transfer date is day in both stays.)

Step 3 – Summarize non-institutional amount allowed and paid for each episode of care where one observation is one stay in an acute care hospital.

Step 4 – Perform a regression model by DRG where the dependent variable is total non-institutional allowable cost and independent variables are institutional allowed cost and length of stay. This model will be applied to each DRG with sufficient observations to yield DRG specific coefficients.

Step 5 – Place DRG specific coefficients into a format file. Acute care stays have care indicator=’D’, non-acute care stays have care indicator=’I’. The first line in the format file is the statement “proc format”. The format value is $PROFyyA, where yy represents the fiscal year of the DRG mapping keys. Each line thereafter consists of care indicator||DRG and a concatenated string containing the following values, in order:

### **MDR Professional Service Tail Format Table**

| **Variable Name** | **Format** | **Start Position** | **Length** |
| --- | --- | --- | --- |
| Fixed Amount | NNNN.NN | 1 | 8 |
| Slope of Institutional Allowed Amount | NNNN.NN | 9 | 8 |
| Slope of Length of Stay | NNNN.NN | 17 | 8 |

The last line in each format file is the SAS “other=” statement, i.e. other = “lank spaces” which is used by SAS to assign values to care indicator||DRG that are not found in the Professional Services Tail Format Table.

For example, the Professional Services Tail Format Table for a given year would resemble:

PROC FORMAT;

VALUE $PROFyyA

‘care indicator||DRG’ = ’ 1000.00 2000.00 3000.00’

‘care indicator||DRG’ = ‘etc…

.

.

.

other = ’ blank spaces’;

**Professional Service Tail Application**

Calculate estimated professional services allowed amount using formula below:

*PROFTAIL = (Fixed Amount) +*

*(Slope of Inst Allowed Amount \* ALLOW) + (Slope of Length of Stay\*DAYS)*

Calculate professional services paid amount by reducing professional services allowed amount by a percentage based on coverage category.

*PROFTAIL = PROFTAIL \* (percentage reduction*)

**Appendix E: TED Episode Reference File**

The purpose of the TED Episode Reference file is to allow the linking of claims that are part of an episode of care. Only acute care stays are included. Methodology used to create episode reference table for acute care stays is described below. Episode table is refreshed month at the same time when processing of monthly TED-I occurs.

***TED-I – 1st pass (creating episode table)***

* A total table refresh will be generated every month using Master TED-I files from current FY and prior. Priority is given to create episode files using TED-I master files FY04 and forward first before creating episode files using FY03 and prior.
* Include acute care hospitals only. Use acute care flag (TED-I) or institution type (HCSRi) based on same institution type that TED-I defined as acute care.
* Include only claims where allowed amount is greater than 0.
* Keep in data cube person id (EDIPN), provider tax id, DRG, admit date, enddate, cycle date, TEDno, and disposition flag (Y or N to identify if patient has been discharged).

TED-I Deduping rules (in order):

* Remove non-acute care claims based on acute care flag.
* If person id, admit date and enddate do not overlap then output as is and assign admitting tedno to tedno of claim.
* If person id, admit date and enddate overlap then do the following in order:
  1. If transfer (defined by same person, different provider id and no more than 1 day overlap) then output as is and assign admitting tedno to tedno of respective claim.
  2. Exclude claims that are entirely overlap with another claim.
  3. If same provider and same day overlap then do;
     + If same DRG then count as 1 continuous stay and output admit date and greatest enddate, keeping admit tedno from earliest admit date
     + If different DRG then count as different stays. Keeping admit tedno from their respective stays.
     + If same provider and consecutive stays where end date of 1st stay is consecutive to admit date of 2nd stay then count as 2 diff stays. Output as is and assign admitting tedno to tedno of respective claim.
  4. If different providers and dates overlap then shorten end date of 1st claim equal to admit date of 2nd claim minus 1 day. Keep 2nd claim as is. Output both claims and assign admitting tedno to tedno of respective claim.
* Upon completion of the deduplication process above you should have a clean episode table that includes person id (EDIPN), occurrence count representing the number of episodes for each EDIPN, admit date, end date, admitting TEDno and disposition flag (identify if patient has been discharged).
* If an episode has a disposition flag=’N’ (not disposition), then 60 days to the end date of care. If the addition of 60 days to end date of care overlaps with the next episode then set end date of care of the episode to admit date of next episode minus 1 day. This is to account for long institutional stays where non-institutional claims may arrive earlier than the institutional claim.
* Episode table should be in format file so that it can be easily apply to TED-I and TEDni by patient id (EDI\_PN). Format files are fiscal year specific and includes episodes where admit date and end date falls within the specified fiscal year. For example, if a person has an episode spanning across 2 fiscal years (admit date=9/30/2004 and enddate=10/2/2004) then this episode would be in both FY04 and FY05 episode files.
* Episode table should resemble format below. The first line in the format file is the statement “proc format”. The format value is $EPIFMT. Each line thereafter consists of unique EDI\_PN and a concatenated string containing the following values, in order. Variables Admit Date of Care, End Date of Care, Admitting TED Number and Discharge Flag will repeat if number of episode segment is greater than 1.

### **Internal Episode Format Table**

| **Variable Name** | **Format** | **Start Position of 1st Episode** | **Start Position**  **of 2nd Episode**  **(where *i*>1)** | **Length** |
| --- | --- | --- | --- | --- |
| Number of Episode Segments (*i*) | NN | 1 | N/A | 2 |
| Admit Date of Care*i* | YYYYMMDD | 3 | 2 + ((*i* - 1) \* 41) +1 | 8 |
| End Date of Care*i* | YYYYMMDD | 11 | 2 + ((*i* - 1) \* 41) + 9 | 8 |
| Admitting TED Number*i* | 123456789012345678901234 | 19 | 2 + ((*i* - 1) \* 41) + 17 | 24 |
| Discharge Flag*i* | Y or N | 43 | 2 + ((*i* - 1) \* 41) + 41 | 1 |

* The last line in each format file is the SAS “other=” statement, i.e. other = “blank spaces”; which is used by SAS to assign values to EDI\_PN that are not found in the Episode Format Table.

