13 March 2026

MHS Future GENESIS Laboratory Orders

BDE 2.4/3.0

for the

MHS Data Repository (MDR)

Version 1.00.30
Service Now Number
DHAINC05669941

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Revision History

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00.00	11/06/2018	S. Keane	Initial Document	Baseline
1.00.01	01/18/2019	S. Keane	Sections VI-IX	Updated
1.00.02	05/31/2019	S. Keane	Table 2	Update Table 2 and remove Table 3.
1.00.03	12/10/2019	S. Keane	Entire Document	Change Record Key, Change Logic for records to keep, add fields from General laboratory Orders, Omit Bill Type and Revenue fields, Remove OMTF Fields, Remove Verifying Provider Fields, Remove FMP and Space Available Flag. Derive new fields.
1.00.04	02/13/2020	S. Keane	Tables 1 and 2, Section VIII	Include Merge to Micro Order; Derive MTF Resulted (mtf_resulted) and MTF Nurse Unit Location (nurse_unit). Corrected Record Type Flag Derivation.
1.00.05	02/25/2020	S. Keane	Tables 1 and 2, Section VIII	Updated location (loc_merge) and MTF derivations. Update Exclusions.
1.00.06	03/31/2020	S. Keane	Section V and Table 2	Update record duplication. Update MTF derivation. Update exclusions.
1.00.07	05/21/2020	S. Keane	Sections VI, VII	Derive MEPRS4 Code, Performing and related fields.
1.00.08	05/29/2020	S. Keane	Section VII	Updated derivation of CPTMOD and CPTMOD_DESC.
1.00.09	6/19/2020	S. Keane	Section VII	Add Personnel Completing First Name, Physician Ordering First Name, Personnel Non-Physician Ordering First Name, Primary Care Manager Name, Primary Care Manager NPI, PCM NPI Type Code, Service Line Ordering, and Service Line Performing.
1.00.10	11/5/2020	S. Keane	Section VII	Update length of variables: Patient First Name and Patient Last Name

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00.11	11/20/2020	S. Keane	Section VII	Remove First/Last Name replace with Full Name for Patient, Physician Ordering, Personnel Completing, and Personnel Non-Physician Ordering variables. Reduce length for merging with CADRE.
1.00.12	03/10/2021	S. Keane	Section VII	Add CPT mapping to backfill CPT procedure codes, etc. Also include mapping to backfill Reason for Test.
1.00.13	02/17/2022	S. Keane	Section IV	Add Time Slicing, Frequency of processing, and Frequency of updates.
1.00.14	9/18/2023	S. Keane	Entire Document	Add Bulk Data Extract (BDE) MIP Redshift 3.0 feed logic.
1.00.15	08/21/2024	S. Keane	Section VIII	Update Exclusion for Clarity
1.00.16	11/20/2024	S. Keane	Section VIII	Update complete date logic
1.00.17	12/06/2024	S. Keane	Sectionv VII	Replace obe loc_nurse_unit_disp with unit_display in 3.0
1.00.18	03/06/2025	S. Keane	Section VII and X	• Update join logic to Procedure table and apply format file to keep only labrad cpt codes • Hide T3 fields • Add T5 fields • Add Section IX Special Outputs section
1.00.19	03/20/2025	S. Keane	Section VII	Add new variable Procedure Code Is Charged (cpt_is_charged) in 3.0.
1.00.20	04/25/2025	S. Keane	Section IV and VII	• Apply filter to keep only completed orders • Update derivation of complete_dt_tm_local • Include derivation of reason_for_test
1.00.21	04/29/2025	S. Keane	Section VII	• Update T5 regions
1.00.22	05/05/2025	S. Keane	Section VII	• Remove reason_for_test
1.00.23	05/13/2025	S. Keane	Section VII	• Update Personnel ID related fields.
1.00.24	05/21/2025	S. Keane	Section VII	• Update PATCAT derivation rules.
1.00.25	05/22/2025	S. Keane	Section VII	• Update cptmod derivation rules.

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00.26	10/07/2025	S. Keane	Section VII	• Add MEPRDMIS. • Add FULLCOST and VARCOST. • Update MEPR3, MEPR2, MEPR1.
1.00.27	1/20/2026	S. Keane	Section VII	• Update MEPRS Parent • Update contributor system • Remove VA exclusion.
1.00.28	02/17/2026	S. Keane	Section VII and Section VIII	• Update location derivation and exclusion rule • Update mepr2, dept_status, mtf_name, unit_name, unit_display
1.00.29	3/10/2026	S. Keane	Section VII	• Update Primary Key Encounter_key (2.4) Encounter_sk (3.0) • Update meprs_cd, mepr3 • Upate mtf_resulted, mtf_accession • Relabel Service Resource Fields, MTF_resulted, MTF.
1.00.30	3/13/2026	S. Keane	Section VII	• Update sr_fac

I. BACKGROUND

This specification describes the process required to create the Military Health System (MHS) Data Repository (MDR) GENESIS Laboratory tables based on data received from Cerner PowerInsight Enterprise Data Warehouse (PI-EDW) feeds to the MDR and the MIP Redshift 3.0 feeds.

II. SOURCES

The source data files used to create the MHS GENESIS Laboratory tables are extracted from the MHS GENESIS PI-EDW and MIP Redshift 3.0. The transfer of the raw source extracts is handled by the Solution Delivery Division (SDD) for loading into the MDR for further processing according to routine MDR operations. The format of the raw MHS GENESIS feeds to the MDR is described in the Department of Defense Healthcare Management System Modernization (DHMSM®) Program DRAFT Interface Control Document (ICD) for Bulk Data Extract (BDE).

III. TRANSMISSION (FILES AND FREQUENCY)

MHS GENESIS BDE PI-EDW feeds are provided weekly and MIP Redshift 3.0 feeds are updated daily.

IV. ORGANIZATION AND BATCHING

Source Data: The first step in MDR processing is to batch records received from MHS GENESIS. Raw data batches are stored in /mdr/raw/genesis according to routine MDR operating procedures.

Output Products: The processor outputs separate SAS data sets containing all years of laboratory data. The processor performs merges and field derivations and must incorporate updates to records across raw data extracts. Table 2 lists the output data sets: fyXX.sas7bdat will be stored in /mdr/pub/genesis/laboratory/fyXX.sas7bdat.

