

7 January 2026

**Comprehensive Ambulatory/Professional Encounter
Record (CAPER) Enhanced
for the
MHS Data Repository (MDR)
(Version 4.23.00)**

Future Specification

Revision History¹

Version	Date	Originator	Para/Tbl/Fig	Description of Change
4.14.00	03/15/2017	D.Jackett	• Table 1	<ul style="list-style-type: none"> • Item 807 REFNUM will be sent to M2 • Item 808 REFNUM_R will not be sent to M2
4.14.01	04/19/2017	D.Jackett	• Table 1	<p>Remove APG Fields from the M2 Feed.</p> <ul style="list-style-type: none"> • APG E&M • APG Medical • APG, CPT/HCPCS Code 1-10 • Total APG Weight • Variable Cost, E&M APG • Variable Cost, Medical APG • Variable Cost, Proc1 APG-Proc4 APG • Full Cost, E&M APG • Full Cost, Medical APG • Full Cost, Proc1 APG-Proc4 APG
4.15.00	10/25/2017	K. Hutchinson	• Table 1	<ul style="list-style-type: none"> • Changes for NDAA 2017 and T2017 • Delete fields
4.16.00	06/26/2018	D. Juckett	<ul style="list-style-type: none"> • Table A5.2 • Appendix 3 • Table A5.5 • Appendix 7 	<ul style="list-style-type: none"> • Edit the calculation of Composite Weight for PMPM • Add logic for Anesthesia coding credit • Interprofessional Telephone/Internet Consultation • Added IntprofCon.txt to Reference List
4.16.01	08/26/2018		• Appendix 9	<ul style="list-style-type: none"> • Revision History moved to new Appendix 9 • Logic Updates for Anesthesia coding for clarity
4.16.02	10/12/2018		• Multiple Sections	<ul style="list-style-type: none"> • Fixed references for RVUs from 3.3 to the correct table of 4.3
4.17.00	11/21/2019	D. Juckett	• Appendix 3	<ul style="list-style-type: none"> • Modified logic for Anesthesia coding credit
4.17.02	02/20/2020	D. Juckett	• Appendix 3	<ul style="list-style-type: none"> • Modified logic for Anesthesia coding credit for A MEPRS Codes
4.18.01	10/26/2020	D. Juckett	• Table A2	<ul style="list-style-type: none"> • Added <ul style="list-style-type: none"> ◦ Provider Name (DMHRSi); Appointment Provider, Additional Providers 1-4 ◦ Provider Name Referring ◦ Service Line ◦ PCM Name ◦ Patient Attached UIC ◦ Patient Assigned UIC

¹ Previous Revision History was moved to Appendix 9.

Version	Date	Originator	Para/Tbl/Fig	Description of Change
4.19.01	02/01/2021	D. Juckett	•	<ul style="list-style-type: none"> Reorder Procedure Codes by Total Raw RVU (TRVUj) j=4-13
4.20.01	06/23/2021	D. Juckett	• Table 1 • Table 2	<ul style="list-style-type: none"> Add Revenue Code
4.20.01	07/13/2021	D. Juckett	• Appendix 3	<ul style="list-style-type: none"> Modify logic for Anesthesia Coding
4.21.01	08/30/2022	D. Juckett	• Table A5.3	<ul style="list-style-type: none"> Modify logic Skill Type 1 Work RVUs Skill Type 2 Work RVUs Skill Type 3/4 Work RVUs plus Skill Type 1-4 PE RVU
4.22.01	01/14/2025	D. Juckett	<ul style="list-style-type: none"> Table 1 and Table A2 Appendix 2 	<ul style="list-style-type: none"> Add Enrollment DMIS ID T5 Region Add Treatment MTF T5 Region Add Beneficiary T5 Region Modify Logic to add T5 Region: <ul style="list-style-type: none"> DMIS ID Merge CAD Merge
4.23.00	01/07/2026	K. Hutchinson	• Item #3	<ul style="list-style-type: none"> Reorder Procedure Codes by Work Raw RVU (RRVUj) j=4-13

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COMPREHENSIVE AMBULATORY/PROFESSIONAL ENCOUNTER RECORD (CAPER) ENHANCED FOR THE MDR

This specification describes the process required to convert the CAPER-Basic, as generated through the process described in the specification "Comprehensive Ambulatory/Professional Encounter Record (CAPER) - Basic for the MDR", into the CAPER-Enhanced. For FY04 and forward, CAPER-Enhanced will be derived from the CAPER-Basic through the processes documented through the remainder of this specification and referred to as Blending, Administrative Processing and Field Additions, and Analytic Processing and Field Additions.

I. SOURCE

Source	Data File	Purpose
CHCS/AHLTA	CAPER-Basic, Master, MDR, current (after weekly update processing)	Collection of records for encounters/professional services in near raw form, prepared in accordance with the specification "CAPER-Basic for the MDR".
MDR	CAPER-Enhanced, Master, MDR, previous (week)	
CHCS/AHLTA	Appointment File, Master, MDR	Records to supplement CAPER-Basic when an appointment was identified as complete but a CAPER not submitted.
Interim file from Processor	Cancel File, Master, current (week)	Cancelled records resulting from CAPER-Basic processing that divides weekly harvests into "keepers" and "cancels".

II. TRANSMISSION (Format and Frequency)

The most current CAPER-Basic file as it resides in PUB/APUB is used for CAPER Enhanced processing.

Table for Multiple Input Feeds

Source	Data File	Periodicity	Format
CHCS/AHLTA	CAPER-Basic	Weekly	SAS
CHCS/AHLTA	Appointment File	Weekly	SAS

III. ORGANIZATION AND BATCHING

CAPER-Enhanced data contains records from the CAPER Basic file, supplemented with fields supplied or modified in CAPER Enhanced processing as described in this document. The CAPER records are organized into fiscal year files.

Current year CAPERs are processed weekly after the Appointment Master and the CAPER Basic.

Frequency of updates, based on CAPER encounter date:

- Current FY: Every week
- Prior FY: weekly for one quarter (October, November, and December) then semiannually (April, October)
- All years prior to prior FY: Annually (October)
- Retrofits: On an as needed basis when data corrections or updates are required.

IV. RECEIVING FILTERS

None.

V. DATA PROCESSING AND FIELD TRANSFORMATION

Generating a CAPER-Enhanced begins with the most recent version of the CAPER-Basic master file for the period in question². The file and included records pass through the following processes to create the new CAPER-Enhanced master for the MDR.³

A. Administrative Processing:

1. Records from all four input files (See I.) are uniquely identified by the key (HOSTDMIS || APPTIDNO).

2. Blending

The Blending process combines records from the refreshed CAPER-Basic master file with information about newly identified cancellations, the Appointment master file, and the previous CAPER Enhanced master file to generate a refreshed file ready for Administrative processing and records to be maintained in the M2 Drop Dataset. The file, referred to below as the Blended CAPER, is an interim file retained for the duration of processing only and does not reside in PUB/APUB. The Blending process has three steps:

- a. Link records in the new CAPER-Basic master to records in the CAPER-Enhanced master on the key HOSTDMIS||APPTIDNO.

In CAPER-Basic Master	In CAPER Enhanced Master	Value of Enhanced APPTINFR	Relation of Source Processing Dates	Action
No	Yes	N		Remove CAPER-Enhanced record. Add key to M2DROP data set.
No	Yes	Y		Retain CAPER-Enhanced record in Blended CAPER. Set M2CODE = ''.
Yes	No			Add CAPER-Basic record to Blended CAPER. Set M2CODE = 'N'.
Yes	Yes	N	Basic SRCPROCDATE > Enhanced SRCPROCDATE	Retain CAPER-Basic record in lieu of CAPER-Enhanced record. Set M2CODE = 'U'.

² Refer to the specification "Comprehensive Ambulatory/Professional Encounter Record (CAPER) – Basic for the MDR" for a complete list of variables in the CAPER-BASIC file.

³ To be clear, the process of blending the data sets together as described through the remainder of this section implies that all interim data sets in the CAPER-Enhanced processing will have all the final fields of a CAPER-Enhanced data set because one of the input data sets, namely the previous CAPER-Enhanced data set, already has all variables. Consequently, the fields are not technically added later in processing. Rather, they receive values later in processing.

In CAPER-Basic Master	In CAPER Enhanced Master	Value of Enhanced APPTINFR	Relation of Source Processing Dates	Action
Yes	Yes	N	Basic SRCPROCDATE =< Enhanced SRCPROCDATE	Retain CAPER Enhanced record. Set M2CODE= ' '.
Yes	Yes	Y		Retain CAPER-Basic record in lieu of CAPER-Enhanced record. Set M2CODE='U'.

b. Join records in the new Cancel Master file to records in the Appointment Master file using the key HOSTDMIS||APPTIDNO. Appointment records are kept or omitted as follows:

- Keep all appointment records for the administrative processing merges (see Appendix 2). Once the appointment file merge is complete, only B, FBI and FBN appointment records with INFRSADR flag = Y are kept (all INFRSADR = N and all MEPRS appointments other than B, FBI and FBN are dropped).
- Omit all test records where the test records are identified as those starting with MEPRS 3-level codes other than standard codes from the EAS-IV Repository Account Subset Definition (ASD) table or from CHCS⁴.
- Keep only records where the Appointment Status=2 (Kept), 5 (Walk-in), 6 (Sick Call), or 7 (TELCON).
- Keep only appointments that do not have a mate in the cancellations.

c. Link net appointment records from Step V.A.2.b. to records in the Blended CAPER using the key HOSTDMIS||APPTIDNO. If a match is found, set APPTMTCH = 1.

In Appointment Master	In Blended CAPER	Value of Blended CAPER APPTINFR	Relation of Source Processing Dates	Action
No	Yes	N		Retain Blended CAPER record. Set APPTINFR= 'N'.
No	Yes	Y		Remove Blended CAPER record. Add record key to M2DROP dataset
Yes	No			Add Appointment record to Blended CAPER file. Set APPTINFR='Y'. Set M2CODE='N'
Yes	Yes	N		Retain Blended CAPER record. Set APPTINFR= 'N'. Set M2CODE to 'U' if and only if M2CODE is not 'N' and any of the appointment-derived fields are different, in which case the values of those fields on the appointment record should be retained.

⁴ Identified in /mdr/ref/sadr.minvld.fmt

In Appointment Master	In Blended CAPER	Value of Blended CAPER APPTINFR	Relation of Source Processing Dates	Action
Yes	Yes	Y	Appt CHGDT > Blended SRCPROCDATE	Retain Appointment record in Blended CAPER file. Set APPTINFR= 'Y'. Set M2CODE= 'U'.
Yes	Yes	Y	Appt CHGDT <= Blended SRCPROCDATE	Retain Blended CAPER record.

The resulting file is the interim Blended CAPER.

3. Grouping

Ambulatory Payment Classifications (APCs) and Ambulatory Patient Groups are applied to non-inferred records of the Blended CAPER following the process described in Appendix 1: Application of Ambulatory Groupers and Related Fields.

4. Text Processing

This step involves merging the blended CAPER interim file with other MDR datasets to add frequently used descriptive variables that are needed in the final MDR CAPER file. The process and appended fields are described in Appendix 2: Administrative Text Processing Steps and Field Additions.

B. Analytic Processing (Legacy)

This step uses the results of the Administrative Process as inputs for generating aggregate workload (RVUs) and cost variables resembling those in the MDR SADR and needed for trending. When replaced by later generation workload/cost methodologies, this step may be removed. See Appendix 3: Analytic Processing and Field Additions to the CAPER-Enhanced (Legacy).

C. Editing

For FY07+, variables describing care provided during the encounter—CPT codes, modifiers, providers and provider/pointer links—are reviewed. Common data and coding errors are repaired and non-standard reporting is adjusted in preparation for workload reapplication/calculations in the next step. The “corrected” values for these variables and for variables that depend on them (e.g., APCs) are retained in the final MDR CAPER table; original values are maintained in CAPER Basic. The edits and modifications are detailed in Appendix 4: Modify Data Prior to Workload Assignment to Adjust for Common Data and Coding Errors.

D. Analytic Processing (Updated)

For FY07+, workload measures are applied to the revised/edited components from the previous step. The process generates the non-provider affected workload array and provider affected workload array and leads to detail and aggregate workload measures. Calculations are based on MHS policy, including discounting and multiple provider crediting. See Appendix 5: Analytic Processing and Field Additions to the CAPER-Enhanced (Updated) and Appendix 6: Completion Table for Appointment-Inferred CAPERs.

E. Post Analytic Processing

The CAPER file retains a field M2CODE which will be used to support the process of maintaining the M2 CAPER. When analytic processing is complete, the resulting CAPER Enhanced is written

to resting locations in PUB and APUB. See Table 1: Fields in the MDR CAPER for the list of all retained fields.

F. Reference Table information is provided in Appendix 8: Reference Tables.

VI. DIRECTORY LOCATION

/mdr/pub/caper/enhanced/fy##.sas7bdat	Public
/mdr/apub/caper/enhanced/fy##/dyymmdd/fy##.sas7bdat	Special Access

VII. DATA QUALITY

Basic quality checks are necessary throughout the execution of the processes in this specification. It is recommended that the processing organization maintain a spreadsheet to support tracking key characteristics of the data across processing cycles; making it straightforward to identify how data should look and to identify variations from expected metrics. BEA (the functional proponent and the specification author) should be contacted immediately should quality issues arise. These checks, at a minimum, should include:

- Comparing M2CODE status of the CAPER-Basic to the M2CODE status of the new CAPER Enhanced MDR Master should show the following:
 - ❖ Final count of updated records \geq total count of update records in CAPER-Basic version.
 - ❖ Final count of M2CODE=' ' records \leq total count of M2CODE=' ' records in CAPER-Basic version.
 - ❖ Final count of M2CODE='N' records = total count of M2CODE='N' records in CAPER-Basic version.
- Additional checks, at a minimum, should include:
 - ❖ Total record counts in the data feed should go up with each month of data provided.
 - ❖ The number of records 'cleaned out' each month should be similar in scope.
 - ❖ The number of records that match when doing the MPI merge should be consistent.
 - ❖ The number of records that match when doing the LVM merge should be consistent.
 - ❖ The number of records that match to the Omni-CAD should be consistent.
 - ❖ The distribution of service branch and component should be consistent.
 - ❖ When reading in the initial data feed, a small number of records should be printed off and manually inspected to ensure they have read in properly.
 - ❖ Cross tabulations should be reviewed on derived elements to ensure the derivation logic works.
 - ❖ A data flow tracker should be built to ensure that all records that are intended to make it into the final file do. In other words, all deletions should be explained in the data flow tracker.
 - ❖ A small number of records in the proc format output should be manually reviewed to ensure that it is written properly.
 - ❖ TBD: The sum of the FY full costs will fall within a reasonable range of the MEPRS costs.

VIII. DATA MARTS

MHS Mart (M2): See M2 CAPER Detail and CAPER Summary specifications for layout of MDR feeds to M2.

IX. SPECIAL OUTPUTS

Create the following as a SAS dataset, in the most logical processing location, for the cancelled records. The cancellation data is de-duplicated on CHCS Host DMIS ID and Appointment ID

Number, retaining the observation with the most recent Extract Date. Place file in the directory /mdr/ref/cber/cancel/caper.sas7bat and its associated /mdr/aref area.

Field Description	Format	SAS Name	Notes
Associated Appointment IEN	Char(10)	APPTIDNO	
CAPER Extract Date	Char(8)	EXTRDATE	
CHCS Host DMIS ID	Char(4)	HOSTDMIS	
Site Identifier from Filename of Raw Feed	Char(8)	SITEID	

Table 1. Fields in the MDR CAPER

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
1	Actual Appointment Duration	Char(10)	ACTDUR	CAPER Basic	CAPER Basic	Y
2	Alternate Care Value	Char(1)	ACV	CAPER Enh	Table A2	Y
3	ACV Group	Char(15)	ACVGROUP	CAPER Enh	Table A2	Y
4	Administrative Disposition	Char(5)	ADMIDISP	CAPER Basic	CAPER Basic	Y
5	Age Group	Char(1)	AGEGRP	CAPER Enh	Table A2	Y
6	Ambulatory Surgery	Char(1)	AMBSURG	CAPER Basic	CAPER Basic	
7-19	APC; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(5)	APC1 – APC13	CAPER Enh	Tables A1.1, A5.2	Y
20	APC Aggregate Weight	N(8)	APCAGGWT	CAPER Enh	Table A5.2	Y
21-33	APC Procedure Edit; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(40)	APCEDIT1 – APCEDIT13	CAPER Enh	Tables A1.1, A5.2	
34-46	APC Packaging Flag; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(1)	APCPKG1-APCPKG13	CAPER Enh	Tables A1.1, A5.2	
47-59	APC Status Code; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(2)	APCPSI1 – APCPSI13	CAPER Enh	Table A1.1, A5.2	Y
60-72	APC Weight (Discounted); E&M Code 1-3, CPT/HCPCS Code 1-10	N(8) Z9.4	APCW1 – APCWT13	CAPER Enh	Table A5.2	
73	APG E&M	Char(3)	APG1	CAPER Enh	Table A1.1	N
74	APG Medical	Char(3)	APG2	CAPER Enh	Table A1.1	N
75-78	APG, CPT/HCPCS Code 1-10	Char(3)	APG3 – APG6	CAPER Enh	Table A1.1	N
79	Total APG Weight	N(8)	APGWGT_S	CAPER Enh	Table A3.3	N
80	Associated Appointment IEN	Char(10)	APPTIDNO	CAPER Basic	CAPER Basic	Y
81	Appointment Inferred CAPER Flag	Char(1)	APPTINFR	CAPER Enh	Para V.A, Table A2	
82	Appointment Record Match	N(3)	APPTMTCH	CAPER Enh	Para V.A.2c.	
83	Appointment Prefix (Source System Flag)	Char(1)	APPTPREFIX	CAPER Basic	CAPER Basic & Table A2	Y
84	Appointment Status Type with Appointment Data Walk-In	Char(1)	APPTSTAT	CAPER Enh	Table A2	Y
85	Appointment Status Type	Char(1)	APPTSTAT1	CAPER Enh	Table A2	
86	Appointment Type from Appointment Data	Char(6)	APPTTYPE	CAPER Enh	Table A2	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
87	Appointment Type Raw	Char(6)	APPTTYPE_R	CAPER Enh	CAPER Basic & Table A2	Y
88	APV Flag	Char(1)	APV	CAPER Enh	Table A2	Y
89-101	ASC Code; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(2)	ASC1-ASC13	CAPER Enh	Table A5.2	
102	Assigned Appointment Duration	N(8)	ASSGNDUR	CAPER Basic	CAPER Basic	Y
103	Beneficiary Category	Char(3)	BENCAT	CAPER Enh	Table A2	
104	Beneficiary Category from LVM	Char(3)	BENCATX	CAPER Enh	Table A2	Y
105	Appointment Cancellation Status Type	Char(1)	CANCSTAT	CAPER Basic	CAPER Basic	
106	CAPER Processing Date	Char(8)	CAPERPROCDAT E	CAPER Enh	Table A2	
107	CAPER Status	Char(1)	CAPERSTAT	CAPER Basic	CAPER Basic	Y
108	Patient Catchment Area	Char(4)	CATCH	CAPER Enh	Table A2	Y
109	CCE Encounter Status Flag	Char(1)	CCESTAT	CAPER Basic	CAPER Basic	Y
110	Change Edit Flag	Char(10)	CEDITFLG	CAPER Enh	Appendix 4	Y
111	Bilateral Code Edit Flag	Char(1)	CEDITBILAT	CAPER Enh	Appendix 4	Y
112	Procedure on TCON Edit Flag	Char(1)	CEDITTCON	CAPER Enh	Appendix 4	Y
113	Prov/Proc Linkage Edit Flag	Char(1)	CEDITPROVPRO C	CAPER Enh	Appendix 4	Y
114	Surgical Follow Up Edit Flag	Char(1)	CEDITSURG	CAPER Enh	Appendix 4	Y
115	UOS Edit Flag	Char(1)	CEDITUOS	CAPER Enh	Appendix 4	Y
116	Claim Denial Disposition	Char(1)	CLAIM_DEN	CAPER Enh	Table A1.1	
117	Overall Claim Disposition	Char(2)	CLAIM_DISP	CAPER Enh	Table A1.1	
118	Clinic State (from DMIS merge)	Char(2)	CLINSTAT	CAPER Enh	Table A2	
119	Clinic State	Char(2)	CLINSTAT_R	CAPER Basic	CAPER Basic	
120	Clinic Zip Code (from DMIS merge)	Char(5)	CLINZIP	CAPER Enh	Table A2	
121	Clinic Zip Code (Raw)	Char(10)	CLINZIP_R	CAPER Basic	CAPER Basic	
122	Calendar Month	Char(2)	CM	CAPER Basic	CAPER Basic	Y
123	Common Beneficiary Category	Char(1)	COMBEN	CAPER Enh	Table A2	Y
124	DX(ICD-9-CM) Code, Encounter Chief Complaint	Char(7) ⁵	COMPLAINT	CAPER Basic	CAPER Basic	Y
125	Composite Weight for TFL Earnings	N(8)	COMPWT	CAPER Enh	Table A5.2	Y
126	Composite Weight for PMPM	N(8)	COMPWTCY	CAPER Enh	Table A5.2	Y
127	Variable Cost	N(8)	COST	CAPER Enh	Table A3.3	Y
128	Variable Cost, E&M APG	N(8)	COST1	CAPER Enh	Table A3.3	N
129	Variable Cost, Medical APG	N(8)	COST2	CAPER Enh	Table A3.3	N
130-134	Variable Cost, Proc1 APG-Proc4 APG	N(8)	COST3-COST6	CAPER Enh	Table A3.3	N
134	Count Visit Indicator	Char(1)	COUNTVIS	CAPER Basic	CAPER Basic & Table A2	Y
135-147	E&M Code 1-Code 3, CPT/HCPCS Code 1-Code 10	Char(5)	CPT_1 - CPT_13	CAPER Basic	CAPER Basic	Y

⁵ Diagnosis codes are ICD-10 compliant (max length of ICD-10 diagnosis is 7 characters).

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
148-160	Diagnosis Pointers; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(4)	CPTDX_1 - CPTDX_13	CAPER Basic	CAPER Basic	
161-170	Min of Anesthesia, CPT/HCPCS Code 1-10	N(8)	CPTMIN_4 - CPTMIN_13	CAPER Basic	CAPER Basic	
171-183	Modifier 1; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(2)	CPTMOD1_1 - CPTMOD1_13	CAPER Basic	CAPER Basic	Y
184-196	Modifier 2; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(2)	CPTMOD2_1 - CPTMOD2_13	CAPER Basic	CAPER Basic	Y
197-209	Modifier 3; E&M Code 1-3, CPT/HCPCS Code 1-10	Char(2)	CPTMOD3_1 - CPTMOD3_13	CAPER Basic	CAPER Basic	
210-212	E&M Code 1 E&M Code 3- Provider Pointers	Char(5)	CPTPROV_1 - CPTPROV_3	CAPER Basic	CAPER Basic	
213-222	CPT/HCPCS Code 1 – Code 10-Provider Linkages	Char(5)	CPTPROV_4 - CPTPROV_13	CAPER Basic	CAPER Basic	
223-235	Units of Service (Raw); E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	CPTUNITS_1 - CPTUNITS_13	CAPER Basic	CAPER Basic	Y
236-248	Units of Service; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	CPTUOS_1 - CPTUOS_13	CAPER Enh	Table A1.1	Y
249	Calendar Year	Char(4)	CY	CAPER Basic	CAPER Basic	Y
250	DEERS Dependent Suffix	Char(2)	DDS	CAPER Enh	Table A2	Y
251	Deployment Country	Char(2)	DEPLOYCNTRY	CAPER Basic	CAPER Basic	
252	Deployment Related Illness/Condition	Char(1)	DEPLOYCOND	CAPER Basic	CAPER Basic	
253	Deployed Relationship	Char(1)	DEPLOYRELN	CAPER Basic	CAPER Basic	
254	Disposition Code	Char(1)	DISPCODE	CAPER Basic	CAPER Basic	Y
255	Treatment DMIS ID	Char(4)	DMISID	CAPER Basic	CAPER Basic	Y
256-265	DX (ICD-9-CM) Code #1 - Code #10	Char(7)5	DX1 - DX10	CAPER Basic	CAPER Basic	Y
266	Diagnosis Group	Char(2)	DXGRP	CAPER Enh	Table A2	Y
267-276	DX (ICD-9-CM) Code #1 - Code #10 - Priority	Char(1)	DXPRI1 - DXPRI10	CAPER Basic	CAPER Basic	
277	Unique Person Identifier (EDIPN)	Char(10)	EDIPN	CAPER Enh	Table A2	Y
278	Patient Identifier (EDIPN), Raw	Char(10)	EDIPN_R	CAPER Basic	CAPER Basic	
279	Modified Appointment (Encounter) Date	Char(8)	ENCDATE	CAPER Basic	CAPER Basic	Y
280	Raw Appointment (Encounter) Date	Char(8)	ENCDATE_R	CAPER Basic	CAPER Basic	
281	Enrollment DMIS ID	Char(4)	ENRDMIS	CAPER Enh	Table A2	Y
282	Enrollment DMIS ID Raw	Char(4)	ENRDMIS_R	CAPER Basic	CAPER Basic	
283	Enrollment DMIS ID Region	Char(2)	ENRREG	CAPER Enh	Table A2	
284	End of Record	Char(5)	EOR	CAPER Basic	CAPER Basic	
285	Ethnic Background	Char(1)	ETHNICGR	CAPER Basic	CAPER Basic	
286	Evaluative Visit	N(3)	EVALVIS	CAPER Enh	Table A5.2	Y
287	Age Group Common	Char(1)	EXPAGE	CAPER Enh	Table A2	Y
288	CAPER Extract Date	Char(8)	EXTRDATE	CAPER Basic	CAPER Basic	
289	MDR Original CAPER Extract Date	Char(8)	EXTRDATE_O	CAPER Basic	CAPER Basic	Y
290	Facility/Non-Facility Flag	Char(1)	FAC_FLAG	CAPER Enh	Tables A3.3, A5.2	Y
291	Full Cost, Clinician Salary	N(8)	FCCLNSAL	CAPER Enh	Table A5.4	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
292	Full Cost, Laboratory	N(8)	FCLAB	CAPER Enh	Table A5.4	Y
293	Full Cost	N(8)	FCOST	CAPER Enh	Table A5.4	Y
294	Full Cost, E&M APG	N(8)	FCOST1	CAPER Enh	Table A5.4	N
295	Full Cost, Medical APG	N(8)	FCOST2	CAPER Enh	Table A5.4	N
296-299	Full Cost, Proc1 APG-Proc4 APG	N(8)	FCOST3 – FCOST6	CAPER Enh	Table A5.4	N
300	Full Cost, Other Ancillary	N(8)	FCOTHANC	CAPER Enh	Table A5.4	Y
301	Full Cost, Other	N(8)	FCOTHER	CAPER Enh	Table A5.4	Y
302	Full Cost, Other Labor	N(8)	FCOTHLBR	CAPER Enh	Table A5.4	Y
303	Full Cost, Professional Salary	N(8)	FCPROFSAL	CAPER Enh	Table A5.4	Y
304	Full Cost, Radiology	N(8)	FCRAD	CAPER Enh	Table A5.4	Y
305	Full Cost, Pharmacy	N(8)	FCRX	CAPER Enh	Table A5.4	Y
306	Full Cost, Support	N(8)	FCSUP	CAPER Enh	Table A5.4	Y
307	Beneficiary First Name	Char(20)	FIRSTNAME	CAPER Enh	Table A2	Y
308	Fiscal Month	Char(2)	FM	CAPER Basic	CAPER Basic	Y
309	Family Member Prefix	Char(2)	FMP	CAPER Basic	CAPER Basic	Y
310-322	RVU, Raw Facility Practice; E&M Code 1–3, CPT/HCPCS Code 1–10	N(8)	FPRVU1 – FPRVU13	CAPER Enh	Tables A3.3 & A5.2	
323	Fiscal Year	Char(4)	FY	CAPER Basic	CAPER Basic	Y
324	Health Care Delivery Program Code	Char(3)	HCDPCODE_R	CAPER Basic	CAPER Basic	
325	HCDP – Enrolled, from LVM	Char(3)	HCDPLVM	CAPER Enh	Table A2	Y
326	Inpatient Indicator, Raw	Char(1)	HOSPSTAT	CAPER Basic	CAPER Basic	Y
327	CHCS Host	Char(4)	HOSTDMIS	CAPER Basic	CAPER Basic	Y
328-330	Injury Related/Cause Code 1 – Code 3	Char(2)	INJCODE1 – INJCODE3	CAPER Basic	CAPER Basic	Y
331	Date of Injury, CCYYMMDD	Char(8)	INJDATE	CAPER Basic	CAPER Basic	Y
332	Injury Geographic Location	Char(5)	INJGEOGLOC	CAPER Basic	CAPER Basic	Y
333	Injury Place of Accident	Char(54)	INJPOA	CAPER Basic	CAPER Basic	Y
334	Injury Place of Employment	Char(54)	INJPOE	CAPER Basic	CAPER Basic	Y
335	Injury Related	Char(1)	INJREL	CAPER Basic	CAPER Basic	Y
336	Inpatient Appointment, Raw	Char(1)	INPAPPT	CAPER Basic	CAPER Basic	Y
337	Medical Insurance Billable	Char(1)	INSBILL	CAPER Basic	CAPER Basic	Y
338	Beneficiary Last Name	Char(26)	LASTNAME	CAPER Enh	Table A2	Y
339	M2 Code	Char(1)	M2CODE	CAPER Basic	CAPER Basic & Table A2	
340	Marital Status	Char(1)	MARITAL	CAPER Basic	CAPER Basic	Y
341	MCP Group ID	Char(19)	MCPID	CAPER Basic	CAPER Basic	Y
342	Major Diagnostic Category	Char(2)	MDC	CAPER Enh	Table A2	Y
343	Medicare Eligibility Field	Char(2)	MEDELIG	CAPER Basic	CAPER Basic	
344	Medicare Eligibility Aggregate	Char(1)	MEDELIG2	CAPER Enh	Table A2	Y
345	Medicare Eligibility Flag	Char(1)	MEDFLAG	CAPER Enh	Table A2	
346	Medical Home Flag	Char(1)	MED_HOME_FLAG	CAPER Enh	Table A2	N
347	Enrollment MEPRS Code	Char(4)	MED_HOME_MEPRS	CAPER Enh	Table A2	Y
348	Medicare Eligibility as Reported in the Appointment Data	Char(2)	MELIGAPT	CAPER Enh	Table A2	
349	MEPRS1 Code	Char(1)	MEPR1	CAPER Enh	Table A2	Y
350	MEPRS2 Code	Char(2)	MEPR2	CAPER Enh	Table A2	Y
351	MEPRS3 Code	Char(3)	MEPR3	CAPER Enh	Table A2	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
352	Treatment MEPRS Code	Char(4)	MEPRSCD	CAPER Basic	CAPER Basic	Y
353	Multi-Service Market Area	Char(3)	MSMA	CAPER Enh	Table A2	Y
354	Treatment Parent DMIS ID	Char(4)	MTF_PAR	CAPER Enh	Table A2	Y
355	Treatment Parent DMIS ID, Raw	Char(4)	MTF_PAR_R	CAPER Enh	Table A2	
356	Inpatient DMISID & Patient Register Number	Char(11)	MTF_PRN	CAPER Basic	CAPER Basic	
357	IP Enhanced PE RVU (Non-Provider Affected PE RVU Aggregate)	N(8)	NPERVU	CAPER Enh	Table A5.2	
358-370	Non-Provider Affected PE RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	NPERVU1-NPERVU13	CAPER Enh	Table A5.2	
371-383	RVU, Raw Non-Facility Practice; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	NPRVU1 – NPTVU13	CAPER Enh	Tables A3.3 & A5.2	
384	IP Enhanced Total RVU (Non-Provider Affected Total RVU Aggregate)	N(8)	NTRVU	CAPER Enh	Table A5.2	
385-397	Non-Provider Affected Total RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	NTRVU1 – NTRVU13	CAPER Enh	Table A5.2	
398	IP Enhanced Work RVU (or Non-Provider Affected Work RVU Aggregate)	N(8)	NWRVU	CAPER Enh	Table A5.2	
399-411	Non-Provider Affected Work RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	NWRVU1 – NWRVU13	CAPER Enh	Table A5.2	
412	Patient OHI Indicator	Char(1)	OHI	CAPER Basic	CAPER Basic	Y
413	RVU, Organizational Work Per SADR	N(8)	OWRVU_S	CAPER Enh	Table A3.3	
414-418	Provider PE RVU Aggregate; Appointment Provider, Additional Providers 1-4	N(8)	P1PERVU – P5PERVU	CAPER Enh	Table A5.2	Y
419-483	Provider PE RVU; Appt Provider, Additional Providers1-4 and E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	P1PERVU1 – P5PERVU13	CAPER Enh	Table A5.2	
484-488	Provider Total RVU Aggregate; Appointment Provider, Additional Providers 1-4	N(8)	P1TRVU – P5TRVU	CAPER Enh	Table A5.2	Y
489-553	Provider Total RVU; Appt Provider, Additional Providers1-4 and E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	P1TRVU1 – P5TRVU13	CAPER Enh	Table A5.2	
554-558	Provider Work RVU Aggregate; Appointment Provider, Additional Providers 1-4	N(8)	P1WRVU – P5WRVU	CAPER Enh	Table A5.2	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
559-623	Provider Work RVU; Appt Provider, Additional Providers1-4 and E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	P1WRVU1 – P5WRVU13	CAPER Enh	Table A5.2	
624	Person Association Reason Code	Char(2)	PARC	CAPER Enh	Table A2	Y
625	Parent DMIS ID (Cost)	Char(4)	PARCOST	CAPER Enh	Table A2	
626	Parent DMIS ID (Enrollment)	Char(4)	PARENTR	CAPER Enh	Table A2	Y
627	Parent DMIS ID (MEPRS)	Char(4)	PARMEPRS	CAPER Enh	Table A2	
628	Patient Age	N(8)	PATAGE	CAPER Enh	Table A1.1	Y
629	Patient Category	Char(3)	PATCAT	CAPER Enh	Table A2	Y
630	Patient Category Raw	Char(5)	PATCAT_R	CAPER Basic	CAPER Basic	
631	Patient Date of Birth	Char(8)	PATDOB	CAPER Basic	CAPER Basic	Y
632	Beneficiary HSSC Region	Char(1)	PATHSSC	CAPER Enh	Table A2	N
633	Patient Person ID Type Code	Char(1)	PATIDTYPE	CAPER Basic	CAPER Basic	Y
634	Beneficiary Name	Char(74)	PATNAME	CAPER Enh	Table A2	Y
635	Patient Race Code	Char(1)	PATRACE	CAPER Basic	CAPER Basic	Y
636	Patient Health Service Region	Char(2)	PATREGN	CAPER Enh	Table A2	N
637	Patient Gender	Char(1)	PATSEX	CAPER Basic	CAPER Basic	Y
638	Patient Social Security Number	Char(9)	PATSSN	CAPER Basic	CAPER Basic	Y
639	Inpatient Indicator as Reported in the Appointment Data	Char(1)	PATSTAT	CAPER Enh	Table A2	Y
640	Patient Subcategory Code	Char(1)	PATSUBCODE	CAPER Enh	Table A2	Y
641	Modified Patient Zip Code	Char(9)	PATZIP	CAPER Basic	CAPER Basic	Y
642	Patient Zip Code (Raw)	Char(10)	PATZIP_R	CAPER Basic	CAPER Basic	
643	PCM EDIPN	Char(10)	PCMEDIPN	CAPER Basic	CAPER Basic	
644	PCM Group Tax ID	Char(10)	PCMGRP	CAPER Basic	CAPER Basic	
645	Primary Care Manager Provider ID	Char(10)	PCMID	CAPER Basic	CAPER Basic	Y
646	PCM ID from the LVM merge	Char(18)	PCMIDLVM	CAPER Enh	Table A2	Y
647	NED Primary Care Manager ID	Char(18)	PCMID_NED	CAPER Basic	CAPER Basic	
648	Primary Care Manager Location CD	Char(2)	PCMLOC	CAPER Basic	CAPER Basic	
649	Primary Care Manager NPI	Char(10)	PCMNPI	CAPER Basic	CAPER Basic	Y
650	PCM NPI Type	Char(1)	PCMNPITYPE	CAPER Basic	CAPER Basic	Y
651	NED PCM Type Code	Char(1)	PCMTYPE_NED	CAPER Basic	CAPER Basic	
652-664	RVU, Practice Expense; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	PERVU1 – PERVU13	CAPER Enh	Table A3.3	Y
665	Aggregate PE RVU (Provider-Affected PE RVU Aggregate)	N(8)	PERVUAGG	CAPER Enh	Table A5.2	Y
666-678	Provider Affected Aggregate PE RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	PPERVU1 – PPERVU13	CAPER Enh	Table A5.2	
679	PPS Enrollment Parent Site	Char(4)	PPS_EPS	CAPER Enh	Table A2	