For example, the Episode Format Table for a given year would resemble:

PROC FORMAT;

VALUE $EPIFMT

‘EDI\_PN1’ = ’ 1YYYYMMDDYYYYMMDD123456789012345678901234Y’

‘EDI\_PN2’ = ’ 2YYYYMMDDYYYYMMDD123456789012345678901234Y YYYYMMDDYYYYMMDD123456789012345678901234N’

.

.

.

other = ’ ‘;

***TED-I – 2st pass (applying Episode Table to TED-I)***

* Apply Admitting TED number to master TED-I file using corresponding FY episode file.
* Merge episode table to acute care claims (use acute care flag)
* If begin date of a claim is between admit date and end date on episode table and does not have overlap with any other episode segments then populate claim admitting TEDno with episode admitting TEDno.
* If begin date of a claim is an overlap between 2 episode segments then populate claim admitting TEDno with 2nd episode admitting TEDno. **Appendix F: Category of Care**

The Category of Care is a two digit field derived from the PRINCIPAL TREATMENT DIAGNOSIS CODE, PATIENT AGE, PRINCIPAL OPERATION/NONSURGICAL PROCEDURE CODE, and SPECIAL PROCESSING CODES.

IF the value of PRINCIPAL TREATMENT DIAGNOSIS CODE relates to psychiatry

or psychology (value of the field PRINCIPAL TREATMENT DIAGNOSIS CODE(first 3 characters) is greater than or equal to '290' and less than or equal to '316' ) then

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘A1’

ELSE the value of the field CATEGORY OF CARE is ‘A ’

ELSE IF the value of PRINCIPAL TREATMENT DIAGNOSIS CODE relates to obstetrics (first 3 characters between '630' and '676' or is equal to 'V22' or 'V23' or 'V24' or 'V28') then

IF ((the value of the field PRINCIPAL TREATMENT DIAGNOSIS CODE (first 3 characters) is greater than or equal to '640'

and the value of the field PRINCIPAL TREATMENT DIAGNOSIS CODE (first 3 characters) is less than or equal to '669')

and the value of the field PRINCIPAL TREATMENT DIAGNOSIS CODE (position 5) is equal to '1 ' OR '2 ')

or the value of the field PRINCIPAL TREATMENT DIAGNOSIS CODE (first 3 characters is equal to '650' then

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘B3’

ELSE the value of the field CATEGORY OF CARE is ‘B2’

ELSE IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘B1’

ELSE the value of the field CATEGORY OF CARE is ‘B ’

ELSE IF the value of PRINCIPAL TREATMENT DIAGNOSIS CODE relates to gynecology (value range of first 3 characters between '614' and '629'

or is equal to 'V25' or 'V26') then

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘C1’

ELSE the value of the field CATEGORY OF CARE is ‘C ’

ELSE IF (the PRINCIPAL OPERATION/NONSURGICAL PROCEDURE CODE

is within an operation/non-surgical procedure code range (first 3 characters greater than or equal to '001' and less than or equal to '869)')

and (the value of at least one REVENUE CODE (line item) position 1-3 indicates surgery (value of ’036’ (operating room services) or

‘045’ (emergency room) or

‘072’ (labor room/delivery))) then

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘D1’

ELSE the value of CATEGORY OF CARE is equal to ‘D ’

ELSE IF the any occurrence of the field SPECIAL PROCESSING CODE is equal to 'PF' (Program for Persons with Disability) then

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘H1’

ELSE the value of the field CATEGORY OF CARE is ‘H ’

ELSE

IF the value of the field PATIENT AGE is less than ‘19’ then the value of the field CATEGORY OF CARE is ‘E1’

ELSE the value of the field CATEGORY OF CARE is ‘E ’.

**Appendix G: Type of Submission**

The Type of Submission Code is a 1 character field derived from AMOUNT ALLOWED TOTAL, AMOUNT PAID BY OTHER HEALTH INSURANCE, AMOUNT PAID BY GOVERNMENT CONTRACTOR, TOTAL AMOUNT BILLED, DENIAL REASON DERIVED CODE, and SUBMISSION CODE.

IF AMOUNT ALLOWED TOTAL > 0,

and AMOUNT PAID BY OTHER HEALTH INSURANCE > 0,

and AMOUNT PAID BY GOVERNMENT CONTRACTOR < or = 0, then

the value of TYPE OF SUBMISSION, DERIVED is ‘O’ (100% paid by Other Health insurance)

ELSE

IF AMOUNT ALLOWED TOTAL < OR = 0,

and all Line Items (except for the line with revenue code 0001) contain a value in DENIAL REASON DERIVED CODE,

and the AMOUNT PAID BY OTHER HEALTH INSURANCE = TOTAL AMOUNT BILLED,

then the value of TYPE OF SUBMISSION, DERIVED is ‘O’ (100% paid by Other Health insurance)

ELSE

IF AMOUNT ALLOWED TOTAL < OR = 0,

and all Line Items (except for the line with revenue code 0001) contain a value in DENIAL REASON DERIVED CODE, then

the value of TYPE OF SUBMISSION, DERIVED is ‘D’ (Complete contractor denial initial TED Record submission)

ELSE

IF SUBMISSION CODE on the raw TED Record = ‘D’ (Complete contractor denial initial TED Record submission), and AMOUNT ALLOWED (TOTAL) not = 0, and AMOUNT PAID GOVERNMENT CONTRACTOR > 0, then

the value of TYPE OF SUBMISSION, DERIVED is ‘I’, (Initial TED Record submission)

ELSE

IF SUBMISSION CODE on the raw TED Record = ‘D’ (Complete contractor denial initial TED Record submission) then the value of TYPE OF SUBMISSION, DERIVED is ‘D’ (Complete contractor denial initial TED Record submission)

ELSE

IF SUBMISSION CODE on raw TED Record = ‘A’ (Adjustment to TED Record data) or

‘B’ (Adjustment to non-TED Record (HCSR) data or ‘I’ (Initial TED Record submission),

then the value of TYPE OF SUBMISSION, DERIVED is ‘I,’ (Initial TED Record submission

ELSE

IF SUBMISSION CODE on raw TED Record =

‘C’ (Complete cancellation of TED record data) or

‘E’ (Complete cancellation of non-TED Record (HCSR) data)

then the value of TYPE OF SUBMISSION, DERIVED is ‘C’ (Complete cancellation of TED record data)

ELSE

The value of TYPE OF SUBMISSION, DERIVED is the value of SUBMISSION CODE on the raw Record.