Time slicing: Data are organized into fiscal year files. The Fiscal Year is determined by DATE_COMPELETE.

Frequency of processing: Data are harvested weekly. Raw data batches are harvested, processed, and appended/updated to the master file. If data are received from a fiscal year not being processed that month, they will be held to batch with all other data received prior to that fiscal year's next update batch.

Current FY: Weekly. Frequency of updates:

Prior FY: Weekly for one quarter (October, November, and December) then semiannually (April, October).
All years prior to prior FY: Annually (October) or on an as needed basis when data corrections or updates are required.

Archiving (APUB): Use routine archiving rules and procedures of the MDR.

Receiving Filters: There are no receiving filters.

Laboratory records are identified from the Financial Charges, Charge Mod, Procedure, General Lab and Orders tables where HEALTH_SYSTEM_ID=18635(PI-EDW feed only), ACTIVITY_TYPE_REF in (671 Anatomic Pathology;

674 Blood Bank Orders; 692 General Laboratory; 696 Microbiology; and 25463137 Patho/Lab) or the associated CPT Procedure codes begins with the number eight and the Last_order_status not in ('Canceled', 'Discontinued', 'Future', 'Incomplete', 'On Hold, Med Student', 'Suspended', 'Transfer/Canceled', 'Unscheduled', 'Voided With Results', 'Voided Without Results')~~(PIEDW feed only)~~. We apply a filter to include only completed records. All records were provided with the initial batch of data. Thereafter, new and changed records are sent each week.

V. UPDATE PROCESSES

New raw feeds contain either insert or update records. These records shall be used to update the master MHS GENESIS laboratory datasets. The primary key consists of ENCOUNTER_SK and ACCESSION and ORDER_SK and CPT and CPTMOD. The processor shall delete duplicates before updating the table. Duplicate records, defined as those with the same primary key. When choosing among duplicate records, e.g., multiple records with the same primary key, the processor shall select the record with the most recent value for the variable: COMPLETED_DT_TM_LOCAL.

VI. FILE MERGES

Table 1a and Table 1b describe the various datasets that are necessary to append many of the fields in the MHS GENESIS Laboratory file.

Table 1a: File Merges from PI-EDW Source Tables

Merge	Date Matching	Key Matching
MHS GENESIS Orders		
MHS GENESIS General Lab Order		ORDER_SK, Frst_Perf_Svc_Res_Dept_Hier_Sk
MHS GENESIS Microbiology Order		ORDER_SK, Frst_Perf_Svc_Res_Dept_Hier_Sk
MHS GENESIS Order Detail		ORDER_SK
MHS GENESIS Clinical Event		ORDER_SK
MHS GENESIS Encounter		ENCOUNTER_KEY
Service Resource Reference File		LVL_CODE_VALUEC with RESOURCE_REF from refe.csrdhref

Merge	Date Matching	Key Matching
MHS GENESIS Financial Charges		ORDER_SK
MHS GENESIS Charges Mod		FIN_CHARGES_SK
MHS GENESIS Diagnosis		ENCOUNTER_KEY and CONTRIBUTOR_SYSTEM_REF in (459, 469, 470, 110586353, 43266689) (3M, PowerChart, PROFILE, CCE, HCPCS/CPT Dx)
MHS GENESIS Procedure		ENCOUNTER_KEY and CONTRIBUTOR_SYSTEM_REF in (459, 469, 470, 110586353) (3M, PowerChart, PROFILE, CCE)
MHS GENESIS Person		PERSON_SK
MHS GENESIS Personnel		PRSNL_SK
MHS GENESIS Location		LOCATION_SK
Longitudinal VM6 (LVM6)	DATE_COMPLETE between the begin and end dates associated with the segment	EDIPN
Master Person Index (MPI)		EDIPN
DEERS	DATE_COMPLETE	EDIPN or SSN
DMIS ID Index		MTF, MTF_ENR, MTF_RESULTED
Omni-CAD	year and month of CAD in DATE_COMPLETE	ZIP_D and SPONSVC

Table 1b: File Merges from MIP Redshift 3.0 Source Views

Source Table Name	View Name	Date Matching	Key Matching
MHS GENESIS Orders	genesis_vw.orders		order_id
MHS GENESIS Order Laboratory	genesis_vw.order_laboratory		order_id
MHS GENESIS Order Action	genesis_vw.order_action		order_id
MHS GENESIS Encounter	genesis_vw.encounter		encntr_id
MHS GENESIS Encounter Alias	genesis_vw.encntr_alias		encntr_id
MHS GENESIS Encounter Info	genesis_vw.encntr_info		encntr_id
MHS GENESIS Resource Group	genesis_vw.resource_group		resource_cd
MHS GENESIS Financial Charges	genesis_vw.charge		charge_item_id
MHS GENESIS Charges Mod	genesis_vw.charge_mod		charge_item_id
MHS GENESIS Diagnosis	genesis_vw.diagnosis		encntr_id
MHS GENESIS Procedure	genesis_vw.procedure		encntr_id
MHS GENESIS Clinical Event	genesis_vw.clinical_event		event_id
MHS GENESIS CE Specimen Collection	genesis_vw.ce_specimen_col		event_id
MHS GENESIS Container	genesis_vw.container		container_id
MHS GENESIS Code Value	genesis_vw.code_value		code_value
MHS GENESIS Nomenclature	genesis_vw.nomenclature		nomenclature_id
MDR GENESIS Person			person_id
MDR GENESIS Personnel			person_id
MDR GENESIS Location			location_cd
MDR Longitudinal VM6 (LVM6)		date_complete	edipn

Source Table Name	View Name	Date Matching	Key Matching
MDR Master Person Index (MPI)			edipn
MDR DEERS		date_complete	edipn or ssn
MDR DMIS ID Index			mtf, mtf_enr, mtf_resulted
MDR Omni-CAD		year and month of date_complete	zip_d and sponsvc

VII. FILE LAYOUT

The file layout of the MHS GENESIS Laboratory Table is described in Table 2. Unless specified, business rules apply to both source tables. Listed by Source table then by SAS Name.

