**29 January 2020**

Ancillary Laboratory and Radiology

for the

MHS Data Repository (MDR)

(Version 1.09.02)

Current Specification

Revision History

| Version | Date | Originator | Para/Tbl/Fig | Description of Change |
| --- | --- | --- | --- | --- |
| 1.00.00 | 08/27/2008 | M. Weston |  | Initial document. |
| 1.00.01 | 02/08/2010 | M. Weston | * Appendix B
 | * CY 2010 bilateral code changes for Radiology.
* Does not cause a processor update.
 |
| 1.00.02 | 11/30/2010 | M. Weston | * Appendix D
 | * Added Reference tables.
* Does not cause a processor update.
 |
| 1.01.00 | 02/28/2011 | M. Weston | * VII File Layout and Content
 | * Create the new field ACVGROUP
* Drop DDS for FY09+
* BENCAT - change value Z to UNK
* Create FY, FM, CY, CM based on SERVDATE
* PARC - change blank value to ZZ
 |
| 1.02.00 | 05/16/2012 | S. Keane | * VII File Layout and Content
 | * Added Medical Home Fields;
* Removed PPS Market Value Field(s).
 |
| 1.02.01 | 08/08/2012 | S. Keane | * Appendix E
 | * Added CADRE to ASADR Explanation.
 |
| 1.02.02 | 10/01/2012 | S. Keane | * VII File Layout and Content
 | * Updated Medical Home Fields.
 |
| 1.03.00 | 03/12/2013 | S. Keane | * VI Updating the Master Tables
* VIII Special Outputs
 | * Created a separate file for Cancellation Records per CBER requirements.
 |
| 1.03.01 | 05/21/2013 | S. Keane | * VIII Special Outputs
 | * Updated date fields of Cancellation File.
 |
| 1.03.02 | 06/10/2013 | D. McDonald | * VII File Layout and Content
 | * Update transformation for ACVGROUP.
 |
| 1.03.03 | 11/27/2013 | S. Keane | * IV Filters
 | * Remove filter on MEPRS Codes.
 |
| 1.04.00 | 02/05/2014 | S. Keane | * VI Updating the Master Tables
 | * Remove Laboratory records with cptmod ‘00’ when another record (for same test) exists with cptmod ‘90’ for FY12+.
 |
| 1.04.01 | 03/05/2014 | S. Keane | * VI Updating the Master Tables
 | * Update condition for removing Laboratory records with cptmod ‘00’ when another record (for same test) exists with cptmod ‘90’ for all Fiscal Years.
 |
| 1.05.00 | 09/02/2014 | S. Keane | * V Field Transformations
 | * Update application of Ancillary Cost Table to cost only MEPR A B C D E F codes FY13 +.
 |
| 1.06.00 | 05/18/2015 | S. Keane | * III Organization and Batching
 | * Update processing date.
 |
| 1.06.01 | 06/10/2016 | S. Keane | * VII File Layout and Content
 | * Format Inpatient Record ID so it matches SIDR format.
 |
| 1.07.00 | 10/25/2017 | H. Hutchinson |  | * Changes for NDAA 2017 and T2017
* Delete fields
 |
| 1.08.00 | 01/30/2018 | S. Keane | * VII File Layout and Content
 | * Add fields
 |
| 1.09.00 | 03/22/2018 | S. Keane | * VII File Layout and Content
 | * Apply new fields to FY18 forward. Delete “CPNPI”.
 |
| 1.09.01 | 06/01/2018 | S. Keane | * VII File Layout and Content
 | * *Administrative changes only.* Undo deletions, set FY requirements.
 |
| 1.09.02 | 01/29/2020 | S. Keane | * III Organization and Batching
 | * As of January 29, 2020 stop production and processing of Ancillary Laboratory and Radiology Fiscal Year tables, Ancillary specific CPT Weight or RVU tables, Ancillary Specific Cost Tables, and Transfusion or Blood Bank Format files all years.
* These changes do not impact CADRE Lab/Rad FY tables, CADRE Cost Tables, or Bilateral Format files; for more information refer to MDR Current CADRE Laboratory Enhanced or MDR Current CADRE Radiology Enhanced specifications,
 |

# Ancillary Lab-Rad Files for the MDR

1. Source

Data capture system: Composite Health Care System (CHCS).

