

12 September 2019

**MHS Address File
for the
MHS Data Repository (MDR)
(Version 1.02.00)**

Current Specification

Revision History

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00.00	10/16/2004	W. Funk	<ul style="list-style-type: none"> • Appendices C & F • Entire document 	<ul style="list-style-type: none"> • Modified the DRG and MS-DRG grouper input and output layouts. • Changed EI/DS references to DHSS
1.01.00	08/02/2012	L. Hopkins	<ul style="list-style-type: none"> • VIII • Entire Document 	<ul style="list-style-type: none"> • Added Patient SSN • Changed VM4 references to VM6
1.02.00	09/12/2019	K. Hofmann	<ul style="list-style-type: none"> • Entire Document 	<ul style="list-style-type: none"> • Added MDR GENESIS Person file as a source of address data

MHS Address File

I. SOURCE:

The MHS Address File is prepared from outputs from three other MDR processes; the MDR VM6 (a.k.a Point in Time Extract) Address File, the CHCS Appointment Address File, and the GENESIS Person File. Those three outputs are prepared as a part of routine MDR Processing and are described in the specifications of the respective data types.

II. TRANSMISSION (FORMAT AND FREQUENCY):

The VM6 Address file, the CHCS Appointment Address file, and the GENESIS Person file are all stored as SAS Datasets. The VM6 Address file is available once per month, upon completion of processing of the VM6. The CHCS Appointment Address file and GENESIS Person file are both available once per week, upon completion of processing of the CHCS Appointment Data and the GENESIS Person data.

III. ORGANIZATION AND BATCHING

There is one cumulative MDR Address file, representing data found in the MDR VM6 Address file, the CHCS Appointment Address file, and the GENESIS Person file.

IV. RECEIVING FILTERS

See VM6, CHCS Appointment, and GENESIS Person Specifications for further detail on business rules used to create the source data files

V. INITIAL FILE REQUIREMENT

To create the initial address file:

1. Read in the raw VM6 file. De-duplicate records so that there is only one record per EDI_PN. For records that share an EDI_PN and have the address field populated, select the record with the most recent LST_UPDT_DT. If there is more than one record with the same LST_UPDT_DT, but different address information, select the record with the MI_HC DP_PLN_CVG_CD populated and valid at the time the VM6 extract was pulled (determine validity of MI_HC DP_PLN_CVG_CD by assessing the MI_PCM_SLCT_BGN_DT and MI_PCM_SLCT_END_DT compared with extract date). If there is no record with valid enrollment, simply de-duplicate arbitrarily.
2. Prepare appointment-address records
 - a. Read in and append all available CHCS files.
 - b. Merge to the MMPI to populate records in the CHCS data with blank EDI_PN, according to MDR Retrofit rules established in July 2004.
 - i. De-duplicate the July 2004 MMPI file based on Sponsor SSN and DDS. Merge the resulting dataset to the CHCS appointment-address data by Sponsor SSN and DDS if merge key is not blank.
 - ii. For those appointment records that did not merge using the criteria above (2bi):
 1. Create 4 relationship categories (sponsor, spouse, children, and other) in appointment data based on FMP where FMP='2*' equal sponsor,

- FMP='3*' equal spouse, FMP='0*' or '1*' equal children, and the rest are grouped as other.
2. Create 4 relationship categories (sponsor, spouse, children, and other) in the MMPI file based on DDS where DDS='2*' equal sponsor, DDS='3*' equal spouse, DDS='0*' or '1*' equal children, and the rest are grouped as other. Note, the MMPI file used in this step should not be dedup by Sponsor SSN and DDS.
 3. Merge appointment records with MMPI file by Sponsor SSN and relationship category based on best match criteria in the order of (1) patient sex and date of birth matched exactly; (2) patient date of birth matched exactly; (3) patient sex matched exactly, patient date of birth if plus or minus 2 months and 1 day from one another; and (4) patient date of birth if plus or minus 2 months and 1 day from one another.
- c. At the end of this step, delete records where the EDI_PN remains blank.
 - d. Keep only the most recent record (latest appointment date) for a given person where:
 - i. A person is defined using EDI_PN, and
 - ii. The address is not blank, and
 - iii. If there is more than one record for a person matching the criterion above, the record with the most recent update date is selected.
3. Prepare GENESIS-based records
 - a. From the file stored in MDR PUB, pull the following variables: PERSON_KEY, CITY, COUNTRY, EDIPN, FIRST_NAME, LAST_NAME, SSN, STATE, SUFFIX, ZIP, UPDT_DT_TM, TEST_RECORD_IND.
 - b. From the file stored in MDR Restricted, pull the following variables: PERSON_KEY, ADDR_LINE_1, ADDR_LINE_2, ADDR_LINE_3, HOME_PHONE, WORK_PHONE.
 - c. Merge the PUB-based and Restricted-based data using person_key as the merge key, keeping only people found in both files. This data is already filtered to the most recent update (by updt_dt_tm) for each person.
 - d. Remove any test patients by keeping only records with TEST_RECORD_IND = 0.
 4. Merge the VM6 Address file created in step 1, with the file that results from steps 2 and 3, using EDI_PN as a merge key, and keep fields according to the file layout document below.
 5. Sort the data set by EDI_PN.