**Appendix H: TNex Option Period**

This variable is a 1 character field that represents the TNex option period of the claim. It is derived based on the following fields:

* Contract Type (contype)
* End Date of Care (cy, cm)
* Residence Region (resreg)

The combinations of values in each of these fields that result in a particular TNex Option Period are presented below.

| **Case** | **Contract Type (contype)** | **Residence Region (resreg)** | **End Date of Care**  **(cy, cm)** | **TNex Option Period**  **(op)** |
| --- | --- | --- | --- | --- |
| 1 | 1 (TNex) | 11 | Jun 2004 – Mar 2005 | 1 |
| 2 | 2, 5  9, 10, 12, AK | Jul 2004 – Mar 2005 | 1 |
| 3 | 3, 4 | Aug 2004 – Mar 2005 | 1 |
| 4 | 1 | Sep 2004 – Mar 2005 | 1 |
| 5 | 7,8 | Oct 2004 – Mar 2005 | 1 |
| 6 | 6 | Nov 2004 – Mar 2005 | 1 |
| 7 | Any | Nov 2004 – Mar 2005 | 1 |
| 8 | Any | Apr 2005 – Mar 2006 | 2 |
| 9 | Apr 2006 – Mar 2007 | 3 |
| 10 | Apr 2007 – Mar 2008 | 4 |
| 11 | Apr 2008 – Mar 2009 | 5 |
| 12 | 3 (TRex) | Any | Jun 2004 – May 2005 | 1 |
| 13 | Jun 2005 – May 2006 | 2 |
| 14 | Jun 2006 – May 2007 | 3 |
| 15 | Jun 2007 – May 2008 | 4 |
| 16 | Jun 2008 – May 2009 | 5 |
| 17 | 4 (TDEFIC) | 11 | Apr 2004 – Mar 2005 | 1 |
| 18 | 2, 5 | Jun 2004 – Mar 2005 | 1 |
| 19 | 9, 10, 12, AK | Jul 2004- Mar 2005 | 1 |
| 20 | 3, 4 | Aug 2004 – Mar 2005 | 1 |
| 21 | 1 | Sep 2004 – Mar 2005 | 1 |
| 22 | 7,8 | Oct 2004 – Mar 2005 | 1 |
| 23 | 6 | Nov 2004 – Mar 2005 | 1 |
| 24 | Any | Nov 2004 – Mar 2005 | 1 |
| 25 | Any | Apr 2005 – Mar 2006 | 2 |
| 26 | Apr 2006 – Mar 2007 | 3 |
| 27 | Apr 2007 – Mar 2008 | 4 |
| 28 | Apr 2008 – Mar 2009 | 5 |
| 29 | 5 (TMOP) | Any | Mar 2003 – Feb 2004 | 1 |
| 30 | Mar 2004 – Feb 2005 | 2 |
| 31 | Mar 2005 – Feb 2006 | 3 |
| 32 | Mar 2006 – Feb 2007 | 4 |
| 33 | Mar 2007 – Feb 2008 | 5 |
| 34 | 1(TNex) | Any | Apr 2009 – Mar 2010 | 6 |
| Not in any of the above 1-34 cases | Any | Any | Any | Blank |

**Appendix I: Medicare Eligible Retiree Health Care Fund (MERHCF) Flag**

The MERHCF flag has 4 values (A,N,U,T), which are based on accrual fund eligibility and patient age and beneficiary category (common). First the ACCRUAL FUND status is determined, then the patient age or ben cat common is used to assign the MERHCF flag.

If the DEERS Health Care Delivery Program Code (dhcdp) is blank, use the Health Care Delivery Program Code from the TED processing (hcdp).

If the contractor number (konum) is '04', '05', '08', '62', '63' or '64' then ACCRUAL FUND = DHP.

If the enrollment status (enrstat) is 'SR', 'AA' or 'Y' then ACCRUAL FUND = DHP.

If any special processing code (sprocd1-sprocd4) is 'AR', 'DC' or 'DE' then ACCRUAL FUND = DHP.

If the member relationship (memrln) is 'A' or 'Z' and either the enrollment status is 'SN' or any special processing code is 'AN' then ACCRUAL FUND = DHP.

If the member relationship is 'A' and the member category (memcat) is 'A', 'G', 'J', 'N', 'S', 'T', 'V', or 'Y' then ACCRUAL FUND = DHP.

If the health care delivery program code (dhcdp or hcdp) is between '405' and '414' or between '417' and '421' then ACCRUAL FUND = DHP.

If the health care delivery program code is '000', '121' or '122' then ACCRUAL FUND = DHP.

If the other government insurance begin reason code (govinbeg) is 'N' then ACCRUAL FUND = DHP.

If the other government insurance (govins) is not 'A', 'C', 'H', 'I', or 'L' then ACCRUAL FUND = DHP.

If the member category is not 'F', 'H', 'R' or 'W' and the health care delivery program code is not blank, '004', '005', '016', '017', '021', '023', '110', '111', '114', '115', '136', '137', '138', '139', 143', '144', '148', '149', '151' then ACCRUAL FUND = DHP.

If none of the above conditions are true then ACCRUAL FUND = MERHCF.

If ACCRUAL FUND is DHP and the beneficiary category (comben) is 1 or 4, then MERHCF flag is 'A'.

If ACCRUAL FUND is DHP and the beneficiary category is 2 or 3, then MERHCF flag is 'N'.

If ACCRUAL FUND is MERHCF and patient age (patage) < 65 then MERHCF flag is 'U'.

If ACCRUAL FUND is MERHCF and patient age (patage) => 65 then MERHCF flag is 'T'.

**Appendix J: DEERS Person Demographic File**

Under the TRICARE Next Generation contracts, new demographic data elements were added to the DEERS interface with the fiscal intermediaries, allowing for new content to be available on TED records. This content is added to HCSRS and ATOH records based on a derivation from matching to a DEERS point in time based extract. This process is done on the initial MDR database for each year prior to FY06 as well as monthly ATOH feeds.

The following demographic variables added to HCSR and ATOH records are listed below.[[11]](#footnote-11) Create one DEERS file containing both FY04 and FY05. Prior years will be added at a later time.

