7 November 2024

MHS GENESIS CPT Charge Table for the MHS Data Repository (MDR) (Version 1.04)

Future Specification

Revision History

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00	1/3/2024	C. Kangas, D. Juckett	Initial Document	Initial Document
1.01	3/15/2024	C. Kangas	Table 3	Added ERSA and Place of Service Org fields
1.02	4/10/2024	C. Kangas, D. Juckett	• VI. Receiving Filters • Table 3	• Added a filter on Encounter Type • Updated logic for MTF field
1.03	8/19/2024	C. Kangas, D. Juckett	• Table 3	• Added DOD Clinic Group field
1.04	11/7/2024	C. Kangas, D. Juckett	• Table 3	• DEERS Beneficiary Category update logic for no match to OTH, rather than UNK. • Added fields: PROVID_CREDITED, PROV_NPI_ CREDITED, PROV_EDIPN_ CREDITED, PROV_NAME_ CREDITED, PROV_HIPAA_ CREDITED

MDR GENESIS CPT Charge Table

I. BACKGROUND

This specification describes the transformation process required to create the Military Health System (MHS) Data Repository (MDR) GENESIS CPT Charge table based on data received from the Oracle Bulk Data Extract (BDE) feeds.

II. SOURCE

The source system is the MHS GENESIS Oracle Millennium database.

III. RAW

All records in the CPT Charge table are based on data pulled from the MIP Redshift genesis_vw.charge view. To increase the utility of this file, variables from other MDR tables in the following subject areas have been added: Encounter, Person, Personnel, and Location. Additionally, variables from the DEERS LVM, CPT Table, and DMIS ID Index tables have been added. Table 1 provides a listing of raw Redshift views that are used during the creation of the MDR CPT Charge table.

Table 1: MIP Redshift Raw Source Views

Raw Source Table	View Name	Feed Description
Charge	genesis_vw.charge	Contains charge-level data, both CPTs and other types of charges.
Charge Mod	genesis_vw.charge_mod	Contains CPT modifier level detail of the charges.
Encounter	genesis_vw.encounter	Contains information related to the encounter.
Encounter Alias	genesis_vw.encntr_alias	Used to look up key encounter identifiers such as the FIN.
Person Alias	genesis_vw.person_alias	Used to look up key person identifiers such as the EDIPI.
Code Value	genesis_vw.code_value	A reference table used to look up descriptions for many code values.
Billing Entity	genesis_vw.billing_entity	Contains descriptions of billing entities.
Health Plan	genesis_vw.health_plan	Contains descriptions of health plans such as TRICARE PRIME.

Raw Source Table	View Name	Feed Description
Time Zone	mdr_processing.vw_gen_mdr_time_zone	Used to identify the MTF time zone to convert UTC datetimes to local time.
Test Patients	mdr_processing.vw_gen_test_pats	Used to remove test patients from the final dataset.

IV. TRANSMISSION FREQUENCY

The MDR GENESIS CPT Charges table is updated daily.

V. ORGANIZATION

Output products: FY-based SAS datasets containing all CPT Charge records where the SERVICE_DT_TM is in a fiscal year. The CPT Charge files are stored at as fiscal year datasets located at: /mdr/pub/genesis3/encounter/fy[##].sas7bdat.

VI. RECEIVING FILTERS

Charge records are kept based on the following logic criteria:

- Only charge_type_cd = 3490 (represents 'debit' charges) records are kept.
- Only records with an offset_charge_item_id = 0 are kept.
- Only records with a populated CPT or HCPCS code are kept.
- Test patients are excluded.
- Records with a process_flg = 996 (OMF Stats) or 998 (Pharmacy No Charge) are excluded.
- Records with an encounter_type of Lifetime Pharmacy, History, Outside Documentation Only, or Referral Tracking are excluded.

VII. UPDATE PROCESS

Raw BDE feeds from Oracle are sent to MIP Redshift, and the Redshift tables (ex. genesis_vw.charge) are updated daily. New and updated records are sent each day. New records are added to the existing table. Updated records replace the original record in the table based on the CHARGE_ITEM_ID field, which is the primary key for the Charge view. Similar processes are applied to the other raw supporting views within Redshift.

Once the raw data has been updated, the MDR processes it into the analytic table as described in this specification and assigns many other internally derived variables as described in Table 3. Additional logic is necessary to get to the final level of granularity for an individual CPT Charge record, leading to the formation of the composite key of the MDR CPT Charge table: FIN_CHARGES_SK + PROC + CPTMOD1.