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
680	PPS Treatment Parent Site	Char(4)	PPS_TPS	CAPER Enh	Table A2	
681	PRISM Service Area	Char(4)	PRISM	CAPER Enh	Table A2	Y
682	Processing Date	Char(8)	PROCDATE	CAPER Basic	CAPER Basic	
683	Product Line	Char(7)	PRODLINE	CAPER Enh	Table A2	Y
684	Appointment Provider Class	Char(30)	PROVCLAS1	CAPER Basic	CAPER Basic	
685	Referring Provider DMISID	Char(4)	PROVDMISREF	CAPER Basic	CAPER Basic	Y
686-690	EDIPN; Appointment Provider, Additional Providers 1-4	Char(10)	PROVEDIPN1 – PROVEDIPN5	CAPER Basic	CAPER Basic	Y
691	Referring Provider EDIPN	Char(10)	PROVEDIPNREF	CAPER Basic	CAPER Basic	Y
692-696	HIPAA Taxonomy; Appointment Provider, Additional Providers 1-4	Char(10)	PROVHIPAA1 – PROVHIPAA5	CAPER Basic	CAPER Basic	Y
697	Provider ID, Appointment Provider	Char(9)	PROVID1	CAPER Basic	CAPER Basic/ Table A2	Y
698-701	Provider ID, Additional Provider 1 – Additional Provider 4	Char(10)	PROVID2 – PROVID5	CAPER Basic	CAPER Basic	Y
702-706	Assigned MEPRS Code; Appointment Provider, Additional Providers 1-4	Char(4)	PROVMEPR1 – PROVMEPR5	CAPER Basic	CAPER Basic	
707-711	People Group Assigned FCC (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(4)	PROVMEPRD1- PROVMEPRD5	CAPER Enh	Table A2	
712-716	Assigned MTF; Appointment Provider, Additional Providers 1-4	Char(4)	PROVMTF1 – PROVMTF5	CAPER Basic	CAPER Basic	
717-721	Assigned MTF (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(4)	PROVMTFD1- PROVMTFD5	CAPER Enh	Table A2	Y
722-726	NPI; Appointment Provider, Additional Providers 1-4	Char(10)	PROVNPI1 – PROVNPI5	CAPER Basic	CAPER Basic	Y
727	Referring Provider NPI	Char(10)	PROVNPIREF	CAPER Basic	CAPER Basic	Y
728-732	NPI Type; Appointment Provider, Additional Providers 1-4	Char(1)	PROVNPITYPE1 – PROVNPITYPE5	CAPER Basic	CAPER Basic	Y
733	Referring Provider NPI Type	Char(1)	PROVNPITYPEREF	CAPER Basic	CAPER Basic	Y
734-737	Assigned Org ID (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(8)	PROVORGD1- PROVORGD5	CAPER Enh	Table A2	Y
738-743	Provider Personnel Category (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(22)	PROVCATD1- PROVCATD5	CAPER Enh	Table A2	Y
744-748	Provider Role; Appointment Provider, Additional Providers 1-4	Char(1)	PROVROLE1 – PROVROLE5	CAPER Enh	Table A2	Y
749-753	Provider Specialty Code; Appointment Provider, Additional Providers 1-4	Char(3)	PROVSPEC1 – PROVSPEC5	CAPER Basic	CAPER Basic	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
754-758	Military Status; Appointment Provider, Additional Providers 1-4	Char(3)	PROVSTAT1 – PROVSTAT5	CAPER Basic	CAPER Basic	Y
759-763	Provider Service (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(1)	PROSVCD1-PROSVCD5	CAPER Enh	Table A2	Y
764-768	Provider, MTF Assigned Service (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(1)	PROVSVCASSGD1-PROVSVCASSGD5	CAPER Enh	Table A2	Y
769	Appointment Provider Type Code	Char(1)	PROVTYPE1	CAPER Basic	CAPER Basic	Y
770-774	Assigned UIC (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(8)	PROVUICD1-PROVUICD5	CAPER Enh	Table A2	Y
775-787	Provider Affected Aggregate Total RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	PTRVU1 – PTRVU13	CAPER Enh	Table A5.2	
788-800	Provider Affected Aggregate Work RVU; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	PWRVU1 – PWRVU13	CAPER Enh	Table A5.2	
801	Sponsor Rank Group	Char(2)	RANKGRP	CAPER Enh	Table A2	Y
802	Sponsor Rank/Paygrade	Char(3)	RANKPAY	CAPER Enh	Table A2	Y
803	Military Grade/Rank	Char(4)	RANKPAY_R	CAPER Basic	CAPER Basic	
804	Reason for Appointment	Char(78)	REASON	CAPER Basic	CAPER Basic	
805	Referring Provider [from Referral Database]	Char(14)	REF_PROV	CAPER Enh	Table A2	Y
806	Referring Provider ID, Raw	Char(9)	REF_PROV_R	CAPER Basic	CAPER Basic	Y
807	Referral Number [from Referral Database]	Char(11)	REFNUM	CAPER Enh	Table A2	Y
808	Referral Number, Raw	Char(11)	REFNUM_R	CAPER Basic	CAPER Basic	N
809-821	RVU, Raw Work; E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	RRVU1 – RRVU13	CAPER Enh	Tables A3.3 & A5.2	Y
822	Recoded Sponsor Service	Char(1)	RSPONSVC	CAPER Enh	Table A2	Y
823	RVU, Enhanced Practice Expense	N(8)	RVU_EPE	CAPER Enh	Table A3.3	Y
824	RVU, Enhanced Practice Expense per SADR	N(8)	RVU_EPE_S	CAPER Enh	Table A3.3	
825	RVU, Enhanced Total	N(8)	RVU_ET	CAPER Enh	Table A3.3	Y
826	RVU, Enhanced Total per SADR	N(8)	RVU_ET_S	CAPER Enh	Table A3.3	
827	RVU, Enhanced Work	N(8)	RVU_EW	CAPER Enh	Table A3.3	Y
828	RVU, Enhanced Work per SADR	N(8)	RVU_EW_S	CAPER Enh	Table A3.3	
829	Sponsor Service Aggregate from LVM	Char(1)	SAGGLVM	CAPER Enh	Table A2	Y
830	Scope of Care	Char(1)	SCOPE	CAPER Basic	CAPER Basic	
831	Same Day Surgery Flag	Char(1)	SDS	CAPER Enh	Table A2	Y
832	Site Identifier from Filename of Raw Feed	Char(8)	SITEID	CAPER Basic	CAPER Basic	

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
833-837	Skill Type (CHCS-based); Appointment Provider, Additional Providers 1-4	Char(2)	SKILL1 – SKILL5	CAPER Enh	Table A3.3	Y
838-842	CAPER Skill Level; Appointment Provider, Additional Providers 1-4	Char(1)	SKILLH1- SKILLH5	CAPER Enh	Table A3.3	Y
843	Reservist Special Operation Code	Char(2)	SOC	CAPER Enh	Table A2	Y
844	Special Operations Code (Raw)	Char(2)	SOC_R	CAPER Basic	CAPER Basic	
845	Sponsor Person ID Type Code	Char(1)	SPONSIDTYPE	CAPER Basic	CAPER Basic	Y
846	Sponsor Social Security Number	Char(9)	SPONSSN	CAPER Enh	Table A2	Y
847	Sponsor Social Security Number	Char(9)	SPONSSN_R	CAPER Basic	CAPER Basic	
848	Source Processing Date	Char(8)	SRCPROCDATE	CAPER Enh	Table A2	
849	Sponsor Service from DEERS	Char(1)	SSVCLVM	CAPER Enh	Table A2	
850	DOD Specific Injury Code	Char(3)	STANAG	CAPER Basic	CAPER Basic	Y
851	Reservist Status Code	Char(1)	STATUS	CAPER Enh	Table A2	Y
852	Telemedicine/Remote Consult Code	Char(1)	TELEMED	CAPER Basic	CAPER Basic	
853	TPR Eligibility Flag	Char(1)	TPRELIG	CAPER Enh	Table A2	Y
854-866	RVU, Raw Total (based on FAC_FLAG); E&M Code 1-3, CPT/HCPCS Code 1-10	N(8)	TRVU1 – TRVU13	CAPER Enh	Table A5.2	
867	Aggregate Total RVU (Provider-Affected Total RVU Aggregate)	N(8)	TRVUAGG	CAPER Enh	Table A5.2	Y
868	Tmt DMIS ID HSSC Region	Char(1)	TXHSSC	CAPER Enh	Table A2	N
869	Treatment Region	Char(2)	TXREG	CAPER Enh	Table A2	N
870	Treatment Service	Char(1)	TXSVC	CAPER Enh	Table A2	Y
871	TRICARE Young Adult Flag	Char(1)	TYAFLAG	CAPER Enh	Table A2	Y
872	Underwritten Region	Char(1)	UNDFLAG	CAPER Enh	Table A2	N
873	Variable Cost, Clinician Salary	N(8)	VCCLNSAL	CAPER Enh	Table A5.4	Y
874	Variable Cost, Laboratory	N(8)	VCLAB	CAPER Enh	Table A5.4	Y
875	Variable Cost, Other Ancillary	N(8)	VCOTHANC	CAPER Enh	Table A5.4	Y
876	Variable Cost, Other	N(8)	VCOTHER	CAPER Enh	Table A5.4	Y
877	Variable Cost, Other Labor	N(8)	VCOTHLBR	CAPER Enh	Table A5.4	Y
878	Variable Cost, Professional Salary	N(8)	VCPROFSAL	CAPER Enh	Table A5.4	Y
879	Variable Cost, Radiology	N(8)	VCRAD	CAPER Enh	Table A5.4	Y
880	Variable Cost, Pharmacy	N(8)	VCRX	CAPER Enh	Table A5.4	Y
881	Variable Cost, Support	N(8)	VCSUP	CAPER Enh	Table A5.4	Y
882	Aggregate Work RVU (Provider-Affected Work RVU Aggregate)	N(8)	WRVUAGG	CAPER Enh	Table A5.2	Y
883	HCDP – Assigned	Char(3)	HCDP_ASSGN	CAPER Enh	Table A2	Y
884	Eligibility Group	Char(2)	ELG_GRP	CAPER Enh	Table A2	Y
885	Enrollment Group	Char(2)	ENR_GRP	CAPER Enh	Table A2	Y
886	Enrollment PCM Type	Char(1)	PCM_TYPE	CAPER Enh	Table A2	Y
887	Enrollment Site T3 Region	Char(2)	ENR_T3_REG	CAPER Enh	Table A2	Y

Line	Field	Type	SAS Name	Source	Spec Reference	M2?
888	Enrollment Site T17 Region	Char(2)	ENR_T17_REG	CAPER Enh	Table A2	Y
889	Beneficiary T3 Region	Char(2)	BEN_T3_REG	CAPER Enh	Table A2	Y
890	Beneficiary T17 Region	Char(2)	BEN_T17_REG	CAPER Enh	Table A2	Y
891	Treatment DMIS ID T3 Region	Char(2)	MTF_T3_REG	CAPER Enh	Table A2	Y
892	Treatment DMIS ID T17 Region	Char(2)	MTF_T17_REG	CAPER Enh	Table A2	Y
893-897	Provider Name Appointment; Additional Providers 1-4	Char(40)	PROVNAME1-PROVNAME5	CAPER Enh	Table A2	Y
898	Provider Name Referring	Char(40)	PROVNAMEREF	CAPER Enh	Table A2	Y
899	Service Line	Char(5)	SERVICE_LINE	CAPER Enh	Table A2	Y
900	PCM Name	Char(40)	PCMNAME	CAPER Enh	Table A2	Y
901	Patient Assigned UIC	Char(8)	PAT_ATTACHMENT_UIC	CAPER Enh	Table A2	Y
902	Patient Attached UIC	Char(8)	PAT_ASSGN_UIC	CAPER Enh	Table A2	Y
903	Revenue Code	Char()	REVCODE1	CAPER Enh	Table A2	Y
904	Enrollment Site T5 Region	Char(2)	ENR_T5_REG	CAPER Enh	Table A2	Y
905	Beneficiary T5 Region	Char(2)	BEN_T5_REG	CAPER Enh	Table A2	Y
906	Treatment DMIS ID T5 Region	Char(2)	MTF_T5_REG	CAPER Enh	Table A2	Y

APPENDIX 1: Application of Ambulatory Groupers and Related Fields.

Ambulatory Payment Classification (APC) codes and APC-related values will be added to the non-inferred records of the Blended CAPER for FY07+. For FY07 and FY08, APC values are added through application of a format that assigns CMS APCs and related fields for every B-MEPRS, valid (non-blank and non-XXXXX) CPT position. APC Payment Status Indicators are assigned for all MEPRS, valid CPT positions. For FY09+, APC values are added by processing through the TRICARE APC Grouper, which assigns TRICARE 5-character APCs for every non-blank CPT position. After grouping, and after codes edits are applied, additional MHS-specific APC codes are applied by format to a select set of CPT codes for which there is no APC weight assigned by TRICARE (see Appendix 5, para 2). While the APC grouper processes all records, only B-MEPRS, Facility records will retain the APC and APC-related fields for all valid CPT positions (fields are blank if MEPRS1 <> B or FAC_FLAG <> F). However, the APC Payment Status Indicators (APCPSIJ) are needed in the calculation of workload on all records (see Appendix 5) so they will be retained for all valid CPT positions on all CAPERs.

Ambulatory Patient Group (APG) codes and APG-related values will be added to the non-inferred records of the Blended CAPER for FY05-FY11. Values are added by processing through the APG Grouper⁶, which assigns 3-character APGs for non-blank CPTs in the first E&M position and the first four procedure positions plus a medical APG.

Add grouper-related fields for all non-inferred CAPERS as follows:

1. Add UOSLIM_J and UOSSUB_J (not retained in CAPER) and CPTUOS_J and PATAGE (retained). See Table A1.1.
2. FY07-FY08: Add Ambulatory Payment Classification Codes (APCJ (where J = 1 to 13), associated Payment Status Indicators (APCPSIJ), and APC weights (RAPCWTJ) using the CY-based CPT to APC mapping format as described in Table A1.1.
3. FY09+: Prepare input data for the APC Grouper (see Table A1.2).
 - a. Modify CPT codes used to report Observation Stays only for input to the Grouper (See Table A1.2.b.). For any CPT code converted to represent an Observation Stay, change the associated Units of Service value to 8. The modified codes and Units of Service will not be retained or used to overwrite the original fields on exit from the Grouper.
 - b. FY09 and FY10 only: To allow the grouper to group records with encounter dates prior to 1 May 2009, the encounter date on the APC grouper input file must be set to 20090501 (See Table A1.2). CY08 CPT codes deleted for CY09, but appearing in FY09 data, will appear to the grouper to be invalid. To enable the grouper to apply APC information to these codes, a mapping of the deleted codes to their replacements is applied prior to grouping (See Table A1.2c). Due to delays in deploying new code sets at the start of a calendar year, this mapping of deleted codes will be continued through FY10 (See Table A1.2.d). Modified encounter dates and replacements for deleted codes will not be retained or used to overwrite the original fields on exit from the APC Grouper or used for APG Grouping.
4. Prepare and submit the input file to the 3M Grouper Plus System (GPS) TRICARE APC Grouper. The input to the APC Grouper is a flat text file based on a custom dictionary file created for the loaded production version of the TRICARE APC grouper. It allows for a total of 12 diagnoses (one Admitting Diagnosis, one Primary diagnosis and up to 9 more, one Reason for Visit diagnosis), 13 CPT codes and corresponding CPT code-related fields (e.g., modifiers).

⁶ The APG Grouper is no longer available. APG-related fields will not be updated for any FY.

See Table A1.2⁷: Format for Input to APC Grouper. The input record has three main components:

- a. The Record Key comes from the CAPER, is retained through the grouping process, and output on the output record with other output information. Checking the Record Key on the output information against the original CAPER ensures that APC output was, in fact, merged onto the correct CAPER.
- b. General information required by the grouper, e.g., User Key, and information describing the patient and patient condition, e.g., age, gender, diagnoses.
- c. A set of variables affiliated with each CPT code.
 - o Every CPT code entering the Grouper must be accompanied by Revenue Code, Units of Service, Line Charge Procedure Date, Line Action Flag, and Professional Service Flag.
 - o If any CPT code position is empty on entry to the Grouper, it will signal the Grouper to stop looking for additional CPT codes. Therefore, in the event of a blank CPT position prior to the last CPT position, non-blank CPT codes must be moved to the left-most empty position. Further, all other variables related to the CPT code must also be moved to the corresponding position among that field's values. The original positions of moved CPT codes must be tracked to enable all fields to be properly repositioned after grouping.

5. After the text file has been created, group the data with the MDR processing utilities **cgs** script, which will submit the text file to the 3M Grouper Plus System (GPS) TRICARE APC grouper. The syntax of the **cgs** script is⁸:

```
/mdr/aprod/util/cgs [-d editfile] [-e errfile] [-o outfile] infile
```

Where

- *infile* is the name of the text file to be grouped,
- *outfile* is the name of the text file to be created that will contain the grouped data,
- *errfile* is the name of the text file that will contain error messages from the grouping software, and
- *editfile* is the name of the text file that will contain edit messages from the grouping software.

The command can be invoked from any directory (e.g., /dqfp>) and the *infile* text file to be grouped should exist in that directory.

If the optional arguments are absent, the software will create edit, error, and output files by substituting “_edit”, “_err”, and “_out” for “_in” in the input filename, respectively. If the input filename does not include “_in”, then the “_edit”, “_err”, and “_out” are simply appended to the input filename to create the filenames.

The user can add whatever path information to the various filenames, which allows them to store the edit, error, output, and input files in different directories.

For example, if the name of the text file for grouping is *apc_in.txt*, then the following commands can be used to group the data, creating the same three edit, error, and output files.

⁷ Grouper version updates are expected semi-annually in October and January with other versions possible during the year to accommodate software adjustments.

⁸ If /mdr/aprod/util is included in the execution path (the PATH environment variable in the user profile), then only “cgs” rather than “/mdr/aprod/util/cgs” needs to be invoked.

```
/dqfp> /mdr/aprod/util/cgs apc_in.txt  
(apc_in.txt is in /dqfp and all the output files will go to /dqfp)
```

```
/dqfp> /mdr/aprod/util/cgs -d apc_edit.txt -e apc_err.txt -o apc_out.txt (apc_in.txt is in /dqfp and all the output files will go to /dqfp with the specific file names listed)
```

```
/dqfp> /mdr/aprod/util/cgs -o /dqfp/grouped/apc_out.txt /dqfp/misc/apc_in.txt  
(apc_in.txt is in /dqfp/misc and apc_out.txt will be saved to /dqfp/grouped, the edit and error files will go to /dqfp/misc as any file that the script has to name will end up in the same location as the input file.)
```

(Note: it is intended that the command is entered on a single line.)

The cgs script can accept and produce files that have been compressed by the gzip (GNU zip) program. If the input filename ends in .txt.gz, then any unspecified output files will also be compressed and bear the .txt.gz suffix.

6. The output from the APC Grouper is a flat text file read based on a custom dictionary file created for the loaded production version of the TRICARE APC grouper. It allows for a total of 12 diagnoses (one Admitting Diagnosis, one Primary diagnosis and up to 9 more, one Reason for Visit diagnosis), 13 CPT codes and corresponding CPT code-related fields. Retrieve APC Grouper output and using the APC Grouper output format detailed in Table A1.3, extract grouper generated APC codes (APC_J, where J = 1 to 13) and associated variables as indicated in Table A.1.3 and apply to CAPER records as described in Table A1.1. Since the records from which Grouper input was generated were not re-sorted, the Grouper output may be merged directly back onto those records. The match of key fields on the Grouper output to those on the CAPER will confirm the match is correct. Using the tracking information described in Paragraph 4.c, reposition the CPT code-related APC Grouper output to correspond to original CPT positions.
7. APCs are not applicable on records other than B-MEPRS, Facility records (MEPRS1=B and FAC_FLAG=F). Blank out all APC and APC-related fields (except APCPSI_J) on all non-B, non-Facility records.
8. The following processes will be applied to the Blended CAPER records to add Ambulatory Patient Groups (APG)⁶. See Table A1.4, Preparing Input to the APG Grouper and Table A1.5, Reading Output from the APG Grouper.

Use the currently loaded production version of the 3M Core Grouper Software (CGS) Ambulatory Patient Group (APG) Grouper to append:

- The CPT_1 (the first E&M code) APG code (APG1)
- The Medical APG code (APG2)
- Any applicable procedural APG codes for CPT_4 through CPT_7 (the first 4 procedural CPT codes) (APG3-APG6)⁹.

The diagnosis code fields submitted as part of the feed to the grouping software should be formatted to remove the decimal and to substring to the first "space" that is encountered (for example, "V70.5 0 " would be submitted as "V705").

For FY05-FY11, prior to application of APGs by the APG Grouper, all 99499 values in CPT_1 will be temporarily converted to 'BLANK' in the grouper input record to prevent assignment

⁹ APGs are retained for the purpose of developing and applying costs until the basis for assigning such costs changes.

of a valid E&M APG code or of related APGs in other positions. In the event an E&M APG code is assigned, it will be removed after the record is grouped.

- a. For non-telephone consults (APPTSTAT ≠ 7) with CPT_1 = 99499, CPT_1 99499 will be restored and no E&M APG will be assigned.
- b. For telephone consults (APPTSTAT=7) with CPT_1 = 99499, the following action will be taken:
 - For FY05-FY07, if the provider (PROVSPEC1) is a credentialed provider¹⁰, the CPT_1 99499 will be restored and an E&M APG 999 will be assigned.
 - For FY05-FY07, if the provider (PROVSPEC1) is not a credentialed provider, the CPT_1 99499 will be restored and no E&M APG will be assigned. Any other APGs assigned in association with other CPT codes on the record will also be removed.
 - For FY08-FY11, CPT_1 99499 will be restored and APGs will be assigned per the following paragraph.

For FY08 – FY11, telephone consults (APPTSTAT=7) will be handled as follows:

- a. For records with CPT_1 of 99371-99373 or 99441-99444, the following actions will be taken:
 - An E&M APG of 901 will be assigned.
 - Any other APGs assigned in association with other CPT codes on the record will be removed.
- b. For records that do not meet condition (a) and do have a CPT code of 98966, 98967, or 98968 in any CPT code position, the following actions will be taken:
 - An E&M APG of 902 will be assigned.
 - Any other APGs assigned in association with other CPT codes on the record will be removed.
- c. For records that do not meet either condition (a) or condition (b), the following actions will be taken:
 - An E&M APG of 999 will be assigned.
 - Any other APGs assigned in association with other CPT codes on the record will be removed.

Table A1.A: Field Values Added to Blended CAPER During Grouper and APC Format Applications

Field	Type	SAS Name	Derivation
APC Code; E&M1-E&M3, Proc 1-Proc 10	Char(5)	APCJ	<p>J=1 to 13¹¹</p> <p>FY07-08: B-MEPRS, FAC_FLAG=F¹² only: Look up of CPTJ in the CPT-to-APC (4-char code appended with a leading 0) CMS mapping. See Table A1.6.</p> <p>APCJ = substr(put(CPTJ,\$APCcyqC.),1,5) where cy is the 2-digit calendar year and q is the 1-digit calendar quarter (eg., APC081C. for CY08, CQ1).</p>

¹⁰ Credentialed providers will be identified through application of a format file. See Table A4.3d2: Format File Excerpt for Identifying Qualifying Providers

¹¹ Throughout this table, reference to procedures J=1 to 13 implies that J=1 to 3 represents the E&M positions and J=4 to 13 represents procedure positions.

¹² The derivation of FAC_FLAG is in Appendix 3, Table A3.3.

