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

I. 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.

II. TRANSMISSION (FORMAT AND FREQUENCY)

TBD

III. 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.

IV. RECEIVING FILTERS

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

V. 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.

VI. 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.

VII. 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

Field	Format	SAS Name	Source Element	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

Field	Format	SAS Name	Source Element	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.

Field	Format	SAS Name	Source Element	Transformation
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.

Field	Format	SAS Name	Source Element	Transformation
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.

VIII. REFRESH FREQUENCY

Weekly

IX. DATA MARTS

N/A.

X. SPECIAL OUTPUTS

N/A