Table 2 File Layout for MHS GENESIS Laboratory Table

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
MHS GENESIS Orders					
Accession	$100.00	accession	accession	accession	None.
Activity Type	$48.00	activity_type	activity_type_ref	activity_type_cd	Apply format $ord_activity_type (code set = 106).
Activity Type Code	$40.00	activity_type_ref	activity_type_ref	activity_type_cd	2.4 Apply format $ord_activity_type (code set = 106). Keep if activity_type_ref in ('671', '674', '692', '696', '25463137'). 3.0 Keep if active_ind = 1 and activity_type_cd in (671, 674, 692, 696, 25463137).
Catalog Code	$40.00	catalog_ref	catalog_ref	order_mnemonic	None.
Date Time Order Completed Local	E8601DT1 9.	completed_dt_tm_local	completed_dt_tm	service_dt_tm, clin_relevant_updt_dt_tm	2.4/3.0. Convert to Local Time. Format e8601dt. 3.0. Coalesce(service_dt_tm, clin_relevant_updt_dt_tm).
Department Status	$29.00	dept_status	dept_status_ref	dept_status_cd	Apply format $dept_status (code set = 14281).

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Last Order Status	$20.00	last_order_status	last_order_status _ref	order_status_cd	2.4 Apply format $last_order_status (code set = 6004). Keep if last_order_status_ref not in ('2542', '2544', '2545', '2546', '2547', '2549', '2552', '2553', '614538', '643467'). 3.0 keep if order_status_cd in (2543, 2548, 2550) and dept_status_cd in (0, 9312, 9316, 9321, 9332). If order_status_cd = 2550 and dept_status_cd = 0 then delete.
Date Time Order Local	E8601DT1 9.	order_dt_tm_local	order_dt_tm	orig_order_dt_tm	Convert to Local Time. Format e8601dt.
Order Location	$40.00	order_loc	order_loc	future_location_faciil ty_cd	None.
Orders File Primary Key	$100.00	order_sk	order_sk	order_id	None.
Order Submission	$27.00	order_submit	orig_communicati on_ref	latest_communicatio n_type_cd	Apply format $orig_communication (code set = 6006).
MHS GENESIS Test Ordered Description	$100.00	orderable_disp	orderable_disp	order_mnemonic	None.
MHS GENESIS Order Laboratory and Order Micro					
MHS GENESIS Person ID	$100.00	person_sk	person_sk	person_id	None.
Number of Containers	N(8)	nbr_of_containers	nbr_of_containers	n/a	2.4 No Transformation. 3.0 NULL.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Number of Specimen	N(8)	nbr_of_specimens	nbr_of_specimen s	n/a	2.4 No Transformation. 3.0 NULL.
Container Collection Method	$13.00	cntr_collection_method	first_cntr_coll_me thod_ref	collect_method_cd	Apply format $collm (code set = 2058).
Container Type	$60.00	cntr_type	first_cntr_type_re f	container_type_cd	Apply format $specc (code set = 2051).
Specimen Type	$40.00	specimen_type	first_specimen_ty pe_ref	source_type_cd	Apply format $spect (code set = 2052).
Container Volume	N(8)	cntr_volume	first_cntr_volume	volume	None.
Container Units	$24.00	cntr_units	first_cntr_units_r ef	units_cd	2.4 Apply format $unitii (code set =240). 3.0 Apply code set 54.
Collected Indicator	N (8)	collected_ind	collected_ind	specimen_id	2.4 No Transformation. 3.0 If SPECIMEN_ID is null then 0; else 1.
Collection Priority	$11.00	collection_priority	collection_priority _ref	collect_priority_cd	2.4 Apply format $collection_priority (code set =240). 3.0 Apply code set 2054.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Treatment MTF	$4.00	mtf_resulted	frst_perf_svc_res _dept_hier_sk , section_descriptio n	accession	2.4Match to refe_csrdhref on FRST_PERF_SVC_RES_DEPT_HIER_SK =SVC_RES_DEPT_HIER_SK. Obtain SECTION_DESCRIPTION. Apply format $MTF_REF to INST_REF. ~~If activity_type not in ('General Laboratory' or 'Microbiology') then mtf_resulted equal "NONE"; if activity_type in ('General Laboratory', 'Microbiology') and valid mtf_resulted then mtf_resulted; else~~ 3.0 Map loc_merge to code_set (220,221) If missing or invalid then mtf_accession. Use clean algorithm to remove ZZZ.
2.4 MDR Service Resource; 3.0 MHS GENESIS Resource Group					
MEPRS4 Code, Performing	$4.00	sr_meprs	lvl_4_meprs, lvl_5_meprs, mep rs_cd	child_resource_cd	2.4 Match to refe_csrdhref on SVC_RES_DEPT_HIER_SK =SVC_RES_DEPT_HIER_SK. Obtain RESOURCE_REF. Next match RESOURCE_REF to LVL_CODE_VALUEC. Obtain MEPRS_CD. 3.0 use CHILD_RESOURCE_CD as RESOURCE_REF.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Service Resource Facility	$5.00	sr_fac	facility	child_resource_cd	2.4 Match to refe_csrdhref on SVC_RES_DEPT_HIER_SK =SVC_RES_DEPT_HIER_SK. Obtain RESOURCE_REF. Next match RESOURCE_REF to LVL_CODE_VALUEC. Obtain FACILITY. 3.0 SUBSTRING(regexp_replace(unit_display, '^ZZDONOTUSE *', ''), 1, 5)
