

MHS GENESIS3 Pharmacy
for the
MHS Data Repository (MDR)
(Version 0.00.01)

Current Specification

Revision History

| Version | Date | Originator | Para/Tbl/Fig | Description of Change |
|---------|-----------|------------|------------------|-----------------------|
| 0.00.01 | 11/9/2023 | S. Keane | Initial Document | Baseline |
| | | | | |

MHS GENESIS3 Pharmacy

I. BACKGROUND

This specification describes the process required to create the Military Health System (MHS) Data Repository (MDR) GENESIS3 Pharmacy tables based on data received from Oracle Health Bulk Data Extract (BDE) 3.0 MIP Redshift feeds to the MDR.

II. SOURCES

The source data files used to create the MHS GENESIS3 Pharmacy tables are extracted from the MHS Information Platform (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)

Source files are provided 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 for Fiscal Year (FY) of data. The processor performs merges and field derivations, and must incorporate updates to records across raw data extracts. The output data set fyxx.sas7bdat will be stored in /mdr/pub/genesis3/pharmacy/fyxx.sas7bdat.

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

Receiving Filters: There are no receiving filters.

MDR GENESIS3 Pharmacy tables will contain medications dispensed and/or administered at MHS GENESIS Military Treatment Facilities (MTF). Select result records where Activity Type equals "Pharmacy" and to avoid selecting results for omitted orders, match order records on primary key. All records are provided with the initial batch of data. Thereafter, new and changed records are sent each day.

V. UPDATE PROCESSES

New raw feeds contain either insert or update records. These records shall be used to update the master MDR GENESIS3 Pharmacy datasets. The primary key for the final dataset is the combination of Encounter

ID, Order ID, Action Sequence, and Ingredient Sequence. The processor shall delete duplicates before updating the table. Duplicate records, defined as those with the same primary key. When choosing among duplicate records, the processor shall select the record with the most recent value for the variable: UPDT_DT_TM (update date/time (UPDT_DT_TM) for multiple of records with the same primary key.

VI. FILE MERGES

Table 1 describes the data merges that are necessary to append many of the fields in the MHS GENESIS3 Pharmacy file.

Table 1: File Merges

| Merge | Key Matching |
|---|--|
| MHS GENESIS3 Order Action | order_id where action_type_cd = 2534 |
| MHS GENESIS3 Orders | order_id where activity_type = "Pharmacy" |
| MHS GENESIS3 Pharmacy Dispense History | order_id, action_sequence |
| MHS GENESIS3 Pharmacy Order Dispense | order_id |
| MHS GENESIS3 Pharmacy Order Product | order_id, get item_id, med_product_id |
| MHS GENESIS3 Medication Product Reference | match on item_id and/or med_product_id |
| MHS GENESIS3 Encounter | encntr_id from orders |
| MDR GENESIS3 Person | person_id |
| MDR GENESIS3 Personnel | prsnl_id |
| MDR DMIS Index | MTF, MTF_ENR |
| MDR LVM and/or MDR DEERS | EDIPN or SSN and date_dispense between begin and end dates associated with the segment |
| MDR MPI | EDIPN |
| MDR Omni-CAD | zip_d and sponsvc and year and month of CAD in date_dispense |

VII. FILE LAYOUT

Table 2 describes the file layout and derivation rules for the MHS GENESIS3 Pharmacy file.