To create the DEERS merge files:

1. Read in primary eligible PITE/VM4 records.
2. Create a PITE month date element, indicating the month of the PITE data.
3. For each EDI\_PN, retain the most recent non-blank value (with primary eligibility) for:
   1. Sponsor Social Security Number
   2. Legacy DDS Code
   3. DEERS Patient ID
   4. Sponsor Social Type Code
   5. Patient Social Security Number
   6. Patient Social Type Code
   7. Cadency
4. And (for each EDI\_PN) retain most current Medicare A and Medicare B segments:
   1. Medicare A Begin Reason Code, Effective and Expiration Dates
   2. Medicare B Begin Reason Code, Effective and Expiration Dates
5. And (for each EDI\_PN) retain a monthly history segment of:
   1. AGR Legal Service Authority Code

To match the pre-processed DEERS files to the HCSR data:

1. Sort DEERS file and deduplicate by sponsor social and DEERS dependent suffix where both fields are populated. (If either of these fields is unpopulated, records should be merged to DEERS data based on patient social security number, if available. If unavailable, the DEERS-based values to be added to HCSRs described in this appendix should be coded as unknown).
2. Sort HCSRs by sponsor social and DDS (or patient social, as noted above).
3. Match to DEERS records. Only retain records that result with a matching HCSR. In other words, delete DEERS only records.
4. For matching records, populate the HCSR demographic data
   1. From the matching DEERS record:
      1. Cadency
      2. Patient Social (if empty)
      3. Patient ID Type Code
      4. DEERS ID
      5. Sponsor ID Type Code
   2. Populate AGR Legal Service Authority information by matching the month of the begin date of care to month of DEERS file. If the begin date of care is prior to the earliest month of available AGR Legal Service Authority information, fill with earliest available information for the beneficiary. If no match is found, leave blank.
   3. By deriving the Type of Other Government Health Insurance (GOVINS) and the Begin Reason Code for Other Government Insurance (GOVINBEG) from the most recently reported Medicare information available for the respective FY. In order to derive the GOVINS and the GOVINBEG, the begin date of care should be compared with the effective and expiration dates of Medicare eligibility. Should the care begin outside the window of eligibility, the associated Medicare begin reason code should be considered to be “N”. Do this comparison separately for Medicare A and for Medicare B, and then derive the GOVINS and GOVINBEG segments according to the table below:

| **OGP Type Code** | **OGP Begin Reason Code** | **Medicare A date window contains the begin date of care** | **Medicare B date window contains the begin date of care** | **HCSR Branch of Service** |
| --- | --- | --- | --- | --- |
| A (Medicare A) | Set to value in Medicare A Begin Reason Code DEERS record. | Yes | No | Any but V |
| B (Medicare B) | Set to value in Medicare B Begin Reason Code DEERS record. | No | Yes | Any but V |
| C (Medicare A and B) | Set to the value contained in the Medicare A begin reason code if not N, otherwise, use the value from the Medicare B begin reason code. | Yes | Yes | Any but V |
| V (CHAMPVA) | Set to V | Any | Any | V |
| N (No Medicare) | Set to W | All Other | | |

**Appendix K: DEERS Dependent Suffix and EDI\_PN File**

The DEERS dependent suffix reference file is a one-time requirement, prepared from the historical MDR Institutional claims files. This reference file is prepared by extracting the HCSR Key from the MDR HCSR Institutional File (positions 87 – 100), the DEERS Dependent Suffix (186-187), the person id EDI\_PN (76-85) and process to completion date (112-119). The data file should be sorted by HCSR Key and matched to the initial set of HCSRs delivered for this processor. Retain value from initial DDS and EDI\_PN merge should the HCSR be adjusted with an ATOH.

**Appendix L: Underwritten Flag**

The purpose of Underwritten Flag is to code which TNex region the responsible for the claim. This methodology is verified and approved the TMA and MCSC. For Regional jurisdiction, Prime beneficiaries (defined by enrollment status) are assigned to each contractor based on enrollment region and enrollment DMIS ids (for the 69XXs and 79XXs ids). Non Prime beneficiaries are assigned based on residence region. The new 69XX (managed care contractor) and 79XX (remote) series of enrollment DMIS ids are being assigned to enrollment region “00”. Thus, those enrollment DMIS ids must be included with the enrollment regions. There are 4 values in which this variable may contain (N, S, W, blank). This flag should only be applied to TED claims (based on TED indicator).

Below are rules used to determine underwritten flag.

1. Active Duty (based on common beneficiary code=4) claims are not underwritten.
2. USFHP enrollees (based on alternate care value=U) claims are not underwritten.
3. TRICARE Senior Pharmacy, Senior Supplement, Senior Prime, TRICARE for Life (based on enrollment status=PS,TS,BB,FE,FS and special processing codes=FF,FS,FG) claims are not underwritten.
4. Supplemental care (based on enrollment status= SN,SO,SR,ST) claims are not underwritten.
5. TRICARE Reserve Select (based on HCDP code=401-402,405-412)) claims are not underwritten.
6. CHCBP (based on enrollment status=AA,Y) claims are not underwritten.
7. Foreign claims (based on provider state/country code) claims are not underwritten.
8. TRICARE Dual Eligibles ages less than 65 (based on special processing codes=R,T,RS) claims are not underwritten.
9. Cancer-clinical trials, utero fetal surgery, CCTP or ICMP (based on special processing codes=CL,CT,CM) claims are not underwritten.
10. For remaining claims not identified above as not underwritten do the following:

* Determine prime enrollment based on enrollment status codes in ('U' 'Z' 'W' 'WF' 'WA' 'WO' 'X' 'XF').
* If claim is prime enrollment and enrollment region in (01, 02, 05, 17) or enrollment site in (6917, 7917) then set underwritten flag=’N’ (North)
* Else If claim is prime enrollment and enrollment region in (03, 04, 06, 18) or enrollment site in (6918, 7918) then set underwritten flag=’S’ (South)
* Else If claim is prime enrollment and enrollment region in (07, 08, 09, 10, 11, 12, 19) or enrollment site in (6919, 7919) then set underwritten flag=’W’ (West)
* Else if claim is not prime enrollment and residence region in (01, 02, 05, 17) then set underwritten flag=’N’ (North)
* Else if claim is not prime enrollment and residence region in (03, 04, 06, 18) then set underwritten flag=’S’ (South)
* Else if claim is not prime enrollment and residence region in (07, 08, 09, 10, 11, 12, 19) then set underwritten flag=’W’ (West)
* Else set underwritten flag equal to blank

1. If underwritten flag=’W’ and enrollment site in ('6919' '7919') and residence region equal 'AK' then set underwritten flag equal blank.
2. All other claims where underwritten flag not in (‘N’ ‘S’ ‘W’) are assigned blank.
3. If TED indicator is not ‘T’ then assign underwritten flag equal to blank. **Appendix M: Master Person Index Merge for EDI\_PN**

See MPI Specification.