Field	Type	SAS Name	Derivation
APC Code; E&M1-E&M3, Proc 1-Proc 10	Char(5)	APCJ	<p>FY09+: From TRICARE APC Grouping of CPT procedures $J=1$ to 13. Retain the value only for MEPRS1=B and FAC_FLAG=F¹²</p> <p>Populated for FY07+ only.</p>
APC Procedure Status Indicator (PSI); E&M1-E&M3, Proc1-Proc 10	Char(2)	APCPSIJ	<p>$J=1$ to 13¹¹</p> <p>FY07-08: Look up of CPTJ in the CPT-to-APC CMS mapping.</p> <p>$APCPSIJ = \text{substr}(\text{put}(CPTJ, \\$APCcyqC.), 6, 2)$ Where cy is the 2-digit calendar year and q is the 1-digit calendar quarter (eg., APC081C. for CY08, CQ1). See Table A1.6.</p> <p>FY09+: From TRICARE APC Grouping of CPT procedures $J=1$ to 13.</p> <p>Populated for FY07+ only.</p>
APC Weight, Raw; E&M1-E&M3, Proc1-Proc10	N(9,4)	RAPCWTJ	<p>$J=1$ to 13¹¹</p> <p>FY07-08: Look up of CPTJ in the CPT-to-APC CMS mapping.</p> <p>$RAPCWTJ = \text{input}(\text{substr}(\text{put}(CPTJ, \\$APCcyqC.), 8, 9), 9.4)$ where cy is the 2-digit calendar year and q is the 1-digit calendar quarter (eg., APC081C. for CY08, CQ1). See Table A1.6.</p> <p>FY09+: APC weight will be appended after grouping and MHS-specific updates during the analytic processing. See Table A5.2.</p> <p>Populated for FY07+ only. (Not retained)</p>
Units of Service Limit; E&M1-E&M3, Proc1-Proc10	N(3)	UOSLIM_J	<p>For $J=1$ to 13¹¹</p> <p>Derived from match with the CPT Table (format uosyyb) based on CY of encounter and CPT. (Not retained)</p>
Units of Service Substitute; E&M1-E&M3, Proc1-Proc10	N(3)	UOSSUB_J	<p>For $J=1$ to 13¹¹</p> <p>Derived from match with the CPT Table (format subyyb) based on CY of encounter and CPT. (Not retained)</p>

Field	Type	SAS Name	Derivation
Units of Service	N(8)	CPTUOS_J	For J= 1 to 13 ¹¹ CPTUOS_J = CPTUNITS_J If CPT_J has a value (other than XXXXX) and CPTUOS_J = 0 or missing, set CPTUOS_J = 1 If UOSLIM >0 and CPTUOS_J > UOSLIM_J, set CPTUOS_J = UOSSUB_J (Required prior to APC Grouping)
Patient Age		PATAGE	Based on encounter date (ENCDATE) and birth date (PATDOB). (Required prior to APC Grouping)
Packaging Flag; E&M1-E&M3, Proc1-Proc 10, as assigned by the TRICARE APC Grouper.	Char(1)	APCPKGJ	From TRICARE APC Grouping of CPT procedures J=1 to 13 ¹¹ . Retain the value only for MEPRS1= B and FAC_FLAG=F ¹² Populated for FY09+ only.
Overall Claim Disposition	Char(2)	CLAIM_DISP	From TRICARE APC Grouping. Retain the value only for MEPRS1=B and FAC_FLAG=F ¹² . Populated for FY09+ only.
Claim Denial Disposition	Char(1)	CLAIM_DEN	From TRICARE APC Grouping. Retain the value only for MEPRS1=B and FAC_FLAG=F ¹² . Populated for FY09+ only.
APC Procedure Edits, E&M1-E&M3, Proc1-Proc 10, as assigned by the TRICARE APC Grouper.	Char(40)	APCEDITJ	From TRICARE APC Grouping of CPT procedures J=1 to 13 ¹¹ . Retain the value only for MEPRS1=B and FAC_FLAG=F ¹² . Populated for FY09+ only.
APG – Proc 1	Char(3)	APG3	From APG Grouping of 1st procedural CPT. Populated through FY11 only.
APG – Proc 2	Char(3)	APG4	From APG Grouping of 2nd procedural CPT. Populated through FY11 only.
APG – Proc 3	Char(3)	APG5	From APG Grouping of 3rd procedural CPT. Populated through FY11 only.
APG – Proc 4	Char(3)	APG6	From APG Grouping of 4th procedural CPT. Populated through FY11 only.
APG – E&M	Char(3)	APG1	From APG grouping of E&M Code 1. Populated through FY11 only.
APG – Medical	Char(3)	APG2	From APG Grouping of Diagnosis 1. Populated through FY11 only.

Table A1.2: Format for Input to APC Grouper

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
Record Key Part 1	HOSTDMIS		1	4	1
Record Key Part 2	APPTIDNO		5	10	1
Blank filled			15	77	1
From Date	ENCDATE	mmddyyyy. If ENCDATE < 20090501, use 20090501, else use ENCDATE ¹³ .	92	8	1
To Date	ENCDATE	mmddyyyy. If ENCDATE < 20090501, use 20090501, else use ENCDATE.	100	8	1
Patient Date of Birth	PATDOB	mmddyyyy	108	8	1
Age	PATAGE	Right-justified, zero filled, valid values = 0 through 124	116	3	1
Patient Gender	PATSEX		119	1	1
Type Bill	131	Right justified blank filled	120	4	1
Condition code	77		124	2	1
Disposition Status	DISPCODE	See Table A1.2.a.	126	2	1
Blank filled			128	7	1
User Key 1	0000000000000001		135	15	1
Blank filled			150	25	1
Diagnosis Code (Admitting Diagnosis)	DX1	Left justified, decimal removed, blank filled, truncated prior to DoD Extender.	175	7	1
Diagnosis Codes 1-10	DX _I , <i>I</i> = 1 to 10	Left justified, decimal removed, blank filled, truncated prior to DoD Extender. Up to 10 ICD-9-CM diagnosis codes. In the event of a blank DX prior to the last DX, non-blank DX codes must be moved to left most empty position. Invalid or missing DX will generate a warning message.	182	7	10

¹³ Effective with CGS V2010.3.1 (Oct 2010), 3M modified the TRICARE APC grouper and removed TRICARE OCE/APC logic and functionality for encounters/claims with dates prior to 1 May 2009. Inputs to the grouper with dates prior to May 1 generate edit 0024 "TRI-Date out of OCE range" and do not receive APCs. For purposes of applying APCs, this specification will send the Grouper values of 20090501 for dates prior to 1 May 09. These date changes will not appear in the CAPER itself.

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
Diagnosis Code (Reason for Visit Diagnosis)	DX1	Left justified, decimal removed, blank filled, truncated prior to Dod Extender.	252	7	1
Procedure Code	CPT_J where J=1 to 13.	Left justified, blank filled 5 characters per CPT (5 position code) In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position. Procedure codes are temporarily modified for observation stays (see Table A.1.2.b) or codes deleted for CY09 or CY10 (see Table A.1.2.c and A.1.2.d)	259	5	13
CPT Modifier 1	CPTMOD1_J, where J=1 to 13.	Left justified, blank filled 2 characters per CPTMOD1_J In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and related CPTMOD1_J codes are moved to correspond to the new CPT position.	324	2	13
CPT Modifier 2	CPTMOD2_J, where J=1 to 13.	Left justified, blank filled 2 characters per CPTMOD2_J In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and related CPTMOD1_J codes are moved to correspond to the new CPT position.	350	2	13

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
CPT Modifier 3	CPTMOD3_J, where J=1 to 13.	Left justified, blank filled 2 characters per CPTMOD3_J In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and related CPTMOD3_J codes are moved to correspond to the new CPT position.	376	2	13
Revenue Code	REVCODEJ = put(CPTJ,\$RVCcyA.), J=1 to 13 where cy is the 2-digit calendar year	See Table A1.2.e. Numeric (4), right- justified value assigned based on CPT. In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and revenue codes are moved to correspond to the new CPT position. Applied after the deleted CPT codes are mapped in the APC Grouper Input (see Procedure Code, start position #259)	454	4	13
Units of Service	CPTUOS_J, J=1 to 13	Numeric (7), right justified, left zero filled, if CPT_J is present. Blank if CPT_J=blank. In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and Units of Service values are moved to correspond to the new CPT position.	506	7	13

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
Line Charge	If CPT_J ne blank, then 0000500.00; Else blank	Format 9999999.99 right justified, zero filled with value of 500 if line item is present. Blank if CPT_J=blank. In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and Line_Charge values are moved to correspond to the new CPT position.	597	10	13
Procedure Date	ENCDATE	Format mmddyyyy. Blank if CPT_J =blank. In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and ENCDATE values are moved to correspond to the new CPT position. If ENCDATE < 20090501, use 20090501, else use ENCDATE.	727	8	13
Blank filled			831	358	1
Professional Service Flag	If CPT_J in ('99199' '99499') then = 1 Else if CPT_J ne blank, then = 0 Else leave blank Note: to exclude line item from grouping, this will be set to 1.	Numeric. Blank if CPT_J=blank. In the event of a blank CPT prior to the last CPT, non-blank CPTs are moved to the left most empty position and Professional Service Flag values are moved to correspond to the new CPT position.	1189	1	13
Blank filled			1202	23	1
New line	SAS Code: 'OD'x 'OA'x	End of record. Carriage Return/Line feed.	1225	2	1

Table A1.2.a. Format File for Converting CAPER Disposition Status to Disposition Code for APC Input

DISPCODE (CAPER)	Disposition Code (APC Input)
'1','2','3','4','A','C','F','H','M','O','R','S','U'	01
7	02
8	20
B	03
D	30
E	07
G	20

Table A1.2.b. File for Converting CPT Codes Observation Stays (G0378)

```
if cpt{i} in('99217', '99218', '99219', '99220', '99234', '99235', '99236') then do;
  cpt{i} = 'G0378'; /*adjusting all CPT */
end;
```

Table A1.2.c. Mapping of CPT Codes deleted for CY09 mdr/ref/caper.delmap.cy09.txt

These are the codes deleted from 08 to 09.

When the encounter date is artificially modified to enable grouping, CPT codes that were valid on the date of service but deleted for CY09 are grouped to invalid APCs. To remedy that, the deleted codes are temporarily replaced by their CY09 replacements prior to grouping.

This format provides the replacement codes for the CY08 codes deleted in CY09 primarily from Appendix M in the CY09 CPT book.

In the case where the deleted code maps to more than one code and all mapped to the same APC, the first was selected.

Any deleted code not in Appendix M and with at least 10 CY09 frequency, was replaced for grouper input with a CPT that maps to the APC it would have mapped to as proposed in CY08.

Deleted codes that were without replacements in Appendix M and that had less than 10 FY09 frequency or that mapped to a zero-weighted APC were not included.

If FY or CY of the encounter date=2009 then tempCPT{i}=put(CPT{i},\$DEL09a.);

PROC FORMAT;
VALUE \$DEL09a
"20986"="0054T"
"20987"="0054T"
"46934"="46930"
"46935"="46930"
"46936"="46937"
"52606"="52214"
"52612"="52601"
"52614"="52601"
"52620"="52630"
"61793"="61796"
"77781"="77785"
"77782"="77785"
"77783"="77785"
"77784"="77785"
"88400"="88720"
"90760"="96360"
"90761"="96361"
"90765"="96365"
"90766"="96366"
"90767"="96367"
"90768"="96368"
"90769"="96369"
"90770"="96370"
"90771"="96371"
"90772"="96372"
"90773"="96373"
"90774"="96374"
"90775"="96375"

"90776"="96376"
"90779"="96379"
"90918"="90951"
"90919"="90954"
"90920"="90957"
"90921"="90960"
"90922"="90951"
"90923"="90954"
"90924"="90957"
"90925"="90960"
"93727"="93285"
"93731"="93280"
"93732"="93280"
"93733"="93293"
"93734"="93279"
"93735"="93279"
"93736"="93293"
"93741"="93282"
"93742"="93282"
"93743"="93283"
"93744"="93283"
"99289"="99466"
"99290"="99467"
"99293"="99471"
"99294"="99472"
"99295"="99468"
"99296"="99469"
"99298"="99478"
"99299"="99479"
"99300"="99480"
"99431"="99460"
"99432"="99461"
"99433"="99462"
"99435"="99463"
"99436"="99464"
"99440"="99465"
"0058T"="89240"
"0059T"="89240"
"0088T"="41530"
"0089T"="95803"
"0090T"="22856"
"0093T"="22864"
"0096T"="22861"
"0137T"="55706"
"0162T"="95980"
"1080F"="1123F"
"C9003"="90378"
"C9239"="J9330"
"C9240"="J9207"
"S2075"="49652"
"S2076"="49652"
"S2077"="49652"
:

** Having no OTHER entry will result in no change to the raw CPT;
run;

**Table A1.2.d. Mapping of CPT Codes deleted for CY10
mdr/ref/caper.delmap.cy10.txt**

These are the codes deleted from CY09 to CY10.

The deleted code map is continued through FY10 due to delays in deploying the new code lists at the start of the calendar year.

If the CY of the Encounter is 2009, the codes are still valid - no change required.

If the CY is 2010, then deleted codes are temporarily replaced by their CY10 replacements prior to grouping. This format provides the replacement codes for the CY09 codes deleted in CY10 primarily from Appendix C in the CY10 CPT book. In the case where the deleted code maps to more than one code and all mapped to the same APC, the first was selected. Any deleted code not in Appendix C and with at least 10 CY10 frequency, was replaced for grouper input with a CPT that maps to the APC it would have mapped to as proposed in CY09. Deleted codes that were without replacements in Appendix C and that had less than 10 FY10 frequency or that mapped to a zero-weighted APC were not included.

If FY of the encounter date = 2010 and CY of the encounter date = 2010
then tempCPT{i}=put(CPT{i},\$DEL10a);

PROC FORMAT;
VALUE \$DEL10a
"01632"="01630"
"14300"="14301"
"23221"="23220"
"23222"="23220"
"24151"="24150"
"24153"="24152"
"26255"="26250"
"26261"="26260"
"27079"="27078"
"29220"="29799"
"36145"="36147"
"36834"="36832"
"45170"="45171"
"46210"="46999"
"46211"="46999"
"46937"="45190"
"46938"="45190"
"51772"="51727"
"51795"="51728"
"63660"="63661"
"64470"="64490"
"64472"="64491"
"64475"="64493"
"64476"="64494"
"75558"="75565"
"75560"="75565"
"75562"="75565"
"75564"="75565"
"75790"="75791"
"78460"="78453"
"78461"="78454"
"78464"="78451"
"78465"="78452"

"78478"="78451"
"78480"="78451"
"82307"="82306"
"86781"="86780"
"90379"="90378"
"92569"="92570"
"0062T"="22526"
"0063T"="22526"
"0064T"="94799"
"0066T"="74263"
"0067T"="74261"
"0068T"="93799"
"0069T"="93799"
"0070T"="93799"
"0077T"="61107"
"0084T"="53855"
"0086T"="93799"
"0087T"="89398"
"0140T"="83987"
"0144T"="75571"
"0145T"="75572"
"0146T"="75572"
"0147T"="75572"
"0148T"="75572"
"0149T"="75572"
"0150T"="75572"
"0151T"="75572"
"0170T"="46707"
"0194T"="84145"
"J0550"="J0630"
"J0835"="J0833"
"J7322"="J7325"
"J9170"="J9171"
;

** Having no OTHER entry will result in no change to the raw CPT;
run;

Table A1.2.e. Format File Excerpt for Assigning Revenue Codes by CPT/HCPCS Code, mdr/ref/caper.revenue.cy## where ##=09+

/* source: http://www.tricare.mil/ocfo/mcfs/ubo/mhs_rates.cfm*/

PROC FORMAT;
value \$RVC09a
"00100" = "0370"
"00102" = "0370"
"00103" = "0370"
"00104" = "0370"
"00120" = "0370"
"00124" = "0370"
"00126" = "0370"
"00140" = "0370"
"00142" = "0370"
"00144" = "0370"
"00145" = "0370"
"00147" = "0370"

"00148" = "0370"
"00160" = "0370"
"00162" = "0370"
.
.
.
.
OTHER = "0920";
RUN;

Table A1.3: Format for Output from APC Grouper

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
Record Key Part 1	HOSTDMIS		1	4	1
Record Key Part 2	APPTIDNO		5	10	1
Claim_Flag	CLAIM_FLAG	Num(1)	1375	1	1
Ambulatory Payment Classification (APC) Codes	APCJ, J=1 to 13	Right justified, zero filled. Blank if no APC assigned. In the event of a blank CPT prior to the last CPT, non-blank CPTs were moved to the left-most empty position on the input record and now are relocated to original positions and have APCs in the corresponding fields on output.	1379	5	13
Procedure Status Indicator	APCPSIJ, J=1 to 13	Right-justified, blank filled. In the event of a blank CPT prior to the last CPT, non-blank CPTs were moved to the left-most empty position on the input record and now are relocated to original positions and have PSIs in the corresponding fields on output.	1509	2	13
Ancillary Packaging	APCPKGJ, J=1 to 13	In the event of a blank CPT prior to the last CPT, non-blank CPTs were moved to the left-most empty position on the input record and now are relocated to original positions and have APCPKG_J in the corresponding fields on output.	1639	1	13

Field	Variable or Coded Value	Conversion/Format	Start Position	Length	Occurs
Overall Claim Disposition	CLAIM_DISP	Char(2)	1704	2	1
Claim Denial Disposition	CLAIM_DEN	Char(1)	1707	1	1
Procedure Edits	APCEDIT J , $J=1$ to 13	CHAR(40) In the event of a blank CPT prior to the last CPT, non-blank CPTs were moved to the left most empty position on the input record and now are relocated to original positions and have APCEDIT J , in the corresponding fields on output. Each 40 character variable may include up to 10 4-character edit codes.	1844	40	13

Table A1.4: Preparing Input to the APG Grouper¹⁴

```
*      Prepare data for input to the APG grouper.  
*;  
%macro apggrp_prep(grprin,fy4,numdx,numcpt,cptpre);  
*  
*      Execution of macro to remove decimal  
*      from DX Codes.  
*;  
%do i = 1 %to &numdx;  
    %icdcode(dx&i,dx0&i,$6)  
%end;  
*  
*      Change blank E&M codes to 'BLANK'.  
*;  
if &cptpre.1 eq '      ' then &cptpre.1='BLANK';  
*      For FY 2005 and forward change '99499'  
*      E&M codes to 'BLANK'.  
*;  
%if &fy4 ge 2005 %then %do;  
    if &cptpre.1 eq '99499' then &cptpre.1='BLANK';  
%end;  
*  
*      Format date elements for grouper.  
*;  
length DOBDATE $8. SVCDATE $8;  
tmpdob = input(patdob, yymmdd8.);  
tmpenc = input(encdate, yymmdd8.);  
dobdate=put(tmpdob,MMDDYY4.)||put(tmpdob,YEAR4.);  
svcdate=put(tmpenc,MMDDYY4.)||put(tmpenc,YEAR4.);  
*  
*      Find the current date and set any birth date or  
*      encounter date past the current date to blank.  
*;  
format tmpdob MMDDYY8.;  
CURRENT = DATE();  
if tmpdob > current then do;  
    dobdate='      ';  
end;  
if tmpenc > current then do;  
    svcdate='      ';  
end;  
drop current;  
*      Format sex data element for grouper.  
*;  
length SEXNUM $1;  
if patsex='M' then  
    sexnum='1';  
else if patsex='F' then  
    sexnum='2';  
else  
    sexnum='U';  
*      Initialize data elements for grouper.
```

¹⁴ Throughout this specification, SAS code is provided for descriptive purposes and does not necessarily represent the actual processing code.

```

*;
length sg01-sg0&numcpt $9;
sg01 = left(&cptpre.1);
sg02 = left(&cptpre.4);
sg03 = left(&cptpre.5);
sg04 = left(&cptpre.6);
sg05 = left(&cptpre.7);
length UK2 $15 filler $1;
uk2="";
filler="";
MEDIPASS='0';
REFERRAL='0';
AGE='000';
DISSTAT='01';
UK1='CAPER Sched   ';
TOTCHRG='000000.00';
%omend apggrp_prep;
*
*   Write the variables for the APG grouper
*   and create the file.
*;
%macro apggrp_put(grprin,numidx,numcpt);
PUT
@1  hostdmis $4.
@5  apptidno   $10.
@31 SVCDATE   $8.
@39 DOBDATE   $8.
@47 AGE      $3.
@50 SEXNUM   $1.
@51 DISSTAT   $2.
@53 MEDIPASS $1.
@54 REFERRAL $1.
@55 UK1      $15.
@70 UK2      $15.
@85 TOTCHRG  $9.
%do i=1 %to &numidx;
  @%eval(94+(6*(&i.-1))) dx0&i $6.
%end;
%do i=1 %to &numcpt;
  @%eval(154+(9*(&i.-1))) sg0&i $9.
%end;
@423 filler $1.
;
%omend apggrp_put;

```

Table A1.5: Reading Output from the APG Grouper

```
*  
*      Read in the variables from the output of APG grouper.  
*;  
  
%macro apggrp_input(numcpt);  
  input  
    @1  hostdmis $char4.  
    @5  apptidno $char10.  
    @426 napg2 $char3.  
    @443 napg1 $char3.  
    @446 napg3 $char3.  
    @449 napg4 $char3.  
    @452 napg5 $char3.  
    @455 napg6 $char3.  
  ;  
%mend apggrp_input;
```

Table A1.6: Format File Excerpt for Assigning CMS APC Fields by CPT/HCPCS Codes, mdr/ref/caper.apc.cycy.cqcq.txt where cy cq =06 04 to 08 03

```
PROC FORMAT;  
  value $APC081C  
    '0001F'='19995 M0000.0000'  
    '0005F'='19995 M0000.0000'  
    '00100'='19900 N0000.0000'  
    '00102'='19900 N0000.0000'  
    '00103'='19900 N0000.0000'  
  
    .  
    'V5362'='19992 E0000.0000'  
    'V5363'='19992 E0000.0000'  
    'V5364'='19992 E0000.0000'  
  
    .  
    '      '='  
    OTHER  ='T9999  0000.0000';  
run;
```

*See the APC Tables Spec (*Ambulatory Payment Classification (APC) Reference Tables for the MHS Data Repository (MDR)*) for further detail.

APPENDIX 2: Administrative Text Processing Steps and Field Additions

The following processes will be applied to the CAPER-Basic, post blending and grouping. Variables will be added according to Table A2 Fields Added to Blended CAPER through Administrative Text Processing.

- MPI Merge: See the MPI specification for appending EDIPN, SPONSSN, DDS (FY08 and back only), and PARC.
- LVM Merge: Append the Enrollment DMISID (ENRDMIS), Alternate Care Value (ACV), Health Care Delivery Program Code (HCDPLVM), Beneficiary Category (BENCATX), PCM ID (PCMIDLVM), and Sponsor Service from DEERS (SSVCLVM), Sponsor Service Aggregate (SAGGLVM), TPR Eligible Flag (TPRELIG) and TRICARE Young Adult Flag (TYAFLAG) from the longitudinal LVM for CAPER data. (This merge occurs after the MPI merge described above and occurs on the "whole" CAPER dataset, not just the newly processed records):
 - a. Merge to the LVM by EDIPN for the FM of the encounter date.
 - b. If a match is found, assign all variables as described in Table A2. (If these values are missing/blank from LVM, then the fields remain missing/blank).
- DMIS Merge:
 - a. Through FY11: Merge to the MDR DMIS ID Index based on encounter date and treatment DMIS ID to append the MEPRS Parent DMIS ID (PARMEPRS), Cost Parent DMIS ID (PARCOST), Clinic State (CLINSTAT), Clinic Zip Code (CLINZIP), Treatment Region (TXREG), Treatment DMIS ID HSSC Region (TXHSSC), Treatment Service (TXSVC), Multi-Service Market Area (MSMA) and PPS Treatment Parent Site (PPS_TPS).

Merge to the MDR DMIS ID Index based on encounter date and enrollment DMIS ID (ENRDMIS) to append the Enrollment DMIS ID Region (ENRREG), Enrollment Parent DMIS ID (PAREN) and PPS Enrollment Parent Site (PPS_EPS).

- b. FY12 +: Merge to the MDR DMIS ID Index based on encounter date and treatment DMIS ID to append the MEPRS Parent DMIS ID (PARMEPRS), Cost Parent DMIS ID (PARCOST), Clinic State (CLINSTAT), Clinic Zip Code (CLINZIP), Treatment DMIS ID T3 Region (MTF_T3_REG), Treatment DMIS ID T17 Region (MTF_T17_REG), **Treatment DMIS ID T5 Region (MTF_T5_REG)**, Treatment Service (TXSVC), Multi-Service Market Area (MSMA) and PPS Treatment Parent Site (PPS_TPS).

Merge to the MDR DMIS ID Index based on encounter date and Enrollment DMIS ID (ENRDMIS) to append the Enrollment DMIS ID T3 Region (ENR_T3_REG), Enrollment DMIS ID T17 Region (ENR_T17_REG), **Enrollment DMIS ID T5 Region (ENR_T5_REG)**, Enrollment Parent DMIS ID (PAREN) and PPS Enrollment Parent Site (PPS_EPS).

Although the DMIS ID and CAD feed processing will be accelerated so that tables are available by the 5th working day of the month, this may cause a one or two day delay in throughput for the first weekly CAPER batch of the month.

- CAD Merge:
 - a. Through FY11: Merge to the MDR CAD based on Patient Zip, Sponsor Service (after mapping to A, F, N and O), and the CAD matching the encounter date. (If Patient Zip is not usable, the Treatment DMIS ID Zip Code is used in its place.) The fields Patient Catchment Area (CATCH), Patient Health Service Region (PATREGN), Beneficiary HSSC Region (PATHSSC), and PRISM Area DMIS ID (PRISM) are added in this process.

- b. FY12 +: Merge to the MDR CAD based on Patient Zip, Sponsor Service (after mapping to A, F, N and O), and the CAD matching the encounter date. (If Patient Zip is not usable, the Treatment DMIS ID Zip Code is used in its place.) The fields Patient Catchment Area (CATCH), Treatment DMIS ID T3, T17, and **T5 Regions** (MTF_T3_REG, MTF_T17_REG, MTF_T5_REG), and PRISM Area DMIS ID (PRISM) are added in this process.
- Reservist Merge: Merge to the Reservist Table File by Sponsor SSN based on encounter date. Add Reservist Special Operation Code (SOC) and Reservist Status Code (STATUS).
- Referral File Merge: Merge to the Referral File with Treatment DMISID and Record ID in the CAPER (DMISID and APPTIDNO) to Appointment Clinic DMISID and Associated Record ID (APPTDMISID and APPTIEN) in the referral data. Add Referral Number (REFNUM) and Referral Provider (REF_PROV).
- Appointment File Merge: Merge in limited fields from appointment records (only those needed by the processor) using HOSTDMIS and APPTIDNO as the key.
 - a. If in CAPER and appointment, replace the value of COUNTVIS in the CAPER with the value of COUNTVIS in the appointment.
 - b. Update with most current appointment data:
 - Add the Medicare Eligibility field (MELIGAPT) from the appointment data to the CAPER and inferred CAPER.
 - Derive a modified Appointment Status Type (APPTSTAT) that identifies as a walk-in appointment in any record with an appointment data WALKIN ='Y'.
 - Add the Inpatient Indicator (PATSTAT), Appointment Type (APPTTYPE)
 - Retain FIRSTNAME and LASTNAME for possible use in adding to CAPER if the Beneficiary Name from the MPI merge is BLANK.
 - c. Drop all appointment inferred records except MEPRS B, FBI, and FBN.
- MDR DMHRSi Basic HR Merge: Add provider information from the MDR DMHRSi Basic HR file by merging the Provider's DMHRSi extract records for the given encounter date and provider identifier. Note that only DMHRSi extract records that have both a defined start (ASSIG_START) and end (ASSIG_END) date should be considered.

Since more than one applicable Provider DMHRSi extract record may coincide with the CAPER encounter date, the following identifiers should be tried, in order, until a definitive match is found, using the sequence of steps below.

- Provider EDIPN (PROVEDIPNK)
- Provider NPI (PROVNPIK)

- a. Determine the set of DMHRSi extract records for the provider identifier in which the start and end dates bound the encounter date.
- b. If that set is empty, then no definitive match is possible.
- c. Determine the subset of DMHRSi extract records with the latest processing date (PROCDATE).
- d. If the records in that set do not all share identical start and end dates, then no definitive match is possible.
- e. If the records in that subset do not yield identical results (ASSIG_DMISID, ORG_UIC, ORG_ID, 1-character mapped value of SERVICE, 1-character mapped value of ASSIG_SERVICE, PERSON_TYPE, and PG_ASSIG_FCC), then no definitive match is possible.
- f. If the records in that subset all yield empty or missing results, then no definitive match is possible.

g. Otherwise, a definitive match has been found, use the results to assign all variables, as described in Table A2.

If no definitive match is found using all possible provider identifiers for a given provider, then PROVMTFDK, PROVMEPRDK, PROVORGDK, PROVUICDK, and PROVCATDK will be set to 'NONE'; PROVSVCDK and PROVSVCASSGDK will be set to 'Z'.

- Add other fields as detailed in Table A2.
- During the process, all records are tracked in such a manner that they can be identified as new, modified, cancelled, etc. These indicators must be retained through this and the Analytic processing.

The table below reflects the fields added to the CAPER-Basic and appearing in the CAPER-Enhanced after Administrative Processing. Other fields may be created to facilitate processing, but will not be retained in the public use MDR file when it is posted.

Table A2: Field Values Added or Modified to Blended CAPER through Administrative Text Processing

Field	Type	SAS Name	Source	Derivation
Unique Patient Identifier	Char(10)	EDIPN	MPI	See MPI specification.
Sponsor SSN	Char(9)	SPONSSN	MPI	See MPI specification.
DEERS Dependent Suffix	Char(2)	DDS	MPI	See MPI specification Populated for FY04-FY08 only.
Person Association Reason Code	Char(2)	PARC	MPI	See MPI specification. If the result is blank, set = 'ZZ'
Beneficiary First Name	Char(20)	FIRSTNAME	MPI Appointmen t	See MPI specification. ¹⁵ If name is not present in MPI get patient name from the Appointment file.
Beneficiary Last Name	Char(26)	LASTNAME	MPI Appointmen t	See MPI specification. Error! Bookmark not defined. If name is not present in MPI get patient name from the Appointment file.
Beneficiary Name	Char(74)	PATNAME	MPI	Concatenate: LAST, FIRST MIDDLE, CADENCY (e.g., SMITH, WILLIAM ROBERT, JR). Error! Bookmark not defined.
Enrollment DMIS ID	Char(4)	ENRDMIS	LVM	From merge to LVM.

¹⁵ Use the M2 Beneficiary Name reference table for the various "name" components.

Field	Type	SAS Name	Source	Derivation
Alternate Care Value	Char(1)	ACV	LVM	<p>Merge to LVM by EDIPN. If there is a match to the LVM by EDIPN, and the date of the encounter is within the date window of a LVM segment, and the ACV on the segment is not ("Z" or blank) then set ACV to the value contained in the enrollment segment.</p> <p>Otherwise, if LVM R_BEN_CAT_CD = ACT or GRD, ACV = "M" else ACV = blank.</p> <p>Note: If using BENCATX in lieu of R_BEN_CAT_CD, it must be done prior to populating BENCATX with BENCAT values. See BENCATX derivation</p>
HCDP Code from LVM	Char(3)	HCDPLVM	LVM	From merge to LVM.
Beneficiary Category from LVM and BENCAT	Char(3)	BENCATX	LVM	<p>From merge to LVM as described in paragraph 2, set equal to LVM Beneficiary Category (R_BEN_CAT_CD).</p> <p>If no match to LVM is found, then set equal to BENCAT.</p> <p>If result = 'Z' then set = 'UNK'</p>
PCM ID from the LVM Data	Char(18)	PCMIDLVM	LVM	From merge to LVM.
Sponsor Service from DEERS	Char(1)	SSVCLVM	LVM	From merge to LVM. If result is blank, set = 'Z'
Sponsor Service Aggregate from LVM	Char(1)	SAGGLVM	LVM	From merge to LVM. If result is blank, set = 'Z'
TPR Eligible Flag	Char(1)	TPRELIG	LVM	Merge to LVM and add the field D_TPR_ELG_CD.
TRICARE Young Adult Flag	Char(1)	TYAFLAG	LVM	From merge to LVM. If no match is found, set to "0".
Enrollment DMIS ID Region	Char(2)	ENRREG	DMIS	Populated through FY11 only. From merge to the DMISID Index based on ENRDMIS, set to MOD_REG from corresponding entry in the DMIS ID index table.
Parent DMIS ID (enrollment)	Char(4)	PARENTR	DMIS	Service-designated parent of Enrollment DMIS ID (from DMIS ID Index) matching FY based on ENRDMIS.
Parent DMIS ID (cost)	Char(4)	PARCOST	DMIS	Costing parent of Treatment DMIS ID (from DMIS ID Index) matching FY.