VIII. FIELD TRANSFORMATIONS AND DELETIONS

This section of this functional specification describes data merges that are necessary to append fields in the MDR GENESIS CPT Charge table. Table 2 lists additional MDR tables that are used in processing. Table 3 lists in detail all the fields added from these merges as well as any additional transformation rules.

Table 2: MDR Table Merges for MDR GENESIS CPT Charges File

Merge	Date Matching	Additional Matching Methodology
MDR GENESIS Person Table	N/A	PERSON_SK
MDR GENESIS Personnel Table	N/A	PERSON_SK
MDR GENESIS Location Table	N/A	LOCATION_CD
Longitudinal VM6 (LVM6)	Service date between the begin and end dates associated with the segment	EDIPN, SSN

IX. File Layout

The MDR GENESIS CPT Charge files are partitioned and stored as fiscal year SAS data sets. Table 3 provides the file layout and transformation rules.

Table 3: Fields in the MDR GENESIS CPT Charge file

Field	Format	SAS Name	Source Element	Transformation
FIN Charges Key	$100	FIN_CHARGES_SK	charge.charge_item_id	No transformation.
Encounter Type	$26	ENCOUNTER_TYPE	encounter.encntr_type_cd	Join to code_value table where encntr_type_cd matches the code_value and code_set = 71 and active_ind = 1 and retrieve display.
Encounter Key	$100	ENCOUNTER_SK	charge.encntr_id	No transformation.
Financial Information Number (FIN)	$40	FIN	charge.encntr_id	Join to encntr_alias table where encntr_id matches and encntr_alias_type_cd = 1077 and active_ind = 1 and end_effective_dt_tm > sysdate and retrieve alias.
Service Date ID	N(8)	SERVICE_DATE_ID	charge.service_dt_tm	Extract the date portion of the service datetime field.
Military Treatment Facility (MTF)	$4	MTF	mtf	Join to MDR Location table where the location_cd matches and return mtf. If ERSA = 1, then mtf = substr(place_of_svc_org,1,4).
Procedure Code	$5	PROC	charge_mod.field6	Join to code_value table where field1_id matches and code_set =14002 and cdf_meaning=CPT4 or HCPCS and active_ind =1 and end_effective_dt_tm > sysdate.
Procedure Code Modifier 1 - 4	$2	CPTMODJ, J=1-4	charge_mod.field6	Join to code_value table where field1_id matches and code_set =14002 and cdf_meaning=MODIFIER and active_ind =1 and end_effective_dt_tm > sysdate.
Order ID	$100	ORDER_SK	charge.order_id	No transformation.
Medical Service (Charges)	$43	MEDICAL_SVC_FC	charge.med_service_cd	Join to code_value table where med_service_cd matches the code_value and code_set = 34 and active_ind = 1 and retrieve display.
Medical Service (Encounter)	$43	MEDICAL_SVC	encounter.med_service_cd	Join to code_value table where med_service_cd matches the code_value and code_set = 34 and active_ind = 1 and retrieve display.
Nurse Unit Location Code	$45	ENCOUNTER_LOC_ COMPOSITE	loc_nurse_unit_disp	Join to MDR Location table where the location_cd matches and return loc_unit_cd_disp.
Clinic Group	$17	DOD_CLINIC_GROUP	dod_clinic_group	Join to MDR Location table where the location_cd matches and return dod_clinic_group.

