**24 May 2021**

MHS Genesis Location File

for the

MHS Data Repository (MDR)

(Version 1.12.00)

Current Specification

**Revision History**

| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| --- | --- | --- | --- | --- |
| 1.00.00 | 2/2/2018 | Tracy Comer | * Initial Document | * Initial Document |
| 1.01.00 | 4/13/2018 | Tracy Comer | * Table 2 | * Removed entire “Fields from the Encounter File” section, which only included the TM\_ZN\_CD field * Removed the derived field of TM\_ZN\_ADJ * Added nomeprs\_flag to Derived Variable section * Corrected typo in variable name for Gen\_Begin\_Dt * dded McChord to Gen\_Begin\_Dt field transformation logic * Added additional note to test\_location\_ind |
| 1.02.00 | 05/07/2018 | Tracy Comer | * Table 1 * Table 2 | * Removed Encounter File from Table 1 * Adjusted Date Matching in Organization File row * Adjusted business rules for Child\_DMIS\_ID and Organization Name |
| 1.03.00 | 06/04/2018 | Tracy Comer | * Table 2 | * Adjusted variable names * Removed mention of not including MEPRS codes for unit names beginning with ‘zz’. All MEPRS codes in Genesis reference files corresponding to location codes will be used. Initially, these locations were thought to be test locations. |
| 1.04.00 | 09/10/2018 | Tracy Comer | * Table 2 | * Adjusted variable names. Parent DMIS ID of record now comes from the Genesis data files while the other Parent DMIS ID comes from the DMIS ID table. |
| 1.05.00 | 10/02/2018 | Tracy Comer | * Table 2 | * Added unit\_display variable, which coincides with the scheduled location text in the MDR Genesis appointment file |
| 1.06.00 | 10/15/2018 | Tracy Comer | * Table 1 * Table 2 | * Included Genesis Start Date from the DMIS ID Index table; adjusted logic to match DMIS ID to the MTF in the Location file * Adjusted business rule to assign MTF value and adjusted DMIS ID business rules to merge to the MTF in the Location file |
| 1.07.00 | 05/20/2019 | Tracy Comer | * Table 1 * Table 2 | * Added SAS look-up tables * Added display fields, including specialty and care location fields, and adjusted the business rule for the Child DMIS ID |
| 1.08.00 | 07/02/2019 | Tracy Comer | * Table 2 | * Included FACZIP from the DMIS ID Index table |
| 1.09.00 | 09/03/2019 | Tracy Comer | * Table 2 | * Added FACTYPE from the DMIS ID Index table * Adjusted MEPRS CD and TEST LOCATION INDICATOR logic * Added VA\_FLAG and ERSA\_FLAG |
| 1.10.00 | 09/25/2019 | Tracy Comer | * Table 2 | * Adjusted TEST LOCATION INDICATOR logic |
| 1.11.00 | 11/20/2019 | Tracy Comer | * Table 2 | * Adjusted Child DMIS ID logic |
| 1.12.00 | 05/24/2021 | Tracy Comer | * Table 2 | * Adjusted MEPRS code logic |

# MDR Genesis Location File

1. Source:

The source system is the Cerner Millenium. All records originate from the WH\_CLN\_LOCATION\_REF file Joins to other reference tables and the MDR’s DMIS ID Index table complete the MDR Genesis Location file.

1. Transmission (Format and Frequency)

TBD

1. 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/genesis/raw according to routine MDR operating procedures.

Output products: A SAS dataset contains all current location records. The current location file is stored at /mdr/pub/genesis/location/location.sas7bdat.

1. Receiving Filters

All records were provided with the initial batch of data. Thereafter, new and changed records are sent each week.

1. Update Process

After sending the initial batch of location data (11/16/2017), the raw feeds for the location file represent insert and updated records. These records shall be used to maintain the master MDR location dataset.

The primary key for the location table is the LOCATION\_KEY field. During the extraction of the raw location records, de-duplication of records, or anytime location key collision occurs between incoming data and existing master data, the processor de-duplicates data by selecting the record with the most recent value of the update date/time (UPDT\_DT\_TM) for any multiple of records with the same primary key.

Once the dataset has been updated, the processor assigns many other internally-derived variables as described in Table 2.

1. Field Transformations and Deletions for MDR Core Database

This section of this functional specification describes the data merges that are necessary to append fields in the MDR Genesis location file. Table 1 describes the reference files that are used in processing.