Service Resource Nurse Unit Location	$40.00	sr_loc	lvl_4_desc, lvl_5_desc, lvl_desc	child_resource_cd	2.4 Match to refe_csrdhref on SVC_RES_DEPT_HIER_SK =SVC_RES_DEPT_HIER_SK. Obtain RESOURCE_REF. Next match RESOURCE_REF to LVL_CODE_VALUEC. Obtain LVL_DESC. 3.0 use CHILD_RESOURCE_CD as RESOURCE_REF.
Service Resource Organization	$60.00	sr_org	organization	child_resource_cd	2.4 Match to refe_csrdhref on SVC_RES_DEPT_HIER_SK =SVC_RES_DEPT_HIER_SK. Obtain RESOURCE_REF. Next match RESOURCE_REF to LVL_CODE_VALUEC. Obtain ORGANIZATION. 3.0 use CHILD_RESOURCE_CD as RESOURCE_REF.
MHS GENESIS Encounter					
Admission Type	$40.00	admit_type	admit_type_ref	admit_type_cd	2.4 Apply format $admit_type (code set = 3). 3.0 Apply code set 71.
Discharge Disposition Code	$60.00	dispcode	discharge_disposi tion_ref	disch_disposition_cd	Apply format $discharge_disposition (code set = 19).
Encounter PIEDW Key	N(8)	encounter_key	encounter_key	n/a	None.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Encounter NK	$100.00	encounter_nk	encounter_nk	n/a	None.
Encounter Key Secondary	$100.00	encounter_sk	encounter_sk	encntr_id	None.
Encounter Status	$25.00	encounter_status	encounter_status _ref	encntr_status_cd	Apply format $encounter_status (code set = 261).
Encounter Type	$22.00	encounter_type	patient_type_ref	encntr_type_cd	Apply format $patient_type (code set =71).
Encounter Classification	$33.00	encounter_type_class	encounter_type_c lass_ref	encntr_type_class_c d	Apply format $encounter_type_class (code set = 69).
Financial Information Number (FIN)	$40.00	fin_e	formatted_financi al_nbr	alias	2.4 No transformation. 3.0 from encntr_alias, get ALIAS as FIN_E where encntr_alias_type_cd = 1077 and active_ind = 1 and beg_effective_dt_tm < sysdate and end_effective_dt_tm > sysdate.
Reason For Visit	$255.00	reason_for_visit_txt	reason_for_visit_t xt	reason_for_visit	None.
MHS GENESIS Financial Charges					
Bill Item Code	$100.00	bill_item_sk	bill_item_sk	bill_item_id	None.
Charge Description	$255.00	charge_desc	charge_desc	charge_description	
Charge Type	$51.00	charge_type	charge_type_ref	charge_type_cd	None.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Financial Charges Primary Key	$100.00	fin_charges_sk	fin_charges_sk	charge_item_id	None.
Institution Name	$60.00	institution_type	institution_ref	institution_cd	Apply format $institution_type (code set = 221).
Medical Service	$40.00	medical_service	medical_service_ref	med_service_cd	Apply format $medical_service (code set = 34).
Date Time Service Local	E8601DT19.	service_dt_tm_local	service_dt_tm	service_dt_tm	Convert to Local Time. Format e8601dt.
MHS GENESIS Charge Mod					
Procedure Code Modifier	$2.00	cptmod	field6	field6	2.4/3.0 Match on fin_charges_sk. Obtain field6. Apply code set 17769 and trim (desc_meaning) = ('MODIFIER') OR field3_sk in apply format $cptmods (code set = 17769). If CPT was obtained from labmap dataset, also obtain cptmod from labmap dataset matching on catalog_ref. if substr(cpt, 1, 1) not in ('7', '8') and missing(cptmod) then cptmod = 'TC'.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Procedure Code Modifier Description	$200.00	cptmod_desc	field7	field7	Match on fin_charges_sk. Obtain field7. Apply code set 17769 and trim (desc_meaning) = ('MODIFIER') OR field3_sk in apply format $cptmods (code set = 17769).
CHGS Diagnosis Code J, J = 1-n, where maxN = 20	$200.00	DX_CHGS_1	field6	field6	Transpose field 6 where (field1_sk="3693"). Order by Field2_SK. Keep first 20 result variables.
CHGS Diagnosis Code Description J, J = 1-n, where maxN = 20	$200.00	DX_CHGS_DESC_1	field7	field7	Transpose field 7 where (field1_sk="3693"). Order by Field2_SK. Keep first 20 result variables.
MHS GENESIS Clinical Event					
~~Reason for Test~~	~~$100.00~~	~~reason_for_test~~	~~N/A~~	~~event_tag~~	~~2.4 None. 3.0 Get event_tag as Reason_For_Test from clinical_event matching on order_skwhere event_cd in ((106540105, 111861135, 113187987, 114608481, 114608487, 114608505, 114608511, 114608547, 116199235, 116301939, 15447104407, 25999705, 319307317, 3346969, 4161291, 423974387, 4257739, 45331173, 427781,5763654399, 5763657291, 5763958477, 5763958981, 709469, 818343149, 8259064531, 9755155559).~~