Field	Format	SAS Name	Source Element	Transformation
Service Datetime	N(8)	SERVICE_DT_TM	charge.service_dt_tm	Converted to local time.
Registration Datetime	N(8)	REG_DT_TM	encounter.reg_dt_tm	Converted to local time.
Discharge Datetime	N(8)	DISCHARGE_DT_TM	encounter.discharge_dt_tm	Converted to local time.
Activity Type	$48	ACTIVITY_TYPE	charge.activity_type_cd	Join to code_value table where activity_type_cd matches the code_value and code_set = 106 and active_ind = 1 and retrieve display.
Financial Class	$40	FINANCIAL_CLASS	charge.fin_class_cd	Join to code_value table where fin_class_cd matches the code_value and code_set = 354 and active_ind = 1 and retrieve display.
Price	N(8)	PRICE	charge.item_price	No transformation.
Update Datetime	N(8)	UPDT_DT_TM	charge.updt_dt_tm	No transformation.
Performing Physician ID	N(8)	PERF_PHYS_ID	charge.perf_phys_id	No transformation.
Charge Event ID	N(8)	CHARGE_EVENT_ID	charge.charge_event_id	No transformation.
Health Plan ID	N(8)	HEALTH_PLAN_ID	charge.health_plan_id	No transformation.
Health Plan	$60	HEALTH_PLAN	charge.health_plan_id	Join to health_plan table where health_plan_id matches and active_ind = 1 and retrieve plan_name.
Arrive Datetime	N(8)	ARRIVE_DT_TM	encounter.arrive_dt_tm	Converted to local time.
Encounter Class	$33	ENCOUNTER_CLASS	encounter.encntr_type_class_cd	Join to code_value table where encntr_type_class_cd matches the code_value and code_set = 69 and active_ind = 1 and retrieve display.
Encounter Status	$25	ENCOUNTER_STATUS	encounter.encntr_status_cd	Join to code_value table where encntr_status_cd matches the code_value and code_set = 261 and active_ind = 1 and retrieve display.
Billing Entity	$50	BILLING_ENTITY_NAME	encounter.location_cd, location.organization_id, billing_entity.billing_entity_id	Join to billing_entity table where billing_entity_id matches and retrieve be_name, and inner join to the be_org_reltn table on billing_entity_id, and inner join to the organization table where organization_id matches and active_ind = 1.

Field	Format	SAS Name	Source Element	Transformation
Countable Flag	N(8)	IS_COUNTABLE	encounter.encntr_type_cd	If encounter type in (Absent Sick, Between Visit, Care Not Rendered, History, Lifetime Pharmacy, Outside Documentation Only, Pre Inpatient, Pre Occupational Health, Pre Outpatient, Pre SNF Inpatient, Pre TeleHealth, Pre Telephone, Preadmit, Preclinic, PreRecurring, Prereg, Referral Tracking) then is_countable = 0. Otherwise, is_countable = 1.
Inpatient Admit Datetime	N(8)	INPATIENT_ADMIT_DT_TM	encounter.inpatient_admit_dt_tm	Converted to local time.
EDIPN	$10	EDIPN	encounter.person_id	Join to person_alias where person_id matches and person_alias_type_cd = 22 and active_ind = 1
Encounter ID	$100	ENCOUNTER_NK	charge.encntr_id	No transformation.
MEPRS Code	$4	MEPRS_CD	encounter.location_cd	Join to MDR Location table where location_cd matches and return MEPRS field.
Attending Provider ID	$100	PROVID_ATT	encounter encntr_id, encntr_prsnl_reltn.prsnl_person_id	Join to encntr_prsnl_reltn table where the encntr_prsnl_r_cd = 1119 and return the first prsnl_person_id value ordered by priority_seq.
Attending Provider Name	$100	PROV_NAME_ATT	provid_att, name_full_formatted	Join to the prsnl table where provid_att = person_id. Then return the name_full_formatted field.
Attending Provider EDIPN	$10	PROV_EDIPN_ATT	provid_att, alias	Join to the prsnl table where provid_att = person_id. Then join to the prsnl_alias table on person_id where the alias_pool_cd = 106935631 and active_ind = 1 and return the alias value.
Attending Provider NPI	$10	PROV_NPI_ATT	provid_att, alias	Join to the prsnl table where provid_att = person_id. Then join to the prsnl_alias table on provid_att where the alias_pool_cd = 4038127 and active_ind = 1 and return the alias value.
Attending Provider HIPAA Taxonomy	$10	PROV_HIPAA_ATT	prov_npi_att, hipaa1	Join to MDR NPPES table on prov_npi_att and return the hipaa1 field.
Calendar Year (Registration Date)	$4	CY	encounter.reg_dt_tm	Extract the calendar year from the reg_dt_tm.
Calendar Month (Registration Date)	$2	CM	encounter.reg_dt_tm	Extract the calendar month from the reg_dt_tm.
Fiscal Year (Registration Date)	$4	FY	encounter.reg_dt_tm	Extract the fiscal year from of the reg_dt_tm.
Fiscal Month (Registration Date)	$2	FM	encounter.reg_dt_tm	Extract the fiscal month of the reg_dt_tm.
Charge Description	$255	CHARGE_DESC	charge.charge_description	No transformation.