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|--------------------------|-------------------|-------------|-------------------------|---|--------------|
| MHSG Rx Dispense History | | | | | |
| Action Sequence | action_sequence | N(8) | action_sequence | none | ACTION_SEQ |
| Authorization Number | authorization_nbr | varchar(75) | authorization_nbr | none | |
| Bill Quantity | bill_qty | N(8) | bill_qty | none | BILL_QTY |
| Charge Date and Time | charge_dt_tm | DATETIME | charge_dt_tm | none | CHARGE_DT_TM |
| Charge Indicator | charge_ind | N(8) | charge_ind | none | CHARGE_IND |
| Charge Date Time Zone | charge_tz | N(8) | charge_tz | none | |
| Copay Amount | copay | N(8) | copay | none | COPAY_AMT |
| Cost Amount | cost | N(8) | cost, event_total_price | coalesce(cost, event_total_price) as cost | COST_AMT |
| Dispense Qty | disp_qty | N(8) | disp_qty | none | |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|---|----------------------|-------------|-------------------------|---|-------------------------------|
| Dispense Quantity Unit | disp_qty_unit | varchar(24) | disp_qty_unit_cd | cv.display as disp_qty_unit, apply code_set 54 | DISPENSE_QTY_UNIT |
| Dispense Quantity Unit Description | disp_qty_unit_desc | varchar(60) | disp_qty_unit_cd | cv.description as disp_qty_unit_desc, apply code_set 54 | |
| Dispense Date and Time | dispense_dt_tm | DATETIME | dispense_dt_tm | none | DISPENSE_DT_TM |
| Dispense Event Type | dispense_event_type | varchar(60) | disp_event_type_cd | cv.description as dispense_event_type, apply code_set 4032 | DISPENSE_EVENT_TYPE |
| Dispense Fee | dispense_fee | N(8) | dispense_fee | none | |
| Dispense Service Resource Department Hierarchy SK | dispense_loc_cd | N(8) | disp_loc_cd, disp_sr_cd | coalesce(disp_loc_cd, disp_sr_cd) as dispense_loc_cd | DISPENSE_SVC_RES_DEPT_HIER_SK |
| Dispense Location Code | dispense_location | varchar(40) | disp_loc_cd | cv.display as dispense_location, apply code_set 220, 221 | DISPENSE_LOC |
| Dispense Priority | dispense_priority | varchar(40) | disp_priority_cd | cv.description as dispense_priority, apply code_set 4513 | DISPENSE_PRIORITY |
| Dispensing Personnel Code | dispense_prsnl_id | N(8) | dispense_prsnl_id | none | |
| Dispense Quantity | dispense_quantity | N(8) | disp_qty | none | DISPENSE_QTY |
| Dispense Date Time Zone | dispense_tz | N(8) | dispense_tz | none | |
| Dose Quantity | doses | N(8) | doses | none | DOSE_QTY |
| Fill List Number | fill_nbr | N(8) | fill_nbr | none | FILL_LIST_NBR |
| Order ID | order_id | N(8) | order_id | none | |
| Pharmacy Type Code | pharm_type_cd | N(8) | pharm_type_cd | none | |
| Pharmacy Type | pharmacy_type | varchar(14) | pharm_type_cd | cv.display as pharmacy_type, apply code_set 4500 | PHARMACY_TYPE |
| Remaining Quantity | qty_remaining | N(8) | qty_remaining | none | REMAINING_QTY |
| Remaining Refill Count | refills_remaining | N(8) | refills_remaining | none | REMAINING_REFILL_COUNT |
| Unit Cost Price | uc_price | N(8) | uc_price | none | |
| MHSG Encounter | | | | | |
| Admit Type | admit_type | varchar(40) | admit_type_cd | cv.display as admit_type, apply code_set 3 | ADMIT_TYPE |
| Encounter Disposition Code | dispcode | varchar(40) | disch_disposition_cd | cv.display as dispcode, apply code_set 19 | DISPCODE |
| Encounter Status | encounter_status | varchar(40) | encntr_status_cd | cv.display as encounter_status, apply code_set 261 | ENCOUNTER_STATUS |