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
MHS GENESIS Procedure					
Date Time Procedure Local	DATETIME 19.	proc_dt_tm_local	proc_dt_tm	proc_dt_tm	Convert to Local Time. Format e8601dt.
Procedure File Primary Key	$100.00	procedure_sk	procedure_sk	procedure_id	2.4 None. 3.0 Merge to Procedure Table by encounter Key where active_ind = 1 and end_effective_dt_tm > sysdate. Merge to Nomenclature using nomenclature_id and principle_type_cd = 1263 and .source_vocabulary_cd = 1217 and n2. .contributor_system_cd in (459, 469, 470, 110586353). Apply labrad format file to keep only labrad cpt codes.
MHS GENESIS Diagnosis					
CCE Diagnosis Code K, where k = 1-n and maxN = 20.	$60.00	dx_cce_1	diag_nomen	source_identifier	2.4 Merge to Diagnosis by Encounter key and CONTRIBUTOR_SYSTEM_REF in (459, 469, 470, 110586353, 43266689). Merge to Nomenclature on DIAG_NOMEN = nomenclature_sk and vocabulary_ref ='19350056' and active_ind = 1 and health_system_id=18635. Obtain "Value". Order by PRIORITY_SEQ. 3.0 From nomenclature, obtain source_identifier as dx_cce, where source_vocabulary_cd = 19350056 and active_ind = 1.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
CCE Diagnosis Code Description K, where k = 1-n and maxN = 20.	$255.00	dx_cce_desc_1	diag_nomen	source_string	2.4 Merge to Diagnosis by Encounter key and CONTRIBUTOR_SYSTEM_REF in (459, 469, 470, 110586353, 43266689). Merge to Nomenclature on DIAG_NOMEN = nomenclature_sk and vocabulary_ref ='19350056' and active_ind = 1 and health_system_id=18635. Obtain "Description". Order by PRIORITY_SEQ. 3.0 From nomenclature, obtain source_string as dx_cce_desc, where source_vocabulary_cd = 19350056 and active_ind = 1.
MDR GENESIS Location					
GENESIS Go Live Date	MMDDYY 1 0.	gen_begin_dt	gen_begin_dt	gen_begin_dt	GEN_BEGIN_DT; Match loc_merge = location_sk.
Location Facility Patient Care Node Indicator	N(8)	loc_facility_patcare_node_ind	loc_facility_patcare_node_ind	loc_facility_patcare_node_ind	LOC_FACILITY_PATCARE_NODE_IND; Match loc_merge = location_sk.
MEPRS4 Code, Ordering	$4.00	meprs_cd	meprs_cd	meprs_cd	MEPRS_CD; where loc_merge = location_sk. if missing(meprs_cd) then do; meprs_cd = ifc(if not missing(mepr3), cats(mepr3, 'A'), 'UNK');end.
Ordering MTF	$4.00	mtf	mtf	mtf	MTF; where loc_merge = location_sk. If missing MTF then mtf_accession.
No MTF MEPRS Code Flag	N(8)	nomeprs_flag	nomeprs_flag	nomeprs_flag	NOMEPRS_FLAG; where loc_merge = location_sk
Parent MTF Name	$40.00	organization_name	organization_name	organization_name	ORGANIZATION_NAME; where loc_merge = location_sk.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Test Location Flag	N(8)	test_location_flag	test_location_flag	test_location_flag	TEST_LOCATION_FLAG; where loc_merge = location_sk.
Nurse Unit Display	$45.00	unit_display	unit_display	Loc_nurse_unit_cd	2.4 UNIT_DISPLAY; where loc_merge = location_sk. 3.0 display for loc_nurse_unit_cd; apply code_set 220.
Nurse Unit Name	$100.00	unit_name	unit_name	Loc_nurse_unit_cd	2.4 UNIT_NAME; where loc_merge = location_sk. 3.0 description for loc_nurse_unit_cd; apply code_set 220.
~~MTF Nurse Unit Location~~	~~$45.00~~	~~nurse_unit~~	~~loc_nurse_unit_disp~~	~~unit_display~~	~~2.4 LOC_NURSE_UNIT_DISP where loc_merge = location_sk3.0;UNIT_DISPLAY where loc_merge = location_sk~~
MDR GENESIS Person					
Patient Name	$61	name	full_name	full_name	FULL_NAME; match on person_sk.
Patient IPI	$10.00	ipi	ipi	ipi	IPI; match on person_sk.
Patient Test Flag	N(8)	patient_test_flag	test_record_ind	test_record_ind	TEST_RECORD_IND; match on person_sk.
MDR GENESIS Personnel					
Ordering Physician	$100	order_doc_prsnl	order_doc_prsnl	order_physician_id	2.4 None. 3.0 Use order_physician_id as order_doc_prsnl.
Physician Ordering EDIPN	$10.00	prov_ord_edipn	prsnl_edipn	prsnl_edipn	2.4 EDIPN; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.
Physician Ordering Flag	$1.00	prov_ord_flag	test_record_ind	test_record_ind	2.4 TEST_RECORD_IND; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Physician Ordering HIPAA Taxonomy	$10.00	prov_ord_hipaa	hipaa1	hipaa1	2.4 HIPAA1; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.
Physician Ordering Name	$61.00	prov_ord_name	full_name	full_name	2.4 FULL_NAME; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.
Physician Ordering MD Flag	N(8)	prov_ord_md_flag	physician_ind	physician_ind	2.4 PHYSICIAN_IND; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.
Physician Ordering NPI	$100.00	prov_ord_npi	npi	npi	2.4 NPI; Match on order_doc_prsnl = prsnl_sk. 3.0 Use order_physician_id as order_doc_prsnl.
Completed Personnel	$100	completed_prsnl	completed_prsnl	action_personnel_id	2.4 None. 3.0 Use action_personnel_id as completed_prsnl.
Personnel Completing EDIPN	$10.00	prsnl_compl_edipn	prsnl_edipn	prsnl_edipn	2.4 EDIPN; Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.
Personnel Completing Flag	$1.00	prsnl_compl_flag	test_record_ind	test_record_ind	2.4 TEST_RECORD_IND; Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.
Personnel Completing HIPAA Taxonomy	$10.00	prsnl_compl_hipaa	hipaa1	hipaa1	2.4 HIPAA1; Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.
Personnel Completing Name	$61.00	prsnl_compl_name	full_name	full_name	2.4 FULL_NAME; Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Personnel Completing MD Flag	N(8)	prsnl_compl_md_flag	physician_ind	physician_ind	2.4 PHYSICIAN_IND; Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.
Personnel Completing NPI	$100.00	prsnl_compl_npi	npi	npi	2.4 NPI Match on completed_prsnl = prsnl_sk. 3.0 Use action_personnel_id as completed_prsnl.
Order Personnel	$100	order_prsnl	order_prsnl	order_provider_id	2.4 None. 3.0 Use order_provider_id as order_prsnl.
Personnel Ordering EDIPN	$10.00	prsnl_ord_edipn	prsnl_edipn	prsnl_edipn	2.4 EDIPN; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.
Personnel Ordering Flag	$1.00	prsnl_ord_flag	test_record_ind	test_record_ind	TEST_RECORD_IND; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.
Personnel Ordering HIPAA	$10.00	prsnl_ord_hipaa	hipaa1	hipaa1	HIPAA1; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.
Personnel Ordering Name	$61.00	prsnl_ord_name	full_name	full_name	FULL_NAME; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.
Personnel Ordering MD Flag	N(8)	prsnl_ord_md_flag	physician_ind	physician_ind	PHYSICIAN_IND; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Personnel Ordering NPI	$100.00	prsnl_ord_npi	npi	npi	NPI; Match on order_prsnl = prsnl_sk 3.0 Use order_provider_id as order_prsnl.
MHS GENESIS Encounter Alias					
Beneficiary Category on Record	$40.00	BENCAT_E	bencat_e	display	2.4 Match on encounter_sk = parent_entity_sk and parent_entity_name = 'ENCOUNTER' and user_defined_type_REF = '109901057'; then apply BENCAT format. 3.0 From encntr_info, match on encntr_id where info_sub_type_cd = 109901057 and active_ind = 1 beg_effective_dt_tm < sysdate and end_effective_dt_tm > sysdate; Apply code set 100070.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
PATCAT Encounter Code	$40.00	PATCAT_E	patcat_e	display	2.4 Match on encounter_sk = .parent_entity_sk and parent_entity_name = 'ENCOUNTER' and user_defined_type_REF = '109901051'; then apply PATCAT format. 3.0 ei as (SELECT encntr_id, value_cd, row_number() over (PARTITION BY encntr_id ORDER BY beg_effective_dt_tm desc, updt_dt_tm desc) as rn FROM genesis_vw.encntr_info WHERE active_ind = 1 AND info_sub_type_cd = 109901051) LEFT JOIN ei ON e.encntr_id = ei.encntr_id AND ei.rn = 1LEFT JOIN genesis_vw.code_value cvei ON ei.value_cd = cvei.code_value AND cvei.code_set = 100075 AND cvei.active_ind = 1.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
PATCAT Person Code	$40.00	patcat_p	patcat_p	display	2.4 Match on person_sk = parent_entity_sk and parent_entity_name = 'PERSON' and user_defined_type_REF = '114540103'; then apply PATCAT format. 3.0 pi as (SELECT person_id, value_cd, row_number() over (PARTITION BY person_id ORDER BY beg_effective_dt_tm desc, updt_dt_tm desc) as rn FROM genesis_vw.person_info WHERE active_ind = 1 AND info_sub_type_cd = 114540103) LEFT JOIN pi ON e.person_id = pi.person_id AND pi.rn = 1 LEFT JOIN genesis_vw.code_value cvpi ON pi.value_cd = cvpi.code_value AND cvpi.code_set = 100075 AND cvpi.active_ind = 1.
MDR Master Person Index (MPI)					
Person ID	$10.00	edipn	edipn	n/a	None.
Person Association Reason Code	$2.00	parc	parc	n/a	None.
Sponsor ID	$9.00	sponssn	spssn	n/a	None.
Patient SSN	$9.00	ssn	pssn	n/a	None.
MDR LVM6					