**Appendix N: AHRQ Prevention Indicators**

The AHRQ publishes technical specifications and SAS Code for their prevention indicators.

Information about methodologies is maintained on the AHRQ website and can be downloaded from http://www.qualityindicators.ahrq.gov/pqi\_download.htm. The current version of the AHRQ indicators is version 3.1, dated March 2007. In the TED-I file, many data elements are added based on SAS “proc format” statements that are developed and maintained by AHRQ. These format statements can be downloaded from the AHRQ Website. The process for applying these formats is to format the data to ensure they run properly, and then to assign indicator variables based on the value contained with the format.

**Appendix O: TRICARE DRG Grouping**

The 3M Core Grouper Software is used to assign TRICARE DRG information to institutional TED data (All Care DRG, MDC and All Care MS-DRG). The process for using the DRG Grouper is to assign a unique record number to each TED record. This number will be used to merge DRG Grouper output back into the TED data later. The TED data is then used to prepare a file which is formatted as the grouper software expects. This file is transferred to a special PC which is used to operate the grouper software. The grouper versions to use are based on the admission fiscal year and the version number in table O-1.

**Table 0-1**

| **Admission Fiscal Year** | **Processed with FY Data** | **DRG Grouper Version Number** |
| --- | --- | --- |
| 2009-2012 | 2008 | 25 |
| 2008 | 2008 | 25 |
| 2007 | 2007 | 24 |
| <=2006 | Matching FY | <= 23 |

FY 2012 will be the last year the DRG is assigned to the data.

The software is then executed for each year and the output concatenated and merged back into the TED data by ‘recnum’; retaining the “new DRG” as “All Care DRG”, and the “new MDC” as “MDC”. The grouper inputs and outputs are described in the tables below.

Use the applicable diagnosis and procedure code mapping based on data to be grouped that is used in the MDR SIDR functional specification, Appendix C.

**Table O-2: Input File for TRICARE DRG Grouper**:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*;

**DATA** FIRST;

SET RECS.*FY\_WORKING\_WITH*;

RECNUM=\_N\_;

**RUN**;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*;

**DATA** ONE;

SET FIRST;

\*----- MAPPING DIAG AND PROC CODES BASED ON THE FEDERAL REGISTER;

\*----- FIRST YOU MUST SUBSTR DIAG AND PROC TO LENGTHS OF 5 AND 4,

\*----- RESPECTIVELY. THEN THE PROC FORMATS START;

LENGTH D1-D12 $ **5**;

D1=SUBSTR(DX1,**1**,**5**);

D2=SUBSTR(DX2,**1**,**5**);

D3=SUBSTR(DX3,**1**,**5**);

D4=SUBSTR(DX4,**1**,**5**);

D5=SUBSTR(DX5,**1**,**5**);

D6=SUBSTR(DX6,**1**,**5**);

D7=SUBSTR(DX7,**1**,**5**);

D8=SUBSTR(DX8,**1**,**5**);

D9=SUBSTR(DX9,**1**,**5**);

D10=SUBSTR(DX10,**1**,**5**);

D11=SUBSTR(DX11,**1**,**5**);

D12=SUBSTR(DX12,**1**,**5**);

LENGTH P1-P12 $ **4**;

P1=SUBSTR(PROC1,**1**,**4**);

P2=SUBSTR(PROC2,**1**,**4**);

P3=SUBSTR(PROC3,**1**,**4**);

P4=SUBSTR(PROC4,**1**,**4**);

P5=SUBSTR(PROC5,**1**,**4**);

P6=SUBSTR(PROC6,**1**,**4**);

P7=SUBSTR(PROC7,**1**,**4**);

P8=SUBSTR(PROC8,**1**,**4**);

P9=SUBSTR(PROC9,**1**,**4**);

P10=SUBSTR(PROC10,**1**,**4**);

P11=SUBSTR(PROC11,**1**,**4**);

P12=SUBSTR(PROC12,**1**,**4**);

LENGTH DIAG1-DIAG12 $**5**;

DIAG1=PUT(D1,$DIAG.);

DIAG2=PUT(D2,$DIAG.);

DIAG3=PUT(D3,$DIAG.);

DIAG4=PUT(D4,$DIAG.);

DIAG5=PUT(D5,$DIAG.);

DIAG6=PUT(D6,$DIAG.);

DIAG7=PUT(D7,$DIAG.);

DIAG8=PUT(D8,$DIAG.);

DIAG9=PUT(D9,$DIAG.);

DIAG10=PUT(D10,$DIAG.);

DIAG11=PUT(D11,$DIAG.);

DIAG12=PUT(D12,$DIAG.);

LENGTH PR1-PR12 $ **4**;

PR1=PUT(P1,$PROC.);

PR2=PUT(P2,$PROC.);

PR3=PUT(P3,$PROC.);

PR4=PUT(P4,$PROC.);

PR5=PUT(P5,$PROC.);

PR6=PUT(P6,$PROC.);

PR7=PUT(P7,$PROC.);

PR8=PUT(P8,$PROC.);

PR9=PUT(P9,$PROC.);

PR10=PUT(P10,$PROC.);

PR11=PUT(P11,$PROC.);

PR12=PUT(P12,$PROC.);

IF PR1='00 ' THEN PR1=' ';

IF PR2='00 ' THEN PR2=' ';

IF PR3='00 ' THEN PR3=' ';

IF PR4='00 ' THEN PR4=' ';

IF PR5='00 ' THEN PR5=' ';