| Encounter Type | encounter_type | varchar(40) | encntr_type_cd | cv.display as encounter_type, apply code_set 71 | ENCOUNTER_TYPE |
| Encounter Class | encounter_type_class | varchar(40) | encntr_type_class_cd | cv.display as encounter_class, apply code_set 69 | ENCOUNTER_CLASS |
| Financial Number (FIN) | fin_e | varchar(40) | alias | tbl.alias as fin_e where encntr_alias_type_cd = 1077, apply code_set 1077 | FIN |
| Location Encounter | loc_enc | varchar(60) | location_cd | cv.display as loc_enc, apply code_set 220, 221 | |
| Location Encounter Nurse Unit | loc_enc_nurse_unit | varchar(60) | loc_nurse_unit_cd | cv.display as loc_enc_nurse_unit, apply code_set 220, 221 | |
| Location Encounter Nurse Unit Code | loc_nurse_unit_cd | N(8) | loc_nurse_unit_cd | none | |
| Location Encounter Code | location_cd | N(8) | location_cd | none | |
| Medical Service | medical_service | varchar(40) | med_service_cd | cv.display as medical_service, apply code_set 34 | MEDICAL_SERVICE |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|--------------------------------|------------------------|--------------|-------------------------------------|--|------------------------------|
| Reason for Visit | reason_for_visit | varchar(255) | reason_for_visit | none | REASON_F OR_VISIT_T XT |
| MHSG Medication Product | | | | | |
| Form Code | form | varchar(60) | form_cd | cv.description as form, apply code_set 4002 | FORM_CO DE |
| Given Strength | given_strength | varchar(50) | GIVEN_STRENGTH | none | GIVEN_STR ENGTH |
| National Drug Code (NDC) | ndc | varchar(50) | med_identifier_type_cd | med_identifier_type_cd, 3104 as ndc | |
| Strength | strength | N(8) | strength | none | STRENGTH |
| Strength Unit | strength_unit | varchar(30) | strength_unit_cd | cv.display as strength_unit, apply code_set 54 | STRENGTH _UNIT |
| Strength Unit Description | strength_unit_desc | varchar(60) | strength_unit_cd | cv.description as strength_unit_desc, apply code_set 54 | |
| Volume | volume | N(8) | VOLUME | md.volume as total_volume | VOLUME |
| Volume Unit | volume_unit | varchar(30) | volume_unit_cd | cv.display as volume_unit, apply code_set 54 | VOLUME_U NIT |
| Volume Unit Description | volume_unit_desc | varchar(60) | volume_unit_cd | cv.description as volume_unit_desc, apply code_set 54 | |
| Therapeutic Class | therapeutic_class | N(8) | THERAPEUTIC_CLASS_SHORT_DESC | obtain therapeutic_class_short_desc from hea; match on item_id | |
| Therapeutic Class Description | therapeutic_class_desc | varchar(55) | THERAPEUTIC_CLASS_LONG_DESC | obtain therapeutic_class_long_desc from hea; match on item_id | |
| MHSG Order Action | | | | | |
| Location Order Nurse Unit | loc_order_nurse_unit | varchar(60) | order_locn_cd | cv.display as loc_order_nurse_unit, apply code_set 220, 221 | LOC_UNIT_ DISP_ORDE R |
| Location Order Code | order_locn_cd | N(8) | order_locn_cd | none | |
| Ordering Physician Code | order_provider_id | N(8) | order_provider_id | none | |
| MHSG Rx Order Dispense | | | | | |
| Claim Flag | claim_flag | N(8) | claim_flag | none | CLAIM_FLG |
| Days Supply | days_supply | N(8) | days_supply | none | DAYS_SUPP PLY |
| Dispense Category | dispense_category | varchar(90) | dispense_category_cd | cv.description as dispense_category, apply code_set 4008 | DISPENSE_ CATEGORY |
| Legal Status | legal_status | varchar(60) | legal_status_cd | cv.description as legal_status, apply code_set 4200 | LEGAL_STA TUS |