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
ACV	$1.00	acv_d	acv	n/a	None.
ACV Group	$2.00	acvgroup	acvgrp	n/a	In MDR, when preparing the M2 feed map “PR” to “Prime” “DP” to “Designated Provider” “OP” to “Overseas Prime” “PL” to “Plus” “O” to “Other” “R” to “Reliant”.
Beneficiary Category	$3.00	bencat_d	ben	n/a	None.
Ben Cat Common	$1.00	comben_d	cben	n/a	None.
Patient Date of Birth	N(8)	patdob	dob	n/a	None.
Eligibility Group	$1.00	elg_grp	elggrp	n/a	None.
Enrollment Group	$1.00	enr_grp	enrgrp	n/a	None.
Patient Ethnicity	$1.00	ethnic	ethnic	n/a	None.
Patient Gender	$1.00	gender_d	sex	n/a	None.
HCDP - Enrolled	$3.00	hcdp	hcdp	n/a	None.
HCDP - Assigned	$3.00	hcdp_asgn	asghcdp	n/a	None.
LVM4 Match Indicator	N(8)	lvm_match	match	n/a	None.
DEERS Marital Status	$1.00	marital	ms	n/a	None.
DEERS Medicare Flag	$11.00	medicare_flag	mf	n/a	None.
Enrollment MTF	$4.00	mtf_enr	enr	n/a	None.
PCM ID	$18.00	pcm_id	pcm	n/a	None.
PCM Type	$1.00	pcm_type	pcmtyp	n/a	None.
Privilege Code	$1.00	privilege	priv	n/a	None.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Patient Race	$1.00	race	race	n/a	If RACE is blank, then RACE = 'Z'.
Relationship to Sponsor	$1.00	rel	rel	n/a	None.
Sponsor Service	$1.00	sponsvc	svc	n/a	None.
Sponsor Service, Aggregate	'$1.	svcagg	aggsvc	n/a	None.
TPR Eligibility Flag	$1.00	tpr	tpr	n/a	None.
Beneficiary Zip Code	$5.00	zip_d	zip	n/a	None.
MDR DEERS					
Primary Care Manager Name	$40	pcmid_nm	d_mi_pcm_nm	n/a	D_MI_PCM_NM from DEERS merge.
Primary Care Manager NPI	$10	pcmid_npi	d_pcm_np_id	n/a	D_PCM_NP_ID from DEERS merge.
PCM NPI Type Code	$1	pcmid_npi_typ	d_pcm_np_id_typ _cd	n/a	D_PCM_NP_ID_TYP_CD from DEERS merge.
MDR DMISID Index					
Performing CMAC Locality Code	$3.00	cmaccd	locality	n/a	Convert 2 digit "Locality" to 3 digit (e.g. add leading zero).
MEPRS Parent	$4.00	meprdmis	n/a	n/a	MEPRS Parent (MEPR_PAR) of mtf_resulted
Treatment MTF Major Command	$8.00	mtf_cmd	majcmnd	n/a	Derive using mtf_resulted.
Enrollment Parent MTF	$4.00	mtf_enr_parent	mtf_parent_rec	n/a	Derive using mtf_enr.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Enrollment MTF Branch of Service	$1.00	mtf_enr_svc	mtf_svc	n/a	Derive using mtf_enr
Enrollment MTF T17 Region	$2.00	mtf_enr_t17_reg	mtf_t17_reg	n/a	Derive using mtf_enr
Enrollment MTF T3 Region	$2.00	mtf_enr_t3_reg	mtf_t3_reg	n/a	Hide Derive using mtf_enr. Not populated as of Jan 2025.
Treatment MTF MSMA	$3.00	mtf_msma	msm_id	n/a	Derive using mtf_resulted
Treatment MTF Parent of Record	$4.00	mtf_parent_rec	ubu_par	n/a	Derive using mtf_resulted
Treatment MTF Branch of Service	$1.00	mtf_svc	ubu_svc	n/a	Derive using mtf_resulted
Treatment MTF T17 Region	$2.00	mtf_t17_reg	t17_reg	n/a	Derive using mtf_resulted
Treatment MTF T3 Region	$2.00	mtf_t3_reg	t3_reg	n/a	Hide. Derive using mtf_resulted. Not populated as of Jan 2025.
Ordering MTF Service	$1.00	omtf_svc	mtf_svc	n/a	Derive using mtf.
Ordering MTF T17 Region	$2.00	omtf_t17	mtf_t17_reg	n/a	Derive using mtf.
Ordering MTF T3 Region	$2.00	omtf_t3	mtf_t3_reg	n/a	Hide. Derive using mtf. Not populated as of Jan 2025.
Beneficiary Site T5 Region	$2	ben_t5_reg	N/A	N/A	T5_REG from DMIS ID Index OR OMNI-Cad based on matching FY and appropriated field. Populated FY23+.
Enrollment Site T5 Region	$2	mtf_enr_t5_reg	N/A	N/A	T5_REG from DMIS ID Index, based on matching FY and ENRDMIS Populated FY23+.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Ordering Site T5 Region	$2	omtf_t5	N/A	N/A	T5_REG from DMIS ID Index, based FY and ORDDMIS Populated FY23+.
Treatment DMIS ID T5 Region	$2	mtf_t5_reg	N/A	N/A	T5_REG from DMIS ID Index, based FY and TXDMIS Populate FY23+.
Treatment MTF Name	$45	mtf_name	N/A	N.A	Derive using mtf_resulted.
MDR OMNI_CAD					
Beneficiary T17 Region	$2.00	ben_t17_reg	t17reg	n/a	None.
Beneficiary T3 Region	$2.00	ben_t3_reg	region	n/a	None.
Catchment Area ID	$4.00	catch	world	n/a	None.
Beneficiary MTF Service Area	$4.00	mtfsvcarea	bpa	n/a	None.
PRISM Area ID	$4.00	prism	prism	n/a	None.
Tricare Prime Remote Flag	$1.00	tprflag	tprflag	n/a	TPRFLAG = Obtain from Omnicad. TPR Flag (TPRFLAG), based on matching FY, FM, and Beneficiary Zip Code (PATZIP).