IF PR6='00 ' THEN PR6=' ';

IF PR7='00 ' THEN PR7=' ';

IF PR8='00 ' THEN PR8=' ';

IF PR9='00 ' THEN PR9=' ';

IF PR10='00 ' THEN PR10=' ';

IF PR11='00 ' THEN PR11=' ';

IF PR12='00 ' THEN PR12=' ';

\*----- YOU DO NOT HAVE TO CALCULATE THE AGE IN YEARS AND DAYS IF YOU

\*----- SUPPLY THE BIRTHDAY AND ADMIT DATE, BUT YOU DO HAVE TO TELL THE

\*----- GROUPER THAT THERE IS NOTHING THERE. SO, TWO VARIABLES ARE

\*----- CREATED AND GIVEN A VALUE OF 3 BLANKS;

LENGTH AGEY $3. AGED $3.;

AGEY=' ';

AGED=' ';

\*----- FOR THE CORE GROUPER, DATES MUST BE MMDDYYYY FORMAT;

LENGTH FBIRTH FADMIT FDISP $ **10**;

LENGTH DOB DOA DOD $ **10**;

LENGTH BYR AYR DYR $ **4**;

LENGTH BMO BDA AMO ADA DMO DDA $ **2**;

DOB=PUT(patdob,MMDDYY10.);

BMO=SUBSTR(DOB,**1**,**2**);

BDA=SUBSTR(DOB,**4**,**2**);

BYR=(SUBSTR(DOB,**7**,**4**));

FBIRTH=BMO||BDA||BYR;

DOA=PUT(ADMDATE,MMDDYY10.);

AMO=SUBSTR(DOA,**1**,**2**);

ADA=SUBSTR(DOA,**4**,**2**);

AYR=(SUBSTR(DOA,**7**,**4**));

FADMIT=AMO||ADA||AYR;

DOD=PUT(enddate,MMDDYY10.);

DMO=SUBSTR(DOD,**1**,**2**);

DDA=SUBSTR(DOD,**4**,**2**);

DYR=(SUBSTR(DOD,**7**,**4**));

FDISP=DMO||DDA||DYR;

LENGTH UK1 UK2 $ **15**;

UK1='0001';

UK2=' ';

if patsex = ‘M’ then RECSEX = ‘1’; else if patsex = ‘F’ then RECSEX = ‘2’; else RECSEX = ‘0’;

If dispstat in (‘40’, ‘41’ ,’42’) then dispstat = ’20’;

LENGTH HACPOA $1;

\*\*\* SELECT ONE OF THE FOLLOWING AND COMMENT OUT THE OTHER \*\*\*;

\*\*\* HACPOA=’0’ ALLOWS HAC/POA PROCESSING (DEFAULT VALUE) \*\*\*;

\*\*\* HACPOA=’1’ SUSPENDS ALL HAC/POA PROCESSING \*\*\*;

HACPOA=’1’; \*\*\*USE UNTIL POA DATA STARTS COMING IN \*\*\*;

RECDISP = dispstat;

KEEP RECNUM FADMIT FDISP DMISDAYS FBIRTH AGEY AGED RECSEX RECDISP

DIAG1-DIAG12 PR1-PR12 UK1 UK2;

**RUN**;

**DATA** \_NULL\_;

SET ONE;

FILE FLAT NOTITLES LRECL= **2351** PAD;

PUT RECNUM 1-8

UK1 $ 74-88

UK2 $ 89-103

FADMIT $ 104-111

FDISP $ 112-119

FBIRTH $ 120-127

AGEY $ 128-130

AGED $ 131-133

RECSEX $ 134

RECDISP $ 135-136

DIAG1 $ **174**-**181**

DIAG2 $ **182**-**189**

DIAG3 $ **190**-**197**

DIAG4 $ **198**-**205**

DIAG5 $ **206**-**213**

DIAG6 $ **214**-**221**

DIAG7 $ **222**-**229**

DIAG8 $ **230**-**237**

DIAG9 $ **238**-**245**

DIAG10 $ **246**-**253**

DIAG11 $ **254**-**261**

DIAG12 $ **262**-**269**

PR1 $ **574**-**580**

PR2 $ **581**-**587**

PR3 $ **588**-**594**

PR4 $ **595**-**601**

PR5 $ **602**-**608**

PR6 $ **609**-**615**

PR7 $ **616**-**622**

PR8 $ **623**-**629**

PR9 $ **630**-**636**

PR10 $ **637**-**643**

PR11 $ **644**-**650**

PR12 $ **651**-**657**

HACPOA $1418

;

RUN;

See the SIDR specification for the directions for running the TRICARE grouping software.

Create the SAS data from the results of the TRICARE core grouping software using the following code:

DATA ORGDATA;

SET RECS.*FY\_WORKING\_WITH*;

RECNUM=\_N\_;

RUN;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*;

DATA DATA1;

INFILE FLAT1 LRECL=4690 TRUNCOVER;

INPUT RECNUM 1-8

UK1 $ **74-88**

UK2 $ **89**-103

FADMIT $ 104-111

FDISP $ **112**-**119**

FBIRTH $ **120**-**127**

AGEY $ **128**-**130**

AGED $ **131**-**133**

RECSEX $ **134**

RECDISP $ **135**-**136**

DIAG1 $ **174**-**181**

DIAG2 $ **182**-**189**

DIAG3 $ **190**-**197**

DIAG4 $ **198-205**

DIAG5 $ **206**-**213**

DIAG6 $ **214**-**221**

DIAG7 $ **222**-**229**

DIAG8 $ **230**-**237**

DIAG9 $ **238**-**245**

DIAG10 $ **246**-**253**

DIAG11 $ **254**-**261**

DIAG12 $ **262**-**269**

PR1 $ **574**-**580**

PR2 $ **581**-**587**

PR3 $ **588**-**594**

PR4 $ **595**-**601**

PR5 $ **602**-**608**

PR6 $ **609**-**615**

PR7 $ **616**-**622**

PR8 $ **623**-**629**

PR9 $ **630**-**636**

PR10 $ **637**-**643**

PR11 $ **644**-**650**

PR12 $ **651-657**

GROUPER $ **2359-2363**

DRG $ **2364-2366**

MDC $ **2367-2368**

RTC $ **2369-2370**

MEDSURG $ **3518**

;

RUN;

DATA TWO; SET DATA1;

KEEP RECNUM DRG MDC RTC DIAG1 PR1 RECDISP FBIRTH FADMIT FDISP;

RUN;

PROC SORT DATA=ORGDATA; BY RECNUM; RUN;

PROC SORT DATA=TWO; BY RECNUM; RUN;

DATA OUT.*OUTPUT\_FILENAME*; SET MERGE ORGDATA TWO; BY RECNUM;

DROP DIAG1 PR1 RECDISP FBIRTH FADMIT FDISP;

RUN;

**Table O-3: Input File for the TRICARE MS-DRG Grouper**

Use the applicable diagnosis and procedure code mapping based on data to be grouped that is used in the MDR SIDR functional specification, Appendix F.