| Order Cost | order_cost | N(8) | order_cost_value, order_price_value | coalesce(order_cost_value, order_price_value) | |
| Order Dispense Indicator | order_dispense_ind | N(8) | order_dispense_ind | none | |
| Order Type Flag | order_type | varchar(15) | order_type | none | ORDER_TY PE_FLAG |
| Location Pharmacy | pharmacy | varchar(90) | rx_nbr_cd | cv.description as pharmacy, apply code_set 4550 | |
| Location Pharmacy Code | rx_nbr_cd | N(8) | rx_nbr_cd | none | |
| MHSG Rx Order Product | | | | | |
| Brandname | brandname | varchar(100) | brand_desc | brand_desc as brand_name | BRANDNA ME |
| Compound Flag | compound_flag | N(8) | compound_flag | none | COMPOUN D_FLAG |
| Compound Flag Description | compound_flag_desc | varchar(10) | compound_flag | none | |
| Dose Quantity Unit | dose_quantity | N(8) | dose_quantity_unit_cd | cv.display as dose_quantity_unit, apply code_set 54 | DOSE_QTY _UNIT |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|------------------------------------|-----------------------------|--------------|---|--|--------------------------------|
| Generic Name | generic_name | varchar(100) | generic_desc | generic_desc as generic_name | GENERIC_NAME |
| Ingredient Sequence | ingred_sequence | N(8) | ingred_sequence | none | INGREDIENT_SEQ |
| Item ID | item_id | N(8) | item_id | none | |
| Medication Product ID | med_product_id | N(8) | med_product_id | none | |
| National Drug Code (NDC) II | ndc_formatted | varchar(50) | drug_identifier | drug_identifier as ndc_formatted | NDC_REF |
| Quantity Unit | quantity_unit | varchar(30) | disp_qty_unit_cd, dose_quantity_unit_cd | cv.display as quantity_unit, apply code_set 54 | |
| Quantity Unit Description | quantity_unit_desc | varchar(60) | disp_qty_unit_cd, dose_quantity_unit_cd | cv.description as quantity_unit_desc, apply code_set 54 | |
| Unrounded Dose Quantity | unrounded_dose_quantity | N(8) | unrounded_dose_qty | unrounded_dose_qty as unrounded_dose_quantity | UNROUNDED_DOSE_QTY |
| MHSG Orders | | | | | |
| Activity Type | activity_type | varchar(60) | activity_type_cd | cv.display as activity_type, apply code_set 106 | |
| Activity Type Code | activity_type_cd | N(8) | activity_type_cd | none | |
| Catalog | catalog | varchar(90) | catalog_cd | cv.description as catalog, apply code_set 200 | |
| Catalog Code | catalog_cd | N(8) | catalog_cd | none | |
| Clinical Category | clinical_category | varchar(60) | dcp_clin_cat_cd | cv.display as clinical_category, apply code_set 16389 | |
| Clinical Display Line | clinical_display_line | varchar(255) | clinical_display_line | none | |
| Comment Type Mask | comment_type_mask | N(8) | comment_type_mask | none | |
| Constant Indicator | constant_ind | N(8) | constant_ind | none | CONSTANT_IND |
| Department Status | dept_status | varchar(30) | dept_status_cd | cv.description as dept_status, apply code_set 14281 | DEPT_STATUS |
| Discontinue Date and Time | discontinue_effective_dt_tm | DATETIME | discontinue_effective_dt_tm | none | DISCONTINUE_DT_TM |
| Discontinue Date Time Zone | discontinue_effective_tz | N(8) | discontinue_effective_tz | none | |
| Discontinue Indicator | discontinue_ind | N(8) | discontinue_ind | none | DISCONTINUE_IND |
| Discontinue Type | discontinue_type | varchar(60) | discontinue_type_cd | cv.display as discontinue_type, apply code_set 4038 | |
| Encounter ID | encntr_id | N(8) | originating_encntr_id, encntr_id | coalesce(encntr_id, originating_encntr_id) | |