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Internally Derived					
Patient Age Group	$1.00	agegrp	patage	n/a	if 0 le patage2 le 4 then agegrp = 'A'; else if 5 le patage2 le then agegrp = 'B'; else if le patage2 le 17 then agegrp = 'C'; else if 18 le patage2 le then agegrp = 'D'; else if le patage2 le 34 then agegrp = 'E'; else if 35 le patage2 le then agegrp = 'F'; else if le patage2 le 64 then agegrp = 'G'; else if 65 le patage2 le then agegrp = 'H'; else if le patage2 le 74 then agegrp = 'I'; else if 75 le patage2 le then agegrp = 'J'; else if le patage2 le 84 then agegrp = 'K'; else if patage2 ge 85 then agegrp = 'L'; else agegrp = 'Z';
Calendar Month	$2.00	cm	date_complete	n/a	CM of DATE_COMPLETE.
Number of Services of Record	N(2)	count	n/a	n/a	equals 1.
Procedure Code	$5.00	cpt	proc_chgs, proc_fin	n/a	if PROC_CHGS not IN ('0', '') THEN CPT = PROC_CHGS; ELSE CPT = PROC_FINC. If missing, obtain cpt from labmap dataset matching on catalog_ref.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Procedure Code Description	$255.00	cpt_desc	multiple	n/a	if cpt = proc_pdx then CPT_DESC = proc_pdx_desc; else if proc_chgs = proc_finc then CPT_DESC = proc_finc_desc; else if (proc_chgs ne proc_finc) and (cpt = proc_chgs) then CPT_DESC = proc_chgs_desc; else if (proc_chgs ne proc_finc) and (cpt = proc_finc) then CPT_DESC = proc_finc_desc; else CPT_DESC = proc_chgs_desc.
Procedure Code Is Charged	N(8)	cpt_is_charged	n/a	n/a	if not missing(fin_charges_sk) and not missing(cpt) then cpt_is_charged = 1; else cpt_is_charged = 0.
Procedure Code Source	N(8)	cpt_source	cpt	n/a	If source of Procedure Code (CPT) is PROC_CHGS or PROC_FIN then 1, else 0.
Calendar Year	$4.00	cy	date_complete	n/a	CY of DATE_COMPLETE.
Date Completed	$8.00	date_complete	completed_dt_tm , order_dt_tm	n/a	if completed_dt_tm not missing or blank; else order_dt_tm.
Number of Services	N(2)	drvcount	n/a	n/a	if (nactcpt = "I" or CPT = '') then 0 ; else 1.
CCE Diagnosis Code Count	N(8)	dx_cce_maxn	n/a	n/a	Count DX_CCE per row.
FM	$2.00	fm	date_compelete	n/a	FM of DATE_COMPLETE.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
RVU, Facility	N(6.2)	fprvu	cptcount, drvcount	n/a	Using CPT Weight Table: obtain Raw MHS updated Facility Practice Expense RVU of CPT Code (pexpfadc) for the CPT Code and Modifier combination by corresponding calendar year; , multiply by derived number of services.
FY	$4.00	fy	date_compele te	n/a	FY of DATE_COMPLETE.
Inpatient Indicator	$1.00	inpt	encounter_ty pe	n/a	if encounter_type = 'Inpatient' then INPT="Y"; else INPT= "N".
Location	$40.00	loc_merge	patient_loc, order_loc, current_loc, admit_loc	loc_facility_cd loc_admit_cdl oc_nurse_unit _cdInstitution _cd	2.4 Derive using first valid value (e.g. non-zero or not blank), in specified order, from patient_loc, order_loc, current_loc, admit_loc.3.0 Derive location identifiers (loc_merge, sr_merge, fac_merge). Use loc_facility_cd as loc_merge. Coalesce level5_cd, loc_nurse_unit_cd as sr_merge. Coalesce institution_cd, loc_facility_cd as fac_merge. Then apply an algorithm to clean values such as mamc, nhb, nhoh, theater, ZZZ.
MEPRS 1-Level Code, Ordering	$1.00	mepr1	patient_loc, order_loc, current_loc, admit_loc	n/a	2.4 MEPR1 = substr(MEPRS_CD,1,1). 3.0 MEPR1 = substr(MEPR3,1,1). If MEPR3 = 'UNK' then set MEPR1 to 'Z'.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
MEPRS 2-Level Code Ordering	$2.00	mepr2	meprs_cd	n/a	2.4 MEPR2 = substr(MEPRS_CD,1,2). 3.0 MEPR2 = substr(MEPR3,1,2). If MEPR3 = 'UNK' then set MEPR2 to 'ZZ'.
MEPRS 3-Level Code, Ordering	$3.00	mepr3	meprs_cd	n/a	2.4 MEPR3 = substr(MEPRS_CD,1,3). 3.0 substr(MEPRS_CD,1,3) Otherwise, Derive MEPR3 by mapping the value of medical_service using the appropriate format: Use $meprmapA. if inpt = 'Y'.Use $meprmap. if inpt= 'N'. if missing(medical_service) or mepr3 in ('','NOM') then do; mepr3 = 'UNK'; If missing(meprs_cd) then meprs_cd = cats(mepr3, 'A'); if missing(meprs_cd) then meprs_cd = 'UNK'.
MHS GENESIS Flag	$1.00	mhs_genesis_flag	n/a	n/a	equals 1.
Medical Record Number	$40.00	mrn	formatted_mrn	n/a	Use MRN_P from Person unless missing. Else use MRN_E from Encounter.
Inactive CPT Code Indicator	$1.00	nactcpt	cpt	n/a	Lookup CPT by CY of Date of Service in CY CPT reference file, if CPT then NACTCPT = A; else NACTCPT = I.
RVU, Non-Facility	N(6.2)	nprvu	cptcode, drvcount	n/a	Lookup CPT by CY of Date of Service in CY CPT reference file, if CPT then NACTCPT = A; else NACTCPT = I.
M2 Key	$6.00	m2key	n/a	n/a	Base 62 of MDR Key.
MDR Key	N(8)	mdrkey	n/a	n/a	Sequential counter of records.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
MTF Accession	$4.00	mtf_accession	accession	n/a	For VA sites, mtf_accession = substr(accession,1,3); else mtf_accession = substr(accession,2,4); If 0 or 0000 or blank then blank. Do Not keep in the final table.
Number of Orders	N(8)	ordcount	order_sk	n/a	if first order_sk then 1 else 0.
Patient Age	N(8)	patage	dob_p, patdob	n/a	Use DOB_P, PATDOB to calculate age.