DATA FIRST;

SET RECS.*FY\_WORKING\_WITH*;

RECNUM=\_N\_;

RUN;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*;

DATA ONE;

SET FIRST;

\*----- MAPPING DIAG AND PROC CODES BASED ON THE FEDERAL REGISTER;

\*----- FIRST YOU MUST SUBSTR DIAG AND PROC TO LENGTHS OF 5 AND 4,

\*----- RESPECTIVELY. THEN THE PROC FORMATS START;

LENGTH D1-D12 $ 5;

D1=SUBSTR(DX1,1,5);

D2=SUBSTR(DX2,1,5);

D3=SUBSTR(DX3,1,5);

D4=SUBSTR(DX4,1,5);

D5=SUBSTR(DX5,1,5);

D6=SUBSTR(DX6,1,5);

D7=SUBSTR(DX7,1,5);

D8=SUBSTR(DX8,1,5);

D9=SUBSTR(DX9,1,5);

D10=SUBSTR(DX10,1,5);

D11=SUBSTR(DX11,1,5);

D12=SUBSTR(DX12,1,5);

LENGTH P1-P12 $ 4;

P1=SUBSTR(PROC1,1,4);

P2=SUBSTR(PROC2,1,4);

P3=SUBSTR(PROC3,1,4);

P4=SUBSTR(PROC4,1,4);

P5=SUBSTR(PROC5,1,4);

P6=SUBSTR(PROC6,1,4);

P7=SUBSTR(PROC7,1,4);

P8=SUBSTR(PROC8,1,4);

P9=SUBSTR(PROC9,1,4);

P10=SUBSTR(PROC10,1,4);

P11=SUBSTR(PROC11,1,4);

P12=SUBSTR(PROC12,1,4);

LENGTH DIAG1-DIAG12 $5;

DIAG1=PUT(D1,$DIAG.);

DIAG2=PUT(D2,$DIAG.);

DIAG3=PUT(D3,$DIAG.);

DIAG4=PUT(D4,$DIAG.);

DIAG5=PUT(D5,$DIAG.);

DIAG6=PUT(D6,$DIAG.);

DIAG7=PUT(D7,$DIAG.);

DIAG8=PUT(D8,$DIAG.);

DIAG9=PUT(D9,$DIAG.);

DIAG10=PUT(D10,$DIAG.);

DIAG11=PUT(D11,$DIAG.);

DIAG12=PUT(D12,$DIAG.);

LENGTH PR1-PR12 $ 4;

PR1=PUT(P1,$PROC.);

PR2=PUT(P2,$PROC.);

PR3=PUT(P3,$PROC.);

PR4=PUT(P4,$PROC.);

PR5=PUT(P5,$PROC.);

PR6=PUT(P6,$PROC.);

PR7=PUT(P7,$PROC.);

PR8=PUT(P8,$PROC.);

PR9=PUT(P9,$PROC.);

PR10=PUT(P10,$PROC.);

PR11=PUT(P11,$PROC.);

PR12=PUT(P12,$PROC.);

IF PR1='00 ' THEN PR1=' ';

IF PR2='00 ' THEN PR2=' ';

IF PR3='00 ' THEN PR3=' ';

IF PR4='00 ' THEN PR4=' ';

IF PR5='00 ' THEN PR5=' ';

IF PR6='00 ' THEN PR6=' ';

IF PR7='00 ' THEN PR7=' ';

IF PR8='00 ' THEN PR8=' ';

IF PR9='00 ' THEN PR9=' ';

IF PR10='00 ' THEN PR10=' ';

IF PR11='00 ' THEN PR11=' ';

IF PR12='00 ' THEN PR12=' ';

\*----- YOU DO NOT HAVE TO CALCULATE THE AGE IN YEARS AND DAYS IF YOU

\*----- SUPPLY THE BIRTHDAY AND ADMIT DATE, BUT YOU DO HAVE TO TELL THE

\*----- GROUPER THAT THERE IS NOTHING THERE. SO, TWO VARIABLES ARE

\*----- CREATED AND GIVEN A VALUE OF 3 BLANKS;

LENGTH AGEY $3. AGED $3.;

AGEY=' ';

AGED=' ';

\*----- FOR THE CORE GROUPER, DATES MUST BE MMDDYYYY FORMAT;

LENGTH FBIRTH FADMIT FDISP $ 10;

LENGTH DOB DOA DOD $ 10;

LENGTH BYR AYR DYR $ 4;

LENGTH BMO BDA AMO ADA DMO DDA $ 2;

DOB=PUT(patdob,MMDDYY10.);

BMO=SUBSTR(DOB,1,2);

BDA=SUBSTR(DOB,4,2);

BYR=SUBSTR(DOB,7,4);

FBIRTH=BMO||BDA||BYR;

DOA=PUT(ADMDATE,MMDDYY10.);

AMO=SUBSTR(DOA,1,2);

ADA=SUBSTR(DOA,4,2);

AYR=SUBSTR(DOA,7,4);

FADMIT=AMO||ADA||AYR;

DOD=PUT(enddate,MMDDYY10.);

DMO=SUBSTR(DOD,1,2);

DDA=SUBSTR(DOD,4,2);

DYR=SUBSTR(DOD,7,4);

FDISP=DMO||DDA||DYR;

LENGTH UK1 UK2 $ 15;

UK1='0001';

UK2=' ';

if patsex = ‘M’ then RECSEX = ‘1’; else if patsex = ‘F’ then RECSEX = ‘2’; else RECSEX = ‘0’;