1. Input Feed
* Transmission of the feeds occurs daily from CHCS to the EI/DS Feed Node, where they are batched and submitted monthly for MDR processing.
* Feed is sent in ASCII format with caret (^) delimiter between fields.
* The feeds are similar to the TPOCS extraction and contain all ancillary records from the laboratory and radiology tables (Record Type flag of “L”, “R”) that are:
	1. Dated FY05 or later (Date of Service on or after 1 October 2004).
	2. Complete, which is defined as a record with (1) exactly 52 fields, (2) the Treatment DMIS ID is not blank nor equal to “0000”, (3) service date is valid, (4) not an empty record nor a message trailer, and,(5) record type must be “L” or “R”.
	3. Non-duplicates of current or previously transmitted records.
* Each submission contains both new records and any updates/cancellations to records previously sent. Duplicate records, defined as those with the same key plus the same Process Flag (PROCFLAG), are deleted. The key is defined as RECTYPE || CHCSDMIS || ACCESSNO || CPT || CPTMOD || MOD || SERVDATE.
1. Organization and batching
* Time slicing: Ancillary data are organized into fiscal year files.[[1]](#footnote-1) The fiscal year is determined by the Date of Service field.
* Frequency of processing: Ancillary (CADRE) processing begins on the second Tuesday of each month. Raw data batches are harvested, processed, and appended/updated to the master file. If ancillary data are received from a fiscal year not being processed that month, they will be held to batch with all other data received prior to that fiscal year’s next update batch.
* ~~Frequency of updates:~~
	+ ~~Current FY: every month~~
	+ ~~Prior FY: monthly for one quarter (October, November, and December), then semiannually (April, October)~~
	+ ~~All years prior to prior FY: annually (October)~~
1. Filters
* If Coding Compliance Editor (CCE) Outpatient is activated for Lab/Rad, Lab/Rad data might not be transmitted until coding has been completed on CCE and transmitted back to CHCS. This may be problematic for complete information, so may require that an interim report pending CCE completion will be received instead.
1. Field Transformations and Deletions for MDR Database
* Any record in the feed that contains a blank Accession Number or CPT code is written to an error file in case investigation is required. Any record in the feed that has a count=0 will be written to an error file. These records are not added to the master file.
* If count > 99, then change count to 1. If count is missing or null, then change count to zero (0).
* A variable, Derived number of services (drvcount) is added.
	+ For lab records, rectype=’L’, if the CPT modifier is external lab (cptmod=’90’) then drvcount=1.
	+ For rad records, rectype=’R’, if the CPT code is in Appendix B (or reference table /mdr/ref/ancillary.bilat.fmt) and count > 1, or the 2nd CPT modifier (mod) indicates a bilateral code (variable mod in 50, 51, or 99) then divide the count by 2.
	+ Note that count will contain the raw values.
* The feed is merged to the Ancillary Transfusion file by Treatment DMIS and CPT code (/mdr/ref/ancillary.transfuse.cyxx.fmt). Records identified will be written to the error file and deleted from the master file. The Transfusion file contains Treatment DMIS IDs and CPT codes from MTFs who have an automated system, which records transactions, not workload.
* A variable, labflag (Laboratory Flag) is derived to separate tests ordered and performed in the same MTF (labflag=I) from tests performed for an outside facility (labflag=O) or external referral (labflag=’E’). The algorithm is: For rectype=’L’, if cptmod in ’00’ or blank then labflag=’I’. Else If cptmod=32 then labflag=’O’. Else If cptmod=’90’ then labflag=’E’.
* The feed is merged to the Master Person Index (MPI) as specified in the Functional Specifications: Identifying Patients in Encounters through MPI merges. For the purpose of the MPI merge, the encounter date-of-birth is approximated by subtracting the patient age in years and 6 months from the date of service, so the window for comparing dates-of-birth is widened to 6 months and 1 day in any approximate MPI-EDIPN or approximate MPI-SSN merges.
* The feed is merged to a longitudinal derivation of the VM4 based on EDI-PN to update patient enrollment, eligibility and demographic data. EDI-PNs that do not match are sent to a reservoir for next month’s merge with longitudinal VM4. Until a VM4 match is made, some attributes of these unmatched records are derived using the following transformation logic:
	+ **Beneficiary Category (bencat)** - Derived from PATCAT code using universal PATCAT format table.
	+ **Sponsor Service, Aggregate (svcagg) and Sponsor Service (svc) -** 1st letter of PATCAT. If U, then recode as Z. If not (A,F,N,M,C,Z), then recode as X. If blank after the above, then recode as Z.
* The feed is merged to the DMIS ID table to add DMIS attributes.
* The feed is merged to the Omni-CAD table to add Market attributes and Tricare Reserve Remote (TPRFLAG).
* The feed is merged to CPT weight tables based on CPT code and modifier to add Work RVU, Practice (facility) RVU, and Practice (non-facility) RVU for ancillary procedures. Radiology modifiers in the record type modifier (mod) will be utilized as well as the modifier of the CPT code (cptmod).
* The feed is merged to an Ancillary Cost Table based on Fiscal Year (FY), MEPRS Parent DMIS ID (meprdmis), and, for FY13 forward, Ordering MEPRS code in (A, B, C, D, E, F). Any other Ordering MEPRS codes do not receive cost for FY13 and forward. There is no change to the FY12 and back processing. Add the following unit costs: LAB full cost per work RVU, LAB variable cost per work RVU, LAB full cost per non-facility practice RVU, LAB variable cost per non-facility practice RVU, RAD full cost per work RVU, RAD variable cost per work RVU, RAD full cost per non-facility practice RVU, RAD variable cost per non-facility practice RVU.
* The feed will be merged to the future MDR Reservist table to add reservist attributes. Merge to the Reservist Table File by Sponsor SSN. Reservist Special Operation is appended to the encounter record if the encounter date occurred during the time frame in which the beneficiary is eligible to receive TRICARE benefits, that is, is within the begin and end dates inclusive on a matching Reservist Table file record.
* Various other fields are appended and derived as noted in the table that follows.
1. Updating the Master Tables

Cancelled records [Process Flag (PROCFLAG)=’C’ or Cancellation Date (CANCDATE) not equal to null] are used to delete or reduce the raw count (COUNT) of the existing MDR record whose RECTYPE || CHCSDMIS || ACCESSNO || CPT || CPTMOD || MOD || SERVDATE matches that of the newly received cancellation record. Cancelled records will be deleted from the master file and stored in separate Ancillary Cancellation table(s), see Section VIII Special Outputs, for more information.

A new ancillary record (Process Flag =’N’) is appended to the master file; an updated ancillary record (Process Flag =’U’) is used to replace the matching record, using the key: RECTYPE || CHCSDMIS || ACCESSNO || CPT || CPTMOD || MOD || SERVDATE. In the event of duplicate records with the same process flag (PROCFLAG), the record with the oldest file date is retained. Duplicates should be removed and cancellations should be processed before records are updated. Any record that has a raw count (COUNT) less than or equal to zero (0) after the above processing will be deleted.

As new ancillary records are added, they are assigned a unique sequentially-ordered number (MDRkey). The number sequence continues across fiscal years. The MDRkey field is a SAS formatted fixed 13.0.