PATCAT Code	$40.00	patcat	patcat	n/a	if patcat_p not in ('', '0') then PATCAT = patcat_p;
					else if patcat_p in ('', '0') then PATCAT = patcat_e;
					else PATCAT = '';

Record Type Flag	$13.00	record_type_flag	encounter_type, ecount	n/a	if encounter_type = 'Inpatient' then INPATIENT LAB'; else if encounter_type = 'Clinic' then 'ENCOUNTER LAB'; else if ecount > 2 then RECORD_TYPE_FLAG then 'ENCOUNTER LAB'; else if substr(cpt,1,1) = ('8') then 'LABORATORY'; else RECORD_TYPE_FLAG = 'OTHER LAB'.
Reflex Test Indicator	N(8)	reflex_test_ind	orderable_disp	n/a	If first character of ORDERABLE_DISP equal * then 1; else 0.
RVU, Total	N(6.2)	rvu	cptcount, drvcount	n/a	Sum the values of Work RVU and Non-facility practice RVUs.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
RVU, Work	N(6.2)	rvuwork	cptcount, drvcount	n/a	Using CPT Weight Table: obtain Raw MHS updated Work RVU of CPT code (workdc) for the CPT Code and Modifier combination by corresponding calendar year; multiply by derived number of services.
Service Line Ordering	$5	svclineo	mepr3	n/a	Apply format from service line map. svclineo = put(mepr3, $slfmt)
Service Line Performing	$5	svclinep	sr_meprs	n/a	Apply format from service line map. svclinep = put(substr(sr_meprs,1,3), $slfmt)
Cost Fields (BDE3.0 FY23+)					
Full Cost	8.2	fullcost	n/a	n/a	Total laboratory full cost = Applied Work RVU + Non-facility Practice RVU. In SAS: fullcost = sum(l_fcostw, l_fcostp). FY23+.
Lab Full Cost / Practice (Non-facility) RVU	10.6	l_fcostp (not stored)	n/a	n/a	Calculated as: FY23+ Full Cost × Non-facility Practice RVU. Represents MEPRS Parent's unit cost for Laboratory in the matching year. Not stored on the final table.
Lab Full Cost / Work RVU	10.6	l_fcostw *(not stored)*	n/a	n/a	Calculated as: FY23+ Full Cost × Work RVU. Represents MEPRS Parent's unit cost for Laboratory in the matching year. Not stored on the final table.
Lab Variable Cost / Practice (Non-facility) RVU	10.6	l_vcostp (not stored)	n/a	n/a	Calculated as: FY23+ Variable Cost × Non-facility Practice RVU. Represents MEPRS Parent's unit cost for Laboratory in the matching year. Not stored on the final table.

Field	Format	SAS Name	PI-EDW (2.4) Field	MIP Redshift 3.0 Field	Business Rule
Lab Variable Cost / Work RVU	10.6	l_vcostw *(not stored)*	n/a	n/a	Calculated as: FY23+ Variable Cost × Work RVU. Represents MEPRS Parent's unit cost for Laboratory in the matching year. Not stored on the final table.
Variable Cost	8.2	varcost	n/a	n/a	Total laboratory variable cost = Applied Work RVU + Non-facility Practice RVU. In SAS: varcost = sum(l_vcostw, l_vcostp). FY23+.

VIII. EXCLUSIONS

Remove any column that contains all null or blank values. If any of the following conditions are met, either delete the record or output to an error file.

If CY less than 2017

If datepart(coalesce(COMPLETED_DT_TM, ORDER_DT_TM)) less than gen_begin_dt.

If (PROC_DT_TM ne . and datepart(PROC_DT_TM) < gen_begin_dt).

If ~~ENCOUNTER_KEY is missing and ORDER_SK is missing or zero~~ both ENCOUNTER_KEY and ORDER_SK are zero or null.

If MTF is missing and MTF_resulted is missing or NONE or TEST.

If PATIENT_TEST_FLAG equals 1.

If TEST_LOCATION_FLAG equals 1.

IX. MDR FEED TO M2

The processor should create a dataset that can be joined with or appended with MDR CADRE Laboratory which then feeds a combined dataset to M2.

X. SPECIAL OUTPUTS

This file serves as the input to the MIP Core MHS GENESIS Laboratory Orders table. In accordance with Technical Data Standards, the data should be made available to users with the same file names, field names and formats as the source data, with underscores replacing spaces in the names, if desired. The MIP core MHS GENESIS Laboratory Orders table should be updated at the same cadency of the M2 file and row counts should be validated against the MDR Export transmittals.