If dispstat in (‘40’, ‘41’ ,’42’) then dispstat = ’20’;

RECDISP = dispstat;

LENGTH HACPOA $1;

\*\*\* SELECT ONE OF THE FOLLOWING AND COMMENT OUT THE OTHER \*\*\*;

\*\*\* HACPOA=’0’ ALLOWS HAC/POA PROCESSING (DEFAULT VALUE) \*\*\*;

\*\*\* HACPOA=’1’ SUSPENDS ALL HAC/POA PROCESSING \*\*\*;

HACPOA=’1’; \*\*\* USE UNTIL POA DATA STARTS COMING IN

KEEP RECNUM FADMIT FDISP DMISDAYS FBIRTH AGEY AGED RECSEX RECDISP

DIAG1-DIAG12 PR1-PR12 UK1 UK2;

RUN;

DATA \_NULL\_;

SET ONE;

FILE FLAT NOTITLES LRECL=**2351** PAD;

PUT RECNUM1-8

UK1 $ 74-88

UK2 $ 89-103

FADMIT $ 104-111

FDISP $ 112-119

FBIRTH $ 120-127

AGEY $ 128-130

AGED $ 131-133

RECSEX $ 134

RECDISP $ 135-136

DIAG1 $ **174**-**181**

DIAG2 $ **182**-**189**

DIAG3 $ **190**-**197**

DIAG4 $ **198**-**205**

DIAG5 $ **206**-**213**

DIAG6 $ **214**-**221**

DIAG7 $ **222**-**229**

DIAG8 $ **230**-**237**

DIAG9 $ **238**-**245**

DIAG10 $ **246**-**253**

DIAG11 $ **254**-**261**

DIAG12 $ **262**-**269**

PR1 $ **574**-**580**

PR2 $ **581**-**587**

PR3 $ **588**-**594**

PR4 $ **595**-**601**

PR5 $ **602**-**608**

PR6 $ **609**-**615**

PR7 $ **616**-**622**

PR8 $ **623**-**629**

PR9 $ **630**-**636**

PR10 $ **637**-**643**

PR11 $ **644**-**650**

PR12 $ **651**-**657**

HACPOA $**1418**

;

RUN;

See the SIDR specification for the directions for running the TRICARE grouping software.

**Table O-4: Output File for the TRICARE MS-DRG Grouper**

Create the SAS data from the results of the TRICARE core grouping software using the following code:

DATA ORGDATA;

SET RECS.*FY\_WORKING\_WITH*;

RECNUM=\_N\_;

RUN;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*;

DATA DATA1;

INFILE FLAT1 LRECL=**4690** TRUNCOVER;

INPUT RECNUM 1-8

UK1 $ **74-88**

UK2 $ **89-103**

FADMIT $ **104-111**

FDISP $ **112-119**

FBIRTH $ **120-127**

AGEY $ **128-130**

AGED $ **131-133**

RECSEX $ **134**

RECDISP $ **135-136**

DIAG1 $ **174**-**181**

DIAG2 $ **182-189**

DIAG3 $ **190-197**

DIAG4 $ **198-205**

DIAG5 $ **206**-**213**

DIAG6 $ **214**-**221**

DIAG7 $ **222**-**229**

DIAG8 $ **230**-**237**

DIAG9 $ **238**-**245**

DIAG10 $ **246**-**253**

DIAG11 $ **254**-**261**

DIAG12 $ **262**-**269**

PR1 $ **574**-**580**

PR2 $ **581**-**587**

PR3 $ **588**-**594**

PR4 $ **595**-**601**

PR5 $ **602**-**608**

PR6 $ **609**-**615**

PR7 $ **616**-**622**

PR8 $ **623**-**629**

PR9 $ **630**-**636**

PR10 $ **637**-**643**

PR11 $ **644**-**650**

PR12 $ **651-657**

GROUPER $ **2359-2363**

MSDRG $ **2364-2366**

MSMDC $ **2367-2368**

MSRTC $ **2369-2370**

MSMEDSURG $ **3518**

;

RUN;

DATA TWO; SET DATA1;

KEEP RECNUM MSDRG MSMDC MSRTC MSMEDSURG DIAG1 PR1 RECDISP FBIRTH FADMIT FDISP;

RUN;

PROC SORT DATA=ORGDATA; BY RECNUM; RUN;

PROC SORT DATA=TWO; BY RECNUM; RUN;

DATA OUT.*OUTPUT\_FILENAME*; MERGE ORGDATA TWO; BY RECNUM;

DROP DIAG1 PR1 RECDISP FBIRTH FADMIT FDISP;

RUN;

1. A TED or HCSR is not technically a “claim,” rather, these records are reports of claims. However, the term “claim” shall be used in this document for simplicity. [↑](#footnote-ref-1)
2. Though these files are called “TED” files, they will contain both TED records and HCSRs. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. This process will only be required for records in fiscal years FY05 and earlier. [↑](#footnote-ref-4)
5. Certain field values are retained from the initial database when updating HCSRs with ATOHs. These fields are identified in the layout table. [↑](#footnote-ref-5)
6. This is a functional requirement, because if reference files are subject to change retroactively, data in the existing MDR database will be incorrect if the changed table is not re-applied to old records routinely. [↑](#footnote-ref-6)
7. The DDS and EDI\_PN file is a one-time requirement, intended to fill in missing person identifying information available historically in the MDR, but dropped from the HCSR Operational data store. The preparation of this data file is described in an appendix. [↑](#footnote-ref-7)
8. The Inpatient Professional Services Tail reference file is described in an appendix to the document. [↑](#footnote-ref-8)
9. A “shoulder date” is considered to be the first or last day of a stay. [↑](#footnote-ref-9)
10. “Encounter span” is considered the period for a line item from the begin-date-of-care to the end-date-of-care, inclusive. [↑](#footnote-ref-10)
11. It is recognized that the values in these fields may change as a result of the ATOH process, but it is unlikely. A review should be conducted after a year or so, to determine whether subsequent adjustments do change the content of any of these data values. If so, a periodic retrofit may be in order. (Of course, considering the volume of ATOH, periodic retrofits may not be in order for long.) [↑](#footnote-ref-11)