**Table 1 Additional Files Used in Processing**

| **Merge** | **Date Matching** | **Additional Matching** |
| --- | --- | --- |
| Raw Location Reference | Only match records with the most recent updt\_dt\_tm | Location\_ref |
| Organization Reference | Match records where updt\_dt\_tm of location record falls between the begin and end effective dt tms of the organization reference record | Loc\_facility\_ref |
| Code Value Out Reference | N/A | Code value ref, contributor source = 105096617 or 108418263, code\_set=’220’; active\_ind=1, health\_system\_id |
| DMIS ID Index File | Current file for the current FY | Include Parent DMIS ID, Branch of Service, Facility Command Code, Facility NPI ID, Genesis Start Date, and Facility HIPAA taxonomy codes (where applicable) where MTF is populated. |
| Specialty Look Up File  /mdr/genesis/aprod/location/spec\_lu.sas7bdat |  | 2nd portion (using “-“ as delimiters) of the unit display=specialty in look-up file |
| Care Location Look Up File  /mdr/genesis/aprod/location/care\_loc\_lu.sas7bdat |  | 3rd portion (using “-“ as delimiter) of the unit display=care\_location in look-up file |

Business rules for each of the appended fields are described in the body of the format table in Section VII.

1. File Layout

The MDR Genesis Location file is stored in a SAS data set. Table 2 provides the file layout and processing rules.