Field	Type	SAS Name	Source	Derivation
Multi-Service Market Area	Char(3)	MSMA	DMIS	MSMA of Treatment DMIS ID (from DMISID Index) matching FY.
Treatment Parent DMIS ID, Raw	Char(4)	MTF_PAR_R (formerly MTF_PAR)		No transformation
Treatment Parent DMIS ID	Char(4)	MTF_PAR	DMIS	UBU Parent of Treatment DMIS ID (from DMISID Index) matching FY.
Parent DMIS ID (MEPRS)	Char(4)	PARMEPRS	DMIS	MEPRS Parent of Treatment DMIS ID (from DMISID Index) matching FY.
Treatment DMIS ID HSSC Region	Char(1)	TXHSSC	DMIS	Populated through FY11 only. Treatment DMIS ID (from DMIS ID Index) matching FY.
Treatment Region	Char(2)	TXREG	DMIS	Populated through FY11 only. Treatment DMIS ID and merge to DMIS ID Index: use T3 Region (T3_REG).
Treatment Service	Char(1)	TXSVC	DMIS	Derived from Treatment DMIS ID and merge to DMIS ID Index.
Clinic State	Char(2)	CLINSTAT	DMIS	CLINSTAT of Treatment DMIS ID (from DMISID Index) matching FY.
Clinic Zip	Char(5)	CLINZIP	DMIS	CLINZIP of Treatment DMIS ID (from DMISID Index) matching FY.
PPS Tmt Parent Site	Char(4)	PPS_TPS	DMIS	Joined to the DMIS Table by FY and Tmt DMISID (DMISID).
PPS Enr Parent Site	Char(4)	PPS_EPS	DMIS	Joined to the DMIS Table by FY and Enrollment Site (ENRDMIS).
Patient Catchment Area	Char(4)	CATCH	CAD	Catchment DMIS ID of patient residence, based on patient Zip, sponsor service (mapped to A,F,N,O), and the CAD matching the encounter date. (If patient Zip is not usable, the treatment MTF Zip code is used in its place.)
Patient (Beneficiary) HSSC Region	Char(1)	PATHHSSC	CAD	Populated through FY11 only. HSSC Region, based on Patient Zip and "World" Region in the Omni-CAD File. (If patient Zip is not usable, the treatment MTF Zip code is used in its place.)
Patient Health Service Region	Char(2)	PATREGN	CAD	Populated through FY11 only. Health Service Region, based on Patient Zip and "World" Region in the Omni-CAD File (If patient Zip is not usable, the treatment MTF Zip code is used in its place.)
PRISM area	Char(4)	PRISM	CAD	PRISM DMIS ID of patient residence, based on patient Zip, sponsor service (mapped to A,F,N,O), and the Omni-CAD matching the encounter date. (If patient Zip is not usable, the treatment MTF Zip code is used in its place.)

Field	Type	SAS Name	Source	Derivation
Reservist Special Operation Code	Char(2)	SOC	Reservist	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.
Reservist Status Code	Char(1)	STATUS	Reservist	Merge to the Reservist Table File by Sponsor SSN. Reservist Status Code 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.
Referral Number, Raw	Char(11)	REFNUM_R (formerly REF_NO)		No transformation.
Referral Number from Referral File	Char(11)	REFNUM	Referral	Merge to referral data based on Treatment DMISID and Record ID in the CAPER (DMISID and APPTIDNO) to Appointment Clinic DMISID and Associated Record ID (APPTDMISID and APPTIEN) in the referral data.
Referring Provider, Raw	Char(9)	REF_PROV_R (formerly PROVIDREF)		No transformation.
Referring Provider from the Referral File	Char(14)	REF_PROV	Referral	Merge to referral data based on Treatment DMISID and Record ID in the CAPER (DMISID and APPTIDNO) to Appointment Clinic DMISID and Associated Record ID (APPTDMISID and APPTIEN) in the referral data. This field is purposely longer in length than needed for Direct Care providers because Purchased Care providers will have longer IDs. Called REFBYPRV_ID in referral file.
Inpatient Indicator as reported in the Appointment Data	Char(1)	PATSTAT	Appointment	From appointment data. No transformation.
Medicare Eligibility as reported in the Appointment Data	Char(2)	MELIGAPT	Appointment	From the appointment data. No transformation.

Field	Type	SAS Name	Source	Derivation
Appointment Type Raw	Char(6)	APPTTYPE_R (formerly APPTTYPE)		No transformation.
Appointment Type from Appointment Data	Char(6)	APPTTYPE	Appointment	From the appointment data merge.
Enrollment MEPRS Code	Char(4)	MED_HOME_MEPRS	Enroll MEPRS	FY11+ only. Join based on rules in Appendix A, Section 1 of the Enrollment MEPRS Code specification and encounter date.
Medical Home Flag	Char(1)	MED_HOME_FLAG	Enroll MEPRS	FY11+ only. Join based on rules in Appendix A, Section 1 of the Enrollment MEPRS Code specification and encounter date.
People Group Assigned FCC (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(4)	PROVMEPRD1-PROVMEPRD5	DMHRSi-HR	FY11+ only. Set to PG_ASSIG_FCC for each identified ¹⁶ Provider (K=1 to 5) from merge to the DMHRSi HR data. If PG_ASSIG_FCC is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Assigned MTF (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(4)	PROVMTFD1-PROVMTFD5	DMHRSi-HR	FY11+ only. Set to ASSIG_DMISID for each identified ^{Error! Bookmark not defined.} Provider (K=1 to 5) from merge to the DMHRSi HR data. If ASSIG_DMISID is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Assigned Org ID (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(8)	PROVORGD1-PROVORGD5	DMHRSi-HR	FY11+ only. Set to ORG_ID for each identified ^{Error! Bookmark not defined.} Provider (K=1 to 5) from merge to the DMHRSi HR data. If ORG_ID is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.

¹⁶ A provider is identified if at least one identifier (EDIPN, NPI or PROVID) is non-blank.

Field	Type	SAS Name	Source	Derivation
Provider Service (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(1)	PROSVCD1-PROSVCD5	DMHRSi-HR	FY11+ only. Map to Service code (see Table A2.6) using SERVICE for each identified Error! Bookmark not defined. provider (K=1 to 5) from merge to the DMHRSi HR data. If SERVICE is blank or there is not a unique matching DMHRSi record, set to Z. Leave blank if no provider is associated with the provider position.
Provider, MTF Assigned Service (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(1)	PROVSVCASSGD1-PROVSVCASSGD5	DMHRSi-HR	FY11+ only. Map to Service code (see Table A2.6) using ASSIG_SERVICE for each identified Error! Bookmark not defined. provider (K=1 to 5) from merge to the DMHRSi HR data. If ASSIG_SERVICE is blank or there is not a unique matching DMHRSi record, set to Z. Leave blank if no provider is associated with the provider position.
Provider Personnel Category (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(22)	PROVCATD1-PROVCATD5	DMHRSi-HR	FY11+ only. Set to PERSON_TYPE for each identified Error! Bookmark not defined. provider (K=1 to 5) from merge to the DMHRSi-HR data. If PERSON_TYPE is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Assigned UIC (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(8)	PROVUICD1-PROVUICD5	DMHRSi-HR	FY11+ only. Set to ORG_UIC for each identified Error! Bookmark not defined. provider (K=1 to 5) from merge to the DMHRSi-HR data. If ORG_UIC is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Appointment Provider ID	Char(9)	PROVID1		If APPTINFR=N then no transformation. If APPTINFR=Y then =SUBSTR(Provid1,1,9) as Reported in the Appointment Data
Count Visit Indicator	Char(1)	COUNTVIS		If in CAPER and appointment, replace the value of COUNTVIS in the CAPER with the value of COUNTVIS in the appointment.

Field	Type	SAS Name	Source	Derivation
ACV Group	Char(15)	ACVGROUP		<p>If ENCDATE >=1/1/2018 then do: if ENR_GRP=P then PR else if ENR_GRP=L then PL else if ENR_GRP=U then DP else if (COMBENF=4 and PCM_TYPE=N) then R else if PCM_TYPE=O then R else if ELG_GRP= R or S then O else O</p> <p>For FY04 to Dec 31, 2017: If ACV = A, E, H, or J then PR Else if ACV = B or F then OP Else if ACV = G or L then PL Else if ACV = U then DP Else if ACV = R or V then O Else if ACV = M or Q then R Else if COMBEN=4 then R Else O</p> <p>For FY03 and back: If ACV = A, D, or E then PR Else if ACV = G or L then PL Else if ACV = U then DP Else if COMBEN=4 then R Else O</p>
Age Group	Char(1)	AGEGRP		<p>Based on PATAGE: A = 0-4 B = 5-14 C = 15-17 D = 18-24 E = 25-34 F = 35-44 G = 45-64 H = 65+ X = all others</p>
Appointment Inferred CAPER Flag	Char(1)	APPTINFR		Y if from Appointment File. Else N
Appointment Prefix	Char(1)	APPTPREFIX		<p>Through FY08: No transformation in CAPER derived record. For FY09+: If TXSVC ne 'C' and APPTPREFIX='G' then set APPTPREFIX='2'. Otherwise, no transformation. I implies appointment inferred record.</p>
Appointment Status Type	Char(1)	APPTSTAT1		<p>No transformation for CAPERs or for Appointment inferred CAPERs. That is: If Appt Data Appt Stat=2 then 2 (Kept) If Appt Data Appt Stat=5 then 5 (Walk-in) If Appt Data Appt Stat=6 then 6 (Sick Call) If Appt Data Appt Stat=7 then 7 (T-Con)</p>

Field	Type	SAS Name	Source	Derivation
Appointment Status Type with Appointment Data Walk-In	Char(1)	APPTSTAT		For FY04: APPTSTAT=APPTSTAT1 For FY05 and forward: If Appt Data WALKIN='Y' then APPTSTAT=5; Else APPTSTAT=APPTSTAT1
APV Flag	Char(1)	APV		APV=Y, when MEPRSCD=B**5 or B**7 or (B**6 at DMISID =0124) for TXSVC=A, F, N, or P.
Beneficiary Category	Char(3)	BENCAT		Derived from patient category code using universal PATCAT format table.
Age Group Common	Char(1)	EXPAGE		Derived from PATAGE: A = 0-4 B = 5-14 C = 15-17 D = 18-24 E = 25-34 F = 35-44 G = 45-64 H = 65-69 I = 70-74 J = 75-79 K = 80-84 L = 85+ X = All others
Beneficiary Category (common)	Char(1)	COMBEN		Derived from BENCATX. 1 = Dep Active Duty / Guard 2 = Retired 3 = Dep of Retired / Survivor / Other / Unknown/Blank/IGR/IDG 4 = Active Duty Guard

Field	Type	SAS Name	Source	Derivation
Major Diagnostic Category	Char(2)	MDC		<p>For FY05-FY15 only: Derived from the first 5 characters of Diagnosis 1 (DX1) after removing decimal¹⁷. Apply the MDC format for that FY as follows: <code>=put(substr(dx1,1,5), mdcfy.);</code> where fy is the 2-digit fiscal year of the encounter.</p> <p>For FY16+: Derived from the first 7 characters of Diagnosis 1 (DX1). Apply the MDC format for that FY as follows: <code>=put(substr(dx1,1,7),mdcfyz.);</code></p> <p>For FY05+: IF MDC = '98' THEN DO; IF PATSEX='F' THEN MDC = '13'; ELSE IF PATSEX = 'M' THEN MDC='12'; END;</p> <p>This field is left blank if APPTINFR='Y'.</p>
Diagnosis Group	Char(2)	DXGRP		Use first three characters of Diagnosis 1 (DX1). See Table A2.1 for derivation rules.
Medicare Eligibility Flag	Char(1)	MEDFLAG		<p>For FY04: For APPTINFR=Y or N: "N" if MELIGAPT field is N or S. If MELIGAPT is blank then assign "N" if patient age is < 65 "Y" if patient age is >= 65 Otherwise, assign value "Y"</p> <p>For FY05+: For APPTINFR=Y or N: "Y" if MELIGAPT is A, AB, or B. If MELIGAPT is blank then assign "N" if patient age is < 65 "Y" if patient age is >= 65 Otherwise, assign value "N"</p>

¹⁷ Diagnosis codes are being modified in CAPER Basic to remove the decimal and append the extender. Removing the decimal in Enhanced processing may be required through this transition.

Field	Type	SAS Name	Source	Derivation
Medicare Eligibility Derived from MEDELIG	Char(1)	MEDELIG2		<p>For FY04: If an APPT record is found then A if MELIGAPT = A B if MELIGAPT = B C if MELIGAPT = AB, D, L, Q, R, E, O, P C if MELIGAPT = blank and age >= 65 Else N.</p> <p>If an APPT record is not found then A if MEDELIG = A B if MEDELIG = B, B1, B2, B3 C if MEDELIG = AB, D, L, Q, R, E, O, P C if MEDELIG = blank and age >= 65 Else N.</p> <p>For FY05+: If an APPT record is found then A if MELIGAPT = A B if MELIGAPT = B C if MELIGAPT = AB C if MELIGAPT = blank and age >= 65 Else N.</p> <p>If an APPT record is not found then A if MEDELIG = A, E, O, P B if MEDELIG = B, B1, B2, B3 C if MEDELIG = AB, D, L, Q, R C if MEDELIG = blank and age >= 65 Else N.</p>
MEPRS1 Code	Char(1)	MEPR1		First position of MEPRS4 Code (MEPRSCD).
MEPRS2 Code	Char(2)	MEPR2		First two positions of MEPRS4 Code (MEPRSCD).
MEPRS3 Code	Char(3)	MEPR3		First three positions of MEPRS4 Code (MEPRSCD)
Patient Category	Char(3)	PATCAT		<p>If APPTINFR=N: PATCAT=SUBSTR(PATCAT_R,1,3); IF HCDPLVM IN ('401' '402' '405' '406' '407' '408' '409' '410' '411' '412') OR HCDPCODE_R IN ('401' '402' '405' '406' '407' '408' '409' '410' '411' '412') THEN DO; IF FMP='20' THEN PATCAT=SUBSTR(PATCAT_R,1,1) '36'; ELSE PATCAT=SUBSTR(PATCAT_R,1,1) '37'; END;</p> <p>If APPTINFR=Y, then PATCAT= PATCAT as reported in the Appointment Data</p>

Field	Type	SAS Name	Source	Derivation
Patient Subcategory Code	Char(1)	PATSUBCODE		If APPTINFR=N then =SUBSTR(PATCAT_R,4,1) Else leave blank.
Product Line	Char(7)	PRODLINE		Through FY10: Derived based on Clinic (MEPR3). See Table A2.2a. =put(mepr3,\$prodlinfyA.) FY11+: Derived based on Clinic (MEPRS3) and Service (TXSVC). See Table A2.2b. If TXSVC in('A' 'N' 'P') then =put(mepr3,\$prodlinfyB.) Else =put(mepr3,\$prodlinfyA.)
Sponsor Rank/ Paygrade	Char(3)	RANKPAY		If APPTINFR=N then =SUBSTR(RANKPAY_R,2,3) Else if APPTINFR=Y then =SUBSTR(RANKPAY,1,3) as Reported in the Appointment Data
Sponsor Rank Group	Char(2)	RANKGRP		Derived based on RANKPAY or PATCAT. See Table A2.3.
Same Day Surgery	Char(1)	SDS		Through FY09, if APV=Y and any of the APGs is of OR intensity (see Table A2.4) then SDS=Y Else SDS=N. For FY10+, if APV=Y and at least one CPT code ¹⁸ : 10121-69999, G0105, G0121, G0186, G0260, G0392, G0393 then SDS=Y Else SDS=N. This field is left blank for APPTINFR=Y.
Recoded Sponsor Service	Char(1)	RSPONSVC		Derived from 1 st character of PATCAT. If A, C, F, M, N then retain value. Else if B then assign O. Else if P then assign H. Else if R then assign 4. Else if PATCAT is K71 or K78 then assign 4. Else assign X.
Underwritten Region	Char(1)	UNDFLAG		Populated through FY15 only. See Table A2.5.
CAPER Processing Date	Char(8)	CAPERPROCDATE		Date record was last updated during CAPER-Enhanced processing. Format yyyyymmdd.

¹⁸ Ambulatory Surgery as identified by the Agency for Healthcare Research and Quality

Field	Type	SAS Name	Source	Derivation
Source Processing Date	Char(8)	SRCPROCDATE		Date record was last updated during source data processing. PROCDATE from the CAPER-Basic if APPTINFR is 'N', and CHGDT from the appointment data if APPTINFR is 'Y'. Format yyyyymmdd."
M2 Code	Char(1)	M2CODE		Tracks record status through process and relative to the last record of the particular key saved in the CAPER-Enhanced, Master, MDR. Values are: Blank = Record exists in Master U=Record changed and represents update to Master N=Record is new, not before seen in Master.
HCDP – Assigned	Char(3)	HCDP_ASSGN	DEERS	Populated for FY12+ If the ENCDATE 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.
Eligibility Group	Char(2)	ELG_GRP	DEERS	Populated for FY12+ If the ENCDATE 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.
Enrollment Group	Char(2)	ENR_GRP	DEERS	Populated for FY12+ If the ENCDATE 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.
Enrollment PCM Type	Char(2)	PCM_TYPE	DEERS	Populated for FY12+ If the ENCDATE 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.
Enrollment Site T3 Region	Char(2)	ENR_T3_REG	DMIS ID Index	Populated for FY12+ T3_REG from DMIS ID Index, based on matching FY and ENRDMIS
Enrollment Site T17 Region	Char(2)	ENR_T17_REG	DMIS ID Index	Populated for FY12+ T17_REG from DMIS ID Index, based on matching FY and ENRDMIS
Beneficiary T3 Region	Char(2)	BEN_T3_REG	OMNI CAD	Populated for FY12+ T3_REG, based on matching to OMNI CAD using FY and PATZIP
Beneficiary T17 Region	Char(2)	BEN_T17_REG	OMNI CAD	Populated for FY12+ T17_REG, based on matching to OMNI CAD using FY and PATZIP

Field	Type	SAS Name	Source	Derivation
Treatment DMIS ID T3 Region	Char(2)	MTF_T3_REG	DMIS ID Index	Populated for FY12+ T3_REG from DMIS ID Index, based FY and DMISID
Treatment DMIS ID T17 Region	Char(2)	MTF_T17_REG	DMIS ID Index	Populated for FY12+ T17_REG from DMIS ID Index, based FY and DMISID
Provider Name (DMHRSi); Appointment Provider, Additional Providers 1-4	Char(40)	PROVNAME1-PROVNAMES5	DMHRSi-HR	FY16+ only. Set to (LASTNAME ,<SPACE> FIRSTNAME) for each identified Provider (K=1 to 5) from merge to the DMHRSi HR data. If (LASTNAME ,<SPACE> FIRSTNAME) is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Provider Name Referring	Char(40)	PROVNAMEREF	DMHRSi-HR	FY16+ only. Set to (LASTNAME ,<SPACE> FIRSTNAME) for each identified Provider PROVNAMEREF from merge to the DMHRSi HR data. If (LASTNAME ,<SPACE> FIRSTNAME) is blank or there is not a unique matching DMHRSi record, set to NONE. Leave blank if no provider is associated with the provider position.
Service Line	Char(5)	SERVICE_LINE	SLFMT	FY16+ only. Apply the Service line format as follows: =put(meprs3,\$slfmt.);
PCM Name	Char(40)	PCMNAME	DEERS	Populated for FY16+ If the ENCDATE is between the begin and end date of D_MI_PCM_NM then fill with D_MI_PCM_NM, else leave blank. See DEERS VM6 specification Section V for rules.
Patient Attached UIC	Char(8)	PAT_ATTCH_UIC	DEERS	Populated for FY16+ If the ENCDATE is between the begin and end date of ATTCH_UIC then fill with ATTCH_UIC, else leave blank.
02 Patient Assigned UIC	Char(8)	PAT_ASSGN_UIC	DEERS	Populated for FY16+ If the ENCDATE is between the begin and end date of ASSGN_UIC then fill with ASSGN_UIC, else leave blank.
Revenue Code 1	Char(4)	REVCODE1		If DX1 = Z049 then REVCODE1= 0762; otherwise REVCODE1= blank. Population FY17+.
Enrollment Site T5 Region	Char(2)	ENR_T5_REG	DMIS ID Index	Populated for FY23+ T5_REG from DMIS ID Index, based on matching FY and ENRDMIS
Beneficiary T5 Region	Char(2)	BEN_T5_REG	OMNI CAD	Populated for FY23+ T5_REG, based on matching to OMNI CAD using FY and PATZIP
Treatment DMIS ID T5 Region	Char(2)	MTF_T5_REG	DMIS ID Index	Populated for FY23+ T5_REG from DMIS ID Index, based FY and DMISID

Table A2.1: Diagnosis Group Derivation

ICD-9 First 3 digits (FY15 and back)	ICD-10 First 3 digits (FY16 and forward)	Category Number	Disease Category Name
001-139	A00-B99	1	Infections & Parasites
140-239	C00-D49	2	Neoplasms
240-279	E00-E89	3	Endocrine & Metabolism
280-289	D50-D89	4	Blood
290-319	F01-F99	5	Mental
320-389	G00-H95	6	Nerves and Senses
390-459	I00-I99	7	Circulatory System
460-519	J00-J99	8	Respiratory System
520-579	K00-K95	9	Digestive System
580-629	N00-N99	10	Genitourinary
630-677	O00-O9A DOD0227	11	Pregnancy and Childbirth
678-709	L00-L99	12	Skin
710-739	M00-M99	13	Musculoskeletal
740-759	Q00-Q99	14	Congenital Anomalies
760-779	P00-P96	15	Perinatal
780-799	R00-R99	16	Ill-Defined
800-999	S00-T88	17	Injury & Poisoning
V**	Z00-Z99	18	Supplementary Classifications
All others	V00-Y99	19	Unknown (external causes)
DOD	Anything starting with "DOD"	20	DOD unique codes
All others	All Others		blank

Table A2.2a: Product Line Derivation, mdr/ref/caper/prodlinefy.txt through FY10

Product Line	Full Name Description	Definition
PC	Primary Care	BGA, BHA, BDA, BAA, BJA, BHB, BHI, BDC, BDB, BKA, BHZ, BGZ, BHH
ORTHO	Orthopedics	BLA, BEA, BEF, BEZ, BEB, BEE, BEC, BED, BLB
MH	Mental Health	BFD, BFE, BFF, BFA, BFB, BFC
OBGYN	Obstetrics/Gynecology	BCC, BCB, BCD, BCA
OPTOM	Optometry	BHC, BBD
IMSUB	Internal Medicine Subspecialty	BAG, BAC, BAL, BAK, BAB, BAN, BAQ, BAS, BAM, BAF, BAJ, BAO, BAH, BAE, BAU, BAT, BAV
ER	Emergency Room	BIA
SURG	General Surgery	BBA
SURGSUB	Surgical Subspecialty	BBI, BBG, BBC, BBK, BBJ, BBH, BBB, BBZ, BBE
ENT	Otolaryngology	BBF
DERM	Dermatology	BAP
OTHER	Other	All other MEPRS Codes

Table A2.2b: Product Line Derivation, mdr/ref/caper/prodlinefy.txt FY11+

Product Line	Full Name Description	Service	MEPRS
PC	Primary Care	A, N, P	BGA, BHA, BDA, BAA, BJA, BHB, BHI, BDC, BDB, BKA, BHZ, BGZ, BHH, BAZ, BDZ
PC	Primary Care	All except A, N, P	BGA, BHA, BDA, BAA, BJA, BHB, BHI, BDC, BDB, BKA, BHZ, BGZ, BHH
ORTHO	Orthopedics	All	BLA, BEA, BEF, BEZ, BEB, BEE, BEC, BED, BLB
MH	Mental Health	All	BFD, BFE, BFF, BFA, BFB, BFC
OBGYN	Obstetrics/Gynecology	All	BCC, BCB, BCD, BCA
OPTOM	Optometry	All	BHC, BBD
IMSUB	Internal Medicine Subspecialty	All	BAG, BAC, BAL, BAK, BAB, BAN, BAQ, BAS, BAM, BAF, BAJ, BAO, BAH, BAE, BAU, BAT, BAV
ER	Emergency Room	All	BIA
SURG	General Surgery	All	BBA
SURGSUB	Surgical Subspecialty	All	BBI, BBG, BBC, BBK, BBJ, BBH, BBB, BBZ, BBE

Product Line	Full Name Description	Service	MEPRS
ENT	Otolaryngology	All	BBF
DERM	Dermatology	All	BAP
OTHER	Other	All	All other MEPRS Codes

Table A2.3: Sponsor Rank (Pay Grade) Collapsing Algorithm¹⁹

Field	Values	Rank Group
PATCAT	PATCAT = A14, C14, F14, N14	CD (Cadet)
RANKPAY	E1-E4	EJ (Enlisted, Junior)
RANKPAY	E5-E9	ES (Enlisted, Senior)
RANKPAY	O1-O3	OJ (Officer, Junior)
RANKPAY	O4 – O9, O10, O11	OS (Officer, Senior)
RANKPAY	W1 – W5	WO (Warrant Officer)
RANKPAY	CD	CD (Cadet)
RANKPAY	All Others	XX – Other (students, civil servants, unknowns (e.g., those without distinction as to whether officer or enlisted

Table A2.4: APGs Assigned Same Day Surgery When Occurring in APV Setting

APG	Description
003	Complex incision and drainage
007	Complex excision, biopsy and debridement
008	Simple excision and biopsy
009	Complex skin repairs and antegument grafts
011	Simple incision and excision of breast
012	Breast reconstruction and mastectomy
021	Complex musculoskeletal procedures excluding hand and foot
023	Complex hand and foot musculoskeletal procedures
025	Arthroscopy
030	Open or percutaneous treatment of fractures
031	Bone or joint manipulation under anesthesia
033	Arthroplasty
034	Hand and foot tenotomy

¹⁹From LEVELS OF ACCESS AND MASKING in MHS Mart (M2) specification

APG	Description
035	Arthrocentesis and ligament or tendon injection
053	Complex endoscopy of the upper airway
054	Simple endoscopy of the upper airway
055	Endoscopy of the lower airway
076	Diagnostic cardiac catheterization
077	Angioplasty and transcatheter procedures
078	Pacemaker insertion and replacement
079	Removal and revision of pacemaker and vascular device
080	Minor vascular repair and fistula construction
082	Vascular ligation
113	Anoscopy with biopsy and diagnostic proctosigmoidoscopy
114	Proctosigmoidoscopy with excision or biopsy
115	Diagnostic upper gi endoscopy or intubation
116	Therapeutic upper gi endoscopy or intubation
117	Lower gastrointestinal endoscopy
118	Ercp and miscellaneous gi endoscopy procedures
119	Hernia and hydrocele procedures
120	Complex anal and rectal procedures
123	Complex laparoscopic procedures
124	Simple laparoscopic procedures
153	Complex penile procedures
176	Complex female reproductive procedures
178	Dilation and curettage
179	Hysteroscopy
196	Revision and removal of neurological device
197	Neurostimulator and ventricular shunt implant
198	Nerve repair and destruction
213	Laser eye procedures
214	Cataract procedures
215	Complex anterior segment eye procedures
216	Moderate anterior segment eye procedures
218	Complex posterior segment eye procedures
221	Complex repair and plastic procedures of eye
234	Complex facial and ent procedures
235	Simple facial and ent procedures
236	Tonsil and adenoid procedures

Table A2.5: Underwritten Region Derivation (Through FY11)

Logic

- Non-ambulatory work is not counted (based on MEPRs code, treated as not underwritten)
- 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 Eligibles (based on age as a proxy)
- Exclude Resource Sharing (based on DMISIDs beginning with 54**)
- 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 Variable	Data Element (see CAPER Detail Layout Above)
EPRSCD	MEPRS code
COMBEN	Common Beneficiary Category
BENCATX	Beneficiary Category
PATAGE	Patient Age
ACV	Alternate Care Value
ENRREG	<i>Enrollment Region – from merge to the DMISID Index based on ENRDMIS, set to MOD_REG from corresponding entry in the DMIS ID index table</i>
ENRDMIS	Enrollment DMISID
PATREGN	Patient Region
UNDRFLAG	<i>Need to Create, Temporary Underwritten Flag</i>
UNDFLAG	<i>Need to Create – underwritten region</i>

SAS Variable Data Element

```

Undrflag=1; /* underwritten flag*/

/* Flag non underwritten beneficiaries as "0". */

/* Exclude non-ambulatory workload from underwritten counts */
if substr(meprscd,1,1) NE 'B' then undrflag=0;

if acv='U' then undrflag=0; /* Exclude USTFs */
if bencatx='DCO' then undrflag=0; /* Exclude Direct Care Only */
if comben=4 then undrflag=0; /* Exclude Active Duty */
if agegrp EQ 'H' then undrflag=0; /* Exclude Medicare Eligibles */
if acv='R' then undrflag=0; /* Exclude Reserve Select */

/* Exclude resource sharing, all dmisisds that start with '54' from underwritten */
if substr(dmisdid,1,2)='54' then undrflag=0;

/* 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=' ';

```

Table A2.6: Service Code Map

DMHRSi-HR Service	Service Code
ARMY	A
COAST GUARD	C
HEALTH AFFAIRS or OSD	D
AIR FORCE	F
PHS or PUBLIC HEALTH	H
TMA or TRICARE MGT AC	K
MARINE CORPS	M
NAVY	N
VA	V
DHA or JTF or NCR	P
NONE or Blank	Z
None of the above	X

APPENDIX 3: Modify Data Prior to Workload Assignment to Adjust for Common Data and Coding Errors

The processor will modify invalid data, supplement missing values, and revise non-standard coding for CAPER Enhanced, FY07 and forward, according to the details of this appendix and prior to applying raw RVU values and calculating aggregate RVUs and APCs.²⁰ Revised values for the modified fields will replace the raw values in CAPER Enhanced. The original/raw values are maintained in CAPER Basic.

The variable Change Edit Flag (CEDITFLG) will document modifications to a record. Change Edit Flag is a 10-place character field where up to 10 flag indicators may be added in the event of any of the changes indicated in Table A3.1. Only one instance of any one change code will be included in CEDITFLG, even if the edit occurs more than once on a record. If the number of different edits for a record exceeds the length of the field, the last (10th) character will be recoded to 'Z', indicating that the number of edits exceeded the space available.

The Change Edit Flag is grouped (see Table A3.1) into different edit flag variables to support data quality efforts. These edit flags are:

- UOS Edit Flag (CEDITUOS)
- Bilateral Code Edit Flag (CEDITBILAT)
- Surgical Follow-Up Edit Flag (CEDITSURG)
- TCON Edit Flag (CEDITTCON)
- Prov/Proc Linkage Edit Flag (CEDITPROVPROC)

Table A3.1: Change Codes

Change Edit Flag (CEDITFLG) Codes	Grouped Edit Flag
Blank - No changes made	
1 - Units of Service changed (exceeded the limit)	CEDITUOS
2 - Units of Service changed (reduced/terminated procedure-mod 52/73)	CEDITUOS
3 - Units of Service changed (bilateral)	CEDITUOS
4 - Recoding for bilateral procedure (code not appropriate for bilateral adjustment)	CEDITBILAT
5 - Recoding for bilateral procedure (using mod 50 to apply bilateral adjustment)	CEDITBILAT
6 - Surgical Followup (coded incorrectly)	CEDITSURG
7 - Surgical Followup (credited as 99024)	
8 - Surgical Followup (no credit for E&M)	CEDITSURG
9 - Surgical Followup (no credit for surgical code)	CEDITSURG
A - TELCON (removed additional TELCON procedures)	CEDITTCON
B - TELCON (no additional credit for non-TELCON procedures)	
C - Provider/Procedure Pointer(s) modified (TELCON)	CEDITPROVPROC
D - Provider/Procedure Pointer(s) modified (multiple, same provider)	CEDITPROVPROC
E - Provider/Procedure Pointer(s) modified (invalid pointer)	CEDITPROVPROC
F - Provider/Procedure Pointer(s) modified (missing pointer)	

²⁰ As long as RVU workload assignment per legacy rules for SADR remains in the processor as described in Appendix 4, this section will describe re-application rather than the only application of RVU workload to record data elements.