| Frequency Type Flag | freq_type_flag | varchar(15) | freq_type_flag | none | FREQ_TYPE_FLAG |
| IV Indicator | iv_ind | N(8) | iv_ind | none | IV_IND |
| Original Action Communication Type | latest_communication_type | varchar(30) | latest_communication_type_cd | cv.description as latest_communication_type, apply code_set 6006 | ORIG_ACTION_COMMUNICATION_TYPE |
| Medication Order Type | med_order_type | varchar(30) | med_order_type_cd | cv.description as med_order_type, apply code_set 18309 | MED_ORDER_TYPE |
| Need Doctor Cosign Indicator | need_doctor_cosign_ind | N(8) | need_doctor_cosign_ind | none | |
| Need Rx Clinical Review Flag | need_rx_clin_review_flag | N(8) | need_rx_clin_review_flag | none | |
| Need Rx Verify Flag | need_rx_verify_ind | N(8) | need_rx_verify_ind | none | NEED_RX_VERIFY_FLG |
| Order Comment Indicator | order_comment_ind | N(8) | order_comment_ind | none | |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|-------------------------------------|-------------------------------|--------------|-----------------------|--|-----------------------|
| Order Mnemonic | order_mnemonic | varchar(100) | order_mnemonic | none | ORDER_MNEMONIC |
| Last Order Status | order_status | varchar(30) | order_status_cd | cv.description as order_status, apply code_set 6004 | LAST_ORDER_STATUS |
| Ordered as Mnemonic | ordered_as_mnemonic | varchar(99) | ordered_as_mnemonic | none | |
| Order Date and Time | orig_order_dt_tm | DATETIME | orig_order_dt_tm | none | ORDER_DT_TM |
| Original Order Flag | orig_order_flag | varchar(30) | orig_ord_as_flag | none | ORIG_ORDER_FLAG |
| Order Date Time Zone | orig_order_tz | N(8) | orig_order_tz | none | |
| Person ID | person_id | N(8) | person_id | none | |
| Prescription Order ID | prescription_order_id | N(8) | prescription_order_id | none | |
| PRN Indicator | prn_ind | N(8) | prn_ind | none | PRN_IND |
| Rx Mask | rx_mask | N(8) | rx_mask | none | |
| Rx Mask Detail | rx_mask_detail | varchar(20) | rx_mask | none | RX_MASK_DETAIL |
| MDR Person | | | | | |
| Patient EDIPN | edipn | varchar(10) | person_sk | edipn; where person_sk = person_sk | EDIPN |
| Patient DEERS Eligibility Indicator | eligibility_ind | varchar(1) | person_sk | eligibility_ind; where person_sk = person_sk | |
| Patient Full Name | full_name | varchar(100) | person_sk | full_name; where person_sk = person_sk | |
| Patient MRN | mrn | varchar(40) | person_sk | mrn; where person_sk = person_sk | MRN |
| Patient First Name | patfn | varchar(100) | person_sk | first_name; where person_sk = person_sk. rename first_name = patfn | PATFN |
| Patient Last Name | patln | varchar(100) | person_sk | last_name; where person_sk = person_sk. rename last_name = patln | PATLN |
| Race (derived) | race_g | varchar(45) | person_sk | race; where person_sk = person_sk | |
| Patient SSN | ssn | varchar(9) | person_sk | ssn; where person_sk = person_sk. | SSN |
| Patient Test Record Indicator | test_record_ind | N(8) | person_sk | test_record_ind; where person_sk = person_sk | |
| MDR Personnel | | | | | |
| Ordering Physician DEA | physician_order_dea | varchar(30) | order_provider_id | dea_nbr; match on order_provider_id = person_id | PHYSICIAN_ORDER_DEA |
| Ordering Physician EDIPN | physician_order_edipn | varchar(10) | order_provider_id | edipn; match on order_provider_id = person_id | PHYSICIAN_ORDER_EDIPN |
| Ordering Physician HIPAA Taxonomy | physician_order_hipaa | varchar(10) | order_provider_id | hipaa1; match on order_provider_id = person_id | PHYSICIAN_ORDER_HIPAA |