**Table 2 File Layout for MDR Genesis Location File**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Health System Source Identifier | N | HEALTH\_SYSTEM\_SOURCE\_ID | HEALTH\_SYSTEM\_SOURCE\_ID | No transformation |
| Location Key | N | LOCATION\_KEY | LOCATION\_KEY | No transformation |
| Facility Reference | $40 | LOC\_FACILITY\_REF | LOC\_FACILITY\_REF | No transformation |
| Building Reference | $40 | LOC\_BUILDING\_REF | LOC\_BUILDING\_REF | No transformation |
| Unit Reference | $40 | UNIT\_REF | LOC\_NURSE\_UNIT\_REF, LOC\_AMBULATORY\_REF, LOC\_SURGERY\_REF | Set equal to loc\_nurse\_unit\_ref if populated and not '0', else loc\_surgery\_ref if populated and not '0', or loc\_ambulatory\_ref if populated and not '0'  Else set to missing. |
| Room Reference | $40 | LOC\_ROOM\_REF | LOC\_ROOM\_REF | No transformation |
| Bed Reference | $40 | LOC\_BED\_REF | LOC\_BED\_REF | No transformation |
| Facility Description | $100 | LOC\_FACILITY\_DESC | LOC\_FACILITY\_DESC | No transformation |
| Building Description | $100 | LOC\_BUILDING\_DESC | LOC\_BUILDING\_DESC | No transformation |
| Unit Description | $100 | UNIT\_NAME | LOC\_NURSE\_UNIT\_DESC, LOC\_AMBULATORY\_DESC, LOC\_SURGERY\_DESC | Set equal to loc\_nurse\_unit\_desc if populated and not '0', else loc\_surgery\_desc if populated and not '0', or loc\_ambulatory\_desc if populated and not '0'.  Else set to missing. |
| Ambulatory Display | $100 | LOC\_AMBULATORY\_DISP | LOC\_AMBULATORY\_DISP | No transformation |
| Building Display | $100 | LOC\_BUILDING\_DISP | LOC\_BUILDING\_DISP | No transformation |
| Facility Display | $100 | LOC\_FACILITY\_DISP | LOC\_FACILITY\_DISP | No transformation |
| Nurse Unit Display | $100 | LOC\_NURSE\_UNIT\_DISP | LOC\_NURSE\_UNIT\_DISP | No transformation |
| Surgery Display | $100 | LOC\_SURGERY\_DISP | LOC\_SURGERY\_DISP | No transformation |
| Unit Display | $45 | UNIT\_DISPLAY | LOC\_NURSE\_UNIT\_DISP, LOC\_AMBULATORY\_DISP, LOC\_SURGERY\_DISP | Set equal to loc\_nurse\_unit\_disp if populated and not '0', else loc\_surgery\_disp if populated and not '0', or loc\_ambulatory\_disp if populated and not '0'.  Else set to missing. |
| Room Description | $100 | LOC\_ROOM\_DESC | LOC\_ROOM\_DESC | No transformation |
| Bed Description | $100 | LOC\_BED\_DESC | LOC\_BED\_DESC | No transformation |
| Begin Effective Date/Time | Date/Time | BEG\_EFFECTIVE\_DT\_TM\_UTC | BEG\_EFFECTIVE\_DT\_TM | No transformation |
| End Effective Date/Time | Date/Time | END\_EFFECTIVE\_DT\_TM\_UTC | END\_EFFECTIVE\_DT\_TM | No transformation |
| Active Indicator | N | ACTIVE\_IND | ACTIVE\_IND | No transformation |
| Update Date/Time | Date/Time | UPDT\_DT\_TM\_UTC | UPDT\_DT\_TM | No transformation |
| Location Reference | $40 | LOCATION\_SK | LOCATION\_SK | No transformation |
| Organization Reference | $40 | ORG\_REF | LOC\_FACILITY\_ORG, LOC\_SURGERY\_ORG, LOC\_AMBULATORY\_ORG | Set equal to loc\_facility\_org if populated and not = '0', else loc\_surgery\_org if populated and not = '0' or loc\_ambulatory\_org if populated and not = '0'.  Else set to missing. |
| Location Facility Patient Care Node Indicator | N | LOC\_FACILITY\_PATCARE\_NODE\_IND | LOC\_FACILITY\_PATCARE\_NODE\_IND | No transformation |
| Incomplete Hierarchy Indicator | N | INCOMPLETE\_HIERARCHY\_IND | INCOMPLETE\_HIERARCHY\_IND | No transformation |
| Source Active Indicator | N | SRC\_ACTIVE\_IND | SRC\_ACTIVE\_IND | No transformation |
| **Fields from the Raw Location File** |  |  |  |  |
| Location Type | $40 | LOCATION\_TYPE\_REF | LOCATION\_TYPE\_REF | Match location\_ref in wh\_raw\_location\_ref table equal to location\_sk where there is the latest updt\_dt\_tm and health\_system\_source\_id='18635', and retrieve location\_type\_ref variable. Then apply $location\_type format to display the location\_type definition. |
| **Fields from the Organization Reference File** |  |  |  |  |
| Organization Name | $40 | ORGANIZATION\_NAME | ORGANIZATION\_NAME | No transformation |
| Address Line 1 | $100 | ADDRESS\_LINE\_1 | ADDRESS\_LINE\_1 | No transformation |
| Address Line 2 | $100 | ADDRESS\_LINE\_2 | ADDRESS\_LINE\_2 | No transformation |
| City | $100 | CITY | CITY | No transformation |
| State | $50 | STATE | STATE | No transformation |
| Zip Code | $50 | POSTAL\_CODE | POSTAL\_CODE | No transformation |
| County | $50 | COUNTY | COUNTY | No transformation |
| Country | $50 | COUNTRY | COUNTRY | No transformation |
| Organization NPI | $100 | ORG\_NPI | ORG\_NPI | No transformation |
| **Fields from the Code Value Out Ref File** |  |  |  |  |
| Parent DMIS ID of Record | $4 | MTF\_PARENT\_REC | N/A | Retrieve the alias where location\_sk matches code\_value\_ref and code\_set=220, active\_ind=1, contributor\_source\_ref=’105099617’. Then, parse from first 4 digits of alias. If the parsed value does not begin with '1' '2' '3' '4' '5' '6' '7' '8' '9'  or '0', leave variable blank. If the code value ref table yields no Parent DMIS ID but the Organization Name starts with '1' '2' '3' '4' '5' '6' '7' '8' '9'  or '0', the first 4 digits of the Organization Name should be used. |