Remove laboratory records (RECTYPE =’L’) with Modifier of the CPT Code (CPTMOD) = ‘00’ when there is another record with the same RECTYPE, CHCSDMIS, ACCESSNO, CPT, SERVDATE, MOD and CPTMOD = “90”. Retrofit records FY 2012 forward; that is SERVDATE is equal to or greater than 01 October 2011. Years older than FY12 will be corrected whenever they are next processed.

1. File Layout and Content

| MDR Field Name | SAS Name | Format | Source Position | Source Element Number or Name | Transformation |
| --- | --- | --- | --- | --- | --- |
| Accession/Exam Number | accessno | $17 | 137-153 | LAB: Accession NumberRAD: Exam Number | No transformation. A laboratory specimen or a radiology exam has a unique accession number. There may be many records per accession number as many laboratory tests may be done on the same specimen. Similarly for radiology, there may be more than one record per accession number as more than one entry may be made for a radiology exam.  |
| ACV | acv | $1 |  |  | DEERS ACV in longitudinal derivation of VM4 where service date in ACV date range and the ACV on the segment is “not Z”. If bencat is active or guard/reserve, then assign “M”; else set to blank if beneficiary is not active or guard/reserve.  |
| ACV GROUP | acvgroup | $15 |  | acv | If SERVDATE >=1/1/2018 then do:if ENR\_GRP=P then PRelse if ENR\_GRP=L then PLelse if ENR\_GRP=U then DPelse if (COMBEN=4 and PCM\_TYPE=N) then Relse if PCM\_TYPE=O then Relse if ELG\_GRP= R or S then O else OFor FY12 to Dec 31, 2017:If ACV = A, E, H, or J then PRElse if ACV = B or F then OPElse if ACV = G or L then PLElse if ACV = U then DPElse if ACV = R or V then OElse if ACV = M or Q then RElse if COMBEN=4 then RElse OFor FY11 and back[[2]](#footnote-2) |
| ACV Derived | acv1 | $1 |  | acv, acv2 | Equal to ACV if not missing, else ACV2. |
| ACV of Record | acv2 | $1 |  | hcdpr | See Appendix A for derivation rules. |
| Appointment Record ID | apptno | $20 | 54-73 | Appointment IEN |  No transformation. |
| Beneficiary Category | bencat | $3 |  | R\_BEN\_CAT\_CD | Ben Cat in longitudinal derivation of VM4 where service date in Ben Cat date range. If no match, derive from patient category code using universal PATCAT format table. Change value Z to UNK. |
| Beneficiary Category (common) | comben | $1 |  | D\_COM\_BEN\_CAT | Derive from Bencat.If “DA”, "DGR" then assign “1”.Else if “RET” then assign “2”.Else if “DR”,”DS”,”DCO”,”NAT”, “IGR”, “IDG”, ”OTH”,”UNK” then assign “3”.Else if “ACT”, “GRD” then assign “4”. |
| Beneficiary zip Code | patzip | $5 |  | D\_ZIP\_CD | Zip Code in longitudinal derivation of VM4 where service date in zip code date range, or “NONE” if unmatched. |
| Catchment Area ID | catch | $4 |  | D\_CATCH\_AREA\_CD | Catchment Area ID of patient residence, based on beneficiary zip code, sponsor service, and the Omni-CAD matching the service date. |
| BPA Catchment Area ID | bpacatch | $4 |  |  | BPA Catchment Area of patient residence based on zip code, sponsor service, and the OmniCad matching the service date.Populated FY11 and back. |
| CPT Code | cpt | $5 | 154-158 | CPT code  | No transformation.  |
| CY | cy | $4 |  | servdate | Calendar Year of the Date of Service. |
| CM | cm | $2 |  | servdate | Calendar Month of the Date of Service. |
| Date of Birth | dob | yyyymmdd |  | PN\_BRTH\_DT | Date of birth in longitudinal derivation of VM4. |
| Date of Service | servdate | yyyymmdd | 166-173 | Date of Service | No transformation. |
| DDS | dds | $2 |  |  | DEERS Dependent Suffix derived from MPI merge procedures. FY05-FY08 only; (Drop FY09+).  |
| DEERS Match Flag | deers | F3.0 |  |  | “1” if EDI-PN matched with longitudinal VM4;“0” if no EDI-PN match in VM4.  |
| Raw EDI-PN | redipn | $10 | 531-540 | Patient Identifier on record | No transformation. |
| EDI-PN | edipn | $10 |  | Patient Identifier | Results of MPI merge procedures. |
| Enrollment DMIS ID | enrdmis | $4 |  | D\_MI\_PCM\_EDVSN\_DMIS\_ID | Enrollment DMIS ID in longitudinal derivation of VM4 where service date in the enrollment dmis id date range, or “NONE” if unmatched. |
| External Indicator | external | $1 | 506-507 | ID Code Qualifier | Derived from Record Type and External LAB Type. Lab: Equals “Y” if External Lab Type=”V”,”O”,”C” Equals “N” if External Lab Type is empty.Rad: Equals “Y” if ID Code Qualifier is not empty Equals “N” if ID Code Qualifier is empty. |
| External LAB Type | Extype(not stored) | $1 | 213 | External LAB Type | Change blanks to “N” (Not stored in final DB). |
| Family Member Prefix | fmp | $2 | 520-521 | Patient FMP | No transformation. |
| File Date | filedate | yyyymmdd |  |  | Derived from the Date/Time used in the ASCII file name from CHCS. |
| Laboratory Flag | labflag | $1 |  |  | Applies to only Lab records, rectype=’L’. If cptmod=’00’ or blank then labflag=’I’ (tests ordered and performed inhouse). If cptmod=32 then labflag=’O’ (tests performed for outside facility). If cptmod=’90’ then labflag=’E’ (external referral). Else labflag=blank. |
| Full Cost | fullcost | 8.2 |  | rvu,l\_fcostw, l\_fcostp, r\_fcostw, r\_fcostp | If external indicator=”N”, product of appropriate rvu and cost fields.[[3]](#footnote-3) |
| FY | fy | $4 |  |  | Fiscal Year of the Date of Service. |
| FM | fm | $2 |  |  | Fiscal Month of the Date of Service. |
| Gender | sex | $1 |  | PN\_SEX\_CD | Gender in longitudinal derivation of VM4. If no match or blank, set value to Z=unknown. |
| HCDP of Record | hcdpr | $3 | 39-41 | Patient HCDP Code | No transformation. |
| HCDP - Enrolled | hcdplvm4 | $3 |  |  | HCDP code in longitudinal derivation of VM4. |
| Host Platform DMIS ID | chcsdmis | $4 | 7-10 | CHCS Host System DMIS ID | No transformation. |
| HSSC Enrollment Region | enrreg | $1 |  |  | HSSC Region of enrollment DMIS from DMIS table. If the enrollment DMIS (enrdmis) is “NONE” then enrreg is blank.Populated FY11 and back. |
| HSSC Residence Region | rsreg | $1 |  |  | HSSC Region of patient residence, based on patient zip and the Omni-CAD matching the service date.Populated FY11 and back. |