Change Edit Flag (CEDITFLG) Codes	Grouped Edit Flag
G - Provider/Procedure Pointer(s) modified (credit reassigned to Appt Provider)	CEDITPROVPROC
H - Procedure recoded as surgical follow-up based on Provider Skill Type	CEDITSURG
Z - Various modifications (the number of applicable edits exceeds the space available)	

Field adjustments are implemented (in sequential order) as follows:

1. Review/modify units of service:
 - CPT Unit of Service Exceeds Limit. If the units of service was changed because the number of units coded exceeded the limit set for the CPT (if CPTUOS_J < CPTUNITS_J and there is no '2' or '3' already in the CEDITFLG) because it exceeded the limit, then add '1' to CEDITFLG. This correction was made pre-APC grouping. See Appendix 1, Table A1.1.
 - If any of the three modifiers for a CPT code is 52 (Reduced Services) or 73 (Discontinued ASC Surgery) and the unit of service (CPTUOS_J) >1, set CPTUOS_J to 1. Add '2' to CEDITFLG.
2. CPT cleansing:
 - Surgical Follow-ups. The MHS Direct Care RVU for a surgical follow-up (CPT 99024) is set to a value so that the surgical code and average number of follow-up visits together generate the total RVU associated with the global CPT code. Follow-up visits are identified by the CPT code 99024 or by a procedure CPT (CPT_J, J=4-13) with modifier 55 (Postoperative Management Only).
 - a. Non-clinicians are only eligible for follow-up credit for the following surgical procedures:
 - S0800 (LASER IN SITU KERATOMILEUSIS)
 - S0810 (PHOTOREFRACTIVE KERATECTOMY)
 - 66999 (EYE SURGERY PROCEDURE)

When these procedure CPT codes are coded (in CPT_J, J=4-13) without a modifier 55 (in any of the three modifier positions) and none of the providers K identified as linked to the procedure (in CPTPROV_J) is a CHCS Skill Type 1 (substr(SKILLK,1,1)='1'), then the procedure will be recoded as a follow-up by adding a modifier 55 in the first available modifier position (overwriting the last position if all modifiers are non-blank). Add 'H' to CEDITFLG.
 - b. If a CAPER has both a 99024 (in CPT_J, J=4-13) and another procedure CPT (CPT_J, J=4-13) that has a modifier 55, replace the CPT_J= 99024 with XXXXX and X-out or set to zero as appropriate, all the associated CPT- and APC-related information (see Table A3.2). Add '6' to CEDITFLG.
 - c. If a CAPER has a procedure CPT code (CPT_J, J=4-13) with a modifier 55 in one of the 3 modifier positions, the raw RVU values for 99024 will be applied as described in Appendix 5 (see Tables A5.2 and A5.2b). Set the APC for that procedure to 19900 and the APCPSI to N. Add '7' to CEDITFLG.
 - d. X-out all CPT- and APC-related information) any E&M code (CPT_J, J=1-3), except 99499, present if any procedure CPT (CPT_J, J=4-13) is either 99024 or has a modifier 55, unless the E&M code has modifier 24, 25 or 57, indicating it is unrelated. Add '8' to CEDITFLG.

e. If any procedure CPT code (CPT_J, J=4-13) on the record besides the surgical follow-up (99024 or other CPT code with modifier 55) is a surgical CPT code (SURGJ=1), X-out that CPT and its related fields unless it is unrelated to the follow-up as indicated by a modifier 58, 59 or 79. Add '9' to CEDITFLG.

Table A3.2: CPT and APC related fields

CPT - and APC²¹-related fields:	Replace with:
• APCJ	XXXXX
• APCEDITJ	XXXXX
• APCPKGJ	X
• APCPSIJ	XX
• BILATERALJ	X
• SURGJ	X
• CPT_J	XXXXX
• CPTDX_J	XXXX
• CPTMIN_J	(.) missing (these are currently placeholder fields)
• CPTMOD1_J	XX
• CPTMOD2_J	XX
• CPTMOD3_J	XX
• CPTPROV_J	XXXXX
• CPTUNITS_J	0
• CPTUOS_J	0

Note: APG- and OWRVU-based cost fields will not be removed or changed due to these edits.

- Telephone Consults (TELCON): The following rules apply to TELCON encounters (all encounters where APPTSTAT=7):
 - a. Only one TELCON CPT per encounter will be allowed on TELCON CAPERs (not including E&M 99499). TELCON CPT Codes are applicable based on the type of provider (see Table A3.3). E&M TELCON CPT codes are reserved for use by physicians (Skill Types 1 and 2); procedure TELCON CPT codes may be used by non-physicians (Skill Types 3 and 4). Note: The unweighted E&M Code 99499 can be used by any provider on a TELCON encounter and will be left on the record, if coded. The highest weighted TELCON CPT code appropriate for the Appointment Provider (based on Skill Type) will be retained and all other TELCON CPTs and their associated information will be replaced by Xs or zeroed out (see Table A3.2).

²¹ APC-related information is only X'd out if already populated (i.e., the CAPER is B-MEPRS, FAC_FLAG=F and there is an E&M or Procedure reported for the position). If not B-MEPRS, Facility, then these APC fields will be left blank.

Table A3.3: TELCON CPT Codes

TELCON and Online Codes	CPT Positions	For Use by²²	Applicable
99441-99444	E&M (J = 1-3)	Skill Types 1-2 only	CY2008+
99371-99373	E&M (J = 1-3)	Skill Types 1-2 only	Through CY2007
98966-98969	Procedure (J = 4-13)	Skill Types 1-4	CY2008+

If APPTSTAT=7 and :

- substr(SKILL1,1,1) in ('1' '2') then X-out all TELCON CPT codes and related fields except the highest weighted TELCON code (either E&M or procedure, J=1-13).
- substr(SKILL1,1,1) in ('3' '4') then X-out all TELCON CPT codes and related fields except the highest weighted TELCON Procedure Code. Skill Types 3 and 4 are only allowed to code the TELCON procedure codes 98966-98969. If the only TELCON CPT code(s) present are E&M code(s) reserved for use by Skill Types 1 and 2 (e.g., 99441-99444), then X-out that code(s) and associated fields; there may be no CPT codes left on the CAPER.

b. CPT codes that are not TELCONs will be retained as coded but will not receive RVU credit (see Tables A5.2 and A5.2b).

If any codes are replaced with XXXXX in this step, add 'A' to CEDITFLG. If any non-TELCON CPT codes are present on the record (except E&M 99499), add 'B' to CEDITFLG.

- Remove CPTs for bundling [TBD - placeholder for next version]. Remove bundled CPT codes based on the Bundled Flag (from the Medicare Status Code= B in the Ingenix table. If CPT codes are changed, amend the APC.

3. Review CPT modifiers:

- Correction for bilateral procedure. Use the CPT Bilateral Indicator (BILATERALJ) to test appropriateness of modifier (50, RT+LT) and/or units of service. Check for incorrect bilateral coding and revise modifiers and units of service as necessary to prepare for the correct application of bilateral workload impact. This edit only applies if one of the following is true:
 - One of the three modifiers ='50'
 - Two of the three modifiers are 'RT' and 'LT'
 - UOS=2 (as reported in CPTUNITS_J²³). Note: If UOS=2 and 'RT' is present without 'LT' or 'LT' is present without 'RT' (i.e., done twice on the same side), these bilateral edits do not apply.

If one of the above cases is true, using the CPT Bilateral Indicator as described below, make the following adjustments:

- a. If BILATERALJ=0, 3 or 9 the bilateral adjustment is not applicable. Modifier impact will be 100% instead of 150%.
 - If modifier 50 is present, replace with blank. Add '4' to CEDITFLG.
 - RT/LT do not have directly associated modifier impacts so they do not need to be removed or changed.

²² Skill Type 1 includes 1R.

²³ The original units of service field is tested for the bilateral condition since that information would be lost once the unit of service limit was applied prior to grouping. However, the modified field (CPTUOS_J) would be the one updated if necessary based on these edits.

- Do not change the unit of service.
- b. If BILATERAL_J=1, then bilateral modifier impact (150%) applies if any of the following is true:
 - If modifiers indicate the procedure is bilateral (either modifier 50 is present or modifiers RT and LT are both present) and CPTUNITS_J >1, then set CPTUOS_J =1 and add '3' to CREDITFLG.
 - If modifiers RT and LT are both present, replace them with 50 and a blank. Add '5' to CREDITFLG.
 - If modifier(s) do not indicate bilateral but CPTUNITS_J =2²⁴, then add modifier 50 in the first blank modifier position (overwriting the last position if all modifiers are non-blank) and set CPTUOS_J=1. Add '3' and '5' to CREDITFLG.
- c. If BILATERAL_J=2, the CPT is inherently bilateral and use of modifier 50 or modifiers RT and LT or units of service=2 is not appropriate.
 - If modifier 50 is present, replace the modifier with a blank. Add '4' to CREDITFLG.
 - RT/LT do not have modifier impacts directly associated with them so they do not need to be removed or changed.
 - If CPTUNITS_J=2 then set CPTUOS_J =1. Add '3' to CREDITFLG.

4. Action Based on Provider information:

- Missing (blank) provider pointer. A blank provider pointer for a non-blank CPT will be set to '1' indicating a link with the Appointment Provider only. At this time, all CAPER E&M provider pointers are blank and must be set to '1'. Add 'F' to CREDITFLG.
- Multiple providers on telephone consult. Only one provider, the Appointment Provider, will be associated with a telephone consult. If APPTSTAT='7', remove any pointer on any CPT code that points to a provider other than provider 1. If the result is a blank provider pointer, set the pointer to '1'. If pointers are removed, add 'C' to CREDITFLG.
- Multiple reporting, same provider. If the same provider appears in more than one provider position, then remove all duplicate providers (retain only the lowest numbered instance) and reassign provider procedure pointers appropriately to avoid double counting. Add 'D' to CREDITFLG.
- Invalid provider in provider pointer. For any non-blank CPT, if the provider pointer points to a provider with no provider identifier (EDIPN, NPI or PROVID), remove the link for that provider. If the result is a blank provider pointer, set the pointer to '1'. Add 'E' to CREDITFLG.
- Multiple provider record, credit reassigned to first provider (appointment provider). If Provider 1 is CHCS-based Skill Type 1 or 2 and an additional provider is NOT CHCS-based Skill Type 1 or 2, any CPT linked only to the additional provider will be relinked to Provider 1. (If Physician is first and Nurse is second and Nurse is the only provider linked to a CPT, the Physician gets the credit for the CPT and not the Nurse). Add 'G' to CREDITFLG.

²⁴ Exclude the case where the bilateral procedure is done twice on the same side (RT is present without LT or LT is present without RT).

5. Combining multiple CAPERs for the same encounter [TBD for next version]

When the CPT codes, modifiers, providers, provider pointer/links, APCs and APCPSI values have been reviewed and revised as required and CREDITFLG has been set, the record is ready for the application of APC and RVU workload.

APPENDIX 4: Analytic Processing and Field Additions to the CAPER-Enhanced (Legacy).²⁵

The following analytic processes will be applied to the CAPER-Enhanced after the Administrative Text variables are added for all new or inferred records. Variables will be added according to Table A4.3: Fields Added to CAPER through Analytic Processing. Where SADR variables are reproduced using only the first E&M and Procedure 1-4 CPT codes, the variable name is appended with _S.

Some of the legacy RVU fields in this Appendix (PERVUJ, RVU_EW, RVU_EW_S, RVU_EPE, RVU_EPE_S and OWRVU_S) will not be re-calculated after the initial processing of the non-inferred record. Some fields that affect legacy RVUs (e.g., CPT Codes, modifiers, units of service) may be modified by edits (Appendix 3) and original values not retained on the record. Without those original values, it is impossible to properly recalculate the legacy workload when a CAPER is reprocessed.

1. APG Aggregate Weight per the SADR (APGWGT_S) reproduces SADR aggregate APG weight on CAPERs.
2. RVUs. Apply the MDR Direct Care CPT weight table format for each of the individual CPT codes (CPT_J, J=1 to 13), regardless of MEPRS code. The calendar year of the encounter date determines the weight table to use. Apply the following RVU values, keeping those marked "for derivation but not retained" only for the duration of the calculation process. Field derivations are summarized in Table A4.1: Legacy Relative Value Unit Fields.

Table A4.1: Legacy Relative Value Unit (RVU) Fields

RVU Description	Variable Name	Use Modifiers?	Use Unit of service?	Use FAC_FLAG?	Comment
Derived / Aggregate Fields:					
PE RVU for all CPT	PERVUJ	YES ²⁶ , any modifier position	NO	YES	MDR and M2
Enhanced Work RVU	RVU_EW, RVU_EW_S	YES ²⁶ , any modifier position	YES (using UOS limits)	N/A	MDR and M2
Enhanced PE RVU	RVU_EPE, RVU_EPE_S	YES ²⁶ , any modifier position	YES (using UOS limits)	YES	MDR and M2

²⁵ This Appendix maintains the legacy RVU aggregates that are required for costing and trending purposes. It will be removed when these fields are no longer required. All other RVU fields are described in Appendix 5.

²⁶ Only the modifiers present in the RVU tables (generated from the Ingenix source file). Modifiers are 26, TC, 53, NU, RR, UE. For FY04-FY06, only modifiers 26 and TC for lab/rad (8XXXX/7XXXX) codes are applied.

RVU Description	Variable Name	Use Modifiers?	Use Unit of service?	Use FAC_FLAG?	Comment
Enhanced Total RVU	RVU_ET, RVU_ET_S	YES ²⁶ , any modifier position	YES (using UOS limits)	YES	Calculated as Enh Work + Enh PE. MDR and M2
Organizational Work RVU	OWRVU_S	NO	NO	N/A	Multiplied by # of qualifying providers. MDR and M2

3. If only in appointment but not in CAPER (APPTINFR=Y), derive fields as noted in Appendix 6: Completion Table for Appointment-Inferred CAPERs. If a derivation is applicable only for APPTINFR=N, then the field is not populated for appointment inferred records.

Table A4.2: Fields Derived but not Retained in Analytic Processing

Field	Type	SAS Name	Derivation
Enhanced/Basic Flag	Char(1)	EBFLAG	=B When this record is new from CAPER Basic. =E When the record has previously been through CAPER Enhanced processor and gone through the edit process (See Appendix 3). =I When the record is inferred.
RVU, Raw Work, E&M1-E&M3 and Proc 1-Proc 10, no modifiers	N(8)	RRVUBJ	For APPTINFR=N: Raw MHS-updated Work RVU for CPT procedures J=1 and 4-7. Derived from match with the CPT Weight Table (format wrkyyb) based on CY of encounter and CPT Modifier key as follows: CY03-CY05: CPT concatenated with 2 blanks CY06-CY10: If MODMATCH in ('C' 'D'), use CPT appended with NU, e.g., 'E0114NU' for the key. Else If MODMATCH = 'E', use CPT appended with RR, e.g., 'E0371RR'. Else CPT concatenated with 2 blanks. Table A4.3d, MOD1 applies.
Modifier Matching Code	Char(1)	MODMATCHJ	For APPTINFR=N: J=1 to 13 ²⁷ . Derived from match with the CPT Table (format \$matchcyb) based on CY of encounter and base CPT appended with 2 blanks, where cy is the 2-digit calendar year. Populated for CY06+.

²⁷ Throughout these tables, reference to procedures J=1 to 13 implies that J=1 to 3 represents the E&M positions and J=4 to 13 represents procedure positions.

Field	Type	SAS Name	Derivation
Bilateral Indicator, E&M1-E&M3 and Proc1-Proc10	Char(1)	BILATERALJ	For APPTINFR=N: J=1 to 13 ²⁷ Derived from match with the CPT Table (format \$bilateralcyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. where cy is the 2-digit calendar year. Populated for FY07+.
Surgical Indicator, Proc 1-Proc 10	Char(1)	SURGJ	For APPTINFR=N: J=4 to 13 ²⁷ . Derived from match with the CPT Table (format \$surgcyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. where cy is the 2-digit calendar year Populated for FY07+.

Table A4.3: Fields Added to CAPER through Analytic Processing

Field	Type	SAS Name	Derivation
Skill Type (CHCS-based); Appointment Provider, Additional Providers 1-4	Char(2)	SKILLK	For Providers K=1 to 5. Derived from match with the skilltype format based on provider specialty code for Provider K. =put(provspec K,\$skilltype.) See Table A4.3e. Populated for FY07+.
CAPER Skill Level; Appointment Provider, Additional Providers 1-4	Char(1)	SKILLHK	For Providers K=1 to 5. Derived from match with the skilltypeH format based on FY of the encounter and Provider HIPAA Taxonomy Code for Provider K. =put(PROVHIPAAK,\$skilltypefyH.) See Table A4.3f. Populated for FY11+.
Total APG Weight, per SADR	N(8)	APGWGT_S	The total APG weight of the encounter, found by adding 100% of the highest weight APG to 50% of all other APGs (except that the medical APG and E&M APG are not included except when either is the highest weight APG). Weights are obtained from merge to APG Weight Table by APG, FY. ²⁸ Set to 0 (zero) for non "B" records. If APPTINFR=Y, see Appendix 6. Populated through FY11 only.

²⁸ Final aggregate measures (APGWGT_S, RVU_EW, RVU_EW_S, RVU_EPE, RVU_EPE_S, RVU_ET, RVU_ET_S, OWRVU_S) on non-inferred CAPERs will be set to zero if missing.

Field	Type	SAS Name	Derivation
Facility/NonFacility Flag	Char(1)	FAC_FLAG	If External Resource Sharing or VA DMISID then FAC_FLAG='R' Else If any of the following: <ul style="list-style-type: none"> • A-MEPRS • B**5, B**7 • BIA • 0124 (NMC Portsmouth) and B**6 • At least one procedure CPT_J (J=4-13) on Facility List then FAC_FLAG='F' Else FAC_FLAG='N' See Table A4.3b.
RVU, Raw Work, E&M1-E&M3 and Procedure 1-Procedure 10	N(8)	RRVUJ ²⁹	For APPTINFR=N: Raw MHS-updated Work RVU for CPT procedures J=1 to 13 ²⁷ Derived from match with the CPT Weight Table (format wrkyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. Table A4.3d, MOD1 applies.
RVU, Raw Facility Practice Expense, E&M1-E&M3 and Procedure 1-Procedure 10	N(8)	FPRVUJ ²⁹	For APPTINFR=N: Raw MHS-updated Facility Practice Expense RVU for CPT procedures J=1 to 13 ²⁷ Derived from match with the CPT Weight Table (format facyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. Table A4.3d, MOD1 applies.
RVU, Raw Non-Facility Practice Expense, E&M1-E&M3 and Procedure 1-Procedure 10	N(8)	NPRVUJ ²⁹	For APPTINFR=N: Raw MHS-updated Non-Facility Practice Expense RVU for CPT procedures J=1 to 13 ²⁷ Derived from match with the CPT Weight Table (format nfacyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. Table A4.3d, MOD1 applies.
RVU, Practice Expense, E&M1-E&M3 and Procedure 1-Procedure 10	N(8)	PERVUJ	For APPTINFR=N: If FAC_FLAG in ('F' 'R') then PERVUJ = FPRVUJ Else PERVUJ = NPRVUJ.
RVU, Enhanced Work	N(8)	RVU_EW	For APPTINFR=N: The Work RVU, with modifiers, per code multiplied by the units of service; computed as: $\Sigma(RRVUJ*CPTUOS_J)$ for all J CPT Codes ²⁸ For APPTINFR=Y, see Appendix 6

²⁹ These values of RRVUJ, FPRVUJ and NPRVUJ are used only to calculate the legacy RVU fields and are not the values in the final table; the Raw RVU values in the final table are described in Appendix 5.

Field	Type	SAS Name	Derivation
RVU, Enhanced Work, per SADR	N(8)	RVU_EW_S	For APPTINFR=N: The Work RVU, with modifiers, per code multiplied by the units of service; computed as: $\sum(RRVUJ*CPTUOS_J)$ for E&M1 and Proc 1-4 (CPT_1 and CPT_4-CPT_7) ²⁸ For APPTINFR=Y see Appendix 6. Populated through FY12 only.
RVU, Enhanced Practice Expense	N(8)	RVU_EPE	For APPTINFR=N: Sum of Practice Expense RVU, with modifiers, chosen based on designation as facility or non-facility care, multiplied by the units of service, computed as: $\sum(PERVUJ*CPTUOS_J)$ for all J CPT Codes ²⁸ For APPTINFR='Y' see Appendix 6.
RVU, Enhanced Practice Expense, per SADR	N(8)	RVU_EPE_S	For APPTINFR=N: Sum of Practice Expense RVU, with modifiers, chosen based on designation as facility or non-facility care, multiplied by the units of service, computed as: $\sum(PERVUJ*CPTUOS_J)$ for E&M1 and Proc 1-4 (CPT_1 and CPT_4-CPT_7) ²⁸ For APPTINFR='Y' see Appendix 6. Populated through FY12 only.
RVU, Enhanced Total	N(8)	RVU_ET	Sum of RVU_EW and RVU_EPE for both APPTINFR Y and N.
RVU, Enhanced Total, per SADR	N(8)	RVU_ET_S	Sum of RVU_EW_S and RVU_EPE_S for both APPTINFR Y and N. Populated through FY12 only.
RVU, Organizational Work, Per SADR ³⁰	N(8)	OWRVU_S	Derived by multiplying discounted (100% for highest of RRVUB1, RRVUB4-RRVUB7, 50% for remaining) MHS-updated Work RVU, without modifiers (RRVUB1, RRVUB4-7) by the number of qualifying providers (first 3 providers only) based on provider specialty codes (see Table A4.3d, MOD2, MOD3 and MOD4 apply). If APPTINFR=Y, see Appendix 6. Populated through FY10 only.

1. Anesthesia CPT Units of Service:

- FY 2020³¹:
 - If the CPT code is identified as an anesthesia code and the MEPRS 3 Code is in DFA then the units of service is representing the minutes of service. Anesthesia codes are identified as CPT Codes with `substr(proc,1,1)` in ('0') and `substr(proc,5,1)` ~in('A' 'T' 'F' 'M' 'U'). The Calculation for the RVUs will be: Work RVU+(Units of Service*0.05).
 - If the CPT code is identified as an anesthesia code and the MEPRS 1 Code is in A or B then the units of service is representing the minutes of service.

³⁰ At a minimum the recalulation of FY12+ will be required for the following values when this change is made: `PERVUJ`, `RVU_EW`, `RVU_EW_S`, `RVU_EPE`, `RVU_EPE_S`, `OWRVU_S`

31 This rule will be re-evaluated in spring 2019 as it depends how well the information is being coded.

Anesthesia codes are identified as CPT Codes with substr(proc,1,1) in ('0') and substr(proc,5,1) ~in('A' 'T' 'F' 'M' 'U'). If the CPTUNITS_J > 52 then CPTUOS_J=53. The Calculation for the RVUs will be: Work RVU+(Units of Service*0.05).

- FY 2018-2019: If the CPT code is identified as an anesthesia code then the units of service is representing the minutes of service. Anesthesia codes are identified as CPT Codes with substr(CPT_J,1,1) in ('0') and substr(CPT_J,5,1) ~in('A' 'T' 'F' 'M' 'U') or CPT_J=4255F. The Calculation for the RVUs will be: Work RVU+(Units of Service*0.05).

2. Interprofessional Telephone/Internet Consultation

FY 2017+: If CPT_1-CPT_3 contain CPT Codes 99446, 99447, 99448, or 99449 then those records must be coded by a provider with a specific HIPAA Taxonomy Code by application of a SAS format file, IntprofCon.txt. (See Table A5.5). If the above CPT codes are coded but the HIPAA Taxonomy code is not in the list then set RVUs to zero.

3. Reorder Procedure Codes by Work Raw RVU.

FY 2016+: Reorder CPT_4-CPT_13 by RRVU4-RRVU13 in descending order. This method puts the highest weighted procedure code in the first position regardless of units of service for that procedure code.

**Table A4.3b: Facility/Non-Facility Flag Format Excerpt,
mdr/ref/caper.facflag_IPfyfy.txt**

```

**For FYfy;

**FAC_FLAG='R' for the following:
*      external resource sharing or VA DMISID

**FAC_FLAG='F' for any of the following:
*      all A MEPRS
*      B**5/7
*      BIA
*      0124 and B**6
*      At least one CPT_J (J=4-13) on Facility List

**FAC_FLAG='N' for everything else;

*****Facility care identified by DMISID (external resource sharing or VA facilities);
***FAC_FLAG='R' if input(dmisid,FDMIS&fy.a.)=1 ;

***Source DMIS ID Resource Page - http://www.dmisid.com/cgi-dmis/download;
***All DMIS IDs with Branch of Service/Authority Code in ('B' 'G' 'R' 'V' '1' '2' '3')
*** are considered "Facility" and will have Facility PE RVUs applied but not APCs;

**FYyy (from FYyy Historical Year-End File);
PROC FORMAT;
invalue FDMISyya
'0660'=1
'0661'=1
'2001'=1
'2002'=1
'5401'=1
'5402'=1
'5404'=1

.
.

OTHER=0;

*****Facility care identified by any A MEPRS or B**5/7);
***FAC_FLAG='F' if input(mepr1,fm1_&fy.a.)=2 or (input(mepr1,fm1_&fy.a.)=1 and
input(substr(meprscd,4,1),fm4_&fy.a.)=1);

PROC FORMAT;
invalue FM1_09a
'A'=2
'B'=1
OTHER=0;

PROC FORMAT;
invalue FM4_09a
'5'=1
'7'=1
'6'=2
OTHER=0;

*****Facility care identified by BIA*;

```

**Table A4.3b: Facility/Non-Facility Flag Format Excerpt,
mdr/ref/caper.facflag_IPfyfy.txt**

```

***FAC_FLAG ='F' if input(mepr3,FM3_&fy.a.)=1;
PROC FORMAT;
invalue FM3_09a
'BIA'=1
OTHER=0
;

*****Facility care identified by - NMC Portsmouth(0124) and B**6;
***FAC_FLAG='F' if input(dmisid,fdmis&fy.b.)=1 and input(mepr1,fm1_&fy.a.)=1 and
input(substr(meprscd,4,1),fm4_&fy.a.)=2;

PROC FORMAT;
invalue FDMIS09b
'0124'=1
OTHER=0;

*****Facility care identified by CPT Code;
***FAC_FLAG='F' if for any of the 10 procedure positions, input(CPT_J,FCPT&fy.b.)=1
(J=4-13).

PROC FORMAT:
invalue FCPT09b
'36557'=1
'36558'=1
'36560'=1
'36561'=1
'36563'=1
'36565'=1
'36566'=1
'36568'=1
.
.
.
OTHER=0;
run;

```

Table A4.3c: Derive CPT Mod Key for the CPT Table Match

For CY03-CY05 (the only modifiers in these tables are 26 and TC on lab/rad codes):
If the CPT is not lab/rad (does not begin with 7 or 8), use base level code (CPT appended with 2 blanks, e.g., '99211 ') for match.

If CPT begins with 7 or 8 and either both 26 and TC or neither 26 nor TC are in any of the modifier positions, use the base level (CPT appended with 2 blanks, e.g., '75710 '). If 26 is in any of the modifier positions (and no TC), use CPT appended with 26, e.g., '7571026'. If TC is in any of the modifier positions (and no 26), use CPT appended with TC, e.g., '75710TC'.

For FY06 encounters that use the CY06 CPT table (encounter dates Jan 06-Sep 06 only):

Starting in CY06, all modifiers in the MDR Master CPT table will be included in the CAPER RVU and CPT formats; however, the additional modifiers beyond lab/rad are only used for encounters in FY07 and forward. Since there are CPT codes that do not have a blank modifier row in the MDR Master CPT table, they must be assigned a modifier that will allow an appropriate match to the CAPER formats for the 9-month period prior to the start of FY07. The MODMATCH field is used to identify which modifier is appropriate for the CPT code in order to create the key. The values for MODMATCH describe the available modifiers for matching to the CPT table:

- A=Only base level (blank) modifier is available
- B=Blank and modifiers 26 and TC are available
- C=NU, UE, and RR modifiers are available (but not blank)
- D=NU and UE modifiers are available (but not RR or blank)
- E=Only modifier RR is available
- F=Blank and modifier 53 are available

If MODMATCH ='B' and CPT is lab/rad (begins with 7 or 8) and either both 26 and TC or neither 26 nor TC are in any of the modifier positions, use the base level (CPT appended with 2 blanks, e.g., '75710 '). If 26 is in any of the modifier positions (and no TC), use CPT appended with 26, e.g., '7571026'. If TC is in any of the modifier positions (and no 26), use CPT appended with TC, e.g., '75710TC'.

Else if MODMATCH in ('A' 'F') or (MODMATCH='B' and CPT is not lab/rad) use base level code (CPT appended with 2 blanks, e.g., '99211 ') for the key.

Else if MODMATCH in ('C' 'D'), use CPT appended with NU, e.g., 'E0114NU' for the key.
Else if MODMATCH ='E', use CPT appended with RR, e.g., 'E0371RR'.

For FY07+:

Create a 7-character CPT||modifier key for the CPT Table match using the modifier matching code (MODMATCH) when the CPT Table has all available modifiers.

If MODMATCH='A' use base level code (CPT appended with 2 blanks, e.g., '99211 ') for the key

Else if MODMATCH='B'

- and either both 26 and TC or neither 26 nor TC are in any of the modifier positions, use the base level (CPT appended with 2 blanks, e.g., '75710 ').
- If 26 is in any of the modifier positions (and no TC), use CPT appended with 26, e.g., '7571026'.
- If TC is in any of the modifier positions (and no 26), use CPT appended with TC, e.g., '75710TC'.

Else if MODMATCH=C

- and NU, UE or RR is present in one of the modifier positions, use that modifier (e.g., 'E0114NU' or 'E0371RR') for the key.

Table A4.3c: Derive CPT Mod Key for the CPT Table Match

--If more than one of these modifiers (NU, UE, RR) is present, append a modifier for the key in that order of priority (if UE and RR are both present, use UE).
 --If none of these modifiers are present, append 'NU' for the key, e.g., 'E0114NU'.

Else if MODMATCH = 'D'

--and NU or UE is present in one of the modifier positions, use that modifier (e.g., 'E0114NU' or 'E0371UE') for the key.
 --If both of these modifiers (NU, UE) are present, append a modifier for the key in that order of priority (if NU and UE are both present, use NU).
 --If none of these modifiers are present, append 'NU' for the key, e.g., 'E0114NU'.

Else if MODMATCH = 'E' then use CPT appended with 'RR' (e.g., 'E0114RR')

Else if MODMATCH = 'F'

--and 53 is present in one of the modifier positions, append the CPT with '53' (e.g., '4537853'
 --if 53 is not present, append with 2 blanks (e.g., '45378 ')

Table A4.3d: Modifications to CPTs and RVUs

These modifications to RVU Values are applied as directed in Table A4.3:

MOD1. For CPT 66999, this RVU has a value of 0 for the period 1 Jan 07 - 30 Jun 07.

MOD2. The E&M codes on a record do not receive weight in the presence of a weighted procedure code unless one of the following is true:

- The E&M code is valued at least 20% of the time in the presence of specific CPT codes based on claims data. These CPT codes are identified in a format file (see Table A4.3d1). If any of the 4 procedure codes is on the list, the E&M codes are valued.
- All of the other procedure codes (CPT_4 – CPT_7) on the record are HCPCs or procedure codes that begin with "9".