Field	Format	SAS Name	Source Element	Transformation
Bill Item ID	$100	BILL_ITEM_SK	charge.bill_item_id	No transformation.
Patient Category	$5	PATCAT	encounter.encntr_id	Join to the encounter_info table on encntr_id where the info_sub_type_cd = 109901051 and active_ind = 1, then join to the code_value table where the value_cd = code_value and the code_set = 100075 and active_ind = 1 and return the display value.
Ordering Provider ID	$100	PROVID_ORD	charge.ord_phys_id	No transformation.
Ordering Provider Name	$100	PROV_NAME_ORD	provid_ord, name_full_formatted	Join to the prsnl table where provid_ord = person_id. Then return the name_full_formatted field.
Ordering Provider EDIPN	$10	PROV_EDIPN_ORD	provid_ord, alias	Join to the prsnl table where provid_ord = person_id. Then join to the prsnl_alias table on person_id where the alias_pool_cd = 106935631 and active_ind = 1 and return the alias value.
Ordering Provider NPI	$10	PROV_NPI_ORD	provid_ord, alias	Join to the prsnl table where provid_ord = person_id. Then join to the prsnl_alias table on provid_ord where the alias_pool_cd = 4038127 and active_ind = 1 and return the alias value.
Ordering Provider HIPAA Taxonomy	$10	PROV_HIPAA_ORD	prov_npi_ord, hipaa1	Join to MDR NPPES table on prov_npi_ord and return the hipaa1 field.
Verifying Provider ID	$100	PROVID_VER	charge.verify_phys_id	No transformation.
Verifying Provider Name	$100	PROV_NAME_VER	provid_ver, name_full_formatted	Join to the prsnl table where provid_ver = person_id. Then return the name_full_formatted field.
Verifying Provider EDIPN	$10	PROV_EDIPN_VER	provid_ver, alias	Join to the prsnl table where provid_ver = person_id. Then join to the prsnl_alias table on person_id where the alias_pool_cd = 106935631 and active_ind = 1 and return the alias value.
Verifying Provider NPI	$10	PROV_NPI_VER	provid_ver, alias	Join to the prsnl table where provid_ver = person_id. Then join to the prsnl_alias table on provid_ver where the alias_pool_cd = 4038127 and active_ind = 1 and return the alias value.
Verifying Provider HIPAA Taxonomy	$10	PROV_HIPAA_VER	prov_npi_ver, hipaa1	Join to MDR NPPES table on prov_npi_ver and return the hipaa1 field.
Credited Provider ID	$100	PROVID_CREDITED	provid_ver, provid_ord, provid_att	Set to provid_ver (if populated), else set to provid_ord (if populated), otherwise set to provid_att.
Credited Provider NPI	$10	PROV_NPI_CREDITED	prov_npi_ver, prov_npi_ord, prov_npi_att	Set to prov_npi_ver (if populated), else set to prov_npi_ord (if populated), otherwise set to prov_npi_att.
Credited Provider EDIPN	$10	PROV_EDIPN_CREDITED	prov_edipn_ver, prov_edipn_ord, prov_edipn_att	Set to prov_edipn_ver (if populated), else set to prov_edipn_ord (if populated), otherwise set to prov_edipn_att.
Credited Provider Name	$100	PROV_NAME_CREDITED	prov_name_ver, prov_name_ord, prov_name_att	Set to prov_name_ver (if populated), else set to prov_name_ord (if populated), otherwise set to prov_name_att.