| HSSC Treatment Region | tmtreg | $1 |  |  | HSSC Region of treatment DMIS from DMIS table.Populated FY11 and back. |
| Beneficiary Residence Region | patregn | $2 |  |  | Beneficiary Residence Region of patient residence, based on patient zip, sponsor service, and the Omni-CAD matching the service date. Populated FY11 and back. |
| ICD9 Diagnosis Code 1 | dx1 | $6 | 463-468 | Diagnosis Code 1 (Principle Diagnosis) | No transformation. 6th character accommodates ICD-9 extender codes.\* \*\*Will remain blank until the CCE lab/rad is activated\*\*\* |
| ICD9 Diagnosis Code 2 | dx2 | $6 | 470-475 | Diagnosis Code 2 | No transformation. 6th character accommodates ICD-9 extender codes.\*\*\*Will remain blank until the CCE lab/rad is activated\*\*\* |
| ICD9 Diagnosis Code 3 | dx3 | $6 | 477-482 | Diagnosis Code 3 | No transformation. 6th character accommodates ICD-9 extender codes.\*\*\*Will remain blank until the CCE lab/rad is activated\*\*\* |
| ICD9 Diagnosis Code 4 | dx4 | $6 | 484-489 | Diagnosis Code 4 | No transformation. 6th character accommodates ICD-9 extender codes.\*\*\*Will remain blank until the CCE lab/rad is activated\*\*\* |
| Inpatient Indicator | inpt | $1 |  | prn | This is “Y” if prn field is populated, and “N” if empty. |
| Inpatient Record ID | prn | $7 | 42-53 | Register Number | Set length to Char(7). Remove leading and trailing blanks. Add leading zeros. Example: change 1234 to 0001234 or 56 to 0000056.  |
| Lab Full Cost / Work RVU | L\_fcostw(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for lab in matching year (not stored in final DB). |
| Lab Full Cost / Practice (non-facility) RVU | L\_fcostp(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for lab in matching year (not stored in final DB). |
| Lab Variable Cost / Work RVU | L\_vcostw(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for lab in matching year (not stored in final DB). |
| Lab Variable Cost / Practice (non-facility) RVU | L\_vcostp(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for lab in matching year (not stored in final DB). |
| M2Key | m2key | $6 |  |  | Base 62 of MDR Key. |
| MDR Key | mdrkey | 13.0 |  | Numeric counter | Sequential counter of records.  |
| Medicare Eligibility | Medelg | $1 |  | Privcode, age | Medicare Eligibility in longitudinal derivation of VM4. If no match or blank, set value to N. |
| MEPRS Parent | meprdmis | $4 |  | MEPR\_PAR | MEPRS Parent of treatment DMIS from DMIS table  |
| MPI Status Flag | mpiflag | $1 |  |  | Flag has value of E if an EDI-PN replaces a previous blank field. Otherwise mpiflag has a blank value. |
| Modifier of the CPT Code | cptmod | $2 | 159-160 | CPT Code Modifier | No transformation. |
| Number of Services | count | 2 | 164-165 | Quantity | If count > 99 then count=1.If count is missing or null then count = 0. |
| Derived Number of Services  | drvcount | 2 |  | For RAD, the approximate civilian equivalent number of services. For LAB, the external lab referral indicates MTF workload. | If rectype=’R’ and the CPT code is in Appendix B (or reference table /mdr/ref/ancillary.bilat.fmt.cyxx for the corresponding year) or the 2nd CPT modifier indicates a bilateral code (mod in 50, 51 or 99) and count >1, then drvcount=count/2; else drvcount=count.If rectype=’L’ and cptmod=’90’ (external lab referral) then drvcount=1. Otherwise, drvcount=count. |
| OHI Indicator | ohi | $1 | 541 | OHI Indicator | No transformation. |
| Provider Order Number  | orderid | $12 |  |  | No transformation. |
| Ordering DMIS ID | orddmis | $4 | 121-124 | Order Requesting Location DMIS ID | No transformation. |
| Ordering MEPRS Code | meprscd | $4 | 125-128 | Order Requesting Location MEPRS Code | No transformation. |
| Parent DMIS | pdmis | $4 |  | UBU\_PAR | Parent DMIS of treatment DMIS from DMIS table. |
| Patient Age | patage | 3 | 33-35 | Patient Age | Change from alpha numeric to numeric. |
| Patient Category Code | patcat | $3 | 36-38 | Patient Category Code | No transformation except for Inactive Guard and Inactive Reserve.[[4]](#footnote-4) |
| PCM ID | pcmid | $18 |  | D\_MI\_PCM\_ID | PCM ID in longitudinal derivation of VM4 where service date in the PCM ID date range. |
| PRISM Area ID | prism | $4 |  | D\_PRISM\_CD | Prism of patient residence based on zip code, sponsor service, and the OmniCad matching the month of the service date.  |
| Privilege Code | privcode | $1 |  | D\_ELG\_CD | Privilege code in the longitudinal derivation of VM4 where service date in privilege code date range. |
| Process Flag | procflag | $1 | 12 | Process Flag | No transformation. |
| Rad Full Cost / Work RVU | R\_fcostw(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for radiology in matching year (not stored in final DB). |
| Rad Full Cost / Practice (non-facility) RVU | R\_fcostp(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for radiology in matching year (not stored in final DB). |
| Rad Variable Cost / Work RVU | R\_vcostw(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for radiology in matching year (not stored in final DB). |
| Rad Variable Cost / Practice (non-facility) RVU | R\_vcostp(not stored) | 10.6 |  |  | MEPRS Parent’s unit cost for radiology in matching year (not stored in final DB). |
| Record Type | rectype | $1 | 11 | Record Type | No transformation. |
| Record Type Modifier | mod | $2 | 162-163 | LAB: System of Origin for the ResultsRAD: Radiology-specific modifiers | No transformation |
| Relationship (to sponsor) | rel | $1 |  | fmp | Derived from first character of FMP: “1” for 0-1, “2” for 20, “3” for 3, and “4” for all others, including missing. |
| Relative Value Units (facility practice) | fprvu | 6.2 |  |  | From CPT Weight Table: Raw MHS updated Facility Practice Expense RVU of CPT Code (pexpfadc) for corresponding year, adjusted for modifiers, and multiplied by derived number of services.  |
| Relative Value Units (non-facility practice) | nprvu | 6.2 |  |  | From CPT Weight Table: Raw MHS updated Non-facility Practice Expense RVU of CPT Code (pexpnfdc ) for corresponding year, adjusted for modifiers and multiplied by derived number of services. |