| Ordering Physician Name | physician_order_name | varchar(100) | order_provider_id | full_name; match on order_provider_id = person_id | PHYSICIAN_ORDER_NAME |
| Ordering Physician NPI | physician_order_npi | varchar(30) | order_provider_id | npi; match on order_provider_id = person_id | PHYSICIAN_ORDER_NPI |
| Ordering Physician MD Flag | physician_order_physician_ind | N(8) | order_provider_id | physician_ind; match on order_provider_id = person_id | PHYSICIAN_ORDER_FLAG |
| Dispensing Personnel DEA | prnsl_dispense_dea | varchar(30) | dispense_prnsl_id | dea_nbr; match on dispense_prnsl_id = person_id. | PRSNL_DISPENSE_DEA |
| Dispensing Personnel EDIPN | prnsl_dispense_edipn | varchar(10) | dispense_prnsl_id | edipn; match on dispense_prnsl_id = person_id. | PRSNL_DISPENSE_EDIPN |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|--|------------------------------|--------------|-------------------|---|----------------------|
| Dispensing Personnel HIPAA Taxonomy | prnsl_dispense_hipaa | varchar(10) | dispense_prsnl_id | hipaa1; match on dispense_prnsl_id = person_id. | PRSNL_DISPENSE_HIPAA |
| Dispensing Personnel Name | prnsl_dispense_name | varchar(100) | dispense_prsnl_id | full_name; match on dispense_prnsl_id = person_id | PRSNL_DISPENSE_NAME |
| Dispensing Personnel NPI | prnsl_dispense_npi | varchar(30) | dispense_prsnl_id | npi; match on dispense_prnsl_id = person_id. | PRSNL_DISPENSE_NPI |
| Dispensing Personnel MD Flag | prnsl_dispense_physician_ind | N(8) | dispense_prsnl_id | physician_ind; match on dispense_prnsl_id = person_id | PRSNL_DISPENSE_FLAG |
| MDR DMIS Index | | | | | |
| Performing CMAC Locality Code | cmaccd | varchar(3) | | convert 2 digit "locality" to 3 digit (e.g. add leading zero). | CMACCD |
| MHS GENESIS Start Date | genesis_begin | N(8) | | rename genesis_start_date=genesis_begin | GENESIS_BEGIN |
| MHS GENESIS Time Zone | genesis_tm_zn | varchar(3) | | rename genesis_time_zone=genesis_tm_zn | GENESIS_TM_ZN |
| MTF MEPRS Parent | meprs_parent | varchar(4) | | rename mepr_par=meprs_parent | MEPRS_PARENT |
| MTF Major Command | mtf_cmd | varchar(8) | | none | MTF_CMD |
| MTF Enrollment Parent | mtf_enr_parent | varchar(4) | | none | MTF_ENR_PARENT |
| MTF Enrollment Facility Branch Of Service | mtf_enr_svc | varchar(1) | | none | MTF_ENR_SVC |
| MTF Enrollment T17 Region | mtf_enr_t17_reg | varchar(2) | | none | MTF_ENR_T17_REG |
| MTF Enrollment T3 Region | mtf_enr_t3_reg | varchar(2) | | none | MTF_ENR_T3_REG |
| MTF Facility Name | mtf_fac_name | varchar(42) | | rename facnme=mtf_fac_name | MTF_FAC_NAME |
| MTF MSMA | mtf_msma | varchar(3) | | none | MTF_MSMA |
| MTF Parent | mtf_parent | varchar(4) | | none | MTF_PARENT |
| MTF Facility Branch Of Service | mtf_svc | varchar(1) | | none | MTF_SVC |
| MTF T17 Region | mtf_t17_reg | varchar(2) | | none | MTF_T17_REG |
| MTF T3 Region | mtf_t3_reg | varchar(2) | | none | MTF_T3_REG |
| MDR LVM | | | | | |
| ACV Group | acvgroup | varchar(2) | | 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". | ACVGROUP |
| Beneficiary Category | bencat | varchar(3) | | none | BENCAT_D |
| Common Beneficiary Category Deers | comben_d | varchar(1) | | none | COMBEN_D |
| Eligibility Group | elg_grp | varchar(1) | | none | ELG_GRP |
| Enrollment Group | enr_grp | varchar(1) | | none | ENR_GRP |
| Ethnicity Code | ethnic | varchar(1) | | none | |
| Ethnicity Code Deers | ethnic_d | varchar(1) | | none | ETHNIC |