MOD3. Residents and interns are not considered MDs in the multiple provider calculation. The provider specialty codes that are considered MDs are provided in Table A4.3d2.

MOD4. Generic provider specialty codes (provspec >= 910 or blank) do not receive weight.

Table A4.3d1: Format File Excerpt CPT Codes for which E&M Codes are Valued
/mdr/ref/sadr.cptlist.txt

```
PROC FORMAT;
VALUE $CPTIN
  '10080'='Y'
  '10081'='Y'
  '11010'='Y'
  '11011'='Y'
  '11012'='Y'
  '11740'='Y'
  '11760'='Y'
  '11981'='Y'
```

Table A4.3d1: Format File Excerpt CPT Codes for which E&M Codes are Valued
/mdr/ref/sadr.cptlist.txt

```
'12001'='Y'  

'12002'='Y'  

'12004'='Y'  

.  

.  

.  

'69000'='Y'  

'69200'='Y'  

OTHER ='N';  

Run;
```

Table A4.3d2: Format File Excerpt for Identifying Qualifying Providers,
mdr/ref/sadr.prov.txt

Residents and interns are not considered MDs in the multiple provider calculation.
The provider specialty codes that are considered MDs are provided in this format file.

*These provider specialty codes qualify for Organizational Work RVU credit;
PROC FORMAT;
INVALUE PROV
'000'= 1
'001'= 1
'002'= 1
'004'= 1
'008'= 1
'011'= 1
'012'= 1
'013'= 1
'014'= 1
'015'= 1
.
.
'814'= 1
'815'= 1
OTHER = 0;
Run;

Table A4.3e: Format File Excerpt Skill Type
/mdr/ref/caper.skilltype.txt

***CHCS-based Skill Type Map - CHCS provspec to Skill Type;

*-Residents/Interns =1R
*-.Generic = G
*-.Inactive = N
*-.Only Skill Types 1-5, G and 1R on the list;

```
proc format;  

value $SKILLTYPE  

'000'='1'  

'001'='1'  

'002'='N'  

'003'='1R'
```

**Table A4.3e: Format File Excerpt Skill Type
/mdr/ref/caper.skilltype.txt**

```
'004='1'  
'005='1R'  
'006='4'  
'007='4'  
'008='1'  
.  
.  
'900='4'  
'901='2'  
'902='4'  
'905='4'  
'910='G'  
.  
'999='G'  
other='';  
run;
```

**Table A4.3f: Format File Excerpt CAPER Skill Level
/mdr/ref/caper.hskilltypefy.txt**

** Provider HIPAA Taxonomy Code to CAPER Skill Level;
**format by FY (because codes can be deactivated);

*-Inactive = N
*-Only Skill Types 1-5 and N on the list;

```
proc format;  
value $SKILLTYPE12H  
'101Y00000X'='2'  
'101YA0400X'='4'  
'101YM0800X'='4'  
'101YP1600X'='5'  
.  
.  
other='';  
run;
```

APPENDIX 5: Analytic Processing and Field Additions to the CAPER-Enhanced (Updated)

Once the data are clean and ready for analytic processing, the processor applies raw workload, completes non-provider affected and provider affected workload arrays, and calculates aggregate RVUs and APC weights³². The steps, applied to CAPERs FY07 and forward, are as follows:

1. RVU Reapplication.

Raw RVUs (Work, Facility, and Non-Facility) and other CPT-related fields used to derive RVUs are re-applied based on CPTs and modifiers as they exist in the CAPER after cleaning. The calendar year of the encounter date determines the weight table to use. All records receive RVUs regardless of MEPRS code.

2. APC Weight Application.

For FY11+, after APC grouping (and prior to applying APC weights), MHS-specific APC codes and associated fields are updated by format (see Tables A5.2 and A5.2c). Raw APC weights are applied to B-MEPRS APCs on Facility records (FAC_FLAG=F) as they exist in the CAPER after cleaning.

3. Working Array

The working array (see Figure A5.1: Working Array Example) consists of all fields necessary to calculate RVU and APC workload associated with each of the 13 CPT codes on the CAPER. It contains the cleaned CPT code, modifiers, and UOS, raw RVUs and APC weights, and CPT related variables, e.g. APCPSI, from earlier steps. It also contains a set of impact factors calculated based on the CPT code's relationship to other CPT codes on the record. The application of these impact factors to the raw RVUs for any one CPT code is the basis for calculating the RVUs ultimately associated with that one CPT code, or when viewed for all procedures for the CAPER, with that record. This workload, unaffected by any information associated with the care providers, is referred to as non-provider affected workload.

Using the non-provider affected workload as a starting point, the processor then considers the provider(s) associated with each procedure, their CHCS-based Skill Type and role, and assigns workload by CPT by provider accordingly. The resulting provider affected components are used to calculate aggregates by provider, CPT and for the overall encounter.

Establish the working array to house all variables in Table A5.1. At this point some variables exist and some will be created as described in Table A5.2. All numeric arrays will be left missing when created and not set to zero³³. Final aggregate measures on non-inferred CAPERs, however, will be set to zero if missing (as noted in Table A5.2).

³² CAPERs not having at least one creditable provider (Skill Type is 1-4, 1R) are considered non-records and do not receive raw RVU or raw APC weights (see MOD3, Table A5.2b).

³³ Many of the workload fields will not be populated in some circumstances (e.g., inferred records). Since 0 (zero) implies a value was applied, all fields will be created as 'missing' to avoid any confusion.

Figure A5.1: Working Array Example							
Array Elements	SAS Names	DIM	Procedures				
CPT LEVEL			PROC1	PROC2	PROC3	PROC4	PROC5
CPT Code	CPT_1 - CPT_13	13	x		y	z	
Units of Service	CPTUOS_1 - CPTUOS_13	13	1		3	1	
Modifier 1	CPTMOD1_1 - CPTMOD1_13	13	25			50	
Modifier 2	CPTMOD2_1 - CPTMOD2_13	13					
Modifier 3	CPTMOD3_1 - CPTMOD3_13	13					
Modifier Impact	MODIMPACT1 - MODIMPACT13	13	1		1	1.5	
APC Code	APC1 - APC13	13	a		b	c	
PSI	APCPSI1 - APCPSI13	13	v		t	t	
Discountable?	DISCOUNT1 - DISCOUNT13	13	N		Y	Y	
APC - Highest of Discountable?	A_HIGH1 - A_HIGH13	13	N		Y	N	
APC - Discount factor	A_DISC1 - A_DISC13	13	1		0.667	0.5	
APC - Applied Factor	A_FACTOR1 - A_FACTOR13	13	1		2	0.75	
RVU - Highest of Discountable?	R_HIGH1 - R_HIGH13	13	N		Y	N	
RVU - Discount factor	R_DISC1 - R_DISC13	13	1		0.667	0.5	
RVU - Applied Factor	R_FACTOR1 - R_FACTOR13	13	1		2	0.75	
Raw APC Weight	RAPCWT1 - RAPCWT13	13	1.3		3	2	
Raw Work RVUs	RRVU1 - RRVU13	13	1.1		3.1	2.1	
Raw Facility RVUs	FPRVU1 - FPRVU13	13	1.5		2.5	4	
Raw Non-Facility RVUs	NPRVU1 - NPRVU13	13	1.5		2.5	3.5	
Raw Total RVUs (based on FAC_FLAG)	TRVU1 - TRVU13	13	2.6		5.6	6.1	

Note: Bold, italicized SAS names indicate fields already present at this point in processing.

Table A5.1: Elements of the Working Array

Field	Type	Dimension	SAS Name
RECORD LEVEL:			
Facility Flag	Char(1)	1	FAC_FLAG
APC, Aggregate Weight	N(8)	1	APCAGGWT
Interim Plus Enhanced Work RVU (Non-Provider Affected Work RVU Aggregate)	N(8)	1	NWRVU
Interim Plus Enhanced PE RVU (Non-Provider Affected PE RVU Aggregate)	N(8)	1	NPERVU
Interim Plus Enhanced Total RVU (Non-Provider Affected Total RVU Aggregate)	N(8)	1	NTRVU
Aggregate Work RVU (Provider-Affected Work RVU Aggregate)	N(8)	1	WRVUAGG
Aggregate PE RVU (Provider-Affected PE RVU Aggregate)	N(8)	1	PERVUAGG
Aggregate Total RVU (Provider-Affected Total RVU Aggregate)	N(8)	1	TRVUAGG
CPT LEVEL:			
CPT Code, E&M1-E&M3 and Proc1-Proc10	Char(5)	13	CPT_1 - CPT_13
Modifier 1, E&M1-E&M3 and Proc1-Proc10	Char(2)	13	CPTMOD1_1 - CPTMOD1_13

Field	Type	Dimension	SAS Name
Modifier 2, E&M1-E&M3 and Proc1-Proc10	Char(2)	13	CPTMOD2_1 – CPTMOD2_13
Modifier 3, E&M1-E&M3 and Proc1-Proc10	Char(2)	13	CPTMOD3_1 – CPTMOD3_13
Units of Service, E&M1-E&M3 and Proc1-Proc10	N(8)	13	CPTUOS_1 – CPTUOS_13
APC Code, E&M1-E&M3 and Proc1-Proc10	Char(5)	13	APC1 – APC13
PSI, E&M1-E&M3 and Proc1-Proc10	Char(2)	13	APCPSI1 – APCPSI13
Discountable?	Char(1)	13	DISCOUNT1 – DISCOUNT13
RVU, Raw Work, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	RRVU1 – RRVU13
RVU, Raw Fac Practice Expense, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	FPRVU1 – FPRVU13
RVU, Raw Non Fac Practice Expense, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	NPRVU1 – NPRVU13
RVU, Raw Total for each CPT (based on FAC_FLAG)	N(8)	13	TRVU1 – TRVU13
APC Weight, Raw, E&M1-E&M3 and Proc1-Proc10	N(8)	13	RAPCWT1 – RAPCWT13
Modifier Impact, E&M1-E&M3 and Proc1-Proc10	N(8)	13	MODIMPACT1 – MODIMPACT13
Highest of the Discountable? – RVU	Char(1)	13	R_HIGH1 – R_HIGH13
Discount Factor for each CPT – RVU	N(8)	13	R_DISC1 – R_DISC13
Applied Factor – RVU	N(8)	13	R_FACTOR1 – R_FACTOR13
Highest of the Discountable? - APC	Char(1)	13	A_HIGH1 – A_HIGH13
Discount Factor for each CPT - APC	N(8)	13	A_DISC1 – A_DISC13
Applied Factor – APC	N(8)	13	A_FACTOR1 – A_FACTOR13
APC Weight (Discounted), E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	APCWT1 – APCWT13
Non-Provider Affected Work RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	NWRVU1 – NWRVU13

Field	Type	Dimension	SAS Name
Non-Provider Affected PE RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	NPERVU1 – NPERVU13
Non-Provider Affected Total RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	NTRVU1 – NTRVU13
Provider-Affected Aggregate Work RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	PWRVU1 – PWRVU13
Provider-Affected Aggregate PE RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	PPERVU1 – PPERVU13
Provider-Affected Aggregate Total RVU, E&M1-E&M3 and Proc 1-Proc 10	N(8)	13	PTRVU1 – PTRVU13
Provider/Procedure Pointers, E&M1-E&M3 and Proc 1-Proc 10	Char(5)	13	CPTPROV_1 – CPTPROV_13
Number of Providers linked, E&M1-E&M3 and Proc 1-Proc 10	N(3)	13	CPTPROVSUM_1 – CPTPROVSUM_13
PROVIDER LEVEL:			
EDIPN, Appt Prov and Additional Provs 1-4	Char(10)	5	PROVEDIPN1 – PROVEDIPN5
NPI, Appt Prov and Additional Provs 1-4	Char(10)	5	PROVNPI1 – PROVNPI5
Skill Type (CHCS-based), Appt Prov and Additional Provs 1-4	Char(2)	5	SKILL1 – SKILL5
Provider Role, Appt Prov and Additional Provs 1-4	Char(1)	5	PROVROLE1 – PROVROLE5
Provider-Affected Agg Work RVU for each Provider	N(8)	5	P1WRVU – P5WRVU
Provider-Affected Agg PE RVU for each Provider	N(8)	5	P1PERVU – P5PERVU
Provider-Affected Agg Total RVU for each Provider	N(8)	5	P1TRVU – P5TRVU
PROVIDER/PROCEDURE LEVEL:			
Provider <i>K</i> associated with Procedure <i>J</i> ?	N(3)	5 x 13	CPTPROV1_1 – CPTPROV5_13
Credit Factor for Provider <i>K</i> on CPT <i>J</i>	N(8)	5 x 13	PROVFACT1_1 – PROVFACT5_13
Provider-Affected Work RVU for each Provider, E&M1-E&M3 and Proc 1-Proc 10	N(8)	5 x 13	P1WRVU1 – P5WRVU13
Provider-Affected PE RVU for each Provider, E&M1-E&M3 and Proc 1-Proc 10	N(8)	5 x 13	P1PERVU1 – P5PERVU13
Provider-Affected Total RVU for each Provider, E&M1-E&M3 and Proc 1-Proc 10	N(8)	5 x 13	P1TRVU1 – P5TRVU13

4. Policy Application to Calculate Non-Provider Affected Workload

For FY07 and forward, non-inferred CAPERs³⁴, apply MHS policies and calculate non-provider affected workload according to Table A5.2: Fields Added to Cleaned CAPER through Analytic Processing and incorporating the following:

- a. Modifier impact, including E&M RVU weight adjustments based on modifiers. Modifier impact is a percent that indicates the portion of workload weight that is retained based on the presence of a particular modifier. Modifier impact (MODIMPACTJ) is assigned based on a table of modifier to modifier percentages (see Table A5.2a).
- b. Discounting for multiple surgical procedures.
APC and RVU discounting factors are calculated based on the procedure's eligibility for discounting and the relationship of its weights to that of other discountable procedures on the CAPER. Only procedures with APCPSI=T are discountable. All but the highest weighted are discounted. If the highest weighted is reported with multiple units of service, only the first is given full credit; the rest are discounted. Measures are discounted as follows:
 - i. APCs – 100% for highest weighted APC, 50% for all other discountable procedures (A_DISCJ)
 - ii. RVUs – 100% for highest weighted Total (Work + PE) RVU, 50% for all other discountable procedures (R_DISCJ).
- c. The Applied Factors are calculated (A_FACTORJ and R_FACTORJ) as a product of the Units of Service, Modifier Impact and Discount Factor.
- d. Raw measures are multiplied by the Applied Factor to calculate APCs and non-provider affected RVUs as listed in Table A5.2 (APCWJT, NWRVUJ, NPERVUJ, NTRVUJ, APCAGGWT, NWRVU, NPERVU, NTRVU).

5. Policy Application to Calculate Provider Affected Workload

Apply MHS policies and calculate provider-affected workload for FY07 and forward. Measures will be derived according to Table A5.2: Fields Added to Cleaned CAPER through Analytic Processing. These measures reflect how the number and Skill Type of providers associated with individual procedures on a CAPER affect the workload measures.

For FY18+: The following describes whether a CPT procedure is considered to have single or multiple provider status and the circumstances under which the provider receives "credit".

- a. If there is only one provider (PROVHIPAA1 not blank, PROVHIPAA2- PROVHIPAA5 blank) listed on the CAPER, then all CPT are Single Provider. If PROVHIPAA1 is blank then check if there is only one provider (PROVSPEC1 not blank, PROVSPEC2- PROVSPEC5 blank) listed on the CAPER, then all CPT are Single Provider.
- b. If more than one provider is listed (PROVHIPAAK or PROVSPECK is not blank), then for each CPT, calculate CPTPROVSUM_J to indicate if Single (CPT is linked to only one provider) or Multiple Provider (CPT is linked to more than one provider)
- c. At the CPT level, if single provider (only one provider on CAPER or CPTPROVSUM_J=1):

³⁴ For inferred CAPERs (APPTINFR=Y), only aggregate workload fields will be assigned values as described in Appendix 6. All other workload for inferred records will not be populated.

- i. If substr(SKILLHK,1,1) in('1' '2'), assign 100% of non-provider affected credit to the provider (PROVFACTK_J=1.0). If PROVHIPAAK is blank then use the substr(SKILLK,1,1) in('1' '2'), assign 100% of non-provider affected credit to the provider (PROVFACTK_J=1.0).
- ii. If substr(SKILLHK,1,1) in('3' '4'), use the Nurse crediting field (NURSEJ) to determine whether the provider is eligible for work and PE RVUs. If PROVHIPAAK is blank then use substr(SKILLK,1,1) in('3' '4'), use the Nurse crediting field (NURSEJ) to determine whether the provider is eligible for work and PE RVUs. The values for NURSEJ are:

1. Y – Yes
2. Q – Yes, with Modifier QW
3. C – Yes, in Case Management (by MEPRS code: ELAN, ELA2, FAZZ, FCG2)
4. N – No

If substr(SKILLHK,1,1) in('3' '4') and:

- NURSEJ=Y or
- NURSEJ=Q and one of the 3 modifiers is QW or
- NURSEJ=C and MEPR4 in('ELAN' 'ELA2' 'FAZZ' 'FCG2')

then PROVFACTK_J=1.0

else if SKILLHK is blank then:

If substr(SKILLK,1,1) in('3' '4') and:

- NURSEJ=Y or
- NURSEJ=Q and one of the 3 modifiers is QW or
- NURSEJ=C and MEPR4 in('ELAN' 'ELA2' 'FAZZ' 'FCG2')

then PROVFACTK_J=1.0

Else PROVFACTK_J=0

- iii. If not CHCS-based Skill Type 1-4 then PROVFACTK_J=0

- d. If multiple provider on a CPT (CPTPROVSUM_J>1):

- i. Provider position on the CAPER determines the order of the providers (first, second, third) on a procedure, not the order listed in the linkages. For example, if only provider 2 and 3 are linked to a CPT, then provider 2 is the first provider on the CPT and provider 3 is the second.
- ii. The provider considered 'first' receives 100% of non-provider affected credit (PROVFACTK_J=1.0) under the same conditions as described for single provider in para c above. See paragraph 5e in this section for different rules for unlicensed residents who are first providers.
- iii. The provider considered 'second' receives 20% (PROVFACTK_J=0.2) of non-provider affected credit only if:
 1. 'First' and 'second' providers are both substr(SKILLHK,1,1) in('1' '2') and
 2. All of the following are true:
 - a. Second provider role is not 'Supervising' (PROVROLEK<>3) Second provider is not anesthesia-related (PROVHIPAAK ~in('1223D0004X' '207L00000X' '207LA0401X' '207LC0200X' '207LH0002X' '207LP2900X' '207LP3000X' '367500000X'))
 - b. Second provider is not a resident/intern (PROVHIPAAK ='390200000X').
- iv. Other than ii and iii above and para. e (below), no other credit is assigned to a provider.

- e. Use these special rules for applying RVUs for unlicensed residents:
 - i. The Unlicensed Resident is the Appointment Provider (Unlicensed Resident Flag (UNLICRES1) ='Y'); and
 - ii. One of the Additional Providers 1-4 is a skill type 1 or 2 if(substr(SKILLHK,1,1) in('1' '2') (K=2 to 5); and
 - iii. The Additional Provider identified in ii above has a provider role of '3 supervising' (PROVROLEK=3) for the K from ii.
 - iv. If all three of the above rules (i-iii) are met, PROVFACT1_J=1.0
 - v. If all three of the above rules (i-iii) are not met, the unlicensed resident provider will be credited as follows:
 - 1. If the unlicensed resident is the appointment provider, the provider is credited as a skill type 4, subject to the Nurse code (described in para 5.c.ii above).
 - 2. If the unlicensed resident is not the appointment provider, the provider is treated as any resident (not eligible for multiple provider credit).
- f. Non-provider affected measures are multiplied by the Provider Credit Factors (PROVFACTK_J) to generate the provider-affected measures for each CPT J and Provider K. Calculate aggregates. See Table A5.2.

For FY17 and backward: The following describes whether a CPT procedure is considered to have single or multiple provider status and the circumstances under which the provider receives "credit".

- a. If there is only one provider (PROVSPEC1 not blank, PROVSPEC2-PROVSPEC5 blank) listed on the CAPER, then all CPT are Single Provider. Go to step c.
- b. If more than one provider is listed (PROVSPECK is not blank), then for each CPT, calculate CPTPROVSUM_J to indicate if Single (CPT is linked to only one provider) or Multiple Provider (CPT is linked to more than one provider)
- c. At the CPT level, if single provider (only one provider on CAPER or CPTPROVSUM_J=1):
 - i. If substr(SKILLK,1,1) in('1' '2'), assign 100% of non-provider affected credit to the provider (PROVFACTK_J=1.0).
 - ii. If substr(SKILLK,1,1) in('3' '4'), use the Nurse crediting field (NURSEJ) to determine whether the provider is eligible for work and PE RVUs. The values for NURSEJ are:
 - 1. Y - Yes
 - 2. Q - Yes, with Modifier QW
 - 3. C - Yes, in Case Management (by MEPRS code: ELAN, ELA2, FAZ2, FCG2)
 - 4. N - No

If substr(SKILLK,1,1) in('3' '4') and:

- NURSEJ=Y or
- NURSEJ=Q and one of the 3 modifiers is QW or
- NURSEJ=C and MEPR4 in('ELAN' 'ELA2' 'FAZ2' 'FCG2')

then PROVFACTK_J=1.0

Else PROVFACTK_J=0

- iii. If not CHCS-based Skill Type 1-4 then PROVFACTK_J=0

- d. If multiple provider on a CPT (CPTPROVSUM_J>1):

- iv. Provider position on the CAPER determines the order of the providers (first, second, third) on a procedure, not the order listed in the linkages. For example, if only provider 2 and 3 are linked to a CPT, then provider 2 is the first provider on the CPT and provider 3 is the second.
- v. The provider considered 'first' receives 100% of non-provider affected credit (PROVFACTK_J=1.0) under the same conditions as described for single provider in para c above. See paragraph 5e in this section for different rules for unlicensed residents who are first providers.
- vi. The provider considered 'second' receives 20% (PROVFACTK_J=0.2) of non-provider affected credit only if:
 - 5. 'First' and 'second' providers are both substr(SKILLK,1,1) in('1' '2') and
 - 6. All of the following are true:
 - c. Second provider role is not 'Supervising' (PROVROLEK<>3)
 - d. Second provider is not anesthesia-related (PROVSPECK ~in('092' '093' '094' '095' '501' '612'))
 - e. Second provider is not a resident/intern (substr(SKILLK,2,1) <> 'R').

Note: If the 'first' provider is CHCS-based Skill Type 3 or 4 and 'second' provider is CHCS-based Skill Type 1 or 2 then the assumption is made that the 'second' provider is supervising and receives no credit.

- vii. Other than ii and iii above and para. e (below), no other credit is assigned to a provider.

e. Use these special rules for applying RVUs for unlicensed residents:

- i. The Unlicensed Resident is the Appointment Provider (Unlicensed Resident Flag (UNLICRES1) ='Y'); and
- ii. One of the Additional Providers 1-4 is a skill type 1, 1R or 2 (substr(SKILLK,1,1) in('1' '2')) (K=2 to 5); and
- iii. The Additional Provider identified in ii above has a provider role of '3 supervising' (PROVROLEK=3) for the K from ii.
- iv. If all three of the above rules (i-iii) are met, PROVFACT1_J=1.0
- v. If all three of the above rules (i-iii) are not met, the unlicensed resident provider will be credited as follows:
 1. If the unlicensed resident is the appointment provider, the provider is credited as a skill type 4, subject to the Nurse code (described in para 5.c.ii above).
 2. If the unlicensed resident is not the appointment provider, the provider is treated as any resident (not eligible for multiple provider credit).

f. Non-provider affected measures are multiplied by the Provider Credit Factors (PROVFACTK_J) to generate the provider-affected measures for each CPT J and Provider K. Calculate aggregates. See Table A5.2.

Table A5.2: Fields Added to Cleaned CAPER through Analytic Processing

Field	Type	SAS Name	Retain ?	Derivation
APC Code; E&M1-E&M3, Proc 1-Proc 10	Char(5)	APCJ	Y	For FY11+, B-MEPRS, FAC_FLAG=F: update APCJ with MHS-specific APCs. If put(cpt,\$MHSAPCcy.) ne 'X' then APCJ=put(cpt, \$MHSAPCcy.) See Table A5.2c.

Field	Type	SAS Name	Retain ?	Derivation
APC Procedure Status Indicator (PSI); E&M1- E&M3, Proc1-Proc 10	Char(2)	APCPSIJ	Y	For FY11+, update APCPSIJ with MHS-specific APCPSIs. If put(cpt,\$MHSPSI _{cy} .) ne 'X' then APCPSIJ=put(cpt, \$MHSPSI _{cy} .) See Table A5.2c.
Packaging Flag; E&M1-E&M3, Proc1-Proc 10, as assigned by the TRICARE APC Grouper.	Char(1)	APCPKGJ,	Y	For FY11+, B-MEPRS, FAC_FLAG=F: update APCPKGJ with MHS-specific APCPKGs. If put(cpt,\$MHSAPCPKG _{cy} .) ne 'X' then APCPKGJ=put(cpt, \$MHSAPCPKG _{cy} .) See Table A5.2c.
APC Procedure Edits, E&M1- E&M3, Proc1-Proc 10, as assigned by the TRICARE APC Grouper.	Char(40)	APCEDITJ	Y	For FY11+, B-MEPRS, FAC_FLAG=F: update APCEDITJ with MHS-specific APCEDITs. If put(cpt,\$MHSAPCEDIT _{cy} .) ne 'X' then APCEDITJ=put(cpt, \$MHSAPCEDIT _{cy} .) See Table A5.2c.
APC Weight, Raw; E&M1- E&M3 and Proc1-Proc10	N(9,4)	RAPCWTJ ³⁵	N	<p>For APPTINFR=N: J=1 to 13³⁶</p> <p>FY07-08: Look up of CPTJ in the CPT-to-APC CMS mapping. RAPCWTJ= input(substr(put(CPTJ,\$APC_{cyqC}.),8,9),9.4) where cy is the 2-digit calendar year and q is the 1-digit calendar quarter (eg., APC081C. for CY08, CQ1). See Table A1.6.</p> <p>FY09+: Look up of APCJ in the APC-to-APC (5-char code) TRICARE weight mapping in the /mdr/ref area. RAPCWTJ = input(APCJ,APC_{cyqW}.) where cy is the 2-digit calendar year of the encounter; q is the 1-digit calendar quarter (eg., APC091W. for CY09, CQ1). See Table A5.2d. For FY11+: Applied after APCJ are updated with MHS-specific APCs.</p> <p>Table A5.2b MOD3 applies FY07+.</p>
Nurse Crediting Flag, E&M1 – E&M3 and Proc1-Proc10	Char(1)	NURSEJ	N	For APPTINFR=N: J=1 to 13 ³⁶ Derived from match with the CPT Table (format \$nurse _{cyb}) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. where cy is the 2-digit calendar year. Populated for FY07+.

³⁵ Note SAS name change from previous version.

³⁶ Throughout this table, reference to procedures J=1 to 13 implies that J=1 to 3 represents the E&M positions and J=4 to 13 represents procedure positions.

Field	Type	SAS Name	Retain ?	Derivation
Unlicensed Resident Flag (CHCS-based); Appointment Provider	Char(1)	UNLICRES1	N	<p>Populated for FY18+. $=if(ProvHIPAA1)='390200000X' then UNLICRES1=Y. Else derive using the unlicensed resident flag format based on provider specialty code (=put(provspec1,\$unlicres.)).$</p> <p>Populated for FY07 – FY17. Derived using the unlicensed resident flag format based on provider specialty code. For Provider 1. $=put(provspec1,\$unlicres.)$ See Table A5.2e.</p>
Medicare Status Code, E&M1 – E&M3, Proc1-Proc10	Char(1)	MEDSTATJ	N	<p>For APPTINFR=N: $J=1$ to 13^{36}. Derived from match with the CPT Table (format \$medstatcyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c., where cy is the 2-digit calendar year. Populated for FY07+. [Placeholder for next version]</p>
Ambulatory Surgical Center Class (ASC) Codes, E&M1- E&M3 and Procedure 1- Procedure 10	Char(2)	ASCJ	Y	<p>For APPTINFR=N: ASC codes for CPT procedures $J=1$ to 13^{36} Derived from match with the CPT Table (format \$asccybyb) based on CY of encounter and base CPT appended with 2 blanks, where cy is the 2-digit calendar year</p>
Facility/NonFacility Flag	Char(1)	FAC_FLAG	Y	<p>If External Resource Sharing or VA DMISID then FAC_FLAG='R' Else If any of the following:<ul style="list-style-type: none"> • A MEPRS • B**5, B**7 • BIA • 0124 (NMC Portsmouth) and B**6 • At least one procedure CPT_J ($J=4-13$) on Facility List then FAC_FLAG='F' Else FAC_FLAG='N' See Table A4.3b.</p>
Evaluative Visit	N(3)	EVALVIS	Y	<p>For FY08+: If at least one CPT_J ($J=1-13$) has an Evaluative Visit Indicator of 'Y' ($=put(CPT_J,\$evalviscyb.) = 'Y'$), then EVALVIS=1. If no CPT_J have an Evaluative Visit Indicator of 'Y' (all = 'N'), then EVALVIS=0.</p>
RVU, Raw Work, E&M1-E&M3 and Procedure 1- Procedure 10	N(8)	RRVUJ	Y	<p>For APPTINFR=N: Raw MHS-updated Work RVU for CPT procedures $J=1$ to 13^{36}</p> <p>Derived from match with the CPT Weight Table (format wrkyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c. Table A5.2b MOD1, MOD2, MOD3, MOD4 and MOD5 apply.</p>

Field	Type	SAS Name	Retain ?	Derivation
RVU, Raw Facility Practice Expense, E&M1-E&M3 and Procedure 1- Procedure 10	N(8)	FPRVUJ	Y	<p>For APPTINFR=N: Raw MHS-updated Facility Practice Expense RVU for CPT procedures J=1 to 13.³⁶</p> <p>Derived from match with the CPT Weight Table (format facyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c.</p> <p>Table A5.2b MOD1, MOD2, MOD3, MOD4, MOD5 and MOD6 apply.</p>
RVU, Raw Non-Facility Practice Expense, E&M1-E&M3 and Procedure 1- Procedure 10	N(8)	NPRVUJ	Y	<p>For APPTINFR=N: Raw MHS-updated Non-Facility Practice Expense RVU for CPT procedures J=1 to 13.³⁶</p> <p>Derived from match with the CPT Weight Table (format nfacyyb) based on CY of encounter and CPT Modifier key derived as described in Table A4.3c.</p> <p>Table A5.2b MOD1, MOD2, MOD3, MOD4, MOD5 and MOD6 apply.</p>
RVU, Raw Total; E&M1-E&M3 and Procedure 1- Procedure 10 (based on Facility Flag)	N(8)	TRVUJ	Y	<p>For APPTINFR=N: If FAC_FLAG=F or R then TRVUJ = sum of RRVUJ and FPRVUJ Else TRVUJ = sum of RRVUJ and NPRVUJ.</p>
Modifier Impact for each CPT	N(8)	MODIMPACTJ	N	<p>For APPTINFR=N:</p> <p>For CPT_J, J=1 to 3 (E&M codes only): If:</p> <ul style="list-style-type: none"> • modifier 24, 25 or 57 is present in any of the 3 modifier positions on the E&M codes OR • procedure code work RVUs (RRVU4 to RRVU13) are all lower weighted than the E&M OR • any procedure (CPT_4-CPT_13) that is coded on the record with the E&M is an add-on to an E&M code (if put(CPT_J,\$emaddon.)='Y', for any J=4 to 13)³⁷ (CY13+only) <p>then MODIMPACTJ=1 Else MODIMPACTJ=0</p> <p>For CPT_J, J=4 to 13 (procedure codes only): If modifier 55 is present in any of the 3 modifier positions or CPT_J in ('99024'</p>

³⁷ E&M codes (CPT_1-CPT_3) will be weighted in the presence of E&M add-on procedure codes (the E&M add-on procedure codes being found in CPT_4-CPT_13).