| Relative value Units (total) | rvu | 6.2 |  | Rvuwork, nprvu | Sum the values of Work RVU and Non-facility practice RVUs. |
| Relative Value Units (work) | rvuwork | 6.2 |  |  | From CPT Weight Table: Raw MHS updated Work RVU of CPT code (workdc) for corresponding year, multiplied by derived number of services. |
| Space Available Flag | spaflag | $1 |  |  | N if ACV is ‘A’, ‘B’, ‘D’, ‘E’, ‘F’, ‘H’, ‘J’, ‘M’, ‘P’, or ‘Q’. Else Y. |
| Special Operation Code | soc | $2 |  | Reservist Special Operation Code | Merge to the Reservist Table File by Sponsor SSN. Reservist Special Operation is appended to the encounter record if the encounter date occurred during the time frame in which the beneficiary is eligible to receive TRICARE benefits, that is, is within the begin and end dates inclusive on a matching Reservist Table file record. |
| Sponsor Branch of Service | svc | $1 |  |  | Sponsor service in longitudinal derivations of VM4 where service date is sponsor service date range. If no match, derive from 1st letter of PATCAT. If U, then recode as Z. If not (A,F,N,M,C,Z), then recode as X. If blank after the above, set to Z=Unknown. |
| Sponsor Branch of Service, Aggregate | svcagg | $1 |  |  | Aggregated sponsor service in longitudinal derivation of VM4 where service date in sponsor service date range. If no match, derive from 1st letter of PATCAT. If U, then recode as Z. If not (A,F,N,M,C,Z), then recode as X. If blank after the above, set to Z=Unknown. |
| Raw Sponsor SSN | rsponssn | $9 | 522-530 | Sponsor SSN on record | No transformation. |
| Sponsor SSN | sponssn | $9 |  | Sponsor SSN | Results of MPI merge procedures. |
| Status Code | status | $1 |  | Reservist Status Code | Merge to the Reservist Table File by Sponsor SSN. Reservist Special Operation is appended to the encounter record if the encounter date occurred during the time frame in which the beneficiary is eligible to receive TRICARE benefits, that is, is within the begin and end dates inclusive on a matching Reservist Table file record. |
| Tricare Prime Remote Eligibility Flag | TPRelig | $1 |  | D\_TPR\_ELG\_CD | Merge to the VM6 where service date in the enrollment date range. |
| Tricare Prime Remote Flag | TPRflag | $1 |  |  | Based on patient residence zip code and the OmniCad matching the service date. |
| Treatment DMIS ID | tmtdmis | $4 | 182-185 | Performing DMIS ID | No transformation. |
| Treatment Service | tmtsvc | $1 |  | UBU\_SVC | Service of treatment DMIS from DMIS table. |
| Variable Cost | varcost | 8.2 |  | rvu,l\_vcostw, l\_vcostp, r\_vcostw, r\_vcostp | Product of appropriate rvu and cost fields. See footnote under Full Cost for SAS code. |
| Person Association Reason Code | PARC | $2 |  | PNA\_RSN\_CD | Results of MPI merge procedures. Change blank values to ZZ. |
| Underwritten Region | undflag | $1 |  |  | See Appendix C. Populated FY11 and back. |
| Enrollment MEPRS Code | med\_home\_meprs | $4 |  | med\_home\_meprs | Join based on rules in Appendix A, section 1 of the Enrollment MEPRS Code specification and Date of Service.  |
| Medical Home Flag | med\_home\_flag | $1 |  | med\_home\_flag | Join based on rules in Appendix A, section 1 of the Enrollment MEPRS Code specification, and Date of Service.Populated FY11 and back. |
| HCDP – Assigned | hcdp\_assgn | $3 |  |  | If the SERVDATE is between the begin and end date of D\_MI\_HCDP\_PLN\_CVG\_CD then fill with D\_MI\_HCDP\_PLN\_CVG\_CD, else leave blank. See DEERS VM6 specification, section G18 and 19 for segment and field position.Populated FY12 and forward.  |
| Eligibility Group | elg\_grp | $2 |  |  | If the SERVDATE is between the begin and end date of D\_ELG\_GRP\_CD then fill with D\_ELG\_GRP\_CD, else leave blank. See DEERS VM6 specification, section G18 and 19 for segment and field position.Populated FY12 and forward. |
| Enrollment Group | enr\_grp | $2 |  |  | If the SERVDATE is between the begin and end date of D\_ENR\_GRP\_CD then fill with D\_ENR\_GRP\_CD, else leave blank. See DEERS VM6 specification, section G18 and 19 for segment and field position.Populated FY12 and forward. |
| Enrollment PCM Type | pcm\_type | $1 |  |  | If the SERVDATE is between the begin and end date of D\_PCM\_TYPE\_CD then fill with D\_PCM\_TYPE\_CD, else leave blank. See DEERS VM6 specification, section G18 and 19 for segment and field position.Populated FY12 and forward. |
| Enrollment Site T3 Region | enr\_t3\_reg | $2 |  |  | T3\_REG from DMIS ID Index, based on matching FY and ENRDMIS |
| Enrollment Site T17 Region | enr\_t17\_reg | $2 |  |  | T17\_REG from DMIS ID Index, based on matching FY and ENRDMIS |
| Beneficiary T3 Region | ben\_t3\_reg | $2 |  |  | T3\_REG, based on matching to OMNI CAD using FY and PATZIP |
| Beneficiary T17 Region | ben\_t17\_reg | $2 |  |  | T17\_REG, based on matching to OMNI CAD using FY and PATZIP |
| Treatment DMIS ID T3 Region | mtf\_t3\_reg | $2 |  |  | T3\_REG from DMIS ID Index, based FY and TMTDMIS |
| Treatment DMIS ID T17 Region | mtf\_t17\_reg | $2 |  |  | T17\_REG from DMIS ID Index, based FY and TMTDMIS |
| Ordering DMIS ID T3 Region | ord\_t3\_reg | $2 |  |  | T3\_REG from DMIS ID Index, based FY and ORDDMIS |
| Ordering DMIS ID T17 Region | ord\_t17\_reg | $2 |  |  | T17\_REG from DMIS ID Index, based FY and ORDDMIS |
| CLIA Number | clia | $15 | 491-505 | CLIA # | No Derivation. Populated FY18 and forward. Lab only. |
| PATCAT subcategory | patcat2 | $1 | 542-542 | PATCAT subcategory | No Derivation. Populated FY18 and forward. |
| Patient SSN | patssn | $9 | 543-551 | Patient Social Security Number | No Derivation. Populated FY18 and forward. |
| Patient SSN Type Code | patssntyp | $1 | Field 72 | Patient Person ID Type Code | No Derivation. Populated FY18 and forward. Type code describing the Patient SSN. Valid values: D = Temporary Identification Number (TIN)F = Foreign Identification Number (FIN)I = Provider Tax ID (ITIN)P = US military personnel code prior to SSNsR = Special Code assigned to a DOD contractorS = Social Security Number (SSN) U = Pseudo SSN. |