VI. UPDATE PROCESS

The MHS Address File is updated monthly. To update the MHS Address File:

1. The monthly VM6 address file is merged to the master MHS Address File by EDI_PN, and the last update date of the incoming record is compared with the VM6 last update date in the MHS address file. The VM6 information in the MHS address file is replaced by the content in the incoming feed, if:
 - a. The incoming feed's update date is more recent, and
 - b. The address in the incoming feed is populated.
2. The incremental CHCS data is merged to the resulting file by EDI_PN, and the last update date of the incoming record is compared with the CHCS last update date in the MHS address file. The CHCS information in the MHS address file is replaced by the content in the incoming feed, if:
 - a. The incoming feed's update date is more recent, and
 - b. The address in the incoming feed is populated.

3. The latest GENESIS Person data is merged to the resulting file by EDI_PN, and the update date of the incoming record is compared with the GENESIS last update date in the MHS address file. The GENESIS information in the MHS address file is replaced by the content in the incoming feed, if:
 - a. The incoming feed's update date is more recent, and
 - b. The address in the incoming feed is populated.

VII. FIELD TRANSFORMATIONS AND DELETIONS FOR MDR CORE DATABASE

In the MHS Address file, address related values for CHCS-based fields are set to blank if a VM6 or GENESIS address exists, but nothing has been reported through CHCS. Similarly, address related values for VM6 data are set to blank if address-related information reported for a beneficiary is available through the CHCS or GENESIS feeds, but not the VM6 feed; and GENESIS values are set to blank if address data is available through either VM6 or CHCS but not GENESIS.

Three fields are appended to the address file to represent the most recent update date for the CHCS, DEERS, and GENESIS addresses. For the CHCS update date, this field will hold the most recent appointment date as defined in the "Update Process" section of this document. For the VM6 update date field, the date will be the LST_UPDT_DT. For the GENESIS update date, the date will hold the date portion of the UPDT_DT_TM field.

VIII. RECORD LAYOUT AND CONTENT

The MDR Address file is stored as a SAS dataset. The format for the MDR Address file is provided in the table below.

Master MDR Address Dataset.

Field Name	Format	SAS Name	Address file reference	Source of Data Element	Transformation
DEERS EDI_PN	\$10	edi_pn	DOD EDI_PN (from VM6), PATUNIQ (from CHCS Appt), EDIPN (from GENESIS Person)	Any of the three sources	No transformation. This is the file key.
Patient SSN	\$9	patssn	PN_ID	VM6	No transformation.
DEERS First Name	\$20	d_name1	PN_1 ST NAME	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Last Name	\$27	d_name2	PN_LST_NM	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Cadency	\$4	d_cadncy	PN_CDNCY_NM	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Mailing Address, Line 1	\$40	d_addr1	MA_LN1_TX	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Mailing Address, Line 2	\$40	d_addr2	MA_LN2_TX	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS City	\$20	d_city	MA_CITY_NM	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Country	\$2	d_cntry	MA_CTRY_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS State	\$2	d_state	MA_ST_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Zip Code	\$5	d_zip	MA_PR_ZIP_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Zip + 4	\$4	d_zip4	MA_PR_ZIPX_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".

Field Name	Format	SAS Name	Address file reference	Source of Data Element	Transformation
DEERS Work Telephone Number	\$20	d_wkfon	WK_TNUM_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Home Telephone Number	\$20	d_hmfon	HM_TNUM_CD	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
DEERS Last Update Date	SAS Date	d_updt	LST_UPDT_DT	VM6	Set to blank if no VM6 record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS First Name	\$20	c_name1	PATFN	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Last Name	\$26	c_name2	PATLN	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Mailing Address, Line 1	\$40	c_addr1	ADDR1	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Mailing Address, Line 2	\$40	c_addr2	ADDR2	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Mailing Address, Line 2	\$40	c_addr3	ADDR3	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS City	\$20	c_city	CITY	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS State	\$2	c_state	STATE	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Zip Code	\$5	c_zip	ZIP	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Home Telephone Number	\$14	c_hmfon	FONHOME	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
CHCS Last Update Date	SAS Date	c_updt	APPTDT	CHCS	Set to blank if no CHCS record for this EDI_PN; otherwise, fill with value of field in column "address file reference".
GENESIS First Name	\$20	g_name1	FIRST_NAME	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 20 characters of FIRST_NAME.

Field Name	Format	SAS Name	Address file reference	Source of Data Element	Transformation
GENESIS Last Name	\$26	g_name2	LAST_NAME	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 26 characters of LAST_NAME.
GENESIS Cadency	\$5	g_cadncy	SUFFIX	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 5 characters of SUFFIX.
GENESIS Mailing Address, Line 1	\$40	g_addr1	ADDR_LINE_1	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 40 characters of ADDR_LINE_1.
GENESIS Mailing Address, Line 2	\$40	g_addr2	ADDR_LINE_2	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 40 characters of ADDR_LINE_2.
GENESIS Mailing Address, Line 3	\$40	g_addr3	ADDR_LINE_3	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 40 characters of ADDR_LINE_3.
GENESIS City	\$20	g_city	CITY	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 20 characters of CITY.
GENESIS Country	\$3	g_cntry	COUNTRY	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 3 characters of COUNTRY.
GENESIS State	\$2	g_state	STATE	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 2 characters of STATE.
GENESIS Zip Code	\$10	g_zip	ZIP	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 10 characters of ZIP.
GENESIS Work Telephone Number	\$14	g_wkfon	WORK_PHONE	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 14 characters of WORK_PHONE.
GENESIS Home Telephone Number	\$14	g_hmfon	HOME_PHONE	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, keep the first 14 characters of HOME_PHONE.
GENESIS Last Update Date	SAS Date	g_updt	UPDT_DT_TM	GENESIS	Set to blank if no GENESIS record for this EDI_PN; otherwise, fill with the date portion of UPDT_DT_TM.