Field	Type	SAS Name	Retain ?	Derivation
Modifier Impact for each CPT				'S0800' 'S0810' '66999') then MODIMPACTJ=1 ³⁸ Else: Match all three modifiers on the procedure codes with modifier impact table (Table A5.2a). MODIMPACTJ = the product of the 3 modifier impact results. =π input(CPTMODi_J,modimpact.), for i=1 to 3
Discountable?	Char(1)	DISCOUNTJ	N	For APPTINFR=N: if APCPSIJ = T and modifier 50 is not present ³⁹ then DISCOUNTJ = Y Else = N
APC - Highest of Discountable?	Char(1)	A_HIGHJ	N	For APPTINFR=N: If DISCOUNTJ=Y and RAPCWTJ has the highest value among all RAPCWTJ where DISCOUNTJ=Y then A_HIGHJ = Y, Else A_HIGHJ = N If there is more than one APC with the highest value, then only the first= Y.
APC – Discount Factor	N(8)	A_DISCJ	N	For APPTINFR=N: If DISCOUNTJ= N then A_DISCJ=1 Else if DISCOUNTJ=Y and A_HIGHJ = N then A_DISCJ = 0.5 Else if DISCOUNTJ=Y and A_HIGHJ = Y then A_DISCJ = 0.5*(CPTUOSJ+1)/CPTUOSJ
APC – Applied Factor	N(8)	A_FACTORJ	N	For APPTINFR=N: =CPTUOSJ * MODIMPACTJ * A_DISCJ
RVU - Highest of Discountable?	Char(1)	R_HIGHJ	N	For APPTINFR=N: If DISCOUNTJ=Y and FAC_FLAG = F or R and (RRVUJ+FPRVUJ) has the highest value among all (RRVUJ+FPRVUJ) where DISCOUNTJ=Y then R_HIGHJ = Y, Else If DISCOUNTJ=Y and FAC_FLAG=N and (RRVUJ+NPRVUJ) has the highest value among all (RRVUJ+NPRVUJ) where DISCOUNTJ=Y then R_HIGHJ = Y Else R_HIGHJ = N If there is more than one RRVU with the highest value, then only the first= Y.

³⁸ Table A5.2b, Mod2 describes how modifier 55 affects RVU application and Mod6 describes how bilateral RVUs are applied for Lasik/PRK. MODIMPACTJ is not applicable in those cases (set to 1) or for surgical follow-ups identified with CPT 99024.

³⁹ To avoid potentially discounting bilateral procedures already discounted.

Field	Type	SAS Name	Retain ?	Derivation
RVU – Discount Factor	N(8)	R_DISCJ	N	For APPTINFR=N: If DISCOUNTJ= N then R_DISCJ=1 Else if DISCOUNTJ=Y and R_HIGHJ = N then R_DISCJ = 0.5 Else if DISCOUNTJ=Y and R_HIGHJ = Y then R_DISCJ = 0.5*(CPTUOSJ+1)/CPTUOSJ
RVU – Applied Factor	N(8)	R_FACTORJ	N	For APPTINFR=N: =CPTUOSJ * MODIMPACTJ * R_DISCJ
APC Weight (Discounted) for each CPT	N(8)	APCW TJ	Y	For APPTINFR=N, MEPRS1='B', FAC_FLAG=F and non-missing, non-XXXXX APCJ: APCW TJ=RAPCW TJ * A_FACTORJ Else APCW TJ is left missing (.)
Non-Provider Affected Work RVU for each CPT	N(8)	NWRVUJ	Y	For APPTINFR=N: =RRVUJ * R_FACTORJ, J=1 to 13
Non-Provider Affected PE RVU for each CPT	N(8)	NPERVUJ	Y	For APPTINFR=N: =FPRVUJ * R_FACTORJ if FAC_FLAG in ('F' 'R') Else =NPRVUJ * R_FACTORJ
Non-Provider Affected Total RVU for each CPT	N(8)	NTRVUJ	Y	For APPTINFR=N: =sum of NWRVUJ and NPERVUJ
APC Aggregate Weight	N(8)	APCAGGWT	Y	If FAC_FLAG <> 'F' or MEPR1<> 'B' set =0 If FAC_FLAG='F' and MEPR1 = 'B': For APPTINFR=N: =Σ APCW TJ ⁴⁰ , J=1 to 13 For APPTINFR=Y, see Appendix 6.
IP Enhanced Work RVU (Non-Provider Affected Work RVU Aggregate)	N(8)	NWRVU	Y	For APPTINFR=N: =Σ NWRVUJ ⁴⁰ , J=1 to 13 If APPTINFR=Y, see Appendix 6.
IP Enhanced PE RVU (Non-Provider Affected PE RVU Aggregate)	N(8)	NPERVU	Y	For APPTINFR=N: =Σ NPERVUJ ⁴⁰ , J=1 to 13 If APPTINFR=Y, see Appendix 6.
IP Enhanced Total RVU (Non-Provider Affected Total RVU Aggregate)	N(8)	NTRVU	Y	=Sum of NWRVU and NPERVU Note: If APPTINFR=Y, then inferred NWRVU and NPERVU must be applied first.
Is Provider K associated with Procedure J?	N(1)	CPTPROVK_J	N	For APPTINFR=N: =1 if index(CPTPROV_J,'K') >0
Number of providers linked to each CPT	N(3)	CPTPROVSUM_J	N	For APPTINFR=N: =Σ CPTPROVK_J, K=1 to 5, J=1 to 13

⁴⁰ Final aggregate measures (APCAGGWT, NWRVU, NPERVU, NTRVU, PWRVUJ, PPERVUJ, PTRVUJ, PKWRVU, PKPERVU, PKTRVU, WRVUAGG, PERVUAGG, and TRVUAGG) on non-inferred CAPERs will be set to zero if missing.

Field	Type	SAS Name	Retain ?	Derivation
Provider Credit Factor for Provider K on CPT J	N(8)	PROVFACT1_1 – PROVFACT5_13	N	<p>FY18+:</p> <p>For APPTINFR=N:</p> <p>If CPTPROVK_J <> 1 then PROVFACTK_J=0 else if SKILLHK is blank then PROVFACTK_J=0 else find the 'first' provider (lowest provider position that is associated with CPTJ): if substr(SKILLHK,1,1) of 'first' provider is in('1' '2') then PROVFACTK_J=1 else if substr(SKILLHK,1,1) is in ('3' '4') then derive as described in Appendix 5, para 5.</p> <p>FY17 and backward:</p> <p>For APPTINFR=N:</p> <p>If CPTPROVK_J <> 1 then PROVFACTK_J=0 else if SKILLK is blank then PROVFACTK_J=0 else find the 'first' provider (lowest provider position that is associated with CPTJ): if substr(SKILLK,1,1) of 'first' provider is in('1' '2') then PROVFACTK_J=1 else if substr(SKILLK,1,1) is in ('3' '4') then derive as described in Appendix 5, para 5.</p>
Provider Affected Work RVU, for each Provider, for each CPT	N(8)	P1WRVU1 – P5WRVU13	Y	For APPTINFR=N: NWRVUJ * PROVFACTK_J, K=1 to 5, J=1 to 13
Provider Affected PE RVU, for each Provider, for each CPT	N(8)	P1PERVU1 – P5PERVU13	Y	For APPTINFR=N: NPERVUJ * PROVFACTK_J, K=1 to 5, J=1 to 13
Provider Affected Total RVU, for each Provider, for each CPT	N(8)	P1TRVU1 – P5TRVU13	Y	For APPTINFR=N: =Sum of PKWRVUJ and PKPERVUJ, K=1 to 5, J=1 to 13
Provider-Affected Aggregate Work RVU for each CPT	N(8)	PWRVU1 – PWRVU13	Y	For APPTINFR=N: =Σ PKWRVUJ, K=1 to 5, for each J CPT Code
Provider-Affected Aggregate PE RVU for each CPT	N(8)	PPERVU1 – PPERVU13	Y	For APPTINFR=N: =Σ PKPERVUJ, K=1 to 5, for each J CPT Code
Provider-Affected Aggregate Total RVU for each CPT	N(8)	PTRVU1 – PTRVU13	Y	For APPTINFR=N: =sum of PWRVU J and PPERVU J , for each J CPT Code
Provider-Affected Agg Work RVU for each Provider	N(8)	P1WRVU – P5WRVU	Y	For APPTINFR=N: =Σ PKWRVUJ, J=1 to 13, for each Provider K
Provider-Affected Agg PE RVU for each Provider	N(8)	P1PERVU – P5PERVU	Y	For APPTINFR=N: =Σ PKPERVUJ, J=1 to 13, for each Provider K

Field	Type	SAS Name	Retain ?	Derivation
Provider-Affected Agg Total RVU for each Provider	N(8)	P1TRVU – P5TRVU	Y	For APPTINFR=N: =sum of PKWRVU and PKPERVU, for each Provider K
Aggregate Work RVU (Provider-Affected Work RVU Aggregate)	N(8)	WRVUAGG	Y	For APPTINFR=N: =Σ PWRVU ^{J40} , J=1 to 13 If APPTINFR=Y, see Appendix 6.
Aggregate PE RVU (Provider-Affected PE RVU Aggregate)	N(8)	PERVUAGG	Y	For APPTINFR=N: =Σ PPERVU ^{J40} , J=1 to 13 If APPTINFR=Y, see Appendix 6.
Aggregate Total RVU (Provider-Affected Total RVU Aggregate)	N(8)	TRVUAGG	Y	=sum of WRVUAGG and PERVUAGG Note: If APPTINFR=Y, then inferred WRVUAGG and PERVUAGG must be applied first.
Composite Weight for TFL Earnings	N(8)	COMPWT	Y	=APCAGGWT + (36.54/67.41) * TRVUAGG Populated for FY12+
Composite Weight for PMPM	N(8)	COMPWTCY	Y	Populated for FY14+ =(APCAGGWT* (input(CY,apcconv.))) / ((input(CY,rvuconv.) + TRVUAGG)) Populated for FY07-FY13 =(APCAGGWT* (input(CY,rvuconv.))) / ((input(CY,apcconv.) + TRVUAGG))

Table A5.2a: Modifier Impacts

Total combined modifier impact is the product of the impacts of the 3 modifiers.
= π input(CPTMOD*i*_J,modimpact.), for *i*=1 to 3

```
PROC FORMAT;
  invalue modimpact
    '22' = 1.2
    '50' = 1.5
    '52' = 0.5
    '73' = 0.5
    OTHER = 1.0;
run;
```

Table A5.2b: Modifications to CPTs and RVUs

These modifications to RVU Values are applied as directed in Table A5.2:

MOD1. For CPT 66999, apply 0 RVUs for the period 1 Jan 07 - 30 Jun 07.

MOD2. If Modifier 55 is present, apply the RVUs for CPT Code 99024.

MOD3. Inactive or generic provider specialty codes (CHCS Skill Type=N, G, or X) and, CHCS-based Skill Type 5 providers do not receive weight. If all substr(SKILLK,1,1) (K=1 to 5) not in ('1' '2' '3' '4'), then set values for all aggregate RVUs and all RVUJ for non-missing, non-XXXXX CPTJ to 0; set values for aggregate APC weight to 0 and all APCWTJ to 0 for non-missing, non-XXXXX APC codes.

MOD4. If TELCON (APPTSTAT=7), apply 0 RVUs for all non-TELCON CPT codes; everything except :

- TELCON E&M Codes (on CPT_J, J=1-3):
 - 99441-99444 for CY2008 and forward
 - 99371-99373 for CY2007 and back
 - 99499 any year
- TELCON Procedure Codes (on CPT_J, J=4-13):
 - 98966-98969 for CY2008 and forward

MOD5. For CPT G9001-G9011, apply RVU table only if MEPRSCD in ('ELAN' 'ELA2' 'FAZ2' 'FCG2'), otherwise set RVU=0.

MOD6. For CY12+ only: Practice-expense RVUs will be computed as described below for bilateral Lasik and PRK (CPT 66999, S0800 and S0810) when not a surgical follow-up (modifier 55 is not present with the Lasik or PRK procedure) Bilateral is indicated by one of the following associated with the CPT:

- Modifier 50 is present in one of the modifier positions
- Modifiers RT and LT are both present
- Unit of Service=2

The work RVU is credited at 150% for bilateral Lasik and PRK.

For the Practice Expense RVU, a royalty fee, valued at 6 RVUs per eye, is a fixed portion of the procedure for which the bilateral impact (150%) does not apply. The royalty fee is deducted

Table A5.2b: Modifications to CPTs and RVUs

from the raw (unilateral) PE RVU, the bilateral impact is applied and then double the royalty fee is added back:

(Raw Practice Expense RVU – royalty fee) * bilateral impact factor + (2 * royalty fee).

For example, in CY12, the calculation for both facility and non-facility practice expense RVU would be:

$$\text{PE RVU} = (12.86 - 6) * 1.5 + (2 * 6) = 22.29$$

And the calculation for the work RVU would be:

$$\text{Work RVU} = (4.86 * 1.5) = 7.29$$

Table A5.2c: MHS-specific APC Values
/mdr/ref/caper.apcmhs.cycy.txt

```

*      The MHS-specific values will be implemented when approved;
*      After APC codes are applied by the APC Grouper, update the following based on CPT
codes:;;
*;

PROC FORMAT;
  VALUE $MHSAPC10a
    OTHER='X'
;

PROC FORMAT;
  VALUE $MHSPSI10a
    OTHER='X'
;

PROC FORMAT;
  VALUE $MHSAPCPKG10a
    OTHER='X'
;

PROC FORMAT;
  VALUE $MHSAPCEDIT10a
    OTHER='X'
;

```

Table A5.2d: Format File Excerpt for Assigning TRICARE APC Weight to APC Grouper Assigned APC Codes, mdr/ref/caper/apcwt/caper.apc.cycy.cqcq.txt where ##=08+ and q # = 1 to 4.

```

PROC FORMAT;
invalue APC091W
  '00001' = 0.5102
  '00002' = 1.4324
  '00003' = 3.1526
  '00004' = 4.4727
  '00005' = 7.3879
  '00006' = 1.4128
  '00007' = 12.5953
  '00008' = 19.3874
  'T9999' = 0.0000
  ' ' = .

```

Table A5.2d: Format File Excerpt for Assigning TRICARE APC Weight to APC Grouper Assigned APC Codes, mdr/ref/caper/apcwt/caper.apc.cycy.cqcq.txt where ##=08+ and q # = 1 to 4.

```
OTHER = 0;
run;
```

Table A5.2e: Format File for identifying Unlicensed Residents using the CHCS Provider Specialty Code, /mdr/ref/caper.skilltype.txt

```
PROC FORMAT;
value $UNLICRES
'006' = 'Y'
'007' = 'Y'
'010' = 'Y'
'039' = 'Y'
'062' = 'Y'
'077' = 'Y'
'082' = 'Y'
'095' = 'Y'
'112' = 'Y'
'113' = 'Y'
'117' = 'Y'
'122' = 'Y'
'132' = 'Y'
'143' = 'Y'
'155' = 'Y'
'220' = 'Y'
'303' = 'Y'
'408' = 'Y'
'830' = 'Y'
'831' = 'Y'
'832' = 'Y'
'833' = 'Y'
'834' = 'Y'
'835' = 'Y'
'836' = 'Y'
other = 'N';
run;
```

6. Cost Application:

Through FY07, costs are APG-based; FY08 forward, costs are APC- and RVU-based. For FY08+, temporary workload fields (Table A5.3) are created and used to calculate costs. Cost fields for all years are described in Table A5.4. Costs on inferred records are applied as described in Appendix 6.

Costs are generally calculated for application only to B-MEPRS at:

- DHP sites (TXSVC = A, N, F, P) or
- Resource Sharing sites (FAC_FLAG='R')

Through FY07: Merge to the cost masters by cost parent (PARCOST), APG, and fiscal year to append the full cost less clinician salary, variable cost less clinician salary, and components of full/variable cost (other labor, laboratory, radiology, other ancillary, other, and pharmacy). Merge to the cost master matching the cost parent and fiscal year to append the full and variable clinician salary per Organizational Work RVU per SADR (OWRVU_S).

For FY08+: Once the workload fields are calculated, the full and variable cost elements are added. Cost tables for application to a base year consist of workload-based elements and encounter-based elements. Cost tables for a non-base year (generally the two FY following the most recent base year) are applied based on workload. Base years are identified according to Table A5.4a.

- a. Encounter-based (on non-inferred, base year records only). These costs are applied to records through a merge by FY, APPTIDNO and patient EDIPN. Encounter-based cost elements include Radiology (FCRAD, VCRAD).
- b. Workload-based. The following cost elements are derived using workload components (temporary cost fields described in Table A5.3) multiplied by the applicable unit cost factor:
 - i. Clinician Salary (CHCS-based Skill Type 1) (FCCLNSAL, VCCLNSAL)
 - ii. Non-Clinician Salary (CHCS-based Skill Type 2) (FPROFSAL, VCPROFSAL)
 - iii. Other (FCOTHER, VCOTHER)
 - iv. Lab (FCLAB, VCLAB)
 - v. Other Ancillary (FCOTHANC, VCOTHANC)
 - vi. Pharmacy (FCRX, VCRX)
 - vii. Support (FCSUP, VCSUP)

Table A5.3: Cost Temporary Fields

Field	Type	SAS Name	Derivation
Skill Type 1 Work RVUs	N(8)	SK1RVU	For FY17 and backward, APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLK,1,1)='1' For FY18+ and SkillHK is not missing APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLHK,1,1)='1'
Skill Type 2 Work RVUs	N(8)	SK2RVU	For FY17 and backward, APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLK,1,1)='2' For FY18+ and SkillHK is not missing APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLHK,1,1)='2'
Skill Type 3/4 Work RVUs plus Skill Type 1-4 PE RVU	N(8)	SKPERVU	For FY17 and backward, APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLK,1,1) in ('3' '4') + PERVUAGG For FY18+ and SkillHK is not missing, APPTINFR=N: $\sum PKWRVU$ for all ProvK where substr(SKILLHK,1,1) in ('3' '4') + PERVUAGG

Table A5.4: Cost Fields

Field	Type	SAS Name	Derivation
Full Cost	N(8)	FCOST	<p>For APPTINFR=N: Through FY07: Sum of FCCLNSAL, FCOTHLBR, FCLAB, FCRAD, FCOTHANC, FCOTHER, and FCRX. Note: the individual components are already discounted prior to summing.</p> <p>For FY08+: Sum of FCCLNSAL, FCPROFSAL, FCLAB, FCRAD, FCOTHANC, FCOTHER, FCSUP and FCRX.</p> <p>If APPTINFR=Y, see Appendix 6.</p>
Full Cost, E&M APG	N(8)	FCOST1	<p>For APPTINFR=N: Sum of the component (FCOTHLBR, FCLAB, FCRAD, FCOTHANC, FCOTHER, and FCRX) pieces derived from E&M1 APG and most current cost masters for that FY (not discounted). Does not include clinician salary. If APPTINFR=Y, leave missing. Populated through FY07 only.</p>
Full Cost, Medical APG	N(8)	FCOST2	<p>For APPTINFR=N: Sum of all the component (FCOTHLBR, FCLAB, FCRAD, FCOTHANC, FCOTHER, and FCRX) pieces derived from the Medical APG and most current cost masters for that FY (not discounted). Does not include clinician salary. If APPTINFR=Y, leave missing. Populated through FY07 only.</p>
Full Cost, Procedure 1 APG – Full Cost, Procedure 4 APG	N(8)	FCOST3 – FCOST6	<p>For APPTINFR=N: Sum of all the component (FCOTHLBR, FCLAB, FCRAD, FCOTHANC, FCOTHER, and FCRX) pieces derived from each of the 1st to the 4th Procedural APGs and most current cost masters for that FY (not discounted). Does not include clinician salary. If APPTINFR=Y, leave missing. Populated through FY07 only.</p>
Full Cost, Clinician Salary	N(8)	FCCLNSAL	<p>For APPTINFR=N: Through FY07: Based \$/Organizational Work RVU, per SADR (OWRVU_S) by Cost Parent DMISID.</p> <p>For FY08+: =FCCLNSAL cost factor * SK1RVU. Match to cost tables on FY, PARCOST, and MEPR2.</p> <p>If APPTINFR=Y, leave missing.</p>

Field	Type	SAS Name	Derivation
Full Cost, Professional Salary	N(8)	FCPROFSAL	For APPTINFR=N: =FCPROFSAL cost factor * SK2RVU. Match to cost tables on FY, PARCOST and MEPR2. If APPTINFR=Y, leave missing. Populated FY08+.
Full Cost, Other	N(8)	FCOTHER	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weighted APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(FCOTHER RVU cost factor*SKPERVU) +(FCOTHER APC cost factor* APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Full Cost, Other Labor	N(8)	FCOTHLBR	For APPTINFR=N: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. Populated through FY07.
Full Cost, Lab	N(8)	FCLAB	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(FCLAB RVU cost factor * SKPERVU) +(FCLAB APC cost factor*APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Full Cost, Rad	N(8)	FCRAD	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and

Field	Type	SAS Name	Derivation
Full Cost, Rad	N(8)	FCRAD	<p>half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped.</p> <p>For FY08+: If FY is a base year (see Table A5.4a): =FCRAD from match to Rad cost table on FY, EDIPN and APPTIDNO. If no match is found, set=0. Else if not a base year: =(FCRAD RVU cost factor * SKPERVU) +(FCRAD APC cost factor * APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3.</p> <p>If APPTINFR=Y, leave missing.</p>
Full Cost, Other Ancillary	N(8)	FCOTHANC	<p>For APPTINFR=N:</p> <p>Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped.</p> <p>For FY08+: =(FCOTHANC RVU cost factor* SKPERVU) + (FCOTHANC APC cost factor * APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3.</p> <p>If APPTINFR=Y, leave missing.</p>
Full Cost, Pharmacy	N(8)	FCRX	<p>For APPTINFR=N:</p> <p>Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped.</p> <p>For FY08+: =(FCRX RVU cost factor * SKPERVU) + (FCRX APC cost factor * APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3.</p> <p>If APPTINFR=Y, leave missing.</p>
Full Cost, Support	N(8)	FCSUP	<p>For APPTINFR=N:</p> <p>=(FCSUP RVU cost factor * SKPERVU) + (FCSUP APC cost factor * APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3.</p> <p>If APPTINFR=Y, leave missing.</p> <p>Populated FY08+.</p>

Field	Type	SAS Name	Derivation
Variable Cost	N(8)	COST	<p>For APPTINFR=N:</p> <p>Through FY07: Sum of VCCLNSAL, VCOTHLBR, VCLAB, VCRAD, VCOTHANC, VCOTHER, and VCRX. Note: the individual components are already discounted prior to summing.</p> <p>For FY08+: Sum of VCCLNSAL, VCPROFSAL, VCLAB, VCRAD, VCOTHANC, VCOTHER, VCSUP and VCRX</p> <p>If APPTINFR=Y, see Appendix 6.</p>
Variable Cost, E&M APG	N(8)	COST1	<p>For APPTINFR=N:</p> <p>Sum of the component (VCOTHLBR, VCLAB, VCRAD, VCOTHANC, VCOTHER, and VCRX) pieces derived from E&M1 APG and most current cost masters for that FY (not discounted).</p> <p>Does not include clinician salary.</p> <p>If APPTINFR=Y, leave missing.</p> <p>Populated through FY07 only.</p>
Variable Cost, Medical APG	N(8)	COST2	<p>For APPTINFR=N:</p> <p>Sum of all the component (VCOTHLBR, VCLAB, VCRAD, VCOTHANC, VCOTHER, and VCRX) pieces derived from Medical APG and most current cost masters for that FY (not discounted).</p> <p>Does not include clinician salary.</p> <p>If APPTINFR=Y, leave missing.</p> <p>Populated through FY07 only.</p>
Variable Cost, Procedure 1 APG – Procedure 4 APG	N(8)	COST3-COST6	<p>For APPTINFR=N:</p> <p>Sum of all the component (VCOTHLBR, VCLAB, VCRAD, VCOTHANC, VCOTHER, and VCRX) pieces derived from each of the 1st to the 4th Procedural APGs and most current cost masters for that FY (not discounted).</p> <p>Does not include clinician salary.</p> <p>If APPTINFR=Y, leave missing.</p> <p>Populated through FY07 only.</p>
Variable Cost, Clinician Salary	N(8)	VCCLNSAL	<p>APPTINFR=N:</p> <p>Through FY07: Based \$/Organizational Work RVU, per SADR (OWRVU_S) by Cost Parent DMISID.</p> <p>For FY08+: =VCCLNSAL cost factor * SK1RVU. Match to cost tables on FY, PARCOST, and MEPR2.</p> <p>If APPTINFR=Y, leave missing.</p>

Field	Type	SAS Name	Derivation
Variable Cost, Professional Salary	N(8)	VCPROFSAL	For APPTINFR=N: =VCPROFSAL cost factor * SK2RVU Match to cost tables on FY, PARCOST and MEPR2. If APPTINFR=Y, leave missing. Populated FY08+.
Variable Cost, Other	N(8)	VCOTHER	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(VCOTHER RVU cost factor*SKPERVU) +(VCOTHER APC cost factor* APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Variable Cost, Other Labor	N(8)	VCOTHLBR	For APPTINFR=N: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. Populated through FY07.
Variable Cost, Lab	N(8)	VCLAB	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(VCLAB RVU cost factor * SKPERVU) +(VCLAB APC cost factor * APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Variable Cost, Rad	N(8)	VCRAD	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+:

Field	Type	SAS Name	Derivation
Variable Cost, Rad	N(8)	VCRAD	If FY is a base year (see Table A5.4a): = VCRAD from match to Rad cost table on FY, EDIPN and APPTIDNO. If no match is found, set=0. Else if not a base year: =(VCRAD RVU cost factor * SKPERVU) +(VCRAD APC cost factor * APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Variable Cost, Other Ancillary	N(8)	VCOTHANC	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(VCOTHANC RVU cost factor * SKPERVU) + (VCOTHANC APC cost factor * APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Variable Cost, Pharmacy	N(8)	VCRX	For APPTINFR=N: Through FY07: Based on \$ by Cost Parent DMISID and APG; it is the sum of the cost for the highest weight APG, and half of the cost of all other APGs after the lower weighted of E&M or Medical APG is dropped. For FY08+: =(VCRX RVU cost factor * SKPERVU) + (VCRX APC cost factor * APCAGGWT). Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing.
Variable Cost, Support	N(8)	VCSUP	For APPTINFR=N: =(VCSUP RVU cost factor * SKPERVU) +(VCSUP APC cost factor * APCAGGWT) Match to cost tables on FY, PARCOST and MEPR3. If APPTINFR=Y, leave missing. Populated FY08+.

Table A5.4a: Format File for Identifying Cost Base Year, mdr/ref/caper.costbase.txt

*This file is updated and delivered when the annually updated cost tables are put in place;
*as of xx/xx/2013, cost base year is 2012;
*as of xx/xx/2012, cost base year is 2011;
*as of xx/xx/2011, cost base year is 2010;
*=put(fy,\$costbase.)

```
PROC FORMAT;  
VALUE $costbase  
  '2008'='Y'  
  '2009'='Y'  
  '2010'='Y'  
  '2011'='Y'  
  '2012'='Y'  
  OTHER = 'N';  
Run;
```

Table A5.5: Format File for Interprofessional Consult, mdr/ref/ IntprofCon.txt

/*Format file to give credit for Interprofessional Telephone/Internet Consultation*/
/*If CPT_1-CPT_3 in (99446, 99447, 99448, 99449) and HIPAA Taxononmy is in the following format file
*/
/*then RVU credit is given else zero RVUs*/

```
PROC FORMAT;  
invalue EM_CPT  
"99446"=1  
"99447"=1  
"99448"=1  
"99449"=1  
OTHER=0;  
  
RUN;  
  
/*List of 179 HIPAA Taxonomy Codes*/  
  
PROC FORMAT;  
invalue InCo18a  
"1223D0001X"=1  
"1223D0004X"=1  
"1223E0200X"=1  
"1223P0106X"=1  
"1223P0221X"=1  
  
.  
.  
.  
"208VP0014X"=1  
OTHER=0;  
RUN;
```

APPENDIX 6: Completion Table for Appointment-Inferred CAPERs

The Completion Tables for Appointment-Inferred CAPERs are SAS format files saved as MDR reference tables. They are used to populate aggregate cost (B MEPRS only) and workload fields in the appointment inferred CAPER (which are B, FBI and FBN MEPRS only), listed below following the first five fields, which act as the key to the record.

There is one basic method by which the values in the appointment completion tables are derived, plus two extrapolation methods.

- Basic Derivation. Take all B, FBI and FBN CAPERs for each fiscal year, and sort them into groups using either the three key classifiers below (DMISID, MEPR3, VISCLASS) or four key classifiers (DMISID, MEPR3, VISCLASS, FAC_FLAG). Average the raw measures of the CAPER variables of the same name in those groups to get the DMIS ID value for that variable (<formatname>a.).
- The first extrapolation method to create the “wild card” values is to ignore the stratifier of MEPR3 to get averages that depend on visit class but not work center (<formatname>b.).

To create values for a new fiscal year before sufficient current CAPERs are available, the monetary measures of the previous fiscal year are inflated at the service-specific rate of inflation. Physical measures (workload) are not inflated and use the same estimators as the previous fiscal year until better data are available.

In building and applying these formats, “wild card” values are available for each FY and MTF DMIS ID to be used whenever the MEPRS code of the appointment fails to find a matching row of the completion table.

To apply the formats, matches are attempted in this order until a match is made:

- With full key: *SASName*=input(*fullkey,formatnamea.*)
- Drop MEPR3 from key: *SASName*=input(*key,formatnameb.*)

Table A6.1 Completion Factor Derivations

Field	Type	SAS Name	Derivation	Format Names
Fiscal year of visit	Char(4)	FY	FY	
Treatment DMIS ID	Char(4)	DMISID	DMISID	
MEPRS Code	Char(3)	MEPR3	MEPR3	
Visit Class	Char(3)	VISCLASS	TEL where APPTSTAT=7 APV where APV='Y' OTH for all other encounters.	
Facility Flag	Char(1)	FAC_FLAG	FAC_FLAG Note: Used in key only as noted below.	
APC Aggregate Weight	N(8)	APCAGGWT	FAC_FLAG=F only	APCAGGWTa. / b.
Total APG Weight, per SADR	N(8)	APGWT_S	Through FY11 only	APGWT_Sa. /b.
Full Cost	N(8)	FCOST	B MEPRS only	FCOSTa. /b.
Variable Cost	N(8)	COST	B MEPRS only	COSTa. / b.