1. Special Outputs
* MHS Mart (M2)
* See *M2 Laboratory Ancillary\*.doc* and *M2 Radiology Ancillary\*.doc* for specifications of those respective MDR-to-M2 feeds.
* Ancillary Cancellation table(s): For cancelled records [Process Flag (PROCFLAG)=’C’ or Date of Cancellation (CANCDATE) not equal to null], create the following table(s) as SAS dataset(s), in the most logical processing location, for the cancelled records. Place file in the directory /mdr/ref/cber/cancel/ancillary.sas7bdat and its associated /mdr/aref area.

**Ancillary Cancellation File Layout**

| **MDR Fields Name** | **Format** | **SAS Name** | **Notes** |
| --- | --- | --- | --- |
| Accession/Exam Number | Char(17) | ACCESSNO |  |
| Date of Cancellation | Char(8) | CANCDATE | Obtain from ASADR/CADRE source file. |
| Host Platform DMIS ID | Char(4) | CHCSDMIS |  |
| Number of Services | Num(8) | COUNT |  |
| CPT Code | Char(5) | CPT |  |
| Modifier of the CPT Code | Char(2) | CPTMOD |  |
| Filedate | Char(8) | FILEDATE |  |
| Record Type Modifier | Char(2) | MOD |  |
| Process Flag | Char(1) | PROCFLAG |  |
| Record Type | Char(1) | RECTYPE |  |
| Date of Service | Num(8) | SERVDATE | Store as SAS date. |

To apply an update: append new cancellation records onto existing Ancillary Cancellation Table(s). In the event of duplicate cancellation records, e.g., those with the same Process Flag (PROCFLAG) and unique identifier or key: RECTYPE || CHCSDMIS || ACCESSNO || CPT || CPTMOD || MOD || SERVDATE retain the record with the oldest File Date (FILEDATE). Note: Cancellation Records may not be applicable to CADRE data since resulted orders cannot be cancelled. That is, CADRE should not contain records where [Process Flag (PROCFLAG)=’C’ or Date of Cancellation (CANCDATE) not equal to null].