Field	Format	SAS Name	Source Element	Transformation
Credited Provider HIPAA Taxonomy	$10	PROV_HIPAA_CREDITED	prov_hipaa_ver, prov_hipaa_ord, prov_hipaa_att	Set to prov_hipaa_ver (if populated), else set to prov_hipaa_ord (if populated), otherwise set to prov_hipaa_att.
E&M Code Flag	N(8)	EM_FLAG	proc	If '992' le substr(proc,1,3) le '994' then em_flag = 1. Otherwise set the em_flag = 0.
CPT Units of Service (Raw)	N(8)	CPTUNITS	charge.item_quantity	No transformation.
Calendar Year (Service Date)	$4	CY_CHARGE	charge.service_dt_tm	Extract the calendar year from the service_dt_tm.
Calendar Month (Service Date)	$2	CM_CHARGE	charge.service_dt_tm	Extract the calendar month from the service_dt_tm.
Fiscal Year (Service Date)	$4	FY_CHARGE	charge.service_dt_tm	Extract the fiscal year from of the service_dt_tm.
Fiscal Month (Service Date)	$2	FM_CHARGE	charge.service_dt_tm	Extract the fiscal month of the service_dt_tm.
DEERS Beneficiary Category	$3	BENCAT	lvm.r_ben_cat_cd	Fill with bencat associated with this EDIPN. If there is no match for this patient in the LVM, set to OTH.
Health Care Delivery Program Code (LVM)	$3	HCDP	lvm.d_mi_hcdp_pln_cvg_cd	No transformation.
Eligibility Group	$1	ELG_GRP	lvm.d_elg_grp_cd	No transformation.
Enrollment Group	$1	ENR_GRP	lvm.d_enr_grp_cd	No transformation.
CPT Units of Service	N(8)	CPTUOS	cptunits proc uoslim uossub	CPTUOS = CPTUNITS If PROC has a value and CPTUOS = 0 or missing, set CPTUOS = 1 If UOSLIM > 0 and CPTUOS > UOSLIM, set CPTUOS = UOSSUB See Table B1 for sources of UOSLIM & UOSSUB variables.
Facility Flag	$1	FAC_FLAG	meprs_cd mtf proc encounter_type	Apply formats from /mdr/ref/caper.facflag.IP.fy&fy2. to specific variables as follows (see Table B1.A for details): VALUE CRITERIA R records from VA & External ERS sites F MEPR1 = A or encounter_Type = 'Inpatient' or MEPR3 = BIA or MEPRS_CD = B**5 or B**7 or MTF=0124 & MEPRS_CD = B**6 or Encounter_Type = 'Day Surgery' or at least 1 PROC is in the FCPT&fy.B informat N All other

Field	Format	SAS Name	Source Element	Transformation
Attending Provider Skill Type	$1	SKILLH_ATT	prov_hipaa_att	Apply SKILLTYPE&fy.H format from /mdr/ref/caper.hskilltype.fy&fy..txt to PROV_HIPAA_ATT
Ordering Provider Skill Type	$1	SKILLH_ORD	prov_hipaa_ord	Apply SKILLTYPE&fy.H format from /mdr/ref/caper.hskilltype.fy&fy..txt to PROV_HIPAA_ORD
Verifying Provider Skill Type	$1	SKILLH_VER	prov_hipaa_ver	Apply SKILLTYPE&fy.H format from /mdr/ref/caper.hskilltype.fy&fy..txt to PROV_HIPAA_VER
Anesthesia Indicator	N(8)	ANES_IND	proc	If the 1st character of proc = '0' and the 5th character of proc is not in('A', 'T', 'F', 'M', 'U') then anes_ind = 1. Otherwise set anes_ind = 0.
Anesthesia Units of Service	N(8)	UOS_ANES	anes_ind, cptuos	If anes_ind = 1 and cptuos > 52 then uos_anes = 53. Otherwise, set uos_anes = cptuos. If anes_ind = 0 then set uos_anes = 0.
Payment Status Indicator	$2	PSI	proc cptmod1-cptmod4	Derived from match with the CPT Weight Table (format psiyyb) based on CY of encounter and CPT||Modifier key.
Work RVU	N(8)	RRVU	proc cptmod1-cptmod4	Raw MHS-updated Work RVU for CPT procedures. Derived from match with the CPT Weight Table (format wrkyyb) based on CY of encounter and CPT||Modifier key derived as described in Table B1.a. Table B1.c MOD1, MOD2, MOD3, MOD4, MOD5 and MOD6 apply.
Non-Facility Practice Expense RVU	N(8)	NPRVU	proc cptmod1-cptmod4	Raw MHS-updated Non-Facility Practice Expense RVU for CPT procedures. Derived from match with the CPT Weight Table (format nfacyyb) based on CY of service date and CPT||Modifier key derived as described in Table B1.a. Table B1.c MOD1, MOD2, MOD3, MOD4, MOD5 and MOD6 apply.
Facility Practice Expense RVU	N(8)	FPRVU	proc cptmod1-cptmod4	Raw MHS-updated Facility Practice Expense RVU for CPT procedures. Derived from match with the CPT Weight Table (format facyyb) based on CY of service date and CPT||Modifier key derived as described in Table B1.a. Table B1.c MOD1, MOD2, MOD3, MOD4, MOD5 and MOD6 apply.
Total RVU	N(8)	TRVU		If FAC_FLAG = 'Y' then TRVU is the sum of FPRVU & RRVU. Otherwise TRVU is the sum of NPRVU & RRVU.