Field	Type	SAS Name	Derivation	Format Names
RVU, Enhanced Work	N(8)	RVU_EW		RVU_EWa. / b.
RVU, Enhanced Work per SADR	N(8)	RVU_EW_S	Through FY12 only	RVU_EW_Sa. / b.
RVU, Enhanced Practice Expense	N(8)	RVU_EPE	use FAC_FLAG in key	RVU_EPEa. / b.
RVU, Enhanced Practice Expense per SADR	N(8)	RVU_EPE_S	use FAC_FLAG in key Through FY12 only	RVU_EPE_Sa. / b.
RVU, Organizational Work, Per SADR	N(8)	OWRVU_S	Through FY10 only	OWRVU_Sa. / b.
Non-Provider Affected Work RVU	N(8)	NWRVU		NWRVUa. / b.
Non-Provider Affected PE RVU	N(8)	NPERVU		NPERVUa. / b.
Aggregate Work RVU (Provider-Affected Work RVU Aggregate)	N(8)	WRVUAGG		WRVUAGGa. / b.
Aggregate PE RVU (Provider-Affected PE RVU Aggregate)	N(8)	PERVUAGG		PERVUAGGa. / b.

APPENDIX 7: Reference Tables

Reference Table Description	Spec Reference	MDR Location	Filename	Update Schedule
APC; CPT to APC/PSI/Weight Format	APC Reference Tables for the MDR, Table A1.1	/mdr/ref/	caper.apc.cycy.cqcq.txt where cy=06-08 only	N/A
APC; APC to APC Weight Format (TRICARE – 5 char APCs)	APC Reference Tables for the MDR, Table A5.2	/mdr/ref/	caper.apc.cycy.cqcq.txt where cycq=0804+ only	Quarterly
MHS-specific APC Codes	Appendix 5, Table A5.2c	/mdr/ref/	caper.apcmhs.cycy.txt	Annually, CY
CY09 and CY10 Deleted Codes	Appendix 1, Para 3b., Table A1.2c and A1.2d	/mdr/ref/	caper.delmap.cy09.txt caper.delmap.cy10.txt	N/A
CPT and RVU Tables	Appendix 3, Tables A3.2,A4.3, A5.2 CPT Tables for the MDR	/mdr/ref/caper.rvu.cycy /mdr/ref/caper.rvu.cycy	rvu7fmt.sas7bdat cpt7fmt.sas7bdat	Annually, CY
List of CPT affecting E&M weight	Appendix 3, Table A4.3d1	/mdr/ref/	sadr.cptlist.txt	N/A
APG to APG wt	Appendix 3, Table A4.3	/mdr/ref/	sadr.apgwgts.fyfy.fmt	As Needed
Prov Spec code Format	Appendix 3, Table A4.3d2	/mdr/ref/	sadr.prov.txt	As Needed
Revenue Code Tables	Appendix 1, Table A1.2e	/mdr/ref/	caper.revenue.cycy.txt	Annually, CY08+ to support FY09+
Unit Cost tables	Appendix 5, Table A5.4	/mdr/ref/caper.costs.fyfy	costfmt.sas7bdat	Annually, FY
Radiology Base Year Cost Table	Appendix 5, Table A5.4	/mdr/ref/caper.radcosts.fyfy	radcostbase.sas7bdat	Annually, FY
Cost Basis Years	Table A5.4a	/mdr/ref/	caper.costbase.txt	Annual, FY, with Cost Tables
Appointment Completion Tables	Appendix 6, Table 6.1	/mdr/ref/caper.apptctab.fy fy	ctfmt_a_fy.sas7bdat ctfmt_b_fy.sas7bdat	Annually, FY

Reference Table Description	Spec Reference	MDR Location	Filename	Update Schedule
Facility/Non Fac Flag Format	Tables A4.3,A4.3b	/mdr/ref/	caper.facflag.IP.fyfy.txt	Annually, FY
MDC	Appendix 2, Table A2	/mdr/ref/	mdc.fmt ⁴¹	Annually, FY
Product Line Format	Table A2.2	/mdr/ref/	caper.prodlinefy.txt	Annually, FY
Skill Type (CHCS-based)	Appendix 3, Table A3.3.	/mdr/ref/	caper.skilltype.txt	As Needed
Unlicensed Resident Flag Format	Appendix 5, Table A5.2e	/mdr/ref/	caper.skilltype.txt	As Needed
CAPER Skill Level	Appendix 3, Table A4.3.	/mdr/ref/	caper.hskilltypefy.txt	Annually, FY
Test MEPR3 Codes	Para V.A.b.	/mdr/ref/	caper.minvld.fmt	As Needed
Modifier Impact	Table A5.2a	/mdr/ref/	caper.modimpact.txt	As Needed
RVU and APC Conversion Factors	Table A5.2	/mdr/ref/	caper.conv.txt	Annually, CY
E&M Add-on Procedure Codes	Table A5.2	/mdr/ref	caper.emaddon.txt	As needed, CY
Interprofessional Consult Format	Table A5.5	/mdr/ref	caper.IntprofCon.txt	As needed, CY

⁴¹ Source: ICD-9 and ICD-10 to MDC table from Thomson Reuters, via TMA Aurora

APPENDIX 8: SCAPERs⁴²

A one-time addition of SADR-based records to fill gaps in CAPERs may be required. Some CAPER records are missing in FY04 and forward. SADRs will be used to fill in the gaps for these missing CAPERs for current and previous years.

The SADR and CAPER tables are merged by DMIS ID and Appointment Number ID to determine which CAPERs are missing. For any records found to be missing, the SADR to raw CAPER field mapping (Table TBD.1) will be used as described.

APPENDIX 9: Revision History

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.01.00	03/11/2009			Original.
1.01.01	07/31/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 1.3 • Appendix 1.4 • Appendix 1, Table A1.2 • Appendix 1, Table A1.3 	<ul style="list-style-type: none"> • Conversion from standard APC input formats to custom format • Conversion from standard APC output read formats to custom format • Modified APC input format • Modified APC output format
1.01.01	07/31/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 1.5. • Appendix 2.7.g 	<ul style="list-style-type: none"> • Revise application of APGs to telephone consults. • Derive Appointment Status Type with Appointment Data Walk-In
1.01.01	07/31/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 2, Table A2. 	<ul style="list-style-type: none"> • Change Enrollment DMIS ID Region from Char(4) to Char(2) • Clarify descriptive language for variables CLINSTAT and CLINZIP • Correct derivation of Appointment Status Type. • Rename APPTSTAT to APPTSTAT1. • Add additional derived Appointment Status Type that identifies a walk-in appointment by the WALKIN flag in appointment data • Add gender logic to application of MDC. • Change field name for variable PRIME
1.01.01	07/31/2009	S. Rogers	<ul style="list-style-type: none"> • Throughout 	<ul style="list-style-type: none"> • Correct references to "Appendix 5. Completion Table for Appointment-Inferred CAPERs"
1.01.02	08/05/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 1.1 • Appendix 1, Table A1.1 • Appendix 2, Table A2. 	<ul style="list-style-type: none"> • CPT-APC format applied by CY • APC variables from CHAR(4) to CHAR(5) • Correct name of Procedure Status Indicator • Drop PRIME • Add ACV Group.
1.01.03	09/15/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 2, Table A2. 	<ul style="list-style-type: none"> • Add Sponsor Rank/ Paygrade Group. (RANKPAY) • Correct derivation of PATCAT to rely on PATCAT_R rather than previously incorrectly referenced PATCAT1.
1.01.04	10/22/2009	S. Rogers	<ul style="list-style-type: none"> • Appendix 1.5 • Appendix 2, Table A2. 	<ul style="list-style-type: none"> • Correct references to values of APPTSTAT. • APPTSTAT1 and APPTSTAT: Correct references to specific variable values. • Delete variable SPONSVC. • Clarify derivation of RSPONSVC.

⁴² Placeholder, to be removed after processed.

Version	Date	Originator	Para/Tbl/FIG	Description of Change
1.01.05	12/17/09	S. Rogers	• Appendix 2.7.a	<ul style="list-style-type: none"> Change references to values of INFRSADR in the DMISID table from (1=keep, 0=omit) to (Y=keep, N=omit).
1.01.06	01/21/10	S. Rogers	• II	<ul style="list-style-type: none"> Administrative change to reflect weekly (vs previous monthly) availability of appointment file.
1.01.07	02/25/10	S. Rogers	• Appendix 1, Table A1.2	<ul style="list-style-type: none"> Change the APC grouper input file as follows: <ul style="list-style-type: none"> Change the following fields to 20090401 when ENCDATE is before that date: <ul style="list-style-type: none"> From Date To Date Procedure Date Rearrange the order of Procedure Code and Modifier fields based on 3M changes to the grouper (V2010.0.1).
2.01.00	06/25/10	S. Rogers	• Throughout	<ul style="list-style-type: none"> Updates for CAPER Enhanced Interim Some changes to Administrative section include update to APC grouper processing (conversion to single set of APCs, additional fields added during existing merges (fields highlighted), field length changes, and change to derivation of Underwritten Region. Added fields formerly derived in M2 processing. Added all fields required to generate SADR replacement file in CAPER Enhanced Interim Added the analytic processing Appendix to add all raw and some derived and aggregate measures. Updated the completion table Appendix to include all new and changed fields Added a final field layout table Added an Appendix with list of reference tables used in CAPER processing Note: All significant changes and additions through Appendix 2 are highlighted. Only the header line of the newly added sections (Appendix 3+) are highlighted.
2.01.01	07/27/10	S. Rogers	<ul style="list-style-type: none"> Appendix 2, Para 4 Table A2 Table A2.2 Table A3.2 Appendix 5 Reference Table Table A2, footnote 10 	<ul style="list-style-type: none"> Removed reference to BPACATCH. Clarified derivations of MDC, SDS and MEDFLAG for inferred CAPERs. Clarified derivations for PATHSSC and PATREGN. Corrected product line format file name. Corrected field names used in derivation of APCAGGWT_S. Updates to the Final Field Layout Table: <ul style="list-style-type: none"> Corrected PROVROLE1 length and information about APPTMTCH and APPTTYPE Relabeled all Units of Care fields to Units of Service Corrected labels for FPRVU9, NPRVU9 and PERVU9 Added APPTTYPE_R missing from the table Removed duplicate APPTSTAT entry. Updated the RVU table filenames to distinguish 7-char key version from original 5-char key version Clarified source for patient name

Version	Date	Originator	Para/Tbl/Fig	Description of Change
2.01.02	12/06/10	S.Rogers	• Throughout	<ul style="list-style-type: none"> • Corrected the APC format file for FY07-08 and how the file is applied. • Corrected several reference file names and mdr locations. • Corrected derivation and description of the Professional Service Flag • Corrected variable name used in derivation of SPCPRODATE • Corrected variable name used in derivation of Underwritten Region • Added derivation for PROVID1 (truncation of appt field is required if APPTINFR=Y) • Corrected the facility flag format description to reflect CY basis • Clarified that RVUs are applied to all reported CPT, regardless of MEPRS code • Added description of the logic to modify RVU values: <ul style="list-style-type: none"> ◦ Zero out raw RVU weights for CPT 66999 for 1/1/07-6/30/07 ◦ Method to remove RVU weight on E&M codes in certain circumstances ◦ No credit for some fields for generic providers • Deleted Third Party Collection rate (TPC) • Updates to Final Field Layout Table: <ul style="list-style-type: none"> ◦ Corrected table information for several fields ◦ Removed COMPSTAT and TPC field ◦ Collapsed similarly named fields
2.01.03	12/13/10	S. Rogers	• Appendix 1, Para 3b and Table A1.2	<ul style="list-style-type: none"> • To allow the grouper to group records prior to 1 May 2009, the APC grouper input file (not the CAPER record) is modified as follows: <ul style="list-style-type: none"> ◦ Change the following fields to 20090501 when ENCDATE is before that date: <ul style="list-style-type: none"> ▪ From Date ▪ To Date • Procedure Date

Version	Date	Originator	Para/Tbl/Fig	Description of Change
3.00.00	12/10/2010	S. Rogers	<ul style="list-style-type: none"> • Throughout • Para V • Throughout • Appendix 4 • Appendix 5 • Appendix 6 	<ul style="list-style-type: none"> • Updates for CAPER Enhanced Interim Plus • General clean up/correction of descriptions, derivations, field names etc • Limited the appt inferred additions to B, FBI and FBN • Fields dropped: <ul style="list-style-type: none"> ◦ APCAGGWT_S ◦ RRVU/RRVU_S ◦ PERVU/PERVU_S ◦ IWRVU/IWRVU_S ◦ OWRVU • (Retained) Fields added: <ul style="list-style-type: none"> ◦ SKILLK (Provider Skill Type) ◦ CEDITFLG (to identify edits made to a record) ◦ New Interim Plus workload measures • Modified derivation of Facility Flag (FAC_FLAG) • Application of raw RVUs using modifiers no longer limited to lab/rad codes. • Added Appendix 4 to describe various editing/recoding applied prior to final workload calculations • Added Appendix 5 to describe the process for applying new Interim Plus workload fields • Completion fields reduced to only the aggregates. • Removed Provider Procedure Table Appendix; it will be documented separately. <p>Note: Only the header line of the newly added sections (Appendix 4 and 5) are highlighted. All other significant changes and additions are highlighted.</p>

Version	Date	Originator	Para/Tbl/Fig	Description of Change
3.00.01	04/08/2011	S. Rogers	<ul style="list-style-type: none"> • Table A2 • Appendix 3 • Table A3.2 • Table A3.3 • Table A3.3b • Table A3.3c • Table A3.3d • Appendix 4 • Appendix 4, Table A4.1, Para 2a • Appendix 4, Para 4 • Appendix 5, Para 1 • Appendix 5, Para 3 • Appendix 5, Para 5 • Table A5.1 • Table A5.2 • Table A5.2a • Appendix 7 • Appendix 8 • Throughout 	<ul style="list-style-type: none"> • Renamed MTF_PAR to MTF_PAR_R (Treatment Parent DMIS ID, Raw) • Added MTF_PAR from join to DMIS ID Table. • Updated derivation for MDC due to change in diagnosis code format (decimal removed). • PROVROLE1 field length was corrected in CAPER Basic; substring derivation no longer required. • To standardize across systems, recoded values for: <ul style="list-style-type: none"> ◦ PARC ◦ BENCATX ◦ SSVCLVM ◦ SAGGLVM • Moved derivation of APGWGT_S to App 3. • Legacy RVUs only applied for new/updated records. • Added MODMATCHJ for creating the cpt/modifier key (CY06+). • Revised CPT Table matching rules for RRVUBJ and MEDSTAT. • Agg measures will be set to 0 if missing • Corrected the designation of the Facility Flag format files from CY to FY. • Updated procedure for matching CPT and modifier to the CPT Tables for CY06 • Corrected a modification (MOD2) used in the derivation of OWRVU_S to be based on CPT_4-CPT_7 only. • Clarified description of edits. • Added edit for non-clinician use of Lasik/PRK surgical codes. • Moved the missing provider pointers to the first edit in this section. • Keep fields for Additional Providers 3 and 4 • Numeric fields are left missing when created. • Removed value 'T' from Nurse crediting code • Corrected labels for fields referring to CPT position. • For inferred CAPERs, only the aggregate measures will be assigned values. • Raw RVUs for Case Management will only be applied if coded in MEPRS ELAN ELA2 or FAZ2 • Agg measures will be set to 0 if missing • Corrected derivation of R_HIGHJ • Updated modifier impact format • Dropped DXEXT1-DXEXT10 (the values are now appended to the diagnosis codes). • Corrected schedule for the Revenue Code tables formats. • General clean-up/correction of wording

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3.00.02	07/27/2011	S. Rogers	<ul style="list-style-type: none"> Para VI Appendix 2, Para 1/Table A2 Table A3.3 Appendix 8 	<ul style="list-style-type: none"> Removed the directory location for future Provider Table. Noted that DDS is populated through FY08 only. The facility CPTs were approved for inclusion in the Facility Flag designation. Removed footnote that anticipated the change. Adjusted file names/locations to match MDR implementation for CPT, Revenue Code, Facility Flag, Test MEPR3 Code, and Modifier Impact formats. Added footnote to identify the source of the MDC format.
3.01.00	08/19/2011	S. Rogers	<ul style="list-style-type: none"> Table A5.2 	<ul style="list-style-type: none"> Corrected derivation of APC Aggregate Weight Added composite weight field (COMPWT)
4.00.00	09/16/2011	S. Rogers	<ul style="list-style-type: none"> Para VIII Appendix 1 Appendix 2 Appendix 3 Appendix 4 Appendix 5 Appendix 6 Appendix 8 	<ul style="list-style-type: none"> Added Special Outputs Section Added capability to apply MHS-specific APC values. Noted that APG fields are populated only through FY11. Updated derivations for Same Day Surgery (SDS) and APV Flag (APV) Added flag (EBFLAG) to avoid recalculating legacy RVUs. Corrections/clarification to edits. Clarification of definition of generic provider. Moved cost application to Appendix 5. Added new cost methodology and cost fields for FY10+. Dropped the 3rd level of wildcard (format c) for inferred completion. Added new MHS APC and cost reference tables.
4.00.01	01/13/2012	S. Rogers	<ul style="list-style-type: none"> Table 1 Appendices 1, 5 Appendices 3, 5 Table A3.3b Table A5.2 Table A5.2b 	<ul style="list-style-type: none"> Final MDR Field Layout Moved to Table 1 from App 7. Correct field length for PROVSTAT1 (that will follow correction to CAPER Basic). Moved application of MHS-unique APCs to after code edits. Moved application of CPT-related fields not needed prior to code edits to after code edits. Reapply Facility Flag after code edits. Clarification of cost application sites. Replaced FCOTHLBR and VCOTHLBR removed in error. Correction to Facility Flag format and addition of Facility CPTs. Clarification of raw and discounted APC weight application. Clarification of generic/non-creditable providers

Version	Date	Originator	Para/Tbl/Fig	Description of Change
4.01.00	02/14/2012	S. Rogers	<ul style="list-style-type: none"> • Para V and Appendix 2 • Table 1 • Appendix 2, Table A2 • Table A2 • Tables A2, A2.2a, A2.2b • Table A5.4 • Table A4.2 • Table A5.2 • Table A5.2b • Appendix 6 • Appendix 8 	<ul style="list-style-type: none"> • All appointment records kept until after merges; only B, FBI and FBN are retained in final file. • Update column (M2?) identifying fields fed to M2 • Clarify description of CAD merge • Add MDR Original CAPER Extract Date • Update derivations for: <ul style="list-style-type: none"> ◦ PRODLINE ◦ FCRAD ◦ VCRAD • Correction to edit • Limit application of APC Weight to B-MEPRS • Add PPS fields for FY12+ • Clarify description of RVU and APC application to encounters with generic providers. • Correct key for application of appointment inferred completion factors. • Updated Product Line format reference table information.
4.02.00	10/19/2012	M. Martinez	<ul style="list-style-type: none"> • Paras III,V • Para V • Table 1 	<ul style="list-style-type: none"> • Updated description of CAPER processing and CAPER processing files. • Keeping ALL appointment records until merges are complete. • Change COMPLAINT to Char(7) to be ICD10 compliant; add compliancy footnote. • Add to M2: <ul style="list-style-type: none"> ◦ APPTTYPE_R ◦ CREDITBILAT ◦ CEDITTCON ◦ CREDITPROVPROC ◦ CEDITSURG ◦ CEDITUOS ◦ CPTUNITS_1-CPTUNITS_13 ◦ MED_HOME_FLAG ◦ MED_HOME_MEPRS ◦ PROVMTFD1-PROVMTFD3 ◦ PROVORGD1-PROVORGD3 ◦ PROVSVCD1-PROVSVCD3 ◦ PROVSVCASSGD1-PROVSVCASSGD3 ◦ SKILLM1-SKILLM3 • Remove from M2: <ul style="list-style-type: none"> ◦ PPS_EARN ◦ PPS_MV ◦ PPSEF ◦ PPSPTL_EARN ◦ PPSPTL_MV

Version	Date	Originator	Para/Tbl/FIG	Description of Change
4.02.00	10/19/2012	M. Martinez	<ul style="list-style-type: none"> • Appendix 1 • Table A1.1 • Appendix 2 • Table A2 • Table A2.3 • Table A3.3 • Table A3.3c • Table A3.3e • Table A3.3f • App 4, Table A4.1 • Table A4.2 • Table A5.2 	<ul style="list-style-type: none"> • Change labels: <ul style="list-style-type: none"> ◦ COMPWT to Composite Weight for TFL Earnings ◦ HOSPSTAT to Inpatient Indicator, Raw ◦ INPAPPT to Inpatient Appointment, Raw ◦ PATSTAT to Inpatient Indicator as Reported in the Appointment Data ◦ SKILL1-SKILL5 to Skill Type (CHCS-based) • Update description of APC field application (most APC fields will be retained only on B-MEPRS, Facility records. • Update derivations: <ul style="list-style-type: none"> ◦ UOS ◦ APC-related fields • Add logic for MDR DMHRSi HR merge • Add: <ul style="list-style-type: none"> ◦ MED_HOME_MEPRS ◦ MED_HOME_FLAG ◦ PROVMTFD1-PROVMTFD5 ◦ PROVORGD1-PROVORGD5 ◦ PROVSVCSD1-PROVSVCSD5 ◦ PROVSVCASSGD1-PROVSVCASSGD5 • Change label: <ul style="list-style-type: none"> ◦ PATSTAT to Inpatient Indicator as Reported in the Appointment Data • Clarify derivation on SDS • Correct values in Paygrade algorithm • Add SKILLM1-SKILLM5 • Change label: <ul style="list-style-type: none"> ◦ SKILL1-SKILL5 to Skill Type (CHCS-based) • Populated through FY12 only: <ul style="list-style-type: none"> ◦ RVU_EW_S ◦ RVU_EPE_S ◦ RVU_ET_S • Populated through FY10 only: <ul style="list-style-type: none"> ◦ OWRVU_S • Clarified derivation of CPT Mod key • Added Skill Type values • Added Skill Type MEPRS (HIPAA Prov Tax Code based) format excerpt • Add Change Edit Flag Groups: <ul style="list-style-type: none"> ◦ Bilateral Code Edit Flag ◦ Procedure on TCON Edit Flag ◦ Prov/Proc Linkage Edit Flag ◦ Surgical Follow Up Edit Flag ◦ UOS Edit Flag • Modified/clarified TELCON edits • Replacing CPT and CPT-related fields removed through code editing with XXXXX vice blanking them out. • Change label: <ul style="list-style-type: none"> ◦ COMPWT to Composite Weight for TFL Earnings

Version	Date	Originator	Para/Tbl/Fig	Description of Change
4.02.00	10/19/2012	M. Martinez	<ul style="list-style-type: none"> Table A5.2 Table A5.2b App 5, Para 7 Table A6.1 App 7 Throughout 	<ul style="list-style-type: none"> Limit APC-related fields to B-MEPRS, Facility Update derivation for: <ul style="list-style-type: none"> FPRVUJ NPRVUJ Drop <ul style="list-style-type: none"> PPS_EARN PPS_MV PPSEF PPSPTL_EARN PPSPTL_MV Update MODs for applying RVUs Added MOD for applying bilateral RVU credit for Lasik/PRK Clarified cost application sites Added timeframes for inferred values Added Skill Type MEPRS reference table Removed items previously stricken.
4.02.01	10/30/2012	M. Martinez	<ul style="list-style-type: none"> Table 1; App 2, para 8; Table A2 App 1, Para 6/Table A1.1 Table A4.1 	<ul style="list-style-type: none"> Added PROVMEPRD1-PROVMEPRD5 Clarified description of APC application Corrected change edit flag grouping
4.02.02	12/20/2012	M. Martinez	<ul style="list-style-type: none"> Tables A2 and A2.6 Tables 1, A3.3, A3.3f, App 7 	<ul style="list-style-type: none"> Added a Service code map for the DMHRSi Provider Service fields (PROVSVCSDK PROVSVCASSGDK). Corrected typos in the SAS names for PROVSVCSDK Changed the labels, SAS names and proc format name and file name for the CAPER Skill Levels (formerly Skill Type MEPRS).
4.02.03	01/08/2013	M. Martinez	<ul style="list-style-type: none"> Table A2.6 	<ul style="list-style-type: none"> Add values to the Service map for DMHRSi Service
4.02.04	03/12/2013	M. Martinez	<ul style="list-style-type: none"> Para IX App 2, para 8 App 4, para 2 	<ul style="list-style-type: none"> Add data set of cancelled records as special output to support the Centralized Events Billing Repository (CBER). Clarify explanation of the DMHRSi merge. Clarify explanation of TELCON code editing.
4.02.05	04/02/2013	M. Martinez	<ul style="list-style-type: none"> App 1, Table A4.2 Table A5.2 App 5, Table A5.2b 	<ul style="list-style-type: none"> Clarification of APC application. Clarification of APC weight application. Clarification of workload modifications (MOD3 and MOD6)
4.03.00	05/24/2013	M. Martinez	<ul style="list-style-type: none"> Tables 1 and A2 Appendix 4 Appendix 6 	<ul style="list-style-type: none"> Move creation of MDR Original Extract Date to CAPER Basic. Corrections to TELCON Coding Edit Clarification of application of inferred costs to B-MEPRS only and inferred APC Aggregate Weight to Facility Records only.
4.03.01	06/10/2013	D. McDonald	<ul style="list-style-type: none"> Table A2 	<ul style="list-style-type: none"> Update Derivation of ACVGROUP
4.04.00	06/14/2013	M. Martinez	<ul style="list-style-type: none"> V. DATA PROCESSING AND FIELD TRANSFORMATION 	<ul style="list-style-type: none"> Update logic for processing Appointment records

Version	Date	Originator	Para/Tbl/FIG	Description of Change
4.05.00	07/12/2013	M. Martinez	<ul style="list-style-type: none"> Table 1 Table A3.2 Appendix 4, Para 3 Table A5.2 Tables 1 and A5.2 Appendix 7 	<ul style="list-style-type: none"> Change M2 column for fields no longer required in M2 Variables used for Organizational Work RVUs not required after CY10 Add same-side exclusion for bilateral edits Change the derivation for the modifier impact on E&M codes for the E&M Add-on Procedure codes Exclude bilateral procedures from additional discounting. Drop payment flag Add Composite weight for PMPM Add: <ul style="list-style-type: none"> RVU and APC Conversion Factor format file E&M Add-on Procedures format file
4.06.00	08/08/2013	M. Martinez	<ul style="list-style-type: none"> Table A2 Appendix 5 	<ul style="list-style-type: none"> Clarify application of DMHRSi provider fields. Replace APG-based costs for FY08-09 CAPERs with APC/RVU-based costs.
4.07.00	11/19/2013	M. Martinez	<ul style="list-style-type: none"> Table 1 Tables 1 and A2 Table A2.6 Table A3.3e and f Table 1 and Appendix 4 Appendix 5, Para 6 Appendix 7 	<ul style="list-style-type: none"> Remove PCM EDIPN from M2 feed Correct label on Provider MTF Assigned Service Fields Add: <ul style="list-style-type: none"> Evaluative Visit Provider Personnel Category (DMHRSi); Appointment Provider, Additional Providers 1-4 Update Service code for JTF/NCR used in Provider Assigned Service fields to P Correct description of Skill type format file Change label for Procedure on TCON Edit Flag to TCON Edit Flag Remove reference to PAYMENT previously dropped. Add missing spec reference information for reference tables.
4.07.01	01/14/2014	M. Martinez	<ul style="list-style-type: none"> Tables A2, A2.2b Appendix 5, para 7 	<ul style="list-style-type: none"> Add Service code 'P' to derivations of APV Flag and Product Line Add Service code 'P' to cost application
4.08.00	02/20/2014	M. Martinez	<ul style="list-style-type: none"> Table 1 Appendix 2, Table A2 Appendix 1 Tables A2, A5.2 	<ul style="list-style-type: none"> Add: <ul style="list-style-type: none"> Patient Person ID Type Code Sponsor Person ID Type Code Assigned UIC (DMHRSi) for all Providers TRICARE Young Adult Flag Replaced use of 3M CGS with 3M Grouper Plus System (GPS) Noted that APG-related fields will not be updated. Moved derivation of Evaluative Visit to after code editing
4.08.01	03/24/2014	M. Martinez	<ul style="list-style-type: none"> Table A5.2 Table A5.2b 	<ul style="list-style-type: none"> Correct the modifier impacts for surgical follow-ups and Lasik/PRK. Correct how bilateral RVUs are calculated for Lasik/PRK (S0800, S0810, 66999)

Version	Date	Originator	Para/Tbl/FIG	Description of Change
4.09.00	01/15/2015	M. Martinez	<ul style="list-style-type: none"> Para IX, Table 1 Tables 1, A2 Table 1 Appendix 1, Para 5 Appendix 2 Table A2 Appendix 5, Para 5; Table A5.2b Appendix 5, Para 5; Tables A5.2 and A5.2e Appendix 7 	<ul style="list-style-type: none"> Correct label on APPTIDNO Add Patient Subcategory Code Add the following fields to the M2 feed <ul style="list-style-type: none"> Patient Person ID Type Code Sponsor Person ID Type Code Patient Subcategory Code Assigned UIC (DMHRSi); Appointment Provider, Additional Providers 1-4 TRICARE Young Adult Flag Added 3M CGS scripting information. Clarify the DMHRSi merge process Modify the Appointment Prefix (Source System) for non-Coast Guard sites using code 'G' Modify derivation of MDC to accommodate ICD-10 Dx codes for FY16+ Add FCG2 to Case Management MEPRS Clinics for applying RVUs Add new RVU crediting rules for unlicensed resident providers Add unlicensed resident flag format reference file information
4.09.01	02/18/2015	M. Martinez	<ul style="list-style-type: none"> Appendix 2 Table A2.6 	<ul style="list-style-type: none"> Improved the merge with DMHRSi extract records for Provider Assignment fields. Added DMHRSi Service value of 'DHA' to the Provider Service Code map.
4.09.02	03/11/2015	D. Juckett	<ul style="list-style-type: none"> Appendix 2 	<ul style="list-style-type: none"> Corrected the order of steps in the DMHRSi extract merge.
4.10.00	07/01/2015	D. Juckett	<ul style="list-style-type: none"> Table A2.1 Appendix 7: Reference Tables 	<ul style="list-style-type: none"> Include Column for ICD-10 Code derivation. Update the filename for the MDC Reference Table.
4.11.00	02/09/2016	D. Juckett	<ul style="list-style-type: none"> Table A2.1 	<ul style="list-style-type: none"> Changed derivation for DOD unique codes (they go in a new group called 20)
4.12.00	07/19/2016	D. Juckett	<ul style="list-style-type: none"> Table A3.3 Appendix 3 Appendix 4 	<ul style="list-style-type: none"> Remove <ul style="list-style-type: none"> IF EBFLAG = E from RVU computation to ensure recalculating of RVUs when new records come in Swap Appendix 3 and 4 for the changes in the Enhanced RUV calculations. Changed table and reference names within the appendices
4.13.00	12/21/2016	D. Juckett	<ul style="list-style-type: none"> Table A2 	<ul style="list-style-type: none"> Change derivation of Treatment Region to point to T3 Region (T3_REG).
4.10.01	11/16/2015	D. Juckett	<ul style="list-style-type: none"> Table A2.1 Footnote 38 Table A2 Appendix 2 	<ul style="list-style-type: none"> Include DOD Unique ICD-10 Code range. Update foot note to include ICD-10. Update Patient Name logic to look at the Appointment file if the MPI returns a blank. Added description of the use of FIRSTNAME and LASTNAME from the Appointment file.