**Appendix A. Alternate Care Value (ACV2) Derivation**

| **HCDPCODE** | **ACV2** |
| --- | --- |
| 106, 128 | A |
| 155 | B |
| 003, 005, 007, 009, 010, 012, 015, 017, 018, 020, 021, 022, 023 | C |
| 120 | D |
| 107, 108, 110, 111, 112, 113, 116, 117, 129, 130, 131, 132, 134, 135, 136, 137 | E |
| 156, 157 | F |
| 140, 142, 144, 146, 147, 149 | G |
| 103, 152 | H |
| 123, 124, 125, 126 | I |
| 104, 153, 154 | J |
| 105 | K |
| 141, 143, 145, 148, 150, 151 | L |
| 001, 002, 004, 006, 008, 011, 013, 014, 016, 019, 024 | N |
| 101 | P |
| 121, 122 | S |
| 109, 114, 115, 118, 119, 133, 138, 139 | U |
| 127 | W |
| 401,402,405, 406, 407, 408, 409, 410,411, 412 | R |
| Any Other | Z |

**Appendix B. CPT Codes considered Bilateral[[5]](#footnote-5)**

**Bilateral Codes for CY06 and previously**

| **CPT Code** | **CPT Code Description** |
| --- | --- |
| 71110 | RIBS BILATERAL 3 VIEWS |
| 71111 | RIBS BILATERAL & PA CHEST MINIMUM 4 VIEWS |
| 73050 | AC JOINTS BILATERAL W/WO WEIGHTS |
| 73520 | HIPS BILAT MIN 2 VIEWS OF EACH HIP & AP PELVIS |
| 73560 | RADIOLOGIC EXAMINATION, KNEE; ONE OR TWO VIEWS |
| 73565 | BOTH KNEES STANDING AP |
| 73630 | FOOT MINIMUM 3 VIEWS |
| 73700 | CT LOWER EXTREMITY W/O CONT MATERIAL |
| 73701 | CT SCAN, LOWER EXTREMITY; W/CONTRAST |
| 73702 | CT SCAN,LOWER EXTREMITY;W/O CNTRST,THEN W/CNTRST &FRTHR SECT |
| 73720 | MRI,LOW EXTRM NOT JT; WO CONT MTL,FOLL CONT MTL & FUR SEQ |
| 75662 | ANGIOGRAM EXTERNAL CAROTID BILATERAL SELECTIVE |
| 75671 | ANGIOGRAM CAROTID CEREBRAL BILATERAL |
| 75680 | ANGIOGRAM CAROTID CERVICAL BILATERAL |
| 75803 | LYMPHANGIOGRAM EXTREMITY ONLY BILATERAL |
| 75807 | LYMPHANGIOGRAM PELVIC/ABDOMEN BILATERAL |
| 75822 | VENOGRAM EXTREMITY BILATERAL |
| 75833 | VENOGRAM RENAL BILATERAL SELECTIVE |
| 75842 | VENOGRAM ADRENAL BILATERAL SELECTIVE |
| 76091 | MAMMOGRAM BILATERAL |
| 76092 | SCREENING MAMMOGRAM BILATERAL |
| 76094 | MAGNETIC RESONANCE IMAGING, BREAST W W/O CONT, BILAT |
| 76102 | TOMOGRAPHY COMPLEX MOTION O/T UROGRAPHY BILAT |
| 76516 | OPTHAL BIOMET US ECHOGRAPHY A-SCAN |
| 76519 | OPTHAL BIOMET US ECHO A-SCAN W/INTRAOC LENS CALC |
| 76645 | ULTRASND,BREAST(S)(UNI/BILAT),B-SCAN &/REAL TIME,IMAG DOC |

**Bilateral Code Changes for CY07**

| **CPT code Deleted** | **CPT code Added** | **CPT Description** |
| --- | --- | --- |
| 76091 | 77056 | MAMMOGRAM BILATERAL |
| 76092 | 77057 | SCREENING MAMMOGRAM BILATERAL |
| 76094 | 77059 | MAGNETIC RESONANCE IMAGING, BREAST W W/O CONT, BILAT |

**Bilateral Code Changes for CY10**

| **CPT Code Added** | **CPT Description** |
| --- | --- |
| 0219T | Placement of Posterior Intracet Implants, Cervical |
| 0220T | Placement of Posterior Intracet Implants, Thoracic |
| 0221T | Placement of Posterior Intracet Implants, Lumbar |
| 0222T | Placement of Posterior Intracet Implants, additional |

**Appendix C. Underwritten Region (Valid FY11 and back)**

Logic

* Remove USTF (based on ACV code)
* Exclude Direct Care Only (based on beneficiary category)
* Remove Active Duty (based on common beneficiary code)
* Exclude Reserve Select (based on ACV code)
* Remove Medicare Eligible (based on Medicare eligibility code)
* For Regional jurisdiction, Prime beneficiaries 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.

SAS Code

| **SAS Variable** | **Data Element**  |
| --- | --- |
| Comben | Common Beneficiary Category |
| Bencat | Beneficiary Category |
| Medelg | Medicare Eligibility  |
| ACV | Alternate Care Value |
| Enrreg | Enrollment Region |
| Enrdmis | Enrollment DMISID |
| Patregn | Patient Region |
| Undrflag | Need to Create, Temporary Underwritten Flag |
| Undflag | Need to Create – underwritten region |

Undrflag=1; /\* underwritten flag\*/

/\* Flag non underwritten beneficiaries as “0” \*/

if acv=’U’ then undrflag=0; /\* Exclude USTFs \*/

if bencat=’DCO’ then undrflag=0; /\* Exclude Direct Care Only \*/

if comben=4 then undrflag=0; /\* Exclude Active Duty \*/

if medelg in (‘A’ ‘B’ ‘C’) then undrflag=0; /\* Exclude Medicare Eligible \*/

if acv='R' then undrflag=0; /\* Exclude Reserve Select \*/

/\* Define Prime based on ACV \*/

if acv in ('A' 'D' 'E' 'B' 'F' 'H' 'J') then prime='Y';

 else prime='N';