| Gender | gender | varchar(1) | | none | GENDER_D |
| Health Care Delivery Program Code Deers | hcdp | varchar(3) | | none | HCDP |
| Assigned Health Care Delivery Program Code | hcdp_asgn | varchar(3) | | none | HCDP_ASSIGN |
| LVM4 Match Indicator | lvm_match | N(8) | | none | LVM_MATCH |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|--------------------------------|-----------------|--------------|----------------------------------|--|----------------|
| Marital Status Code | marital | varchar(1) | | none | MARITAL |
| Medicare Flag | medicare_flag | varchar(1) | | none | MEDICARE_FLAG |
| MTF Enrollment DMISID | mtf_enr | varchar(4) | | none | MTF_ENR |
| Patient Zip Code Deers | patzip | varchar(5) | | none | PATZIP |
| PCM ID | pcm_id | varchar(18) | | none | PCM_ID |
| PCM Type | pcm_type | varchar(1) | | none | PCM_TYPE |
| Medical Privilege Code | privilege | varchar(1) | | none | PRIVILEGE |
| Race Code Deers | race_d | varchar(1) | | none | RACE |
| Relationship To Sponsor Deers | rel_d | varchar(1) | | none | REL |
| Sponsor Service | sponsvc | varchar(1) | | none | SPONSVC |
| Sponsor Service Aggregate | svcagg | varchar(1) | | none | SVCAGG |
| TPR Eligibility Code | tpr | varchar(1) | | none | TPR |
| Tricare Prime Remote Flag | tprflag | varchar(1) | | tprflag = obtain from omni-cad. tpr flag (tprflag), based on matching fy, fm, and beneficiary zip code (patzip) | TPRFLAG |
| MDR MPI | | | | | |
| Person Association Reason Code | parc | varchar(2) | | none | PARC |
| Patient Date of Birth DEERS | patdob | N(8) | | dob=dob_deers; patdob = input(dob_deers,yyymmdd8.); | PATDOB |
| Sponsor ID | sponssn | varchar(9) | | none | SPONSSN |
| MDR Omni CAD | | | | | |
| Alternate Care Value | acv_d | varchar(1) | | none | ACV_D |
| Beneficiary T17 Region | ben_t17_reg | varchar(2) | | none | BEN_T17_REGION |
| Beneficiary T3 Region | ben_t3_reg | varchar(2) | | none | BEN_T3_REGION |
| Catchment Area ID | catch | varchar(4) | | none | CATCH |
| Beneficiary MTF Service Area | mtfsvcare | varchar(4) | | none | MTFSVCAREA |
| PRISM Area ID | prism | varchar(4) | | none | PRISM |
| Internally Derived | | | | | |
| Age Group Common | agegrp | varchar(1) | | if 0 le patage2 le 4 then agegrp = 'a'; else if 5 le patage2 le 14 then agegrp = 'b'; else if 15 le patage2 le 17 then agegrp = 'c'; else if 18 le patage2 le 24 then agegrp = 'd'; else if 25 le patage2 le 34 then agegrp = 'e'; else if 35 le patage2 le 44 then agegrp = 'f'; else if 45 le patage2 le 64 then agegrp = 'g'; else if 65 le patage2 le 69 then agegrp = 'h'; else if 70 le patage2 le 74 then agegrp = 'i'; else if 75 le patage2 le 79 then agegrp = 'j'; else if 80 le patage2 le 84 then agegrp = 'k'; else if patage2 ge 85 then agegrp = 'l'; else agegrp = 'z'; | AGEGRP |
| Calendar Month | cm | varchar(2) | dispense_dt_tm | cm of dispense_dt_tm | CM |
| Calendar Year | cy | varchar(4) | dispense_dt_tm | cy of dispense_dt_tm | CY |
| Date Dispensed | date_dispense | varchar(8) | dispense_dt_tm, orig_order_dt_tm | coalesce(dispense_dt_tm, orig_order_dt_tm) | DATE_DISPENSE |
| Date Dispensed Numeric | date_dispense_n | N(8) | dispense_dt_tm | sas numeric value of dispense_dt_tm | |
| Encounter SK | encounter_sk | varchar(100) | encntr_id | encntr_id::varchar(100) as encounter_sk | ENCOUNTER_SK |
| Fiscal Month | fm | N(8) | dispense_dt_tm | fm of dispense_dt_tm | FM |
| Fiscal Year | fy | N(8) | dispense_dt_tm | fy of dispense_dt_tm | FY |