| MEPRS Code | $4 | MEPRS\_CD | N/A | If the unit ref is blank or ‘0’ then leave variable blank. Otherwise, retrieve the alias where unit\_ref is populated and not equal to ‘0’ ~~and unit\_name does not equal ‘zz’~~, matches code\_value\_ref and code\_set=220, active\_ind=1, contributor\_source\_ref=’108418263’ ~~and the location file record’s updt\_dt\_tm falls between the begin and end\_effective\_dt\_tms of the file.~~ Then, parse from second portion of alias. If digits 1-4 equal “ARMY" or "NAVY" (not case specific), MEPRS Code should be parsed from digits 6 through 9. If digits 1 through 9 equal "AIR FORCE" (not case specific), then MEPRS Code should be parsed from digits 11 through 14. If the parsed value does not begin with 'A' 'B' 'C' 'D' 'E' 'F' or 'G', leave variable blank.  Another way the above can be accomplished is to return the second portion of the fields when the value contains “-“. If the parsed value does not begin with 'A' 'B' 'C' 'D' 'E' 'F' or 'G', leave variable blank.  IF the alias does not begin with “ARMY", "NAVY", "AIR FORCE", just use first 4 digits of alias. If the parsed value does not begin with 'A' 'B' 'C' 'D' 'E' 'F' or 'G', leave variable blank. |
| **Fields from the DMIS ID Index File** |  |  |  |  |
| Parent DMIS ID | $4 | MTF\_PARENT | UBU\_PAR | If the child DMIS ID is populated, use the child DMIS ID to return associated UBU parent DMIS ID from DMIS ID Index table. If child DMIS ID is blank, use parent DMIS ID to return UBU parent DMIS ID from DMIS ID Index table. There are select cases where the Parent DMIS ID in MHS Genesis may be different from the Parent DMIS ID for a site in the DMISID Index table. |
| Service | $1 | SVC | FINSVC | Match to DMISID Index based on MHS Genesis MTF |
| Facility NPI | $10 | FAC\_NPI | NPI2 | Match to DMISID Index based on MHS Genesis MTF |
| Facility HIPAA Taxonomy Code | $10 | FAC\_TAX | NPITAX | Match to DMISID Index based on MHS Genesis MTF |
| Facility Command Code | $8 | FAC\_CMD | MAJCMND | Match to DMISID Index based on MHS Genesis MTF |
| eMSM ID | $3 | FAC\_MSM | MSM\_ID | Match to DMISID Index based on MHS Genesis MTF |
| Facility Type | $6 | FACTYPE | FACTYPE | Match to DMISID Index based on MHS Genesis MTF |
| Facility Zip Code | $5 | FACZIP | FACZIP | Match to DMISID Index based on MHS Genesis MTF |
| MHS Genesis Begin Date | MMDDYY10 | GEN\_BEGIN\_DT | GENESIS\_START\_DATE | Return Genesis\_Start\_Date from DMIS ID Index table where DMIS ID=MHS Genesis MTF. Convert Genesis\_Start\_Date to MMDDYY10. |
| **Specialty Look Up File** |  |  |  |  |
| Specialty Code Definition | $40 | SPECIALTY\_CODE\_MEANING | N/A | No transformation |
| Specialty Code Category | $5 | SPECIALTY\_CATEGORY | N/A | No transformation |
| **Care Location Look Up File** |  |  |  |  |
| Care Location Definition | $40 | CARE\_LOCATION\_MEANING | N/A | No transformation |
| **Internally Derived Fields** |  |  |  |  |
| Non MEPRS Reporting Flag | 8 | NOMEPRS\_FLAG | N/A | If MEPR\_PAR field from DMIS ID Index table for the CHILD\_DMIS\_ID is null, then nomeprs\_flag=1. Else nomeprs\_flag=0. If a location has a blank Parent\_DMIS\_ID in the Genesis data, this field will be equal to 1. If a site does not report MEPRS, blanks in the MEPRS\_CD variable are not a concern. |
| Adjusted Nurse Unit Display | $45 | UNIT\_DISPLAY\_ADJ | N/A | Remove leading “z”’s from unit\_display variable. |
| Child DMIS ID | $4 | MTF | N/A | If the first and fourth character of the unit\_display\_adj are numeric, set MTF equal to the first 4 digits of the unit\_display\_adj. Else retrieve the alias where location\_sk matches code\_value\_ref and code\_set=220, active\_ind=1, contributor\_source\_ref=’105099617’. If substr(alias,6,4) is a 4 digit numeric value, then this 4 digit value=MTF. Else if the substr(loc\_building\_desc,1,4) equals a 4 digit numeric value, set this as the MTF. Else if the substr(loc\_facility\_desc,1,4) equals a 4 digit numeric value, then MTF=substr(loc\_facility\_desc,1,4). If VA flag=1, ensure MTF is set to blank. |
| Specialty | $10 | SPECIALTY | N/A | Second portion of the Unit Display after the first “-“. If no dashes exist in the Unit Display field, leave blank. |
| Care Location | $10 | CARE\_LOCATION | N/A | Third portion of the Unit Display after the second “-“. If no dashes exist in the Unit Display field, leave blank. |
| Test Location Indicator | 8 | TEST\_LOCATION\_FLAG | N/A | If loc\_facility\_disp does not include “VA” AND (MTF\_PARENT is null or ='0' or MTF is null or =’0’ or organization\_name begins with 'zz', 'Small', ‘Medium’ or 'Large')  then test\_location\_flag=1;  else test\_location\_flag=0; MTFs of 9992-9999 are confirmed test MTFs and should be removed by first clause while keeping VA locations. Other rules to be confirmed by Cerner. Cerner has included historic immunization information in test locations. |
| VA Flag | 8 | VA\_FLAG | N/A | If loc\_facility\_disp contains “VA” then va\_flag=1; else va\_flag=0. |
| ERSA Flag | 8 | ERSA\_FLAG | N/A | If substr(factype,1,3)=”ERS”, then ersa\_flag=1; else ersa\_flag=0. |

1. Refresh Frequency

## Weekly

1. Data Marts

N/A.

1. Special Outputs

N/A