/\* Define Underwritten Region \*/

if undrflag=1 then do; /\* underwritten \*/

if prime='Y' then do;

if enrreg in ('01' '02' '05' '17') or enrdmis in ('6917' '7917') then undflag='N';

else if enrreg in ('03' '04' '06' '18') or enrdmis in ('6918' '7918') then undflag='S';

else if enrreg in ('07' '08' '09' '10' '11' '12' '19') or enrdmis in ('6919' '7919') then

undflag='W';

else undflag=' ';

end; /\* if prime \*/

else if prime='N' then do;

if patregn in ('01' '02' '05' '17') then undflag='N';

else if patregn in ('03' '04' '06' '18') then undflag='S';

else if patregn in ('07' '08' '09' '10' '11' '12' '19') then undflag='W';

else undflag=' ';

end; /\* if not prime \*/

end;

else do;

 undflag=' '; /\* Not underwritten to any region \*/

end;

/\* Remove AK underwritten from West \*/

if undflag='W' and enrdmis in ('6919' '7919') and patregn='AK' then undflag=' ';

if undflag ~in ('N' 'S' 'W') then undflag=' ';

**Appendix D. Reference Tables**

| **Reference Table Description** | **SAS Name** | **MDR Location** | **Filename** | **Update Schedule** |
| --- | --- | --- | --- | --- |
| CPT Weight Tables or RVU Tables | fprvu, nprvu, rvuwork | (1)/mdr/aref/ancillary/rvu/cyxx0/dyymmdd/rvufmt.sas7bdat(2)/mdr/ref/ancillary.rvu.cyxx/rvufmt.sas7bdat | Ancilrvuxx.sas7bdat copied to rvufmt.sas7bdat | Annually, CY |
| Bilateral Format File | drvcount | (1)/mdr/aref/ancillary/bilat/cyxx/d100208.fmt(2)/mdr/ref/ancillary.bilat.cyxx.fmt | Ancillary.bilat.cyxx.fmt | Annually, CY |
| Transfusion or Blood Bank or Format File | Records removed if identified in format | (1)/mdr/aref/ancillary/transfuse/cyxx/d100208.fmt(2)/mdr/ref/ancillary.transfuse.cyxx.fmt  | Ancillary.transfuse.cyxx.fmt | Annually, CY |
| Cost Tables | L\_fcostwL\_fcostpL\_vcostwL\_vcostpR\_fcostwR\_fcostpR\_vcostwR\_vcostp | (1)/mdr/aref/ancillary/costs/fyxx/dyymmdd/lab.sas7bdat/mdr/aref/ancillary/costs/fyxx/dyymmdd/rad.sas7bdat(2)/mdr/ref/ancillary.costs.fyxx/lab.sas7bdat/mdr/ref/ancillary.costs.fyxx/rad.sas7bdat | Ancillabfyxx.sas7bdat copied to lab.sas7bdatAncilradfyxx.sas7bdat copied to rad.sas7bdat | Annually, FY |

**Appendix E. CADRE to ASADR Explanation**

In July-August 2012, CHCS hosts began reporting ancillary pharmacy, laboratory, and radiology services to DHSS using CADRE files rather than ASADR Files. To accommodate the new file format, the following fix is being implemented.

The landing directory “**/sourcedata/ancillary**” receives files sent from CHCS hosts in either (CADRE or ASADR) format. The ad hoc **cadrewns** script archives and decrypts incoming files. In addition, it uses the **cadre2asadr** script to transform, both in name and content, incoming CADRE files into ASADR-formatted files. For incoming ASADR files, no conversion is necessary. Finally, it copies both ASADR-formatted files and ASADR files to the directory “**/sourcedata/asadr**”. There processing resumes as before. That is, feed node scripts and all downstream applications continue to receive ancillary data in the currently supported ASADR format.

**Figure 1. Conversion of CADRE files into ASADR files Illustration**



1. The current files begin with FY05. [↑](#footnote-ref-1)
2. If ACV=A, E, H, or J then “Prime” Else if ACV=B or F then “Overseas Remote” Else if ACV=G or L then “Plus” Else if ACV=U then “Desig Prov” Else if ACV= R or V then “Other” Else if ACV = M or Q then “Reliant” Else if ACV = any other value (including blanks) and Ben Cat Common = 4 then “Reliant” Else “Other”. [↑](#footnote-ref-2)
3. SAS Code to derive costs

 if rectype='L' then do;

fullcost=sum((rvuwork\*l\_fcostw),(nprvu\*l\_fcostp));

varcost=sum((rvuwork\*l\_vcostw),(nprvu\*l\_vcostp));

 end;

 if rectype='R' then do;

fullcost=sum((rvuwork\*r\_fcostw),(nprvu\*r\_fcostp));

varcost=sum((rvuwork\*r\_vcostw),(nprvu\*r\_vcostp));

 end; [↑](#footnote-ref-3)
4. SAS Code to modify PATCAT

 if hcdplvm4 in ('401','402’,‘405’,‘406’,‘407’,‘408’,‘409’,‘410’,’411’,‘412’) or hcdpr in ('401','402,‘405’,‘406’,‘407’,‘408’,‘409’,‘410’,’411’,‘412’) then do;

 if fmp='20' then patcat=substr(patcat,1,1) ||'36';

 else patcat=substr(patcat,1,1) || '37';

 end; [↑](#footnote-ref-4)
5. RVUs for these codes are based on the procedure being performed as a bilateral, AMA, Modifiers Made Easy (Annual Publication) [↑](#footnote-ref-5)