| Field | SAS Name | Format | Source Field | Business Rule | 2.4 Field |
|-----------------------|--------------|--------------|--------------|--|--------------|
| MHS GENESIS Flag | genesis_flag | varchar(1) | | set to y | GENESIS_FLAG |
| Has NDC Indicator | has_ndc | N(8) | | if ndc is not missing then 1; else 0 | |
| Location Derived | loc_merge | varchar(100) | | coalesce location fields | |
| Location Derived Code | loc_merge_cd | N(8) | | coalesce location fields | |
| MEPRS Code | meprs_cd | varchar(4) | | equals "daaa" | MEPRS_CD |
| MTF Treatment DMISID | mtf | varchar(4) | | substr(loc_merge, 1, 4) | MTF |
| NDC Match Indicator | ndc_match | N(8) | | if ndc=ndc_formatted and not missing, then 1; else 0 | |
| Order SK | order_sk | varchar(100) | | o.order_id::varchar(100) as order_sk | ORDER_SK |
| Patient Age | patage | N(8) | | use dob_p, patdob to calculate age | PATAGE |
| Patient Category | patcat | varchar(40) | | set as null | PATCAT |
| Person SK | person_sk | varchar(100) | | person_id::varchar(100) as person_sk | PERSON_SK |
| Race Code | race | varchar(1) | | use race, ethnic rule from encounter | |
| Row Count | rcnt | N(8) | | equals 1 | |
| Service Line | svcline | varchar(5) | | equals "phar" | SVCLINE |

VIII. EXCLUSIONS

Here are the conditions required to exclude and/or remove records from the MHS GENESIS3 Pharmacy file. If any of the following conditions are met, either delete the record or output to an error file.

- If the primary key is missing or zero.
- If patient test flag is missing or one.
- If MTF is either NONE, TEST, or VA.

IX. DATA CONSIDERATIONS

This dataset combines inpatient and ambulatory pharmacy orders in the same file. While many data elements are applicable to both types. Many are not. For instance, Days Supply is only applicable for ambulatory prescripts and will be missing for all inpatient records. For complete list of data elements that populated based on pharmacy_type, refer to the MHS GENESIS3 Pharmacy tab of the MDR Data Dictionary.

In the MHS GENESIS Bulk Data Extract (BDE) 3.0, retail pharmacy prescriptions are assigned to the generic location 'Ambulatory Pharmacy'. As such, most location information is either missing or appears as 'Ambulatory Pharmacy' when the pharmacy_type is 'Retail' and/or encounter_type is 'Lifetime Pharmacy'.

Millennium maintains the link between the originating encounter and the lifetime pharmacy encounter, so the location information is available there.