Field	Format	SAS Name	Source Element	Transformation
Enhanced Work RVU (Non-Provider Affected)	N(8)	NWRVU	proc cptmod1-cptmod4	See Appendix A.
Enhanced Practice Expense RVU (Non-Provider Affected)	N(8)	NPERVU	proc cptmod1-cptmod4	See Appendix A.
Enhanced Total RVU	N(8)	NTRVU		Sum of NWRVU & NPERVU.
Discounted RVU Flag	$1	DISCOUNTED		If multiple CPTs occur on a single service date, and the PSI = 'T' and the anes_ind = 0, then set discounted = Y.
Place of Service Organization	$150	PLACE_OF_SVC_ORG	encounter.place_of_svc_org_id organization.organization_id	Join to the organization table where e.place_of_svc_org_id = o.organization_id and return org_name.
External Resource Sharing Agreement (ERSA) Flag	N(8)	ERSA	place_of_svc_org	Set to 1 if the place_of_svc_org value contains the segment '-ERS', otherwise set to 0.

Appendix A: Analytic Processing and Field Additions to the MDR GENESIS CPT Charges File

Create Enhanced RVUs

The processor applies raw workload based on the following steps. Table A1 has a list of variables created but not retained in the process but referenced in the calculations described in this appendix.

Table A1: Fields Used in RVU Calculations but not Retained

Field	Format	SAS Name	Source Element	Transformation
Modmatch	CHAR(1)	MODMATCH	PROC, CPTMOD1-CPTMOD4	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.
Units of Service Limit	N(8)	UOSLIM	PROC	Derived from match with the CPT Table (format uosyyb) based on CY of encounter and CPT.
Units of Service Substitution Value	N(8)	UOSSUB	PROC	Derived from match with the CPT Table (format subyyb) based on CY of encounter and CPT.

1. Identify the correct Modifier

As CPT/HCPCS codes can have multiple modifiers, Table A2 shows the process for assigning the correct modifier to the procedure code in cases where there are multiple modifiers.

Table A2 Derive CPT Mod Key for the CPT Table Match

Rules
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. --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 ')

2. RVU Application

Raw RVUs (Work, Practice Expense, and Total) and other CPT-related fields used to derive RVUs are applied based on CPTs and modifiers as they exist in the Charges file. The calendar year of the service date determines the RVU weight table to use. All records receive RVUs regardless of MEPRS code.

3. Apply modifications to CPTs and raw RVU values.

Several modifications may be applied to the raw RVU values based on DHA policy. The definition for each RVU variable in Table 3 lists which modifications were applied to that variable. Table A1.c describes several types of modifications that are performed during processing.

Table A3: Modifications to CPTs and RVUs

Rules
These modifications to RVU Values are applied as directed in Table 3: MOD1. For CPT 66999, apply 0 RVUs for the period 1 Jan 07 - 30 Jun 07. (NOTE: This MOD does not apply to MDR GENESIS Encounter data, but it is included to keep the numbering consistent with MDR CAPER (Enhanced) processing.) MOD2. If Modifier 55 is present, apply the RVUs for CPT Code 99024. MOD3. Inactive or generic provider specialty codes (HIPAA-based Skill Type=N, G, or X) and, HIPAA-based Skill Type 5 providers do not receive weight. If all substr(SKILLHK,1,1) (K=1 to 5, _ADM, _APP, _ATT, _ORD, _REF & _VER) not in ('1' '2' '3' '4'), then set values for all aggregate RVUs and all RVUJ for non-missing, non-XXXXX CPT to 0. MOD4. If TELCON (ENCOUNTER_TYPE = Outpatient Message), apply 0 RVUs for all non-TELCON CPT codes; everything except: TELCON E&M Codes (EM_FLAG = 1) 99441-99444 for CY2008 and forward 99371-99373 for CY2007 and back 99499 any year TELCON Procedure Codes (EM_FLAG = 0): 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. 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

Rules
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 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, the calculation for both facility and non-facility practice expense RVU would be: PE RVU=(12.86-6) * 1.5 + (2*6)=22.29 And the calculation for the work RVU would be: Work RVU=(4.86 * 1.5) = 7.29

4. Policy Application to Calculate Enhanced (Non-Provider Affected) Workload

   Apply MHS policies and calculate non-provider affected workload incorporating the following:

   - 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 (MODIMPACT*J*) is assigned based on a table of modifier percentages (see Table A4).

Table A4: Modifier Impacts

Total combined modifier impact is the product of the impacts of the 3 modifiers.
= ∑ 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;
```

- 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 PSI=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:

1. APCs – 100% for highest weighted APC, 50% for all other discountable procedures
2. RVUs – 100% for highest weighted Total (Work + PE) RVU, 50% for all other discountable procedures